# REGIONAL WATER OUALITY CONTROL BOARD CENTRAL COAST REGION 3

WATERSHED
MANAGEMENT
INITIATIVE

January 2002

# REGIONAL WATER QUALITY CONTROL BOARD

#### **CENTRAL COAST REGION**

(REGION 3)

## WATERSHED MANAGEMENT INITIATIVE CHAPTER

January 2002

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#### **EXECUTIVE SUMMARY**

This document constitutes the Watershed Management Initiative (WMI) Chapter of the Central Coast Regional Water Quality Control Board (Region 3) for 2002. The Chapter is updated annually. The focus of this Chapter update is on improving implementation of nonpoint source pollution management, development of Total Maximum Daily Loads, increasing attention and resources to urban runoff and beach closure issues, and developing methods to improve the efficiency of regulatory activities. A WMI Chapter has been developed by the State Water Resources Control Board (State Board), each of the nine Regional Water Quality Control Boards (Regional Boards) and the US Environmental Protection Agency (USEPA) to comprise the Watershed Management Initiative "Integrated Plan."

A five-year Strategic Plan guides the water resource protection efforts of the State Water Resources Control Board and the Regional Water Quality Control Boards. A key component of the Strategic Plan is a watershed management approach for water resources protection. Past State and Regional Board programs tended to be directed at site-specific problems. This approach was reasonably effective for controlling pollution from point sources. However, with diffuse nonpoint sources of pollutants, a new regulatory strategy was needed. To protect water resources within a watershed context, a mix of point and nonpoint source discharges, ground and surface water interactions, and water quality/water quantity relationships must be considered. These complex relationships present considerable challenges to water resource protection programs. The WMI is an attempt to integrate various regulatory and non-regulatory programs, promote cooperative and collaborative efforts within watersheds and focus limited resources on priority issues.

During initial implementation of the Watershed Management Initiative, each Regional Board identified priority watersheds in their Region, prioritized water quality issues, and developed watershed management strategies. The Central Coast Regional Board approved a list of six targeted watersheds at a regularly scheduled Board meeting on March 21 and 22, 1996. The original targeted watersheds were the San Lorenzo River, Pajaro River, Salinas River, Morro Bay, Santa Maria River, and Santa Ynez River. San Luis Obispo Creek and the South Coast of Santa Barbara County were subsequently added. These watersheds were selected because they were recognized as having significant water quality problems along with existing local efforts and commitments to address these problems (see Table 1-1 below). Region 3's watershed management approach is described in more detail in *Section One* of the Chapter. Strategies for each watershed are described in *Section Two* of the Chapter.

In May 1998, Region 3 reorganized into watershed management areas. The watershed management areas are organized internally to implement a watershed management approach. This approach focuses on integrating existing regulatory responsibilities and other program activities to meet region-wide and watershed-specific objectives. Appropriate regulatory and non-regulatory programs and tools (e.g., permits, monitoring, education, and outreach) are being identified and integrated to address high priority issues. These programs and tools are being applied similarly throughout the region in some cases, and individually as appropriate in specific watersheds. Efforts being developed or implemented in a given watershed are frequently pilots or phases of an effort to be transferred to other watersheds or to all watersheds in the region (e.g.,

Salinas River Watershed Management Strategy). Effective application and integration of the regulatory and non-regulatory programs and tools require coordination, stakeholder involvement, program management, planning, monitoring for effectiveness, and technical training on an ongoing basis.

Several general activities have been identified as the Region's highest priorities, based on an assessment of problems in targeted watersheds and the region as a whole. Tasks or components of these activities are outlined for individual watersheds in *Section Two* and for programs in *Section Three*.

The following activities have been identified as priorities for State Fiscal Year 02/03 (July 1, 2002 to June 30, 2003):

- 1. Develop Total Maximum Daily Loads and implement plans for meeting TMDLs throughout the region;
- 2. Expand nonpoint source and regulatory activities to address urban runoff; focus increased funding and outreach to address beach closure and coastal water quality issues and compliance with Phase II of the NPDES Storm Water Program; increase resources to address hydromodification projects and urban development issues (CWA Section 401 water quality certifications and CEQA review);
- 3. Continue expansion of nonpoint source pollution management efforts that address impacts of sedimentation, nutrients and pesticides from agricultural activities and improve groundwater quality in the Salinas River Watershed;
- 4. Expand nonpoint source pollution management throughout the region and continue to solicit and manage nonpoint source contracts;
- 5. Continue expansion of the Central Coast Ambient Monitoring Program into a regional monitoring program that provides information on ambient conditions in the region's watersheds and coastal waters;
- 6. Streamline regulatory workload through development of boilerplates, general NPDES permits and WDRs, and revised WDR schedules where feasible;
- 7. Develop a riparian corridor protection policy, revise Basin Plan narrative groundwater objectives, and undertake highest priority Basin Plan amendments;
- 8. Expand regulatory activities to address discharges or potential threats to water quality from oil-industry cleanup sites, drug labs, dry cleaners and auto repair and dismantling operations, as feasible.

The most significant changes from priorities outlined in previous WMI Chapters are an increased focus on TMDLs, urban runoff and beach water quality issues, and internal efforts to streamline regulatory program activities. These three efforts are described below. There is also greater recognition of the need for more flexibility in the use of existing funding.

• TMDLs: Development of TMDLs for the Region's many impaired waterbodies is in line with greater emphasis on TMDLs statewide. The Region now has a unit devoted to development of TMDLs. TMDL and Nonpoint Source staff are coordinating efforts to increase stakeholder awareness of water quality issues, regulatory requirements, and appropriate management practices.

• Urban runoff and beach water quality issues: Increased monitoring (the Region's monitoring program has just completed the first five-year cycle of monitoring, covering the entire region, and state law requires counties to monitor high use beaches) has provided more data on the quality of the Region's waters, including beaches and coastal streams, and resulted in additional CWA Section 303(d) listings. In addition, Phase II of the NPDES Storm Water Program will require most of the Region's municipalities to obtain permits by 2003. Effective implementation of any regulatory program requires outreach and education, as well as regulatory oversight. Urban development is impacting creeks through increased volume of runoff, encroachment into floodplains and hydromodification projects. The Region receives very limited funding for oversight of these activities (issuance of CWA Section 401 water quality certification and CEQA review and response), yet such projects may have significant impacts on water quality and beneficial uses.

• Streamlining regulatory activities: A large percentage of staff time is devoted to writing and revising NPDES permits and Waste Discharge Requirements. A number of factors, including mandatory minimum penalty requirements (which have led to increased discharger challenges of proposed permits) and the rapid growth of the wine industry in the Central Coast area, have resulted in a substantial increase in the regulatory workload. Region 3 is developing boilerplate language and general permits to increase efficiency; however, there is also a need for greater flexibility in the use of existing resources, so that the highest priority water quality issues can be addressed.

#### **Summary**

Region 3 continues working to integrate and coordinate programs and functions, including permitting, enforcement, basin planning, monitoring and assessment, TMDLs, groundwater protection and nonpoint source pollution control within watersheds as appropriate for each watershed. Simultaneously, land disposal regulation, cost recovery, cost reimbursement, underground tank regulation, and above ground tank regulation activities are being implemented on a region-wide basis.

Additional funding is needed to support an adequate level of regulatory and non-regulatory activities in all watersheds in the region, particularly to focus and increase efforts where high priority problems have been identified or in higher priority watersheds. Additional funding for the activities itemized above would provide more opportunity for watershed-specific problem solving. In *Section Four, Resource Allocation Summary*, Table 4-1 displays anticipated and desired levels of funding by watershed, region-wide, and by program for State Fiscal Year 2002-03.

For more information or copies of the Watershed Management Initiative Chapter, contact Alison Jones, Watershed Coordinator for Region 3 at (805) 542-4646 or <a href="majones@rb3.swrcb.ca.gov">ajones@rb3.swrcb.ca.gov</a>. Additionally, readers can visit Region 3's website at <a href="http://www.swrcb.ca.gov/~rwqcb3">http://www.swrcb.ca.gov/~rwqcb3</a>.

Table 1-1: Water Quality Concerns in Targeted Watersheds (highest priority watersheds are in bold type)

TARGETED WATERSHED	POLLUTANTS OF CONCERN	WATER QUALITY PROBLEMS
San Lorenzo River	Nutrients, sedimentation, pathogens	Erosion from roads and timber harvested areas, urban development and runoff.
Pajaro River	Sedimentation, heavy metals, nitrates	Erosion from inactive and abandoned mines, urban development and runoff, agricultural activities, hydromodification, gravel mining
Salinas River	Seawater intrusion, nitrates and minerals in groundwater, nutrients, pesticides, heavy metals, sedimentation	Overpumping of groundwater, agricultural activities, urban development and runoff, past mineral mining, gravel mining
Morro Bay	Sedimentation, pathogens, nutrients, heavy metals	Urban development and runoff, agricultural activities, septic systems
San Luis Obispo Creek	Nutrients, sedimentation	Urban development and runoff, agricultural activities, hydromodification
Santa Maria River	Sedimentation, nitrates	Erosion from reservoir operation, agricultural activities, urban development and runoff
Santa Ynez River	Sedimentation	Erosion from ranching and land development, habitat loss
South Coast (Santa Barbara County)	Pathogens	Urban development and runoff, illegal and unsanitary encampments, septic systems

#### **SECTION ONE. INTRODUCTION**

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

This document constitutes the Watershed Management Initiative Chapter of the Central Coast Regional Water Quality Control Board (Region 3). A Chapter has been developed by the State Water Resources Control Board (State Board), each of the nine Regional Water Quality Control Boards (Regional Boards) and the US Environmental Protection Agency (USEPA) to comprise the Watershed Management Initiative "Integrated Plan."

The Integrated Plan describes the State's Watershed Management Initiative (WMI). The WMI is a key component of the State Water Resources Control Board Strategic Plan (updated in 1997), which identified the need to improve water resource protection by applying and promoting watershed management.

The WMI's goals are to plan and prioritize activities within and amongst watersheds; integrate various surface and groundwater regulatory programs; promote local, collaborative efforts; and focus limited resources on priorities. To protect water resources with watershed management, a mix of point and nonpoint source discharges, groundwater and surface water interactions, and water quality/water quantity relationships within each watershed must be considered. The relationships between these issues are complex and present considerable challenges to water resource protection programs not previously organized by watershed. The State and Regional Boards are responding to these challenges with the WMI.

At the onset of the WMI, the State and Regional Boards agreed to work in partnership with the USEPA to develop and implement an integrated planning process. This process has continued through meetings of the WMI coordinators (from each region, the State Board and USEPA), management meetings, and program roundtables. The goal is to more effectively and efficiently direct limited state and federal funds to the highest priority activities needed to protect water quality and address the missions of the respective organizations. Regional priorities are based on strategies that each Regional Board has developed to address watersheds within its boundaries. The State Board with active participation of Regional Boards and USEPA develops statewide priorities. These priorities and the planning process are described in the Chapters developed by each of the eleven organizations that, together, comprise the Integrated Plan.

The WMI Chapter for Region 3 is a planning tool that identifies priorities to be funded by baseline resources, and priority tasks that are currently unfunded. This version of the Chapter contains activities planned for State Fiscal Year 2002-03 and the following one or two, and, in some cases, five years. The focus of this update is to describe changes in priorities and activities based on Region 3's experiences in developing watershed management, changes in staff and grant resources in the past year, and an increased focus on TMDLs statewide. The Chapter contains a new table of funding priorities developed in response to the increased availability of funding for watershed planning and nonpoint source implementation (*Table D-7, Appendix D*). Watershed, region-wide, and statewide activities are described along with estimated resource allocations to perform the activities. The Chapter also contains descriptions of regional and watershed strategies. This information should support requests for funding (e.g., the preparation

of Budget Change Proposals to obtain additional funding). Strategies and priorities are reevaluated both periodically (e.g., annual review and planning) and on an on-going basis (e.g., day to day feedback). Some of the region-wide activities currently planned for the next few fiscal years may be implemented on a watershed-basis in the future. Some watershed activities currently planned for the next few fiscal years may be implemented on a region-wide basis in the future.

#### Region 3's Approach to Watershed Management

In response to the Strategic Plan's recommendations on watershed management, Region 3 designated targeted watersheds, initiated a pilot project in a targeted watershed, and reorganized into units based on hydrologic areas. Many of Region 3's watersheds are impacted predominantly by nonpoint source pollution. Region 3's Board wished to identify priority watersheds and develop a more systematic approach to addressing nonpoint source pollution problems, given limited staff resources.

The framework for determining the need to develop and implement a control strategy for a given water quality problem considers four factors. These factors include the magnitude of the problem (through assessment); the presence of existing institutional and community action along with willingness to partner in addressing problems (stakeholder involvement); the presence of existing government agencies as potential partners or responsible parties for controlling the problem; and opportunities to coordinate with existing internal staff efforts (e.g., outreach, point source control strategies, monitoring). Watersheds with all of these factors present for a given waterbody are "highest priority" for staff efforts, as they have the greatest need and greatest chance of success for control strategies. Watersheds with one, two or three of these factors present are "targeted" for staff efforts but not necessarily as the highest priority. Reconsideration of high priority and targeted watersheds is necessary on an on-going basis as new information about waterbodies is developed and as development and implementation of various control strategies are tested. This can only be done effectively with increased levels of monitoring and assessment.

#### **Targeted Watersheds**

Region 3's Board approved a list of targeted watersheds at a regularly scheduled Board meeting on March 21 and 22, 1996. The list included many of the region's major watersheds, including the Salinas, Pajaro, San Lorenzo, Santa Maria, and Santa Ynez Rivers and Morro Bay. Subsequently, Staff identified the Salinas and San Lorenzo Rivers and Morro Bay as the highest priority targeted watersheds (See Figure1-1). These watersheds were selected based on the control strategy described above. Subsequent to the Board action, San Luis Obispo Creek was added to the targeted list because of TMDL considerations and the South Coast watersheds of Santa Barbara County were added because of beach closure issues.

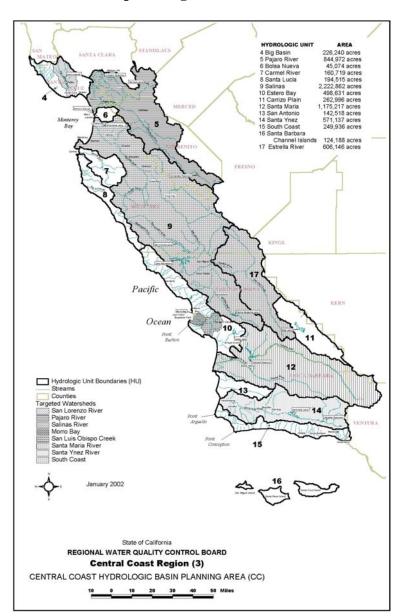


Figure 1-1 Map of Targeted Watersheds

#### Water Resource Issues in Targeted Watersheds

Table 1-1, briefly indicates the major water quality problems in Region 3's targeted watersheds. Expanded descriptions of the conditions and problems in each watershed are contained in *Section Two*, *Watershed Activities* and shown in *Table D-1*, *Appendix Section D*.

Table 1-1: Water Quality Concerns in Targeted Watersheds (highest priority watersheds are in bold type)

TARGETED	POLLUTANTS OF CONCERN	WATER QUALITY PROBLEMS
San Lorenzo River	Nutrients, sedimentation, pathogens	Erosion from roads and timber harvested areas, urban development and runoff.
Pajaro River	Sedimentation, heavy metals, nitrates	Erosion from inactive and abandoned mines, urban development and runoff, agricultural activities, hydromodification, gravel mining
Salinas River	Seawater intrusion, nitrates and minerals in groundwater, nutrients, pesticides, heavy metals, sedimentation	Overpumping of groundwater, agricultural activities, urban development and runoff, past mineral mining, gravel mining
Morro Bay	Sedimentation, pathogens, nutrients, heavy metals	Urban development and runoff, agricultural activities, septic systems
San Luis Obispo Creek	Nutrients, sedimentation	Urban development and runoff, agricultural activities, hydromodification
Santa Maria River	Sedimentation, nitrates	Erosion from reservoir operation, agricultural activities, urban development and runoff
Santa Ynez River	Sedimentation	Erosion from ranching and land development, habitat loss
South Coast (Santa Barbara County)	Pathogens	Urban development and runoff, illegal and unsanitary encampments, septic systems

#### Salinas River Watershed Pilot Project and Region 3's Watershed Management Strategy

In 1996, Region 3 initiated a pilot watershed management project in the Salinas River Watershed. A team of staff was assigned to develop a strategy for implementing watershed management in the Salinas River Watershed. The following steps, identified in the Salinas Watershed Team Strategy, were found to lead towards development and implementation of appropriate control strategies while recognizing the need to build on and carry out the established, existing efforts for any watershed:

- Task 1. Implement existing regulatory responsibilities within the watershed;
- Task 2. Implement non-regulatory activities within the watershed;
- Task 3. Characterize the watershed;
- Task 4. Identify and evaluate water resource issues/areas;
- Task 5. Develop a watershed management action plan;
- Task 6. Implement the management action plan;
- Task 7. Evaluate progress and revise the plan accordingly.

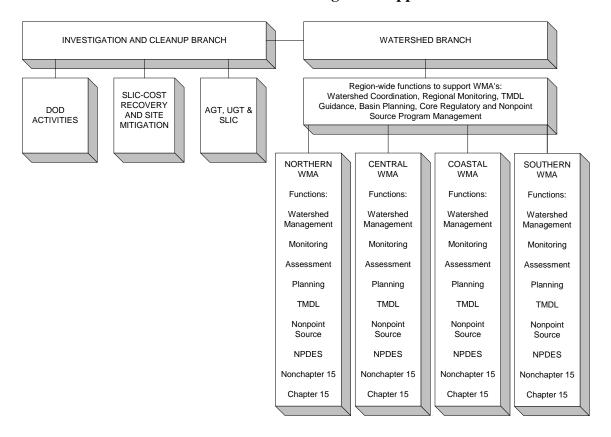
Each step can be implemented by identifying and implementing specific tasks and subtasks appropriate to the watershed. Methods for carrying out the tasks may be modified at any time for any one of the numbered steps above, based on new information and/or evaluation of progress. The numbering of the steps does not necessarily imply that one step must be completed before the next one begins; in fact, implementation of steps will usually occur simultaneously and repeatedly. The term "watershed management strategy," as used later in this document, refers to the steps described above.

Staff completed Tasks 1-5 for the Salinas River Watershed by December 1999 and is currently in the process of implementing the action plan (Task 6) and evaluating progress (Task 7).

#### **Watershed Management Areas**

In May 1998 Region 3 reorganized from program-based units into units based on watershed management areas. The region is currently divided into a region-wide clean-up branch and a watershed branch (see Figure 1-2) with four watershed management areas (WMAs): the Northern, Central, Coastal and Southern WMAs (see Figure 1-3). The Northern WMA includes the San Lorenzo and Pajaro Rivers. The Central WMA includes the Salinas River, the region's largest targeted watershed. The Coastal WMA includes the watersheds of Morro Bay and San Luis Obispo Creek. The Southern WMA includes the Santa Maria and Santa Ynez Rivers, as well as the South Coast watersheds of Santa Barbara County.

# FIGURE 1-2 California Regional Water Quality Control Board Central Coast Region Watershed Management Approach



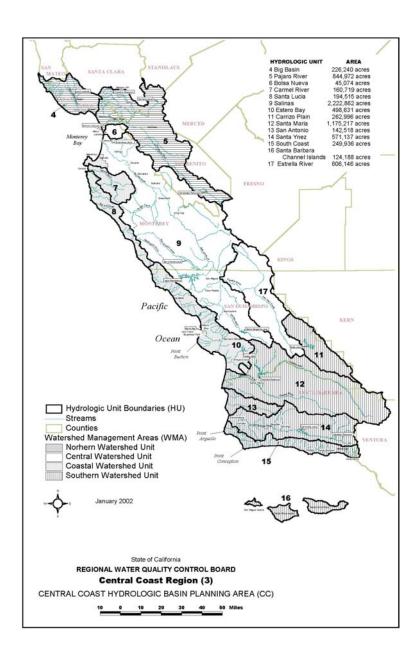


FIGURE 1-3 Map of Watershed Management Areas

#### **Integration of Programs and Tools**

Region 3's approach to watershed management is to integrate non-regulatory tools such as nonpoint source and TMDL activities with existing regulatory responsibilities to meet region-wide goals and watershed-specific objectives that support Region 3's overall goals for the WMI (see Section Two, Watershed Activities, for a complete description of watershed objectives and activities). The programs and tools listed below are described in greater detail in Section Three, Region-wide Activities, along with goals and objectives and current and anticipated future activities and funding needs.

Non-regulatory tools include the following:

• Watershed management activities (including technical assistance, financial assistance, education, outreach, interagency coordination, stakeholder involvement);

- Monitoring and assessment coordinated through Region 3's Central Coast Ambient Monitoring Program (CCAMP);
- Development of TMDLs consistent with USEPA's TMDL Process (as described in *Guidance for Water Quality-based Decisions: The TMDL Process*, USEPA, EPA 440/4-91-001, April 1991);
- Voluntary/self-determined implementation and regulatory encouragement of best management practices (Tiers I and II of the California Nonpoint Source Pollution Control Program's "three-tiered approach"); and
- Grant project solicitation and contract management.

Regulatory programs and tools include the following:

- Basin Plan Amendments (including adoption of TMDLs and best management practices to address nonpoint source pollution);
- Effluent limitations in the form of National Pollutant Discharge Elimination System (NPDES) permits or Waste Discharge Requirements (WDRs) for point and nonpoint source discharges (Tier III of the California Nonpoint Source Pollution Control Program's "three-tiered approach");
- NPDES Storm Water permits for municipalities, construction sites and industrial facilities;
- Clean Water Act Section 401 water quality certifications; and
- Enforcement actions authorized by Porter-Cologne.

These programs and tools will be applied similarly throughout the region (i.e., in all watersheds) in some cases, and individually, as appropriate, in specific watersheds. Efforts being developed or implemented in a given watershed are frequently pilots or phases of an effort to be transferred to other watersheds or to all watersheds in the region (e.g., Salinas River Watershed Management Strategy). Effective application and integration of the regulatory and non-regulatory programs and tools requires intra- and inter- agency coordination, stakeholder involvement, program management, planning, monitoring for effectiveness and technical training on an on-going basis.

Many of the programs and tools used in watershed management compliment each other. For example, impaired waters requiring TMDLs in Region 3 are predominantly affected by nonpoint source pollution. Addressing nonpoint source pollution is a three-tiered approach to encourage voluntary/self-determined use of best management practices (BMPs) or to require BMPs if self-determined efforts do not succeed. Many TMDLs in Region 3 will likely consist of methods for implementing certain BMPs to meet specific objectives, to improve specific constituents in impaired waters. Determining the extent of impaired waters, which impaired waters to target first, which BMPs will be most effective, and whether objectives are met or water quality has improved from use of BMPs, depends on monitoring and assessment. Region 3 is building an ambient monitoring program which includes integrating point source receiving water monitoring into the region-wide program along with nonpoint source identification and control effectiveness.

This coordination will allow assessments made by the monitoring program to indicate changes needed to improve monitoring and data reporting and to inform control efforts.

#### **Priority Watershed Management Activities for 02/03**

Based on an assessment of the highest priority problems in the targeted watersheds or in the region, the following general activities have been identified as the highest priority activities. Specific tasks or components of these activities (funded and unfunded) are contained in the activity lists for each watershed in *Section Two*, for the region in *Section Three*, and in the *Appendices* for programs. Activities are planned to meet the goals and objectives presented previously in this section. Priorities will continue to be reevaluated via the watershed management tools and framework.

- 1. Develop Total Maximum Daily Loads and implement plans for meeting TMDLs throughout the region;
- 2. Expand nonpoint source and regulatory activities to address urban runoff; focus increased funding and outreach to address beach closure and coastal water quality issues and compliance with Phase II of the NPDES Storm Water Program; increase resources to address hydromodification projects and urban development issues (CWA Section 401 water quality certifications and CEQA review);
- 3. Continue expansion of nonpoint source pollution management efforts that address impacts of sedimentation, nutrients and pesticides from agricultural activities and improve groundwater quality in the Salinas River Watershed;
- 4. Expand nonpoint source pollution management throughout the region and continue to solicit and manage nonpoint source contracts:
- 5. Continue expansion of the Central Coast Ambient Monitoring Program into a regional monitoring program that provides information on ambient conditions in the region's watersheds and coastal waters;
- 6. Streamline regulatory workload through development of boilerplates, general NPDES permits and WDRs, and revised WDR schedules where feasible;
- 7. Develop a riparian corridor protection policy, revise Basin Plan narrative groundwater objectives, and undertake highest priority Basin Plan amendments;
- 8. Expand regulatory activities to address discharges or potential threats to water quality from oil-industry cleanup sites, drug labs, dry cleaners and auto repair and dismantling operations, as feasible.

#### **Summary**

Region 3 plans to integrate and coordinate current programs and functions including all permitting, enforcement, basin planning, monitoring and assessment, adopting TMDLs for impaired waters, groundwater protection and nonpoint source pollution control within watersheds as appropriate for each watershed. Simultaneously, cost recovery, cost reimbursement, underground tank regulation, and above ground tank regulation activities will be implemented on a region-wide basis.

The WMI Chapter is not a commitment to complete work. Work commitments are made in fund-source specific workplans. Determinations of which activities will be funded by specific workplans will be negotiated on the basis of the information in the Chapters. Annual program workplans and grant applications will still be prepared by program managers at State and Regional Boards to identify activities to be funded in a particular year based on fiscal decisions. Program managers will still need to manage workplans and contracts, to evaluate program achievements, and to report on completion of commitments.

Additional funding is needed to support an adequate level of regulatory and nonregulatory activities in all watersheds in the region, particularly to focus and increase efforts where high priority problems have been identified or in higher priority watersheds. Additional funding for the activities itemized above would provide more opportunity for and result in more watershed-specific problem solving. In *Section Four, Resource Allocation Summary*, Table 4-1 displays anticipated and desired levels of funding by watershed, region-wide, and by program for State Fiscal Year 2002-03. Since the focus of this update is identifying activities and resource needs to improve implementation of nonpoint source pollution management, increase development of Total Maximum Daily Loads, support related monitoring and data management needs, and address beach closure issues, Table 4-1 shows budget increases beyond the current level of funding for related programs areas. Additionally, the resource needs for some regulatory programs are also above the current budgeted amount.

#### SECTION TWO. WATERSHED ACTIVITIES

This section generally describes the Northern, Central Coastal, Coastal and Southern Watershed Management Areas, the watersheds in each management area, and the high priority activities planned for fiscal year 02/03. Activities are prioritized to meet regional watershed management goals and objectives discussed in *Section One* and watershed-specific goals and objectives characterized in this section.

Region 3 is implementing watershed management by integrating monitoring, assessment, TMDLs, nonpoint source pollution control, and basin planning with existing regulatory activities in the highest priority targeted watersheds first, and in other targeted watersheds as feasible. Activities in the region's remaining watersheds will be to meet region-wide programmatic goals and regulatory commitments, and to the extent possible, to encourage stakeholder organizations and provide educational outreach and technical assistance. Although Region 3 has seen a modest increase in resources for nonpoint source and storm water activities, needs still far exceed available resources. Given these resource constraints, Region 3 will spend most of the existing staff resources currently available for the activities in the highest priority watersheds and spend the remaining resources in other targeted watersheds. If additional resources do become available, they would first be spent on unfunded activities for the highest priority watersheds, followed by activities needed in the existing targeted watersheds, followed by efforts in the other watersheds in the region. Section Four, Resource Allocation Summary, contains a table that displays anticipated and desired levels of funding by watershed, region-wide, and by program for fiscal year 02/03.

#### **Northern Watershed Management Area**

The Northern Watershed Management Area (WMA) includes portions of San Mateo, Santa Cruz, Santa Clara, and San Benito Counties. The Big Basin and Pajaro River Hydrologic Units (304 and 305 respectively) are located within the Northern WMA. The Big Basin Hydrologic Unit consists of a number of coastal streams, including the San Lorenzo River. The Pajaro River drains to the Pacific Ocean through Monterey Bay. The San Lorenzo River and Pajaro River watersheds are targeted in the Northern WMA, with San Lorenzo River watershed one of the region's highest priority watersheds.

The Northern WMA includes portions of San Mateo, Santa Cruz, Santa Clara, San Benito and portions of Monterey Counties. The Big Basin, Pajaro River and the Santa Lucia Hydrologic Units (304 and 305 respectively) are located within the Northern WMA. The Pajaro River Hydrologic Unit drains to the Pacific Ocean through Monterey Bay. San Lorenzo River and Pajaro River watersheds are targeted in the North WMA, with San Lorenzo River watershed one of the region's high priority watersheds. The Northern Watershed area includes a high level of habitat, climate and geological variation. The Santa Cruz Mountains contain vast redwood forests that support one of the highest concentrations of endangered species in California, including Coho Salmon. The Pajaro River is one of the Central Coasts largest watersheds. The Pajaro Watershed is well known for its world-class agricultural soils and powerful flooding characteristics.

Goals for the Northern Watershed Management Area include:

1. Restore and protect watershed functional integrity through development and implementation of watershed management plans.

- 2. Coordination with the National Marine Fisheries Service and the California Department of Fish & Game to ensure restoration and protection of fish and wildlife habitat.
- 3. Restoration of all impaired water bodies.
- 4. Protect and restore wetlands.
- 5. Promote low impact urban development practices.
- 6. Implement monitoring of select timber harvesting operations to minimize water quality impacts and to refine local timber harvest practices.
- 7. Encourage self-determined implementation of management practices throughout the agricultural community.
- 8. Encourage proper flood control planning to ensure both protection of vital infrastructure and beneficial uses of water.
- 9. Promote public awareness and involvement in watershed management issues through education outreach and watershed group activities.

<u>Descriptions of the Watersheds (See Appendix Section D for additional information on the watersheds.)</u>

#### San Lorenzo River Watershed

Water quality issues in the San Lorenzo River watershed include the following:

• Nutrients—Nutrients are periodically elevated among various segments of the San Lorenzo River. The predominant sources include septic tanks, horse corrals, and urban runoff. In 1995, Santa Cruz County began implementing a Wastewater Management Plan. The plan implements actions that will improve and protect water quality. Region 3 staff is currently developing a Memorandum of Understanding with Santa Cruz County regarding construction and maintenance of alternative waste water treatment systems. In addition, staff has developed minimum nitrogen removal limits for onsite treatment and disposal systems. The minimum nitrogen removal limits will support the implementation of a Total Maximum Daily Load program currently being developed by County and Region 3 staff. The County, with input from Region 3 staff, has developed best management practices for animal horse corrals.

Erosion—Erosion has significantly reduced the fish resources of this watershed. The predominant sources include urban development and poor road maintenance. In 1979, Santa

Cruz County implemented a Watershed Management Plan. The plan is currently under revision. The revised plan, when fully implemented, will reduce impacts to water quality. A 319(h) grant, managed by Region 3 staff and directed by the Santa Cruz Resource Conservation District will also implement corrective measures. Additionally, the County and the City of Santa Cruz are developing an urban runoff management program that includes measures to reduce erosion. Region 3 staff have recently begun requesting water quality monitoring at certain Timber Harvest sites to better evaluate this potential sediment source. Region 3 is developing a Total Maximum Daily Load (TMDL) for siltation (see *Table B-2*, *Appendix Section B*).

• Pathogens—Bacteria are periodically elevated along various segments of the San Lorenzo River. The predominant sources include septic tanks, horse corrals, and urban runoff. In 1995, Santa Cruz County began implementing a Wastewater Management Plan. That plan calls for implementation of best management practices to protect and enhance water quality. Staff has aided the County's efforts by assisting on inspections and public outreach. The urban runoff management program will also lead to improvements in discharges of pathogens. Region 3 is developing a TMDL for pathogens (see *Table B-2*, *Appendix Section B*)

The Scott's Valley groundwater aquifer underlies the surface water bodies in this watershed. This aquifer is a sole source aquifer, which means it provides drinking water. This aquifer has been rated high for contamination susceptibility through the statewide groundwater assessment.

#### San Lorenzo River Watershed Activities for 02/03

#### Funded

Nonpoint Source Activities (0.15 PY NPS and 0.3 PY Timber Harvest funds) (see *Table D-5*, *Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Public education and technical assistance to encourage implementation of management measures including participation in Blue Circle CRMP meetings; meeting with municipalities, vineyard operators and forestry operators.
- Solicit and manage 319 grant projects.
- Implement nitrate management measures through the MOU with the County of Santa Cruz for implementation of alternative wastewater disposal systems; review and comment on timber harvest plans in accordance with the Management Agency Agreement with the Department of Forestry.
- Review Timber Harvest Plans, inspect timber harvest activities and facilitate or require implementation of forestry management measures.
- Perform site visits/inspections to facilitate and verify implementation of appropriate MPs.

Monitoring Activities (see *Section Three*, Central Coast Ambient Monitoring Program (CCAMP))

- Begin watershed characterization monitoring
- River mouth monitoring through CCAMP Coastal Confluences Program

TMDL Activities (0.9 PY, see *Table B-2*, *Appendix Section B*)

• Conduct implementation and monitoring oversight of TMDL for nutrients (Santa Cruz County is lead agency). (0.2 PY)

- Conduct implementation planning and stakeholder involvement for TMDL for siltation for listed waters in San Lorenzo River Watershed. (0.2 PY)
- Develop TMDL for pathogens for listed waters in San Lorenzo River Watershed. (0.5 PY)

Regulatory Activities (see *Appendix Section A*, Permit and Inspection Schedules)

- Implement Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities. Some funds that have traditionally been allocated to low threat, Non-chapter 15 facility inspection will be diverted to activities in the watershed, which coincide with the Clean Beach Initiative. For example:
  - Partner in the development of low-flow stormwater bypass

#### Unfunded

Nonpoint Source Activities (1.0 PY, see *Table D-6*, *Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Expand existing activities listed in the "funded" section above.
- Perform nonpoint source enforcement.

#### Regulatory Activities (0.5 PY)

- Implement additional Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities, and enforcement per the "Migden" Bill.
- Encourage watershed restoration activities at all sites requiring Clean Water Act Section 401 certification (the 401 Water Quality Certification program is severely under-funded in this management area relative to numbers of projects and potential impacts)
- Encourage implementation of low impact development techniques at sites regulated under the NPDES storm water program via CEQA review

#### Pajaro River Watershed

The Pajaro River watershed is located within San Benito, Santa Clara, Santa Cruz, and Monterey Counties, and comprises approximately 1,300 square miles. The Pajaro River flows through diverse and important habitats. Types of problems currently facing the watershed include erosion and sedimentation, pesticides, nutrients, heavy metals, pathogens, streambed flow alterations, endangered habitat, and riparian vegetation removal.

Historically, agriculture has been the dominant land use in the watershed with the bottomlands supporting a mixture of intensive irrigated row cropping and orchards systems. Grazing is common in the remote areas of the watershed such as along the upper San Benito River. Agricultural lands are considered to be the major source of nutrient and sediment loading into the Pajaro River. Low-density residential development, flood control projects, sand and gravel and mercury mining, and off-road vehicle activity have also directly impacted water quality in the watershed. Due to the high demand for housing in recent years, substantial portions of the upper watershed areas have now been developed for new residential subdivisions. Land use modifications have resulted in riparian and in-stream habitat loss, changed the geomorphology of

streams and rivers, increased flooding, and reduced groundwater recharge. Most water quality concerns are influenced by water quantity such that coordination with the Water Rights Division of the SWRCB is appropriate for water quality protection. Wetlands are being degraded due to land development and current farming practices. Restoration of riparian corridors along all wetlands (including the Watsonville Slough System, Tesquisquita Slough, and other wetlands) is an on-going goal for these water bodies. A watershed planning process for the Watsonville Slough system is currently in progress.

Historic mercury mining activities in Hernandez Lake area, and gravel mines in the Pajaro River, have resulted in heavy metals migration and disrupted e geomorphologic functions in portions of the watershed. Recent off-road vehicle activity along riparian corridors and in the Clear Creek Area has exacerbated sediment migration and degraded riparian areas. Air borne and water born transport of asbestos from the Clear Creek area is currently being evaluated. Flood control continues to be a high priority with a major levee rehabilitation project near Watsonville currently being developed. A watershed wide flood control study is currently underway. Due to the close proximity of the watershed to large urban centers, and the extent of urbanization occurring, pollutant loads to rivers and streams have significantly affected overall water quality for the entire watershed.

The Pajaro River Watershed Water Quality Management Plan was completed in May 1999 to address many of these issues, and provides a watershed-wide plan for implementation and monitoring of activities significantly affecting water quality in the region. The Water Quality Protection Program of Monterey Bay Marine Sanctuary is continuing to implement Action Plans. The Action Plan for Agriculture was finalized in 1999, in partnership with the Farm Bureau's Coalition. The Farm Bureau is currently initiating pilot projects in several of Region 3's watersheds, including Pajaro, through their Nonpoint Source Initiative.

# Pajaro River Watershed Activities for 02/03 Funded

Nonpoint Source Activities (0.35 PY) (see *Table D-5*, *Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Public education and technical assistance to encourage implementation of management measures including meeting with key agencies and organizations, implementing the Pajaro River Watershed Water Quality Management Plan (June 1999), meeting with developing municipalities and irrigated agriculture operators, implementing Farm Bureau Nonpoint Source Initiative pilot projects, and participate in development of a San Benito River Management Plan
- Solicit and manage 319 grant projects
- Perform site visits/inspections to facilitate and verify implementation of appropriate MPs

Monitoring Activities (see Section Three, Central Coast Ambient Monitoring Program)

- Begin watershed characterization monitoring
- Monitoring for the mercury TMDL in Clear Creek is expected to start in 2002
- River mouth monitoring through CCAMP Coastal Confluences Program

TMDL Activities (1.1 PY and \$200,000 in contracts (see *Appendix Section B*, TMDL Schedule of Activities)

- Establish management structure and initiate process for stakeholder involvement for siltation. (Explore potential to use Pajaro Watershed Management Council or other existing forum). (0.3 PY)
- Conduct stakeholder involvement and implementation planning for TMDL development for siltation (in coordination with forum or management structure established). (0.3 PY)
- Draft siltation TMDL for the Pajaro River June 2003
- Draft nutrient TMDL for the Pajaro River (Llagas Creek) June 2002; draft implementation and monitoring plan June 2003

Regulatory Activities (see *Appendix Section A*, Permit and Inspection Schedules) (0.5 PY)

- Implement additional Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities, and enforcement per the "Migden" Bill. Some funds which have traditionally been allocated to low threat, Non-chapter 15 facility inspection will be diverted to partnerships in the watershed which coincide with activities initiated by the Santa Clara Valley Water District and the San Benito County Water Association. Several of the formerly unfunded activities may fall in this category including:
  - Develop strategy for wetlands protection and restoration
  - Riparian corridor development
  - Develop strategy for regulation of in-stream mining
  - Develop basin-wide groundwater strategy for salts reduction

#### Unfunded

Nonpoint Source Activities (1.1 PYs) (see *Table D-6, Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Expand existing nonpoint source pollution activities listed in "funded" section
- Perform nonpoint source pollution inspections when needed
- Develop strategy for use of Tiers and NPS enforcement efforts
- Develop strategy for wetlands protection and restoration
- Develop strategy for regulation of in-stream mining
- Develop strategy to address importing water/groundwater elevation rise

#### Monitoring Activities

- Special study to assess asbestos in Clear Creek
- Special study to assess grazing impacts (turbidity, coliform, etc.) to the San Benito River

#### Regulatory Activities

- Initiate implementation of Phase II NPDES storm water regulations.
- Those category 3C inspections which were not completed because of the diversion of funds referred to in the section on funded activities.

• Encourage watershed restoration activities at all sites requiring CWA Section 401 water quality certification (the Section 401 Water Quality Certification program is severely under funded in this management area)

• Incorporate NPS requirements into WDRs when appropriate.

#### Other Northern WMA Watersheds

Coastal-draining streams in the Big Basin Hydrologic Unit are impacted mostly by timber harvesting and land development. Sedimentation resulting from these activities is affecting fish habitat and other beneficial uses in the streams. Watershed planning processes are currently underway for the Arana Gulch and Soquel watersheds. TMDLs for Soquel Creek, Aptos Creek, Majors Creek and Waddell Creek are scheduled but will not have major milestones during 02/03.

Main, Cowell, Seabright and Capitola Beaches in the City and County of Santa Cruz have been identified by the Clean Beaches Initiative as high priority due to frequent closures caused by incidents of elevated pathogens. Funding has been allocated for three projects through the Clean Beaches Initiative. Region 3 staff will be involved in ongoing inspection of these projects. Contract management responsibility for the projects has not been determined; however, Region 3's Proposition 13 resources are already allocated to new projects. Clean Beaches Initiative contract management is therefore listed below under "unfunded" activities.

Surface erosion and mass wasting can result from poorly planned timber operations. The mountains of Santa Cruz County are prime timber lands. The California Department of Forestry (CDF) processes many timber harvest proposals each year. The Northern WMA is responsible for the oversight of approved Timber Harvest Plans (THP) and for review and comment on proposals. Region 3 staff does pre-harvest inspection with CDF on all proposed THPs which contain a perennial stream and many others that may pose a threat to water quality

#### Activities in Other Northern WMA Watersheds for 02/03

#### Funded

Nonpoint Source Activities (0.1 PY NPS and 0.1 PY Timber Harvest) (see *TableD-5*, *Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Public education and technical assistance to encourage implementation of management measures.
- Solicit and manage 319 grant projects
- Perform site visits/inspections to facilitate and verify implementation of appropriate MPs

#### **Monitoring Activities**

- Begin watershed characterization monitoring (see *Section Three*, CCAMP)
- River mouth monitoring through CCAMP Coastal Confluences Program

TMDL Activities (0.2 PY, see Appendix Section B, TMDL Schedule)

• Continue TMDL development for siltation in Valencia and Aptos Creeks.

Regulatory Activities (see *Appendix Section A*, Permit and Inspection Schedules)

• Implement existing Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities.

#### Unfunded

Nonpoint Source Activities (1 PY) (See *Table D-6*, *Appendix Section D*, Nonpoint Source Program Information and Schedule of Activities)

- Contract management of Clean Beaches Initiative Proposition 13 projects
- Perform nonpoint source pollution inspections.
- Expand existing nonpoint source activities as described in the "funded" section.
- Facilitate implementation of nonpoint source pollution management measures for timber harvest areas, wetland protection and urban runoff.

#### **Regulatory Activities**

- Implement additional Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities.
- CWA Section 401 water quality certification site inspections (the Section 401 Water Quality Certification program is severely under funded in this management area)
- Encourage watershed restoration activities at all sites requiring Section 401 water quality certification
- Incorporate NPS requirements into WDRs when appropriate.

#### **Central Watershed Management Area**

The Central WMA includes Monterey County and parts of San Luis Obispo County. The centrally located Salinas Hydrologic Unit (309) covers the majority of the Central WMA and drains to the Pacific Ocean through Monterey Bay. The Bolsa Nueva Hydrologic Unit (306) lies in the northern area of the Central WMA and drains to the Pacific Ocean through Elkhorn Slough. The Estrella River Hydrologic Unit (317) lies in the southern area of the Central WMA and is tributary to the Salinas River. The Salinas River Watershed is a targeted, high priority watershed.

<u>Descriptions of the Watersheds (See Appendix Section D for additional information on the watersheds)</u>

#### Salinas River Watershed

The Salinas River Watershed, Region 3's largest watershed, covers approximately 4,600 square miles and lies within San Luis Obispo and Monterey Counties. The Salinas River, which originates in San Luis Obispo County, flows northwestward into Monterey County and continues through the entire length of the Salinas Valley. The watershed's main tributaries are the Arroyo Seco, Nacimiento, San Antonio, and Estrella Rivers. The two primary groundwater basins within the Salinas Watershed are the Salinas Valley Groundwater Basin and the Paso Robles Groundwater Basin.

Agriculture is the dominant land use throughout the Salinas watershed, and has had serious impacts on water resources. As a result of overpumping for irrigation, seawater has intruded nearly six miles inland in the Castroville area and necessitated abandonment of several water supply wells. Additionally, nitrate contamination is widespread throughout the Salinas Valley Groundwater Basin and has been found at high levels in surface water as well.

Urbanization, flood control activities, hydromodification of creeks, and mining of sand, gravel, mineral and oil reserves from various locations throughout the watershed are also impacting water resources within the watershed. Other activities in the Salinas River watershed include contact and non-contact water recreation (associated mainly with the Nacimiento and San Antonio Reservoirs) and military uses associated with Fort Hunter Liggett, Camp Roberts, and until 1993, Fort Ord.

By designating the Salinas River watershed as one of the Region's highest priority watersheds, Region 3's Board has acknowledged the need to focus more resources on nonpoint source pollution in the watershed, particularly nitrate contamination of groundwater and seawater intrusion. By devoting staff time to development of a watershed approach, Region 3's Board acknowledges the importance of cooperative efforts in reducing nonpoint source pollution. Although the state has had a nonpoint source program for a number of years, funding has been extremely limited and inadequate to address nonpoint source problems in the Region, and in the Salinas River watershed in particular, which has relatively few point source discharges.

The primary focus for fiscal year 2002/03 will be revision and implementation of Region 3's Salinas River Watershed Management Action Plan. This plan describes the coordination and relationship of Region 3's resource management and regulatory programs with existing watershed management efforts of partners. The plan refers to Region 3's focus on developing and implementing the Action Plans of the Water Quality Protection Program of Monterey Bay Marine Sanctuary, the Nitrate Management Plan of Monterey County Water Resources Agency, the Statewide Range Water Quality Management Plan, and the Farm Bureau Nonpoint Source Initiative. Key groups working to protect water quality and water resources per these plans include the USDA's Natural Resource Conservation Service, RCDs in San Luis Obispo and Monterey Counties, the Monterey County Water Resources Agency, the Monterey Bay National Marine Sanctuary, San Luis Obispo County Water Resources Advisory Committee, the North County Water Resources Task Force, and the Groundwater Guardian program in Atascadero.

During Fiscal Year 01/02 staff worked with the State Farm Bureau Federation, the six county Farm Bureaus and the Water Quality Protection Program of Monterey Bay Marine Sanctuary to begin implementation of the Plan for Agriculture. Staff will continue to work closely on this effort, which includes water quality monitoring and tracking the implementation and effectiveness of on-farm management practices (MPs).

Several efforts are underway to encourage water quality planning by ranchers and farmers. The Statewide Range Water Quality Management Plan resulted in Ranch Water Quality Planning short courses being offered by UC Cooperative Extension. Cooperative Extension is also offering farm water quality courses through a 319h grant in cooperation with the Coalition of Central Coast County Farm Bureaus. The goal of both the farm and ranch water quality planning

courses is development and implementation of farm and ranch plans which focus on management practices to protect water quality.

Urban development throughout the watershed is having an increasing impact on water quality. Historically, Regional Boards have not been closely involved with land use decisions. In addition, the CWA Section 401 Water Quality Certification Program is severely under-funded, which limits Staff's ability to properly address many problems associated with development. Staff is developing a riparian protection policy for the Basin Plan, along with a set of standard criteria for all projects that require CWA Section 401 water quality certification. Phase II of the NPDES Storm Water Program, which requires municipalities with populations greater than 10,000 to obtain municipal storm water permits, will give the Regional Board another tool to address some of these issues. In addition, Staff is coordinating with the Upper Salinas -Las Tablas RCD on the review of County grading plans. Staff is also developing a series of workshops for small municipalities that focuses on avoiding water quality impacts during development, and compliance with Phase II of the NPDES Storm Water Program.

Staff is currently preparing an outline for a "Small Cities Workshop". The need for the workshop is based on a number of issues, including the number of proposed developments in floodplains, CWA Section 401 water quality certification compliance problems, the upcoming Phase II implementation of the U.S. EPA storm water program, and the land use changes in the Salinas watershed. The Phase II program, which goes into effect in March 2003, will require all small municipal separate storm sewer systems (MS4s) and operators of small construction sites (minimum 1 acre), through the use of NPDES permits, to implement programs and practices to control polluted storm water runoff. Most of the cities and urbanized areas in the Salinas watershed will be required to obtain Phase II coverage (the City of Salinas is currently covered under Phase I). The urbanization in many areas of the watershed is resulting in increased runoff volumes, velocities, and pollutant levels. The upper Salinas land changes are characterized by increased urbanization along the Salinas River and U.S. 101 corridors, and the proliferation of ranchettes and irrigated crops in surrounding lands. The lower Salinas land changes involve conversion of agricultural land to urban development, and more intensive irrigated farming. Urbanization involves increasing impervious surfaces (paving, buildings) which interrupts the natural cycle of gradual percolation and cleansing of water through vegetation and soil. Instead, water is collected and routed to drainage systems where large volumes of untreated runoff quickly flow to the nearest receiving water. The effects of this process include streambank scouring, sediment deposition, and downstream flooding. These effects are particularly significant because the Salinas River is included on the 303(d) list for sedimentation/siltation. The Small Cities Workshop will:

- inform small cities of the upcoming requirements to control and improve storm water runoff through Phase II;
- educate small cities about the detrimental impacts to water quality resulting from current development practices of building in floodplains and along riparian corridors;
- educate small cities about the need to keep post-construction storm water runoff volumes, velocities and timing at pre-construction levels to avoid erosion and flooding problems. This will require limitations on impervious areas and increasing storm water retention and infiltration:

• encourage small cities to more adequately address runoff, erosion, and sedimentation during the CEQA process; and

• encourage small cities to adopt land use policies that will reflect the requirement for storm water quality protection.

The most well documented groundwater problems identified for the Salinas River watershed include seawater intrusion and nitrates in the Salinas Groundwater Basin. In addition, the watershed has several impaired waterbodies listed on EPA's 303(d) list (mercury in the upper Salinas River watershed, pesticides and nutrients in the lower Salinas watershed, and erosion and sedimentation throughout). TMDLs are scheduled for all 303(d) listed waterbodies.

Although the Salinas River Watershed is one hydrologic unit, geographic, political, land use and groundwater divisions, as well as size, facilitate discussing the upper and lower areas separately. Water resource issues and watershed activities for the upper and lower portions of the Salinas River watershed are described in more detail below.

#### **Upper Salinas River Watershed**

The upper Salinas watershed begins in the La Panza Range, southeast of Santa Margarita Lake and extends northwestward past the confluences of the Nacimiento and San Antonio Rivers to where the river narrows near the town of Bradley. The main subwatersheds of the upper Salinas River include the drainages of the Estrella, Nacimiento and San Antonio Rivers. The upper Salinas overlies the Paso Robles Groundwater Basin and lies mostly in San Luis Obispo County.

Agriculture is the primary land use within the upper Salinas watershed. Grazing, pasturelands and dry land farming have historically been the dominant land use in the upper Salinas watershed, but vineyards and wineries are becoming increasingly economically important. The impacts of grazing and vineyard development have not been well quantified. However, it is well known that grazing activities have historically altered waterways through the trampling and destruction of the riparian corridor.

Urban development is occurring in the corridor along the Salinas River and Highway 101, particularly in the communities of Santa Margarita, Atascadero, Templeton and Paso Robles. Outlying suburban areas are being subdivided into one to five acre ranchettes. The population of north San Luis Obispo County is projected to increase from approximately 74,000 in 1994 to 104,650 by 2015. The increase in impervious surface area related to development and the encroachment of buildings in floodplains has increased the amount of water in the creeks, resulting in increased erosion and risk of flooding.

Every two years, the State of California publishes a compilation of water quality assessment information from the State's nine Regional Boards. Although available data are often limited, the assessment attempts to give a qualitative overview of the state of waterbodies in each region. Identified impacts to water bodies in the Upper Salinas Watershed are primarily related to mercury mining. In the 1996 Water Quality Assessment Report, the Nacimiento Reservoir is listed for metals (mercury) in fish tissue, Las Tablas Creek for sedimentation, total dissolved solids, electrical conductivity, sulfate, and nickel, and the north and south forks of Las Tablas

Creek are listed for excessive metal (mercury) concentrations. Ten percent of the Paso Robles Groundwater Basin has been assessed and listed as only partially supporting beneficial uses, primarily due to salt concentrations.

The extent of impacts from inactive mercury mines is still being assessed and an enforcement case is underway for two mercury mines. EPA has performed some work at the mines, primarily to reduce erosion by re-grading and stabilizing slopes, and the construction of a sediment detention basin. Las Tablas creek is currently undergoing a TMDL assessment for mercury.

Current information available about groundwater overdraft and nitrate contamination in the Paso Robles Groundwater Basin is incomplete and conflicting. The extent of salt build-up has also not been well quantified. A geothermal pressure aquifer is located approximately 650 feet below the surface in the Paso Robles and Templeton areas. The water contained in this pressure aquifer is hot (122 degrees +), high in total dissolved solids, and other minerals, including boron. Improper construction of wells in the area may be contributing to contamination of the upper aquifer. Regional Board staff is working San Luis Obispo County to quantify the impacts from the geothermal formation. Some of the improperly constructed wells have been located and have been sealed or retrofitted to prevent migration between the aquifers. In addition, the County is conducting a study of the Paso Robles Groundwater Basin, which is expected to be completed during 2002.

The amount of acreage under cultivation has been expanding in the area, and there is increasing urban development. Therefore, more demands are being placed on groundwater supplies. It is reasonable to conclude that the possibility of overdraft exists in some areas. It is also likely that nitrates in groundwater will increase in the future unless preventative measures are taken.

Other land uses in the upper Salinas watershed include recreational uses of the Nacimiento and San Antonio reservoirs, and military uses at Camp Roberts and Fort Hunter Liggett. Gravel and sand mining are increasing in the area. Gravel mining can have significant impacts on water quality. Staff is currently working on standard provisions for these types of operations.

#### **Lower Salinas River Watershed**

The lower Salinas River watershed encompasses the area from north of Bradley to Monterey Bay. The principle subwatershed of the lower Salinas River is the drainage of the Arroyo Seco River. The lower Salinas watershed overlies the Salinas Groundwater Basin and is entirely within Monterey County. As in the upper Salinas watershed, the dominant land use in the lower Salinas watershed is agriculture; however, irrigated cropland is much more predominant than in the upper Salinas watershed. The lower Salinas watershed encompasses the Salinas Valley, one of the most productive agricultural areas in the world, with a gross annual value of nearly \$2 billion. Urban development occurs primarily in small- to medium-sized cities along the Salinas River. The largest city, Salinas, has a population of over 100,000. Other land uses include grazing and dry land farming in the upland areas away from the floodplain, confined animal facilities, and some public land and open space.

Almost all of the water used to support the huge agricultural industry in the lower Salinas watershed comes from underlying aquifers. As a result, demand has exceeded supply in many parts of the watershed, resulting in overdraft and seawater intrusion. In addition, there is widespread contamination of the upper aquifers by nitrates. Large-scale use of groundwater for irrigated agriculture in the Salinas Valley began just before the turn of the century. As both irrigated agriculture and urban development increased during the past several decades, groundwater demand has exceeded available recharge. As a result, groundwater levels have dropped below sea level, allowing seawater to intrude from Monterey Bay into aquifers located 180 and 400 feet below ground surface. Seawater intrusion was first documented in a few wells in the Castroville area in 1932. By the 1940's, many agricultural wells in the Castroville area had become so salty that they had to be abandoned. Currently, more than 16,000 acres of agricultural land near the coast overlie groundwater too salty for agricultural use. As a result of overdraft, seawater has intruded approximately six miles inland in the most shallow regional (180-foot) aquifer, and three miles inland in the second-deepest regional (400-foot) aquifer. Thus far, the 900-foot regional aquifer is not known to be impacted by seawater intrusion.

Nitrate contamination of groundwater has been identified as a serious water quality problem in the Salinas Valley Groundwater Basin for many years. Agricultural wells indicate the presence of nitrates in groundwater throughout the Basin. Although septic systems, improper handling and storage of farm chemicals, and relatively small-scale confined animal facilities have most likely contributed to the nitrate loading, there is general agreement that crop application is the primary nitrate source. As of 1993, average nitrate concentrations in the 180-foot aquifer approached or exceeded the maximum drinking water standard (45 mg/L nitrate as NO<sub>3</sub>) in three of the Basin's four hydrologic sub-basins.

Between 1987 and 1993, average nitrate concentrations increased in the second-deepest regional (400-foot) aquifer. This signified that nitrate contamination is spreading from the upper most regional (180-foot) aquifer to a deeper zone that had been characterized by higher quality water. 319h grants have been provided to the Monterey County Water Resources Agency to conduct surveys on nitrate use and provide technical assistance to growers to modify fertilization practices when needed. Staff from our office continues to work with the MCWRA, UC Cooperative Extension and the Natural Resource Conservation District on educating and implementing BMPs to reduce nitrate concentrations.

Several water bodies in the lower Salinas watershed have been listed in the Water Quality Assessment Report as only partially supporting beneficial uses, primarily due to elevated levels of organic pesticides in shellfish and fish tissues. Both the Old Salinas River Estuary and the Salinas River Lagoon have been impacted by nutrients, pesticides and sedimentation and are listed as impaired water bodies under Section 303(d) of the Clean Water Act. Other listed water bodies are the Blanco Drain, Salinas River, Old Salinas River Channel, Espinosa Slough, Moro Cojo Slough and Tembladero Slough, due to the presence of organic pesticides in fish, shellfish and sediments, nutrient and sediment. The entire Salinas Valley Groundwater Basin, which includes four sub basins, is listed as impaired and as only partially supporting beneficial uses due to nitrate contamination and seawater intrusion.

Currently, there are four large, proposed and on-going flood control projects within the lower Salinas River watershed. Several of these projects fall under the CWA Section 401water quality certification program. Lack of adequate funding for this program has severely limited the degree to which staff can evaluate the potential effects from these large projects and maintain adequate oversight.

The Salinas River Channel Maintenance program has been underway since 1997 under an Army Corp. of Engineer Regional General Permit. The permit allows for removal of sand bars and inchannel vegetation along 93 miles of the Salinas River. The permit is held by the Monterey County Water Resources Agency (MCWRA), which then allows individual landowners to push the sand bars and vegetation to the riverbanks with bulldozers. This is thought to increase the amount of water that can flow through the river, and therefore prevent flooding. 850,000 cubic yards of sand bars and 250 acres of vegetation are removed on an average yearly basis. This river is currently undergoing a sediment TMDL. Staff is working on the next 5-year permit, which will include a monitoring program to assess potential impacts from the project.

Dredging of the Old Salinas River Channel takes place on an as needed basis. In 2001, approximately 15, 000 cubic yards of material was dredged from the channel. According to the MCWRA, the 1998 rains brought a large amount of sediment into the channel. Dredging was needed to "maintain channel capacity". Material that is removed from the channel was deposited back onto the adjacent farmland. The sediment is known to contain DDT The MCWRA has no plans to address reducing erosion, which leads to the deposit of sediment into the channel. Staff from Region 3 would like to work towards this goal.

The Reclamation Ditch (which is historically the lower portion of Gabilan Creek) begins southeast of Salinas, flows through the city of Salinas, following a path northwest through agricultural fields, out towards Tembladero Slough. Tembladero Slough is currently listed as impaired by nutrients and pesticides. From Tembladero Slough, the Reclamation Ditch flows into the Old Salinas River Channel (see above). From the Channel it flows into Moss Landing Harbor, which currently has an NPDES permit to remove sediment buildup in the harbor. Levels of DDT in the sediment exceed EPA standards and some of this sediment comes from the Reclamation Ditch. Flooding occurs along the entire 30-mile portion of the ditch during 25-year rain events. The MCWRA has a hydraulic assessment of the Reclamation Ditch comparing current flow rates and flow rates if the Ditch was lined with cement. Current proposals are based on increasing flow rates through the entire system, including a proposal to completely re-grade Carr Lake. Staff will continue to participate in meetings concerning this project.

Finally, the MCWRA dredges several creeks and lakes (some of which are farmed) in order to remove the build up of sediment. Much of the sediment is eroded from adjacent farmlands.

#### Salinas River Watershed Activities for 02/03

#### **Funded**

Watershed Management Activities (0.1 PY)

• Implement Salinas River Watershed Management Action Plan

Nonpoint Source Activities (1.4 PY) (see *Table D-5, Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Public education and technical assistance to encourage implementation of management measures including:
  - Meeting with key agencies and organizations regarding Farm Bureau Nonpoint Source Initiative pilot projects, efforts to adopt the Salinas Valley Water Project by MCWRA and irrigated agricultural operators, San Luis Obispo County water resource issues, vineyard resource management efforts (short courses, positive point system).
  - Implementing the Action Plan for Agriculture and the Nitrate Management Plan
  - Presenting at Ranch and Farm Water Quality Planning short courses
  - Meeting with developing municipalities and irrigated agriculture operators
  - Assisting with preparation and distribution of educational and assistance documents.
- Solicit and manage 319 grant projects
- Develop and implement tracking system for management measures and MP implementation

#### **Monitoring Activities**

- Monitoring Chualar Creek Pilot Project area
- River mouth monitoring through CCAMP Coastal Confluences Program
- Pesticide toxicity monitoring activities through Granite Lab Marine Pollution Studies Laboratory

#### TMDL Activities (see *Appendix Section B*, TMDL Schedule)

- Develop technical TMDL for siltation for listed waters in Salinas Watershed (0.5 PY and \$400,000 in contracts).
- Initiate development of TMDL for nutrients, pesticides and salinity for listed waters in Salinas Watershed (1.1 PY and \$400,000 in contracts).

Regulatory Activities (see *Appendix Section A*, Permit and Inspection Schedules)

- Implement existing Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities.
- Initiate implementation of Phase II NPDES storm water regulations.

#### Unfunded

Nonpoint Source Activities (1.0 PY) (see *Table D-6*, *Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Perform nonpoint source pollution inspections
- Develop strategy for use of Tiers and NPS enforcement efforts

  Develop implementation strategies based on the Paso Robles groundwater study, including impacts from mineralized geo-thermal waters.
- Develop strategy for improving municipal and construction storm water management.
- Develop strategy for regulation of in-stream mining
- Implementation of forestry management measures related to road construction and management, streamside management areas and fire management
- Develop a strategy for addressing seawater intrusion in Lower Salinas Valley.

#### Regulatory Activities (1.0 PY)

- Enforcement per the "Migden" Bill
- Expand activities in "funded" section.

#### Elkhorn Slough Watershed

The Elkhorn Slough watershed is located in Northern Monterey County and western San Benito County and includes the drainage areas tributary to Elkhorn and Moro Cojo Sloughs. The primary water quality concerns currently confronting the Elkhorn Slough watershed are erosion, pesticides, bacteria and scour. Many of these water quality concerns are generated from surrounding agricultural activities. Several Moss Landing Harbor activities, including ongoing dredging, impact the slough at its confluence with the harbor.

The problems of erosion and pesticide runoff have been identified as having significant impacts on the watershed region by the Monterey Coast Resource Conservation District and US Department of Agriculture, Natural Resources Conservation District through the Elkhorn Slough Watershed Project. The surrounding agricultural lands are a major source of eroded soils and agricultural chemicals. Soil loss from strawberry and cropped lands has resulted in sediment deposition on roads, drainage channels, and ultimately in wetland habitat in the slough area. Existing economic and social conditions of many growers in the area have prevented effective erosion control systems from being implemented on the most erodable lands in the watershed. Furthermore, public sponsored soil conservation programs have been largely ineffective in financially assisting the most limited-resource growers. There are several projects underway to address water quality issues in this area. To address soil erosion, Region 3 is currently funding the Elkhorn Slough Agricultural Outreach Project. The Monterey County RCD has received 319h funds to implement erosion and nutrient management efforts. Moss Landing Marine Labs is restoring wetlands and creeks along Moro Cojo Slough as part of a 319h project. = ther 319h project currently underway is funding development of a demonstration farm that targets outreach to Hispanic growers in the area.

Bacteria are significantly impacting water quality in the watershed as well. A number of sources in the watershed have been identified as directly attributing to this problem. Moss Landing

Harbor occupies over 600 vessels year round, many of which contain liveaboards/stayaboards who utilize substandard wastewater storage and disposal systems that contaminate waters. The slough is also home to a harbor seal haul out, and is a designated wildlife sanctuary. Coupled with the presence of a large dairy and dairy waste lagoons, and residential on-site septic ems, coliform levels in the lagoon are significantly affecting overall water quality in the slough. Chemical analysis studies conducted by Department of Fish and Game have also revealed increased levels of DDT, DDE, DDD, and toxaphene in tissues and eggshells of the Caspian tern. DFG has postulated these chemicals are introduced through remobilization and transportation of sediment by heavy water flows from both Salinas and Pajaro Rivers. These pollution sources and other factors influencing water quality have restricted shellfish growing in the slough, and substantially reduced overall water quality for the area. Currently, there are no corrective measures being implemented to address the bacteria problem.

#### Elkhorn Slough Watershed Activities for 02/03

#### **Funded**

Nonpoint Source Activities (0.1 PY)

• Participate in stakeholder and interagency meetings of Elkhorn Slough Watershed Project.

#### Monitoring Activities

• None anticipated.

#### TMDL Activities

• None anticipated.

Regulatory Activities (see *Appendix Section A*, Permit and Inspection Schedules) (0.1 PY)

• Implement existing Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities.

#### Unfunded

Nonpoint Source Activities (0.2 PY)

• Implement management measures to improve water quality impacts from bacteria in Elkhorn Slough.

Regulatory Activities (0.1 PY)

• Implement additional Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities.

#### **Coastal Watershed Management Area**

The Coastal Watershed Management Area (WMA) encompasses the coastal portions of San Luis Obispo and Monterey Counties. The major watershed areas in the Coastal WMA include Monterey Peninsula, Carmel River, Santa Lucia and Estero Bay Hydrologic Units (a portion of Hydrologic Unit 309, and all of 307, 308 and 310). The Santa Lucia Hydrologic Unit (HU) and most of the Estero Bay HU drain to the Pacific Ocean through small coastal streams. Morro Bay watershed in Estero Bay HU is one of the region's highest priority watersheds and will receive the majority of resources. However, TMDL and related activities are occurring in the San Luis Obispo Creek watershed and other watersheds such as Carmel will have some activity related to Proposition 13 projects (Carmel received a watershed planning grant under Proposition 13).

<u>Descriptions of the Watersheds</u> (see *Appendix Section D* for additional information on the watersheds)

#### Morro Bay Watershed

The primary water quality concerns confronting Morro Bay are sedimentation, nutrient enrichment, bacterial contamination, and heavy metals. Several related problems, including habitat loss and degradation, and excessive water diversion exacerbate these water quality concerns. A considerable amount of attention and funding has been focused on addressing these problems, due to environmental, economic and public interest in the health of Morro Bay.

Morro Bay is one of 28 estuaries participating in the EPA funded National Estuary Program (NEP), which provided funding to develop and implement a watershed plan (Comprehensive Conservation and Management Plan or CCMP) to address these problems. The CCMP for Morro Bay was approved in January 2001. The NEP will also provide implementation funds for several years following plan completion. This will afford a tremendous long-term opportunity to improve water quality within the watershed. The NEP is directed by the Executive Committee, which includes local, state and federal agencies, and private stakeholders. Region 3's responsibilities to the NEP include managing contracts, writing grant proposals to secure additional funding, reviewing and recommending NEP grants, working with stakeholders to develop and implement projects, coordinating with other implementation efforts in the watershed, facilitating implementation of the CCMP, providing technical expertise, attending public meetings, and participating on the Executive Committee. Priority Problems identified by the Morro Bay NEP include: sedimentation, bacterial concentrations, nutrient concentrations, fresh water reductions, heavy metal and toxics concentrations, and habitat loss.

One of 17 National Monitoring Programs is located in the Morro Bay watershed. The National Monitoring Program provides data necessary to evaluate and prioritize BMPs to develop TMDLs, make long-term management decisions, and transfer lessons learned to other watersheds. The NEP is relying on data from the National Monitoring Program to provide a foundation for its water quality monitoring program. Region 3's responsibilities to the National Monitoring Program include managing contracts, collecting and analyzing data, preparing technical and progress reports, and organizing and facilitating technical advisory committee meetings.

Listed below are water quality issues in the Morro Bay watershed:

• Sedimentation and erosion control—Sedimentation has resulted in the loss of 25% of the tidal capacity of the bay in the last century, and is considered by many as the most serious problem confronting the bay. The Natural Resources Conservation Service implements a watershed enhancement program supported by various federal funds. Region 3 implements the National Monitoring Program with 319(h) funds. This program is providing the data demonstrating the effectiveness of BMPs at reducing sedimentation, and which support development of TMDLs. It has broad application for similar lands throughout the region and statewide. The NEP will assist and support corrective actions based on various action plans. Region 3 is currently developing a TMDL for sediment (see *Table B-2*, *Appendix Section B*).

- Pathogens—Bacterial contamination in Morro Bay has increased to a point where many of the shellfish growing beds are no longer viable. Bacterial levels exceed standards for shellfish growing in half of the sampled locations in the shellfish beds, and often exceed county and state limits for body contact recreation. The predominant sources of bacteria include failing septic systems, agricultural sources, recreational boaters, and urban runoff. The SWRCB has contracted with California Polytechnic State University to conduct a DNA study to help determine sources of bacteria entering the estuary. Results of the DNA study will help target and prioritize pathogen reduction activities. Region 3, in cooperation with the NEP, has formed a technical advisory committee, and is developing action plans for reducing bacteria levels, and a monitoring plan for tracking long-term success. This group's work will be integrated into NEP action plans for future implementation. The Los Osos Community Services District (CSD) is in the design phase of developing a community wastewater collection, treatment and disposal system. The community wastewater system will contribute greatly to water quality improvement in Morro Bay. Region 3 is currently developing a TMDL for pathogens (see *Table B-2, Appendix Section B*).
- Nutrient Enrichment—Groundwater nitrate levels in Los Osos and Chorro Creek basins are elevated, sometimes in excess of drinking water standards. Nitrates and phosphates in surface water contribute to growth of nuisance algae and decreased dissolved oxygen levels in violation of Basin Plan water quality objectives. Sources include septic systems, fertilizers, urban runoff and animal waste. A study of nutrient impacts on bay resources will be undertaken as part of the NEP process, and NEP action plans specifically address solutions to this issue. Region 3 is developing the Morro Bay volunteer monitoring program and is participating in data collection on this and other water quality issues. Region 3 is also developing a TMDL for nutrients (see *Table B-2*, *Appendix Section B*). The Los Osos CSD's community wastewater project will also help address this issue.
- Heavy metals in sediments—Abandoned mines in the upper watershed bring sediments high in chromium, nickel and other metals into Morro Bay. Sediments in the upper watershed at times exceed Hazardous Waste Standards. Sediment levels near offshore boat yards are elevated with mercury and other metals. Staff is working with Camp San Luis Obispo California National Guard in efforts to reduce erosion, and thus sediment and metals from the mines. Region 3 is developing TMDLs for siltation and for metals impacting the Bay (see *Table B-2, Appendix Section B*).

Goals of the Morro Bay NEP and objectives of the Regional Board NPS program within the Morro Bay watershed include:

- 1. Slow the process of bay sedimentation through implementation of management measures which address erosion and sediment transport;
- 2. Reestablish healthy steelhead trout habitat in Chorro and Los Osos Creeks and their tributaries;
- 3. Ensure bay water quality to support viable commercial shellfish industry, safe recreational uses, healthy eelgrass beds, and thriving fish and shellfish populations;
- 4. Ensure integrity of broad diversity of natural habitats and associated native wildlife species in the bay and watershed;
- 5. Maintain watershed functional integrity through appropriate riparian corridor management, impervious surface management, fire management, and grazing management;
- 6. Protect social, economic and environmental benefits provided by the bay and watershed through comprehensive resources management planning; and
- 7. Promote public awareness and involvement in estuarine management issues through education outreach and use of volunteers in ongoing bay monitoring and other programs.

# Morro Bay Watershed Activities for 02/03

#### **Funded**

Watershed Management Activities (0.5 PY federal NEP funds)

• For the Morro Bay National Estuary Program: provide technical assistance and community outreach; facilitate stakeholder meetings; implement actions and monitoring; manage contracts; work with stakeholders to develop and implement projects, review and recommend NPS grants for funding, coordinate with other implementation efforts in the watershed; facilitate purchase, fee title and conservation easement activities.

Nonpoint Source Activities (1.0 PY) (see *Table D-5, Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Provide public education and technical assistance to encourage and facilitate implementation of management measures through National Estuary Program forums.
- Solicit and manage NPS grant projects.
- Perform site visits/inspections to facilitate and verify implementation of appropriate BMPs.
- Provide technical assistance to U. S. Army Corps of Engineers in its Habitat Restoration Feasibility Study.
- Assist with acquisition of key parcels to provide water quality and habitat benefits.
- Assist Resource Conservation District with project development and permit coordination to facilitate implementation of BMPs.

• Provide technical and funding assistance to California Conservation Corps watershed restoration crew to facilitate implementation of a variety of water quality and habitat restoration projects.

• Develop an erosion control project inventory that will identify and prioritize future project implementation.

## **Monitoring Activities**

- Manage bacteria monitoring contract to conduct DNA fingerprinting study with University of Washington and Cal Poly (\$60,000 State Shellfish Harvesting funds and 0.15 PY State Shellfish Protection Funds).
- Implement National Estuary Program and National Monitoring Program monitoring activities described in Watershed Management and Nonpoint Source Activities above.
- Provide technical support to Morro Bay volunteer monitoring program development as part of 319(h) grant
- Complete watershed characterization monitoring (CCAMP)
- Provide lead on Shellfish Technical Advisory Committee (0.15 PY State Shellfish Protection Funds).

# TMDL Activities (1.8 PY, see *Appendix Section B*, TMDL Schedules)

- For the National Monitoring Program: conduct water quality sampling, stream channel profiles, habitat assessment and rapid bioassessment; manage and analyze data and prepare annual reports; manage contracts with Department of Fish and Game and Cal Poly; plan and host annual National Monitoring Program Conference.
- Present TMDL to Board as Basin Plan Amendment for siltation for listed waters in the Morro Bay Watershed. (0.1 PY)
- Finalize technical TMDLs and conduct implementation planning and stakeholder involvement for pathogens for listed waters in the Morro Bay Watershed. (0.9 PY)
- Present TMDL to Board as Basin Plan Amendment for nutrients for listed waters in the Morro Bay Watershed. (0.1 PY)
- Develop technical TMDLs and conduct implementation planning and stakeholder involvement for metals and priority pollutants for listed waters in the Morro Bay Watershed. (0.7 PY)

## Regulatory Activities (see *Appendix Section A*, Permit and Inspection Schedules)

- Implement existing Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities.
- Initiate implementation of Phase II NPDES storm water regulations. Stormwater Management Plans are currently being developed by the local communities to meet the NPDES Phase II requirements for cleanup of urban runoff. The NEP will assist these communities with developing implementation plans and providing technical assistance.
- Regulatory activities related to Los Osos wastewater treatment system

#### Unfunded

Nonpoint Source Activities (see *Table D-6*, *Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Expand existing activities listed in the "funded" section above.
- Perform NPS enforcement when needed.
- Design and implement Self-Monitoring Test Kits Project at Ranch Planning Short Course.
- Provide technical and funding assistance for urban stormwater pollution prevention activities.
- Provide technical and funding assistance in developing riparian protection easements.
- Coordinate with and provide technical assistance to large public landowners in the watershed (San Luis Obispo County, Cal Poly, U. S. Forest Service) to promote water quality improvement projects and implementation of BMPs.
- Develop an erosion control project inventory that will identify and prioritize future project implementation.

## Regulatory Activities (0.5 PY)

• Implement additional Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities, and enforcement per the "Migden" Bill.

# San Luis Obispo Creek Watershed

The San Luis Obispo Creek Watershed encompasses the City of San Luis Obispo and extends to the Pacific Ocean near Avila Beach. The water quality problems facing this watershed include discharges associated with land development, hydromodification and agricultural land practices. Beneficial uses threatened or impaired by this water quality degradation include water contact and non-contact recreation, wildlife habitat, fish habitat and fish migration. The City and County of San Luis Obispo are currently developing a Riparian Corridor Management plan for the San Luis Obispo Creek Watershed and the Land Conservancy is developing a Watershed Enhancement Plan. Region 3 staff is actively participating in the development of both plans. Region 3 is developing TMDLs for nutrients, pathogens and priority organics (see *Table B-2*, *Appendix Section B*). These documents will contain components to address NPS issues in the watershed. Grants from Unocal-Avila Beach mitigation funds are supporting contracts addressing NPS pollution sources from urban areas, marinas and recreational boating, hydromodification, wetlands/riparian areas and land acquisition for long-term watershed protection.

## San Luis Obispo Creek Watershed Activities for 02/03

#### **Funded**

Nonpoint Source Activities (0.1 PY) (see *Table D-5, Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Provide public education and technical assistance to encourage and facilitate implementation of management measures.
- Solicit and manage NPS grant projects.
- Perform site visits/inspections to facilitate and verify implementation of appropriate BMPs.

## TMDL Activities (see *Appendix Section B*, TMDL Schedule)

• Complete "monitored assessments" and develop TMDLs for pathogens and priority pollutants for San Luis Obispo Creek (0.4 PY)

• Initiate implementation planning for San Luis Obispo Creek TMDLs (0.2 PY)

# Monitoring Activities

• Complete watershed characterization monitoring (CCAMP)

Regulatory Activities (see *Appendix Section A*, Permit and Inspection Schedules)

• Implement existing Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities.

#### Unfunded

Nonpoint Source Activities (See *Table D-6*, *Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Expand existing activities listed in the "funded" section above.
- Perform NPS enforcement when needed.

Monitoring Activities (see Section Three, CCAMP)

- Develop watershed scaled monitoring data assessments for San Luis Obispo Creek utilizing existing information and newly collected data (0.1 PY)
- Produce basic statistical analyses and graphic presentations of information collected both by the program and by others for San Luis Obispo Creek (0.1 PY)

## Regulatory Activities

• Implement additional Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities.

## Other Coastal WMA Watersheds

The Carmel River Watershed encompasses the Carmel Valley and drains directly to the Pacific Ocean. The Carmel River is an important steelhead trout habitat. The Carmel Valley Aquifer is the primary water supply for the Monterey Peninsula Area. Overdraft of the aquifer has deprived the River of adequate flow, which has impaired wildlife habitat; fish habitat and fish migration beneficial uses. Runoff and sedimentation from residential development, and agricultural and commercial activities also impairs Carmel River's beneficial uses. The majority of residential development in the Carmel River watershed is served by aging on-site wastewater systems. Watershed management planning is currently underway for the Carmel River watershed through a Proposition 13 watershed protection planning grant.

Many of the coastal-draining streams and rivers in the Santa Lucia Hydrologic Unit (such as Garrapata Creek, San Jose Creek, Little Sur River, and Big Sur River) have few identified water quality problems. Many of these watersheds contain high quality fish and wildlife habitat. Erosion and sedimentation resulting from historic timber harvesting and road construction and maintenance activities may be affecting fish habitat and other beneficial uses in the streams. Caltrans, in coordination with multiple resource agencies, has begun to develop a Big Sur Coast Highway Management Plan to address the water-quality impacts from maintenance of the Big Sur Coast Highway. Limited evidence suggests cattle grazing and failing onsite wastewater

systems may be contributing to bacterial contamination in some streams, such as San Jose Creek and Wildcat Creek. Watershed management plans have been developed for the Little Sur and Big Sur Rivers. Watershed planning is currently underway in the Garrapata Creek watershed.

# Activities in Other Coastal WMA Watersheds for 02/03

#### **Funded**

Nonpoint Source Activities (0.05 PY)

- Public education and technical assistance to encourage implementation of management measures.
- Solicit and manage NPS grant projects
- Perform site visits/inspections to facilitate and verify implementation of appropriate BMPs.

## **Monitoring Activities**

• Complete watershed characterization monitoring (CCAMP)

Regulatory Activities (see *Appendix Section A*, Permit and Inspection Schedules)

• Implement existing Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities.

#### Unfunded

Nonpoint Source Activities (0.05 PY)

- Participate in Caltrans' Big Sur Coast Highway Management Plan development
- Expand existing activities listed in "funded" section.
- Perform NPS enforcement when needed.

## Regulatory Activities

• Implement additional Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities.

#### **Southern Watershed Management Area**

The Southern Watershed Management Area falls within portions of San Luis Obispo, Santa Barbara, and Ventura Counties. The major hydrologic units include Carrizo Plain, Santa Maria, San Antonio, Santa Ynez, South Coast, and the Santa Barbara Channel Islands Hydrologic Units (311, 312, 313, 314, 315, and 316, respectively). The Santa Maria, San Antonio, and Santa Ynez Hydrologic Units drain to the Pacific Ocean through rivers that originate ten or more miles inland, to the east. The South Coast Hydrologic Unit drains to the Pacific Ocean through coastal streams. The Santa Barbara Channel Islands Hydrologic Units drain to the Pacific Ocean through streams and minor drainages on each of the islands. The Santa Maria River, the Santa Ynez River and the watersheds of the South Coast are targeted watersheds.

<u>Descriptions of the Watersheds (See Appendix Section D for additional information on the watersheds)</u>

#### Santa Maria River Watershed

The Santa Maria River watershed is located in southern San Luis Obispo County and northern Santa Barbara County. The Santa Maria River watershed includes all areas tributary to the Cuyama River, Sisquoc River, and Santa Maria River. At 1,880 square miles (1.2 Million Acres) the Santa Maria River and its tributaries drain one of the larger coastal basins of California. The Cuyama River and Sisquoc River originate in wilderness areas of the Los Padres National Forest. The Santa Maria River is formed by the confluence of the Cuyama and Sisquoc approximately 7 miles southwest of Santa Maria. The Twitchell Reservoir Dam on the Cuyama River, six miles up-river from the confluence with the Sisquoc, and the extensive levee system along the majority of the Santa Maria River are the most significant man-made structures in the watershed. The Twitchell reservoir is operated to provide groundwater recharge for water supply and flood control. The major groundwater basins are the Santa Maria Valley and the Cuyama Valley aquifers.

The upper Cuyama and Sisquoc Rivers are in a relatively natural state. From its origin to the US Forest Service boundary the Sisquoc River is a designated National Wild and Scenic River. However downstream of the Forest Service Boundary two in-stream gravel operations alter the riverbed. The upper Cuyama River watershed contains vast areas of recent marine deposits. The soils are sparsely vegetated and highly erosive. Periodic high stream flows cause large sediment loads from the upper watershed to be deposited down stream in the Twitchell Reservoir. Sediment deposits are threatening the operation capability of the dam and reducing groundwater recharge capacity. It can be assumed that reduction in sediment delivery caused by the dam and in-stream mining is threatening the ecological integrity of the estuary and extensive dune complex at the mouth of the Santa Maria River.

The lower Santa Maria River watershed is a highly altered. Below Sierra Madre Road the Cuyama River was shortened by removing meander to provide better alignment of State Highway 166. The Santa Maria River is leveed along the majority of its reach. The Santa Maria Valley is a broad flat valley protected from flooding by the River levee and a series of flood control channels and basin. The valley is intensively farmed and is home to the Cities of Santa Maria (Population 70,800) and Guadalupe (Population 6,500). The flat topography results in the majority of surface runoff from the urbanized area surrounding and including the City of Santa Maria being contained by infiltration basins versus flowing directly to the River. The Santa Maria River is the major source of recharge to the Santa Maria Groundwater basin. The Solomon (Orcutt) creek is a mainly constructed drainage in the southern most area of the lower watershed. The creek joins the Santa Maria River near its outlet to the Pacific Ocean. The area drained by Solomon Creek once contained vast wetland dominated area, but since being drained in the late 1800's has become a productive agricultural area.

Both the Santa Maria Valley and Cuyama Valley groundwater basins have impaired water quality, which is mainly attributed to nonpoint source pollution from agricultural and urban activities. The majority of groundwater data and knowledge pertains to the Santa Maria Groundwater basin. Groundwater has been impacted by nitrates and total dissolved solids (salts). Groundwater quality worsens across the Valley in the direction of flow (westward). No ongoing or contemporary study of the condition exists; however previous studies and current

point source data indicate that high levels of Total Dissolved Solids, sodium, chloride, and nitrate are impacting beneficial uses of groundwater across the valley. Significant changes in farming practices have occurred in recent years (e.g. drip irrigation, more prudent use of chemicals), at the same time population continues to grow. A comprehensive look at historic and current groundwater data is needed to determine what affect these and other changes (e.g. wet/dry climate cycles, natural mineral sources) are having on the groundwater basin. Surface water impacts are less well defined; currently the most evident surface water issue is reduction in Twitchell Reservoir capacity by sedimentation.

Several oilfields have operated in this watershed for many years. Although evaluation of groundwater data is limited, only localized problems from petroleum have presented themselves. One case has resulted in a significant discharge of petroleum, Unocal's Guadalupe Oil Field. This site released diluent, a refined petroleum product, from a pipeline system over a 40-year period. Both groundwater and surface waters in the vicinity of the site have been contaminated by the leaks. A monetary civil settlement, reached between Unocal and the State in July 1998, included \$15 million to fund water quality projects. This money is being distributed as grants to projects that refine the current assessment of nonpoint source impacts (which is preliminary) and/or implement appropriate actions to correct identified problems. The first round of projects to be funded was presented to Region 3's Board in May 1999. Staff efforts for the next two years will focus on directing and coordinating the current and proposed projects to assess and implement watershed management actions.

Priority problems in the Santa Maria River watershed include nitrate contamination of groundwater, sedimentation (build-up in Twitchell Reservoir) and habitat loss.

The Southern WMA's goals in the Santa Maria watershed include:

- 1. Facilitate the construction of a comprehensive groundwater database for the Santa Maria Valley groundwater basin;
- 2. Institute a sediment management plan for Twitchell reservoir;
- 3. Develop and implement the Santa Maria River Estuary Enhancement Plan;
- 4. Maintain watershed functional integrity through appropriate riparian corridor, impervious surface, fire and grazing management;
- 5. Protect social, economic and environmental benefits provided by the watershed and constructed flow systems through comprehensive resources management planning; and
- 6. Promote public awareness and involvement in estuarine management issues through education outreach using volunteers to initiate river and estuary monitoring programs.

# Santa Maria River Watershed Activities for 02/03

#### **Funded**

Nonpoint Source Activities (0.1 PY) (see *Table D-5*, *Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Provide public education and technical assistance to encourage and facilitate implementation of management measures.
- Solicit and manage NPS grant projects.
- Perform site visits/inspections to facilitate and verify implementation of appropriate BMPs.
- Provide technical assistance and participate in formation of a local watershed group.
- Develop scopes of work and initiate and manage contracts for nonpoint source Implementation projects funded with Unocal settlement money.
- Oso Flaco contract

Monitoring Activities (see Section Three, CCAMP)

- Complete watershed characterization monitoring and begin characterization report writeup
- Develop scopes of work and initiate and manage contracts for monitoring projects funded with Unocal settlement money.
- River mouth monitoring through CCAMP Coastal Confluences Program

#### TMDL Activities

None anticipated.

Regulatory Activities (see *Appendix Section A*, Permit and Inspection Schedules)

- Implement existing Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities.
- Initiate implementation of Phase II NPDES storm water regulations.

#### **Unfunded**

Nonpoint Source Activities (see *Table D-6*, *Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Expand existing activities listed in the "funded" section above.
- Perform NPS enforcement when needed.

Regulatory Activities (0.2 PY)

• Implement additional Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities, and enforcement per the "Migden" Bill.

#### Santa Ynez River Watershed

The Santa Ynez River watershed is located in Santa Barbara County and includes Lake Cachuma, the Santa Ynez River and other smaller tributaries within the area. The major areas of concern regarding water quality within the watershed include effects of water rights adjudication,

erosion, sedimentation, flood control and habitat loss (especially for steelhead). Urban development, increased groundwater pumping, ranching, irrigated agriculture, and expanding recreational use all contribute to the degradation of water quality.

The Santa Ynez River Fish Management Plan has been developed to improve the steelhead fishery through habitat restoration, increased flows, etc. NRCS (define NRCS) is implementing a range management plan to control resultant nonpoint source pollution along tributaries to the Santa Ynez River. Historically, Region 3 staff has been active on the technical advisory committees for both of these projects, and this continues to be a goal for the Southern Watershed Unit.

This watershed needs initiation of an updated assessment of nonpoint source impacts in the watershed in order to better target appropriate actions to correct identified problems.

# Santa Ynez River Watershed Activities for 02/03

#### **Funded**

Nonpoint Source Activities (0.2 PY) (see *Table D-5, Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Public education and technical assistance to encourage implementation of management measures including meeting with the Technical Advisory Committee for the Santa Ynez River Fish Management Plan, the Steering Committee for the Lompoc Groundwater Management effort, and NRCS regarding rangeland management.
- Solicit and manage NPS grant projects.
- Perform site visits/inspections to facilitate and verify implementation of appropriate MPs.

Monitoring Activities (see Section Three, Central Coast Ambient Monitoring Program)

- Complete watershed characterization report
- River mouth monitoring through CCAMP Coastal Confluences Program

#### TMDL Activities

• None anticipated

Regulatory Activities (see *Appendix Section A*, Permit and Inspection Schedules)

- Implement existing Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities.
- Initiate implementation of Phase II NPDES storm water regulations.

## **Unfunded**

Nonpoint Source Activities (see *Table D-6*, *Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Expand existing activities listed in the "funded" section above.
- Perform NPS enforcement when needed.

Regulatory Activities (0.2 PY)

• Implement additional Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities, and enforcement per the "Migden" Bill.

## South Coast Watersheds

The South Coast watersheds consist of numerous coastal-drainage streams, which originate on the upper slopes of the south flank of the Santa Ynez mountain range in Santa Barbara County. The County's Environmental Health Services Department (EHS) conducts routine monitoring of the ocean near creek mouths for bacteria. EHS has frequently found bacteria in violation of water quality standards, and has subsequently closed beaches to public access. Beach closures sparked substantial public outcry and subsequent efforts to improve water quality in the creeks and near shore ocean. City and County governments funded a major effort, Project Clean Water, designed to identify the sources of bacterial pollution, and develop and implement control measures. In addition to staffs of city and county governments, the Project Clean Water organization includes a number of working groups associated with potential pollution sources such as, illegal and unsanitary encampments, failing septic systems, sewer system leaks, and so on. Working groups are comprised of public and private members. The Project has identified many creeks where pollution from non-point sources could be reduced by stream restoration and bank stabilization projects. Creeks identified as needing the most attention, with identified improvement projects, include the following creeks: Arroyo Burro (three locations), Mission (six locations), Rincon (septic to sewer conversion), Carpinteria (four locations), and Arroyo Quemado Creeks (avian population control). Project Clean Water has identified other creeks where stream restoration, riparian restoration, and other actions designed to reduce pollution from non-point sources and improve water quality via other means such as shading. Projects of this type have been identified for the following Creeks: Gaviota (two locations), Refugio (two locations), Devereux (two locations), Atascadero (three locations), Maria Ygnacio (three locations), Cieneguitas (two locations), Las Positas, Laguna, and El Estero. Region 3 staff has participated, and will continue to participate, in Project Clean Water groups working on water quality issues including wetlands and riparian restoration, septic tank management, illegal encampments, and sewer system spills. Also, several of the most acute problems resulting in beach closures are being addressed through projects funded by Proposition 13 and Clean Beaches Initiative grants.

## South Coast Activities for 02/03

## **Funded**

Nonpoint Source Activities (0.1 PY) (see *Table D-5*, *Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Public education and technical assistance to encourage implementation of management measures by participating on working groups of city, the county's Project Clean Water and Wetlands Recovery Group.
- Solicit and manage NPS grants (Clean Beaches Initiative, Proposition 13, CWA 319(h)
- Perform site visits/inspections to facilitate and verify implementation of appropriate MPs

Monitoring Activities (see Section Three, Central Coast Ambient Monitoring Program).

- Final draft of watershed characterization report
- River mouth monitoring through CCAMP Coastal Confluences Program

## **TMDL** Activities

None anticipated

Regulatory Activities (see *Appendix Section A*, Permit and Inspection Schedules)

- Implement existing Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities.
- Initiate implementation of Phase II NPDES storm water regulations.

#### Unfunded

Nonpoint Source Activities (0.5 PY, see *Table D-6*, *Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

• Expand existing nonpoint source activities listed in "funded" section.

Regulatory Activities (0.2 PY)

• Implement additional Non-chapter 15, NPDES, and Clean Water Act Section 401 water quality certification activities, and enforcement per the "Migden" Bill.

#### Other Southern WMA Watersheds

Santa Barbara Channel Islands: Cattle grazing occurred historically on the Channel Islands and was allowed to continue when the National Parks Service assumed operation and management of the lands. The grazing caused erosion from steep hillsides. Poorly managed roads also contributed to the erosion. After working with the National Park Service and grazing operators to improve conditions, the Region 3's Board issued a Cease and Desist Order to halt excessive sedimentation. This was followed by a third-party lawsuit and then a settlement agreement that resulted in removal of the cattle. Additionally, the National Park Service is implementing a riparian zone recovery plan and a road management plan. Region 3 staff will provide technical assistance as needed to facilitate implementation of the settlement agreement. Region 3's activities on the Santa Barbara Channel Islands represent implementation of Tier III of the NPS implementation strategy.

<u>Carrizo Plain</u>: The Carrizo Plain Hydrologic Unit (311) is located in the eastern portion of San Luis Obispo County. This is a geologically and biologically unique area. A large portion of the land is protected in the Carrizo Plain Natural Area (CPNA), a cooperative effort since 1985 between the Bureau of Land Management, the California Department of Fish and Game, and The Nature Conservancy. The Carrizo Plain is a basin-shaped watershed without an outlet to the ocean. Runoff within the central Carrizo Plain forms Soda Lake, a 3,000-acre ephemeral alkaline lake at the center of the Plains. Soda Lake provides important habitat for migratory birds and is one of the largest undisturbed alkali wetlands in California. Without an outlet, water from the lake evaporates, leaving behind residual sulfates and carbonates. Erosion by southern

tributaries of the Salinas River has resulted in capture of the more northerly portions of the Plain, so that this area now drains to the Salinas River. The CPNA is 250,000 acres of relatively undisturbed habitat. Elsewhere on the Plain, cattle ranching and dry land farming are prevalent. The Carrizo Plain supports many endangered, threatened and rare plant and animal species and contains some of the last remnants of the once vast San Joaquin Valley grassland habitat. A number of wells in the Carrizo basin have exhibited high levels of nitrates and total dissolved solids. Significant acreage in this area is being used for row crop agriculture, and several surface water monitoring sites are proposed to enable evaluation surface water quality and its potential impact on groundwater resources.

# Activities in Other Southern WMA Watersheds for 02/03

#### **Funded**

Nonpoint Source Activities (0.05 PY) (see *Table D-5*, *Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Public education and technical assistance to encourage implementation of management measures.
- Solicit and manage NPS grant projects
- Perform site visits/inspections to facilitate and verify implementation of appropriate BMPs.
- Provide technical assistance to facilitate implementation of the settlement agreement for the Santa Barbara Channel Islands.

Regulatory Activities (see *Appendix Section A*, Permit and Inspection Schedules)

• Implement existing Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities.

#### Unfunded

Nonpoint Source Activities (0.5 PY) (see *Table D-6*, *Appendix Section D* Nonpoint Source Program Information and Schedule of Activities)

- Expand existing activities listed in "funded" section.
- Perform NPS enforcement when needed.

#### **Regulatory Activities**

• Implement additional Non-chapter 15 WDR, NPDES, and Clean Water Act Section 401 water quality certification activities.

## **SECTION THREE. REGION-WIDE ACTIVITIES**

The broad goals and objectives of Region 3's watershed management approach were outlined in *Section One*. Described below are the various nonregulatory and regulatory programs and tools that are being used to support and implement watershed management. This section identifies goals and objectives for individual programs, along with high priority region-wide activities planned to meet both programmatic and watershed management goals and objectives for the region and in targeted watersheds.

## Watershed Management Initiative (WMI)

## Description

Each region has 1 PY of baseline resources for a WMI coordinator, who is responsible for coordinating the region's watershed management activities. The description that follows indicates that more effort is needed to perform high priority activities than exists in the baseline budget. If additional resources do become available, the activities listed in order of priority would be the next efforts Region 3 would propose to fund. Although Region 3 has received addition resources from Proposition 13 (1 PY) for activities related to soliciting, reviewing and ranking projects, and developing and managing contracts, workload related to contract management of seven new contracts for 02/03, as well as involvement with several new Clean Beaches Initiative projects, will use all of those resources and some WMI resources as well. As a result, less time will be available to perform watershed assessment or outreach activities. In addition, participation of the WMI coordinator on the SWIM II Development project will reduce time available for watershed activities. Therefore, some activities that were included in the "funded" category for 01/02 have been moved to "unfunded" or reduced in level of effort.

## High Priority WMI Activities for 02/03

## **Funded**

- Attend statewide WMI coordinating meetings; prepare WMI Chapter Updates; prepare Annual Report on Regional WMI Activities for Legislature. (0.2 PY)
- Facilitate public involvement and implementation of nonpoint source management measures where needed; provide staff support for public outreach efforts through development of materials and presentations (0.2 PY)
- Contract management of NPS projects (0.2 PY)
- Solicitation and selection of projects under Proposition 13 (0.2 PY)
- Participate on State Board SWIM II Development Committee (0.1 PY)
- Assess priorities and current and planned activities implemented on a region-wide basis and in individual watersheds to determine which activities need additional support and resources

(e.g. TMDLs, monitoring, storm water regulation, SLIC sites such as drug labs); based on assessment, recommend revisions to region-wide and watershed-specific watershed management strategies, if needed. (0.1 PY)

#### Unfunded

- Provide coordination between programs and other agencies including preparing five-year strategies, identifying funds, preparing annual workplans and grant applications, attending intra- and interagency meetings; improve coordination with the Resources Agency's Coastal Salmon Protection efforts, Coastal Commission's Coastal Nonpoint Pollution Program efforts, the State Board Water Rights Division issues that relate closely to water quality and the Department of Pesticide Regulation's involvement with TMDLs. (0.2 PY)
- Facilitate implementation of unfunded activities for the Salinas, Pajaro and South Coast Watersheds through coordination, education, training, soliciting funds, etc. (0.5 PY)
- Facilitate establishment of volunteer monitoring programs, urban creek cleanup and protection, general watershed management education or implementation projects. (0.5 PY)
- Improve program coordination and consistency on region-wide basis to improve watershed management (e.g. transfer current permit streamlining for implementation of water quality practices in Elkhorn Slough area to other watersheds) (0.5 PY).
- Assess status of fish habitat for coastal streams throughout the region. Prioritize streams based on need for fish habitat protection or improvement. Recommend and facilitate implementation of appropriate actions. (0.5 PY)

#### Nonpoint Source Pollution Management

#### Description

Nonpoint source pollution is the leading cause of water quality impairment in California. California's Nonpoint Source (NPS) Pollution Control Program has been in effect since 1988. In January 2000 the lead State agencies for the NPS Program, the SWRCB and CCC in coordination with the RWQCBs, released the "Plan for California's Nonpoint Source Pollution Control Program" (NPS Program Plan). The NPS Program Plan enhances the State's efforts to protect water quality, and to conform to the Clean Water Act Section 319 (CWA 319) and Section 6217 of the Coastal Zone Act Reauthorization Amendments (CZARA). The State's long-term goal is to "improve water quality by implementing the management measures identified in the California Management Measures for Polluted Runoff Report (CAMMPR) by 2013." A key element of the Program is the "Three-Tiered Approach," through which self-determined implementation is favored, but more stringent regulatory authorities are utilized when necessary to achieve implementation.

In February 2000 the SWRCB and CCC submitted the NPS Program Plan to the USEPA and NOAA for federal approval. A condition for approval was a clear commitment by the RWQCBs to implement the NPS Program Plan as expressed in their WMI chapters. Because California's efforts to control NPS pollution have been severely under funded, an important part of the program implementation is a better articulation of each Region's problems and resource needs. Information set forth in this document outlines the Region's NPS efforts to deal with its NPS problems consistent with the NPS Program Plan and its resource needs.

Many of the problems in the watersheds in Region 3 are due to nonpoint source pollution. This is evidenced by the summary of water quality assessment information provided in *Section Two* in the text descriptions of individual watersheds and in *Table D-1*, *Appendix Section D* for all affected waters in the Region. *Table D-1*, *Appendix Section D* indicates which general sources of pollution or management measure categories (from the California Management Measures for Polluted Runoff Report, 1999) are causing the pollution problems identified. The categories of management measures most applicable to land uses and water quality problems in Region 3 include Agriculture, Urban Areas, and Hydromodification.

Region 3's overall nonpoint source strategy is consistent with California's Nonpoint Source (NPS) Pollution Control Program. This program has been in effect since 1988. A key element of the program is the "three-tiered approach," through which self-determined implementation is favored, but more stringent regulatory authorities are utilized when necessary to achieve implementation. The NPS program is being upgraded to enhance efforts to protect water quality, and to conform with Clean Water Act Section 319 and Section 6217 of the Coastal Zone Act Reauthorization Amendments (CZARA). The lead State agencies for the NPS program are the State Board and the California Coastal Commission.

The specific approach to developing and implementing nonpoint source pollution strategies in high priority and targeted watersheds is consistent with the three-tiered approach. Simply put, the approach is to begin working with landowners to encourage voluntary or self-determined implementation of management practices (MPs) (Tier I) for two to three years usually through a community organization. Identifying common areas of interest is frequently an effective methodology. If landowners are not responsive, staff may develop a Management Agency Agreement (MAA) or Memorandum of Understanding (MOU), consider issuing WDRs, or consider a Basin Plan amendment to encourage implementation of MPs (Tier II). Finally, staff may issue WDRs with effluent limitations, then oversee compliance to gain implementation of MPs (Tier III) if previous efforts are unsuccessful.

Region 3 staff has been successful at getting MPs developed and implemented by operating mostly in Tiers I and II. Tier III has been used infrequently. Region 3 staff tries to assess and prioritize problems in a given watershed based on the same four factors that were applied to determine the high priority watersheds: magnitude of the problem, stakeholder involvement, inter-agency coordination, existing efforts. Staff assesses the appropriate stakeholders to partner with and/or address first. In some cases these are public agencies and in other cases they may be private parties. Public agencies often have more authority and resources available to address a given problem than private landowners. On the other hand, private landowners are more likely to have direct control over their own land uses and activities. Self-determined compliance

provides greater opportunity to succeed with development and implementation of MPs and often lays the groundwork for transferring the pollution control strategies to other parties not originally involved. Additionally, Region 3 has targeted land uses or geographic areas with existing institutional and community action, acceptability, and/or willingness to partner in addressing problems. Staff attempts to take advantage of opportunities to coordinate with existing internal efforts as well.

MPs currently encouraged and required to address nonpoint source pollution are based on management measures related to the management measure categories (from the California Management Measures for Polluted Runoff Report, 1999) identified as causing most of the pollution problems in the various watersheds. Additionally, the MPs are being encouraged and required in accordance with existing "action strategies" for watersheds identified as priorities in the Federal Clean Water Action Plan Unified Watershed Assessment. The intent of the Clean Water Action Plan is to encourage implementation of "action strategies" that have the community and technical support necessary to achieve significant environmental results. In Region 3, all of the targeted watersheds in the WMI are also designated as priority watersheds by this federal process. Therefore, the descriptions of planned activities for each WMI–targeted watershed in *Section Two* include references to management plans and/or planning efforts that identify "action strategies".

# NPS Program Goals and Objectives

Region 3's goals for implementing the NPS program include support for the overall goals of the WMI and the following program goals:

- 1. The state-wide goal to improve water quality by implementing the management measures identified in the California Management Measures for Polluted Runoff Report by 2013; and the following region-wide goals;
- 2. Continue or increase current level of nonregulatory activities in targeted watersheds;
- 3. Expand nonpoint source pollution management efforts that address impacts of sedimentation, nutrients and pesticides from agricultural activities in the Salinas River Watershed;
- 4. Expand nonpoint source pollution management throughout the region; and
- 5. Expand outreach activities to address urban runoff issues, including sedimentation and pathogens.

Objectives linked to the region-wide goals are shown in *Table D-2 in Appendix Section D* for the targeted watersheds and the Region. The region-wide objectives linked to these goals include:

- Provide public education and technical assistance that results in implementation of existing management measures or identification and prioritization of new management measures.
- Solicit, recommend and manage projects to assess problems, implement management measures and measure effectiveness with various grant fund sources including, but not limited to, Nonpoint Source Program Pass-through grants (319), State Revolving Funds, USDA Environmental Quality Incentives Program, and Proposition 13.
- Develop NPS inspection program and conduct inspections at geographic locations or facilities presumed to be significant sources of NPS pollution in each targeted watershed.

 Facilitate implementation of urban runoff management programs or appropriate components (e.g. ordinance adoption, general plan revision, project conditions, construction and industrial inspection programs) in urbanizing municipalities, based on Model Urban Runoff Program (MURP) "How-To Guide."

- Develop and initiate preliminary use of a management measure tracking system beginning in the Farm Bureau's Nonpoint Source Initiative pilot project areas and expanding throughout region;
- Facilitate NPS Tier II and III activities as appropriate particularly in the following ways:
  - a) Implement management measures for agricultural sources of nonpoint source pollution by issuing minor ACLs or CAOs when discharges are observed, and by reviewing and providing conditions in CWA 401 water quality certifications or in Waste Discharge Requirements if applicable.
  - b) Implement management measures for urban sources of nonpoint source pollution using the following tools: 1) reviewing CEQA documents, providing comments to lead agency, providing technical assistance to lead agency and project applicants regarding conditions on projects and incorporation of mitigation measures into local and State permits (e.g. grading permits, storm water discharge permits, waste discharge requirements), 2) reviewing and providing conditions in CWA 401 water quality certifications, 3) by issuing minor ACLs or CAOs when discharges are observed (e.g. at construction sites), and 4) including management measures in Waste Discharge Requirements and storm water discharge permits.
  - c) Implement management measures for in-stream gravel mining by issuing minor ACLs or CAOs when discharges are observed, reviewing and providing conditions in CWA 401 water quality certifications and in Waste Discharge Requirements, and by recommending and approving implementation of management measures as mitigation projects required in-lieu of Administrative Civil Liabilities.
  - d) Implement management measures for forestry by reviewing and conditioning Timber Harvest Plans per the MAA with the Department of Forestry.

To be consistent with the watershed management framework, priority activities are those to assess and address priority problems in high priority and targeted watersheds. Additional information is included in *Tables D-1 through D-7*, *Appendix Section D*. Activities prioritized for grant funding are located in *Table D-7*, *Appendix Section D*.

High Priority NPS Activities for 02/03 (also see Section Two for watershed-specific activities)

Region 3 has limited resources available for these region-wide nonpoint source activities. The description that follows indicates that much more effort is needed to perform high priority activities than exists in the baseline budget. If additional resources do become available, activities identified as *unfunded* and listed in order of priority would be the next efforts Region 3 would propose to fund with those additional resources.

#### **Funded**

• Participate in development and implementation of State Nonpoint Source Program Action Plans; participate in state-level meetings to develop, facilitate and track implementation of

nonpoint source management measures; attend State Board Nonpoint Source Program Roundtable meetings; attend training and workshops both for professional development and as a trainer/speaker.

- Throughout Region, encourage implementation of management measures by collecting and exchanging information on types of management measures to implement, methods of implementation, current level and location of implementation, progress with existing implementation efforts, prioritization of areas that need management measures. This will be done mostly by participating in meetings (including interagency meetings, public workshops, site visits).
- Throughout the Region, solicit and recommend potential projects to assess problems, implement management measures, and measure effectiveness of management measures with various fund sources including, but not limited to, Nonpoint Source Program pass-through grants, State Revolving Funds, Environmental Quality Incentives Program, and Proposition 13 subaccounts. Favorable projects will be those consistent with the identified priority actions to address priority problems (per WMI and/or Clean Water Action Plan "Action Strategy") for the watershed where the project is proposed and/or those that are most likely to result in measurable water quality improvement.
- Establish and manage contracts associated with these projects including development of scopes of work, administrative processing, technical assistance, participating on project technical advisory committees, encouraging technology transfer, assuring implementation of management measures and/or measurement of effectiveness as appropriate.
- Perform nonpoint source inspections to verify implementation of management measures in an appropriate and effective manner.

#### Unfunded

- Recommend inspection follow-up actions to correct, improve, and prevent nonpoint source
  pollution problems identified. Recommendations should be in one of the following forms:
  work informally with owner/operator to implement appropriate measures, send 13267 letter
  asking owner/operator for documentation of problem and corrective measures, issue minor
  ACL or CAO if discharges observed, and/or issue Waste Discharge Requirements if
  applicable. Perform follow-up inspections to insure appropriate measures implemented. (1
  PY)
- Establish municipal urban runoff programs by meeting and working directly with urbanizing municipalities to develop and implement appropriate components of urban runoff programs (e.g. ordinance adoption, general plan revision, project conditions, construction and industrial inspection programs). Base approach on MURP "How-To Guide." (1 PY)
- Expand use of pilot MP/MM monitoring and tracking system to assess effectiveness of nonpoint source efforts and TMDLs. (0.2 PY)

• Conduct Tier II and Tier III nonpoint source activities as needed to implement management measures for agricultural sources, urban sources, in-stream gravel mining, and forestry sources of nonpoint source pollution. Enforcement may include 1) reviewing CEQA documents, providing comments to lead agency, providing technical assistance to lead agency and project applicants regarding conditions on projects and incorporation of mitigation measures into local and State permits (e.g. grading permits, storm water discharge permits, waste discharge requirements), 2) reviewing and providing conditions in Clean Water Act 401 water quality certifications, 3) by issuing minor ACLs or CAOs when discharges are observed (e.g. at construction sites), and 4) including management measures in Waste Discharge Requirements and storm water discharge permits. (0.5 PY)

# Central Coast Ambient Monitoring Program (CCAMP)

# **Description**

The mission of the Central Coast Ambient Monitoring Program (CCAMP) is to collect, assess, and disseminate scientifically-based water quality information to aid decision makers and the public in maintaining, restoring, and enhancing water quality and associated beneficial uses.

The Central Coast Ambient Monitoring Program (CCAMP) monitoring strategy for watershed characterization divides the Region into five watershed rotation areas and conducts synoptic, tributary-based sampling each year in one of the areas. Over a five-year period all of the Hydrologic Units in the Region are monitored and evaluated. In addition to the synoptic site selection approach, additional monitoring sites are established in each rotation area to provide focused attention on watersheds and waterbodies known to have water quality impairments. Sampling is also conducted monthly at approximately 30 "integrator" sites located just above tidal influence, through the CCAMP Coastal Confluences monitoring program. Monitoring is continuous at these sites.

The CCAMP strategy of establishing and maintaining permanent long term monitoring sites provides a framework for trend analysis and detection of emergent water quality problems. CCAMP uses a variety of monitoring approaches to characterize status and trends of coastal watersheds, including:

Rapid Bioassessment using benthic invertebrates
Conventional water quality analysis
Analysis of tissue, water, and sediment for organic chemicals and metals
Toxicity evaluations
Habitat assessments
Sedimentation evaluations

In order to develop a broad picture of the overall health of waters in Region 3, a similar baseline monitoring study design is applied in each watershed. This provides compatibility across the Region and allows for prioritization of problems across a relatively large spatial scale. However, it is important that each watershed analysis incorporate additional, watershed specific knowledge into the study design, so that questions which are narrower in focus can also be addressed. For example, in watersheds where Total Maximum Daily Load assessments are being undertaken, other program funds can be applied to

support additional monitoring for TMDL development. Special studies are undertaken as funding and staffing permits to further focus monitoring on questions of interest specific to individual watersheds.

Watershed characterization involves three major components: acquisition and evaluation of existing data, monitoring of surface water and habitat quality, and developing a watershed assessment based on findings.

## Initial Data Acquisition and Evaluation

Existing sources of data are evaluated for pollutants of concern, historic trends, data gaps, etc. These include Department of Health Services, USGS, Department of Fish and Game, Department of Pesticide Regulation, Toxic Substances Monitoring Program, STORET, NPDES discharge data, and other sources. Data from County, City, and other selected programs are acquired. Existing data are evaluated for standard exceedences, pollutant levels that warrant attention, beneficial use impairment, and other pertinent information.

## Watershed Monitoring

In order to provide water body assessments on the USEPA mandated reporting cycle, the Region is divided into five watershed groups based on scientific, logistic, and financial considerations. Figure 3.1 below shows these watershed divisions. Figure 3.2 shows the specific waterbodies within each rotation area which are monitored by the program at the current level of funding. This component of the CCAMP study design involves collection of surface water quality and habitat data which will provide information at a level of detail suitable for assessment reporting requirements, including Clean Water Act 305(b) and 303(d), and for supporting various statewide programs and initiatives (e.g. Nonpoint Source Program, Watershed Management Initiative).

Sampling sites are located at the primary discharge point of the watershed, and at the discharge of each major tributary into the watercourse which drains the watershed. For the purposes of site selection a "major tributary" is defined as a watercourse which drains a minimum percentage of the rotation area or which is the major watercourse that drains a Hydrological Area, Hydrological Subarea, or watershed of special concern. Some sites are also located above and below areas of significant human activity, including urban development, agriculture, and point source discharges. Site selection is constrained by site accessibility. In order to provide safe, all-weather access, conventional water quality sites are preferentially located at bridges where sampling devices can be suspended during periods of high flow. Benthic invertebrate sites are located upstream of conventional water quality sites, but out of the immediate influence of bridges. Other sampling activities are conducted at a subset of conventional water quality sites.

Basic characterization includes collection of water chemistry, sediment chemistry, toxicity, tissue bioaccumulation, habitat assessment, and bioassessment data, as well as acquisition of basic GIS data layers, where available, that describe land use, geology, soils, discharge locations, known problem sites, etc. Funding dictates both sample count and the number of sites which can be characterized using a complete "suite" of sampling approaches.

# **CCAMP Goals and Objectives**

The goals of the Central Coast Ambient Monitoring Program are to: 1) determine the status and trends of surface, ground, estuarine, and coastal water quality and associated beneficial uses; 2) provide water quality information to users in accessible forms to support decision making; and 3) collaborate with other monitoring programs and sources to promote effective and efficient monitoring.

Region 3 staff is coordinating the Region's monitoring program efforts with the concurrent efforts of State Board staff, the Surface Water Ambient Monitoring Program (SWAMP), and the Monitoring and Assessment Roundtable, to ensure that monitoring activities are coordinated wherever possible.

Figure 3.1. Watershed Sampling Rotation Schedule

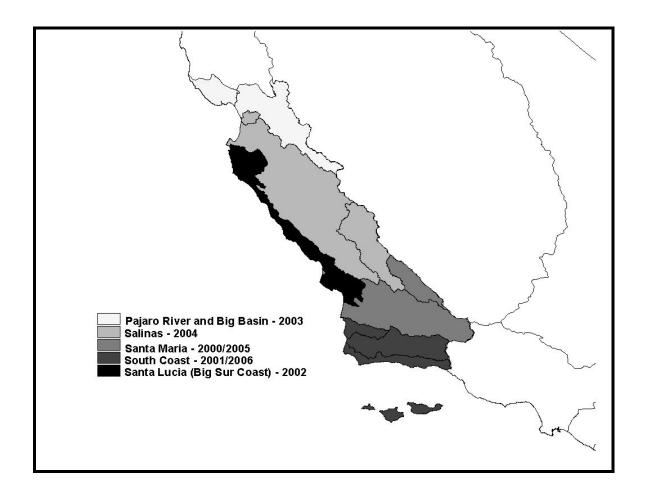


Table 3.1. Waterbodies Monitored as part of Watershed Characterization

#### Hydrologic Waterbody SubArea Hydrologic Waterbody SubArea

# Pajaro and Big Basin Area Watershed Rotation

30411 Scott Creek	30510 Salsipuedes Creek
30411 Waddell Creek	30510 Watsonville Slough
30412 Bear Creek	30520 Chesbro Reservoir
30412 Boulder Creek	30520 Uvas Reservoir
30412 Loch Lomond	30530 Llagas Creek
30412 Newell Creek	30530 Tequisquita Slough
30412 San Lorenzo River	30530 Uvas Creek
30412 Santa Cruz Harbor	30540 Pacheco Creek
30412 Zayante Creek	30540 Pacheco Lake
30413 Aptos Creek	30550 Clear Creek
30413 Soquel Creek	30550 Hernandez Reservoir
30413 Valencia Creek	30550 Laguna Creek
30420 Gazos Creek	30550 San Benito River
30510 Corralitos Creek	30550 Tres Pinos Creek
30510 Harkins Slough	30600 Carneros Creek
30510 Pajaro River	30600 Elkhorn Slough
30510 Pinto Lake	

# **Salinas Area Watershed Rotation**

30600 Espinosa Lake 30920 Quail Creek	
30600 Moro Cojo Slough 30930 Arroyo Seco River	
30600 Moss Landing Harbor 30930 Salinas River (Mid)	
30700 Carmel River 30940 San Lorenzo Creek	
30700 Tularcitos Creek 30950 Monterey Harbor	
30800 Big Creek 30970 Alisal Creek	
30800 Big Sur River 30970 Topo Creek	
30800 Garapata Creek 30981 Atascadero Creek	
(309)	
30800 Limekiln Creek 30981 Nacimiento River	
30800 Little Sur River 30981 Salinas River (Uppe	er)
30800 Mill Creek 30981 San Antonio River	
30800 Willow Creek 30981 Santa Margarita La	ke
30910 Old Salinas River 30982 Nacimiento Lake	
30910 Salinas Reclamation 30983 San Antonio Lake	
Canal	
30910 Salinas River (Lower) 31700 Cholame Creek	
30910 Tembladero Slough 31700 Estrella River	
30920 Gabilan Creek	

Figure 3-2, cont. Waterbodies Monitored as part of Watershed Characterization

#### Santa Lucia Area Watershed Rotation

31011 San Carpoforo Creek 31022 San Bernardo Creek 31012 Arroyo de la Cruz Creek 31022 San Luisito Creek 31013 Pico Creek 31022 Walters Creek 31013 San Simeon Creek 31023 Los Osos Creek 31014 Santa Rosa Creek 31023 Warden Creek 31015 Villa Creek 31024 Laguna Lake 31024 Prefumo Creek 31016 Cayucos Creek 31017 Old Creek 31024 San Luis Obispo Creek 31024 Stenner Creek 31017 Whale Rock Reservoir 31018 Toro Creek 31025 Coon Creek 31021 Morro Creek 31026 Pismo Creek 31022 Chorro Creek 31031 Arroyo Grande Creek 31031 Lopez Lake 31022 Chumash Creek 31031 Los Berros Creek 31022 Dairy Creek 31022 Pennington Creek

#### Santa Maria Area Watershed Rotation

31100 Soda Lake 31220 LaBrea Creek 31210 Blosser Channel 31220 Sisquoc River 31210 Bradley Channel 31230 Alamo Creek 31210 Bradley Cyn Creek 31230 Cuyama River 31210 Little Oso Flaco Creek 31230 Huasna River 31210 Main Street Cannal 31230 Salisbury Creek 31230 Twitchell Reservoir 31210 Nipomo Creek 31210 Orcutt Solomon Creek 31300 San Antonio Creek 31210 Oso Flaco Creek 31410 San Miguelito Creek 31210 Oso Flaco Lake 31410 Santa Ynez River 31210 Santa Maria River 31451 Gibraltar Reservoir 31451 Jameson Lake 31220 Cat Cyn Creek 31452 Lake Cachuma

#### Santa Barbara Area Watershed Rotation

31500 Atascadero Creek 31533 Romero Creek 31500 Goleta Slough 31533 Sycamore Creek 31534 Arroyo Paredon 31510 Bell Creek 31510 Canada de la Gaviota 31534 Carpinteria Creek 31534 Carpinteria Marsh 31510 Jalama Creek 31534 Franklin Creek 31510 Tecolote Creek 31534 Rincon Creek 31531 Atascadero Creek (315) 31531 Devereux Slough 31534 Santa Monica Creek 31531 Glenn Annie Creek 31500 Canada del Refugio 31531 San Jose Creek 31500 Dos Pueblos Cyn. Crk.

31531 San Pedro Creek	31500 El Capitan Creek
31532 Arroyo Burro Creek	31500 Los Carneros Creek
31532 Mission Creek	31500 Maria Ynacio Creek
31532 Montecito Creek	31534 Toro Canyon Creek
31532 San Ysidro Creek	•

In order to meet the goals of CCAMP, activities are scheduled for the following objectives listed in order of priority:

- 1. Conduct detailed characterization monitoring of watersheds, coastal confluences, and near-shore areas.
- 2. Conduct status assessments for watershed characterization areas, coastal confluences and near shore waters, using new and existing monitoring data from Region 3, other agencies, volunteer programs, new studies, and other means.
- 3. Utilize monitoring data and other information to maintain and update a Water Quality Assessment database and list of impaired waterbodies and beneficial uses, and provide support for TMDL listing and TMDL assessment (focused on TMDL listed waterbodies first).
- 4. Utilize monitoring and assessment information to support development of Basin Plan amendments.
- 5. Coordinate data management activities with other programs to maximize accessibility and usability of data.
- 6. Provide data (including metadata, data quality assessments, reports, summaries and information dissemination services) to Region 3 staff and other users through the Internet and other mechanisms.
- 7. Provide effective information presentations including use of geographic information systems technology and other forms of graphic visualizations.
- 8. Work with laboratories and monitoring programs, including volunteer programs, to develop monitoring protocols, methods, and quality control standards, and to encourage efforts consistent with region-wide monitoring goals.

Morro Bay National Monitoring Program and Volunteer Monitoring projects are treated as components of the Central Coast Ambient Monitoring Program, to ensure consistency wherever possible.

Described below are high priority monitoring activities planned to meet the above objectives along with the region-wide objectives to give high priority to regulatory mandates and to address identified priority problems in target watersheds.

## High Priority CCAMP Activities

The following activities are high priority. Region 3 has had limited resources available for Monitoring Program activities (funded watershed-specific activities were discussed in *Section Two*), although new SWAMP funding has contributed significantly to monitoring resources. Region 3 has been fortunate to have a substantial volunteer effort (1.5 PY) to advance the Monitoring Program. This effort should also contribute to implementation of some of the high priority activities in Fiscal Year 02/03. The activities identified as *unfunded* and listed in order of priority would be the next efforts Region 3 would propose to fund with those additional resources.

The statewide coordination of monitoring efforts is in progress by the State Board through the SWAMP program. The "Plan For Implementing A Comprehensive Program For Monitoring Ambient Surface And Groundwater Quality" has been recently developed, and includes extensive recommendations for expanding monitoring statewide. SWAMP funding resulted in an additional (approximate) \$300,000 in monitoring funds and 0.8 PY made available to Region 3 in FY 00/01. A slightly reduced amount was available for FY 2001/2002. The Region developed a site-specific workplan for SWAMP activities in fiscal year 2001/2002. Recommendations for expansion of statewide monitoring activities have made by the Public Advisory Group convened pursuant to Assembly Bill 982, but new monitoring resources beyond initial SWAMP funding have so far not materialized.

# High Priority CCAMP Activities for 02/03

**Funded** (Total 4.7 PYs includes 1.5 PY volunteer assistance and 1.4 PY student assistance)

#### Watershed Characterization (1.3 PY)

- Continue watershed characterization monitoring in the Santa Lucia watershed rotation area. Basic characterization includes monthly conventional water quality sampling and direction of Mussel Watch and Toxic Substances Monitoring Program sampling funds towards sites in the characterization area. Conduct limited sampling of toxicity and chemistry (based on funding availability). Develop workplan and begin monitoring activities in the Pajaro River rotation area. Begin drafting Santa Barbara Watershed characterization report. Complete final draft of Santa Maria Watershed characterization report. Finalize Salinas Watershed Characterization Report and make web accessible. (1.2 PY).
- Test effectiveness of a "Pesticide Risk Index" as a site selection tool, utilizing toxicity and chemistry studies on a Regionwide basis. (0.1 PY)

#### Coastal Confluences Monitoring (0.2 PY)

• Conduct coastal confluences monitoring. This includes monthly water quality sampling in thirty coastal stream mouths. (0.2 PY)

#### Near shore monitoring (0.5 PY)

• Provide technical oversight for sand crab tissue analysis study of sandy beaches (\$288,000 Guadalupe Settlement funds in contracts and 0.2 PY), for ongoing long-term tissue

- bioaccumulation monitoring sites (funded with \$6000 of Mussel Watch endowment funds).
- Conduct detailed monitoring in the Avila Beach area, utilizing sand crab sampling (0.1 PY).
- Oversee implementation of Central Coast Long-term Environmental Assessment Network (CCLEAN) monitoring activities through participation on a Technical Advisory Committee and coordination with new Program Director. (0.1 PY)
- Coordinate sampling of sport fishing areas for fish tissue contamination as part of Coastal Fish Contamination study (0.2 PY)
- Provide technical support and funds to the Department of Fish and Game for analysis of sea otter tissues for chemical constituents of concern (funded with \$30,000 of Guadalupe endowment funds). (0.1 PYs).

# Data Management (1.9 PYs)

- Continue development of database and bibliographic linkages between the Geographic Water Body System (GeoWBS) and monitoring data sources (0.2 PY)
- Manage and make data accessible for characterized watersheds (including Morro Bay, Salinas River, Pajaro River Watersheds) by developing watershed scaled monitoring data software and utilities, and producing basic statistical analyses and graphic presentations of information collected both by the program and by others (1.5 PYs currently supported by volunteer)
- Make monitoring data and reports accessible through CCAMP web site (0.1 PY)
- Develop and distribute a data input and checking tool to encourage uniform data structure use at the level of local agencies and volunteer programs. (0.1 PY)

#### Collaborate and Coordinate with Other Monitoring Efforts (0.8 PY)

- Integrate point source regulatory monitoring data into Monitoring Program where appropriate and assist with improving self-monitoring reports when permits are updated (0.2 PY)
- Participate in SWAMP technical training activities and roundtable meetings to ensure that CCAMP is coordinated and consistent with statewide monitoring efforts (0.2 PY)
- Coordinate nonpoint source and TMDL monitoring with CCAMP monitoring activities (0.2 PY).
- Provide information and lessons learned through the 319(h) contract with the Center for Marine Conservation and the Coastal Watershed Council (completed January 2001) to the new 319(h) contract with the Friends of the Estuary volunteer monitoring project, to ensure development of a coordinated volunteer monitoring program for the Central Coast (0.1 PY)
- Provide input to SWAMP related to CCAMP standard operating procedures to ensure that statewide monitoring Quality Assurance Program Plan includes applicable sampling, analytic protocols, methods, laboratory detection limits, etc. (0.1 PY)

**Unfunded** (3.9 PYs)

Watershed Characterization (0.6 PY)

• Expand scope of watershed characterization monitoring to reflect full scope of Monitoring Program strategy, including implementation of synoptic sampling of multiple sampling methods at each site (0.4 PY, \$250,000 additional contract dollars)

• Conduct follow-up monitoring at identified problem sites, as needed, for completed watershed characterization (0.2 PY, \$50,000)

## Coastal Confluences monitoring (0.3 PY)

• Expand coastal confluences monitoring. This will include 10 additional sites and replicates for sediment and mussel tissue analysis, and benthic invertebrate assessment, as well as water column sampling for toxicity and chemistry (\$200,000 in contracts and 0.3 PY)

## Long term near shore monitoring (1.0 PY)

- Direct sampling funds towards long term marine monitoring activities to detect impacts from nutrient and sediment runoff from rivers and streams (with additional outside funding to be provided by dischargers, settlement funds) (0.7 PY and \$400,000 in contract dollars)
- Pursue development of funds and study design for marine monitoring program components in the central portion of the Region. Establish a technical advisory group consisting of major marine research program participants (0.3)

# Coordinate Data Management with Other Programs (2.0PYs)

- Compile data available from other state-wide and local programs for inclusion in the Monitoring Program database (0.1 PY)
- Develop tools for readily uploading Monitoring Program databases to U.S. EPA STORET; pilot these tools with the Monterey area discharger monitoring reevaluation effort (0.2 PY)
- Aid local agencies and volunteer monitoring organizations in disseminating data through websites (0.2 PY)
- Coordinate region wide data and GIS / data management for monitoring and assessment. Organize and identify gaps in existing GIS information to make this technology accessible for watershed assessment, groundwater assessments, TMDL development, etc. (1.0 PY)
- Conduct detailed data analysis and write technical reports, summarizing monitoring data for use in TMDL development, watershed models, and other staff activities (0.5 PY).

## High Priority CCAMP Activities for 03/04

#### Funded

#### Watershed Monitoring

• Complete watershed characterization in the Santa Lucia rotation area watersheds. Implement watershed characterization monitoring in the Pajaro watershed rotation area. Develop work plan for Salinas rotation area work (in 04/05). Complete Characterization Reports for the Santa Maria and Santa Barbara rotation areas.

#### Data Management (Updates, Information Access)

• Same as activities from 02/03

# Collaborate and Coordinate with Other Monitoring Efforts

• Same as activities from 02/03

## Coastal Confluences monitoring

• Continue to conduct Coastal Confluences monitoring, as funding allows, conduct additional coastal confluences sampling.

## Coordinate Data Management with Other Programs

• Continue activities for 02/03

#### Unfunded

- Same as activities for 02/03
- Data Management activities for 03/04, currently supported by volunteers (1.5 PY)

## CCAMP Activities for 2002 through 2005

• Because of the cyclical nature of monitoring, almost all currently funded activities planned for Fiscal Year 02/03 and Fiscal Year 03/04 will be continued for different monitoring rotation areas. Funding will dictate the site and sample counts and the number and types of follow-up activities that can be implemented. New programs, particularly in the marine realm, will hopefully be developed and implemented; the ability to do this is entirely dependent upon new funds becoming available in the next several years.

#### Basin Planning

## **Description**

The Basin Plan is a flexible planning tool. The Basin Plan must be reviewed and revised regularly for it to adapt to changing conditions pursuant to both the Clean Water Act (every three years as the "Triennial Review") and Porter-Cologne (periodically). Review and revision serves to identify and prioritize tasks necessary and resources available to maintain, change or develop appropriate water quality standards and associated control strategies.

At the last Triennial Review in 2001, the Regional Board identified 56 items to be considered for review and potential Basin Plan amendments. Due to limited resources for Basin Planning activities in the next three years, staff proposes to consider 22 of these items. Basin Planning resources shall fund staff activities such as development of region-wide nonpoint source management measures, development of a region-wide riparian corridor protection policy, clarification of groundwater objectives, and participation in other efforts to improve water quality.

Implementation of Region 3's watershed management strategy reflects the priority considerations determined by the Triennial Review Priority List. The items on the Triennial

Review Priority List are addressed in the context of the watershed management strategy for individual watersheds and/or for the region, as appropriate for each item. Basin Planning activities will be closely coordinated with TMDL development and regional monitoring and assessment activities.

# **Basin Planning Goals and Objectives**

The goal of Basin Planning is to address surface and groundwater planning issues. Objectives are to maintain the Basin Plan (through the Triennial Review and other periodic updates), develop water quality protection policies as needed, develop/revise water quality objectives and beneficial use designations, and coordinate with TMDL development, regional monitoring and assessment efforts, and watershed management activities.

## High Priority Basin Planning Activities for 02/03

Region 3 has limited resources available for these region-wide Basin Planning activities (funded watershed-specific activities are discussed in *Section Two*). Dedicated Basin Planning funds will be used to address surface and groundwater planning issues. Additional resources will be needed to carry out the 34 unfunded Basin Planning activities identified on the 2001 Triennial Review List. Funded and unfunded Basin Planning activities are presented below. Basin Planning activity completion dates and estimated costs are presented in *Appendix Section C*.

The activities to be addressed are listed below:

• Investigate 2001 Triennial Review List priority issues, including development of a detailed work plan for each issue, to determine the need for Basin Plan amendment. Issues to be considered are:

## Funded (1.5 PYs per fiscal year)

Surface Water Issues	Estimated
	Completion Date
Develop Region-Wide Nonpoint Source Management Measures	07/02
Create a Basin Plan Index and Glossary	07/02
Revise Chapter 6 of Basin Plan	07/02
Revise Turbidity Objective	12/02
Develop Riparian Corridor Protection Policy	12/02
Incorporate an Enterococcus standard for water contact recreation in	06/03
ocean waters	
Basin Plan Waiver Policy Revision (SB 390)	06/03
Incorporate an E. Coli standard for water contact recreation in surface	12/03
waters	
Clarify Narrative Objective for Taste/Odors	06/04
Clarify Chapter 5, page V-9, Section IV.C.1., Areas of Special Biological	06/04
Significance.	
Consider TMDLs per the priorities and schedules established on the most	Ongoing

recent 303(d) List of Impaired Waters	
Develop a regional onsite wastewater management policy consistent	06/04
with AB 885.	
Shall include at a minimum: maintenance guidelines, repair standards,	
and monitoring requirements, Update On-Site Septic Tank Policy/Update	
MOUs, Develop Septage Disposal Policy, and Update Mound System	
Guidelines.	10101
Develop region wide nutrient criteria consistent with federal Regional	12/04
Technical Advisory Group (RTAG) and a State Regional Technical	
Advisory Group (STRTAG).	
La la la contributa contra condita all'actione for Familia Conde Contr	
Include nutrient water quality objectives for Franklin Creek, Santa	
Monica Creek, Lopez Lake, and Perfumo Creek, Develop Ammonia	
Objective, Develop Narrative Biological Objective (Nitrogen) to Protect	
from Dominance of Nuisance Species, and Develop Nitrogen Water	
Quality Objectives to Protect Rare, Threatened, or Endangered Species	
Beneficial Use.	
Groundwater Issues	07/02
Revise Chapter 6 of the Basin Plan to include a groundwater monitoring	07/02
and assessment component consistent with AB 599 and assessment of the	
Pajaro Hydrologic Unit	07/02
Create a Basin Plan Index/Glossary	07/02
Update Groundwater Basin configurations	12/02
Revision and/or clarification of Basin Plan narrative groundwater	12/02
objectives; clarification of related tables.	10/00
Develop Region-wide Nitrogen Management measures for GW basins	12/02
May ultimately need to consider development of besin specific	
May ultimately need to consider development of basin-specific	
management measures for some groundwater basins.	
Fertilizer/pesticide backflow prevention measures	12/02
Develop wellhead protection policy (a protective measure for sensitive	12/03
groundwater resources)	12,00
Revise Chapter 6 of the Basin Plan to include assessment of the Salinas	06/03
Hydrologic Unit	
Identify existing beneficial uses (BU's) for groundwaters of the	06/03
Region/determine appropriate BU's for shallow groundwater	
Review and/or develop groundwater objectives for groundwater basins of	06/04
the Region.	
the region.	
Salts objectives - investigate the need for a region-wide salts policy	06/04

- For issues requiring amendment, develop an amendment-processing schedule, including staff review and preparation time, a public review period, legal review, and preparation for presentation at public hearing.
- Identify unfunded water quality issues and estimate costs to address these issues. Activities that will not be addressed without additional resources are listed below:

# **Unfunded (2.0 PYs per fiscal year)**

Develop Groundwater Cleanup Policy

Unfunded (2.0 PYs per fiscal year)
Surface Water Issues
Clarify Narrative Objective for Toxics
Develop Water Diversion Policy (to address water quality impacts)
Determine Beneficial Uses for Arguello Hydrologic Area
Evaluate and Revise "Inorganic" Water Quality Objectives
Update Waiver Policy/Add Waiver for Green Waste used in Composting
Update "Rare" Beneficial Use
Reevaluate Water Quality Objectives for Irrigation Water
Develop Management Plan for Devereaux Slough
Develop Total Chlorine Residual Objective
Evaluate Cadmium and pH Objective for Fish Spawning
Update Table 2-2, "Existing and Anticipated Uses of Coastal Waters"
Develop Abandoned Mine Policy
Reevaluate Llagas Creek Water Quality Objectives
Update Rare, Threatened, or Endangered Species Beneficial Use
Update Beneficial Uses
Update State Board Policies
Update Municipal Facilities Plans
Develop Auto Wrecking Yard Policy
Develop Greenhouse Policy
Develop Low Threat to Water Quality Policy for Surface Water
Evaluate Need for Bacteria Objective for Ocean Waters Used for Desalination Water Supply/Consider Appropriateness or MUN designation
Assess Problems at Shooting Ranges and Develop Management Measures
Develop Aquaculture Management Plan
Develop detailed guidance for the implementation of the anti-degradation policy.
Establish water quality criteria for contaminated sediments.
Groundwater Issues
Develop Monterey County Aquifer Storage and Recovery Policy
D 1 C 1 (Cl D1)

# Develop Soil Cleanup and Disposal Policy/Develop Area -Wide Objectives

Develop Shallow Groundwater Policy

Develop Oilfield Waste Policy

Develop Paso Robles Groundwater Basin Management Plan

Develop Well Abandonment Policy

Add "Groundwater Recharge" Beneficial Use to Watsonville/Harkins Slough

Consider addition of Beneficial Use to protect groundwater and unsaturated zone ecology

- Implement unfunded items identified in table above (1.25 PY per year).
- Conduct watershed assessment activities in collaboration with CCAMP monitoring efforts.
  These will include update of the Water Body Assessment using GeoWBS, contribution to
  watershed characterization reports through assessment of available groundwater data, and
  review of monitoring and reporting programs for NPDES and WDR permits (0.75 PY per
  year).

# Total Maximum Daily Loads (TMDLs)

## Description

A TMDL is the allowable total maximum daily load, from each source of a particular pollutant or stressor threatening or contributing to impairment of a waterbody, that assures attainment of water quality standards. Development of a TMDL for threatened or impaired waters is required by Section 303 of the Clean Water Act. The designation as threatened or impaired (commonly referred to as the "303(d) list") identifies the pollutant or stressor causing the threatened or impaired condition of each waterbody. A TMDL must be developed for each stressor or pollutant for each waterbody threatened or impaired. The Clean Water Act requires that TMDLs be incorporated into the state's water quality management plan (which consist of Regional Board Basin Plans). Porter Cologne Water Quality Control Act, in turn, requires that Basin Plans have a program of implementation to achieve water quality objectives.

A TMDL is accomplished by a phased process which includes assessing point and nonpoint sources of the pollutant, determining the contribution from each source, determining appropriate load reductions for each source, implementing a program to achieve load reductions, adoption of a basin plan amendment, and monitoring to determine attainment of water quality standards. Federal Law requires a TMDL to include a problem statement, numeric targets, source analysis, and load allocations. Federal and State Law require the basin plan be amended to include the technical TMDL, the implementation plan and monitoring plans. Public participation is critical during development of the technical TMDL, development of the implementation plan, adoption of the basin plan amendment, implementation of control actions, and monitoring for effectiveness. Region 3's approach is to simultaneously develop TMDLs for all waters in a given watershed, listed for the same stressor, as a "TMDL Unit." For example, the Morro Bay Watershed Siltation TMDL refers to TMDLs for Chorro Creek, Los Osos Creek and Morro Bay, all on the 303(d) list for siltation. Table 1in Appendix Section B show lists and schedules of all individual TMDLs and of TMDLs grouped by watershed. Table 2 in Appendix, Section B identifies the TMDL Units currently under development and/or most in need of funding to supplement or initiate development over the next five years. Table 2 also identifies type and level

of stakeholder involvement desired or anticipated for each TMDL, and identifies other water quality programs and agencies that will coordinate with the TMDL effort.

Region 3's TMDL effort is led predominantly by one unit, the Watershed Assessment Unit, which is comprised of nine staff people who coordinate with staff in other water quality programs. In the Watershed Assessment Unit, each staff person acts as a project manager or primary analyst for TMDL development. They coordinate closely with staff working in CCAMP, Basin Planning, Nonpoint Source, and Stormwater Programs. Many Region 3 TMDL implementation strategies will rely on existing Stormwater or Nonpoint Source water quality management mechanisms and activities. TMDL staff commonly partner with other agencies with appropriate jurisdiction, typically local or State agencies. Sometimes these agencies function as lead on studies and coordination efforts and other times they function as an interested party, stakeholder or technical advisor. Region 3 relies on a moderate level of stakeholder involvement for TMDL development. Region 3 staff tries to establish a management structure, or forum for stakeholder involvement, or rely on an existing one for each TMDL Unit/Project. Typically, staff coordinates with interested parties in a given watershed to form a steering committee or technical advisory committee. Additionally, these committees will work with staff to plan and conduct public meetings and/or make presentations to focus groups or established groups who express interest or concern. Occasionally, staff participates in written outreach by preparing newsletter articles, brochures or flyers.

State and Federal funds are currently supporting TMDL development work. The current level of funding adequately supports a team of staff to address Region 3's impaired waters and develop TMDLs. It does not adequately support TMDL monitoring, modeling and analysis needed for large watersheds or staff for implementation related to nonpoint sources of pollution-the primary cause of impairment for most of Region 3's impaired waterbodies. Additional Grant funds and in-kind resources will be leveraged and focused to supplement existing State and Federal resources. Possible resources include Department of Pesticide Regulation monitoring funds, California Coastal Conservancy watershed protection funds, and current efforts of Resource Conservation Districts, existing watershed councils, and local farm bureaus.

## TMDL Goals and Objectives

The goal of TMDLs is attainment of water quality standards in impaired waterbodies. The objectives to address TMDL requirements and needs are listed below in order of priority. Activities are scheduled to meet these objectives. These activities are presented in more detail in narrative descriptions in *Section Two: Watershed Activities*, and in *Tables B-1 and B-2 in Appendix Section B*. Activities are prioritized for funding in *TableB-2 in Appendix Section B*.

- 1. Adopt updated 303(d) list to add several new waters, remove Chorro Creek for metals and Los Osos Creek for priority pollutants, and revise priorities and schedules to incorporate TMDL analysis for new waters with TMDL analysis for existing waters listed.
- 2. Establish GIS capabilities (acquire data, manage data, train staff to do basic analysis, hire staff with high level expertise) to support TMDL development, implementation, tracking and assessment.

3. Develop funding for and implement TMDL monitoring for TMDLs in progress with data gaps and in advance of scheduled TMDLs that haven't started yet.

- 4. Establish TMDLs for all 303(d) listed waters in the Morro Bay watershed for nutrients, siltation, and pathogens.
- 5. Establish TMDLs for all 303(d) listed waters in the San Lorenzo River watershed for siltation and pathogens and for other waterbodies listed for pathogens in Santa Cruz County.
- 6. Establish a TMDL for Lake Nacimiento and Las Tablas Creek mercury issues.
- 7. Establish TMDLs for all 303(d) listed waters in the Pajaro River watershed for siltation and nutrients.
- 8. Establish TMDLs for all 303(d) listed waters in the Salinas River watershed for siltation, pesticides, nutrients and salinity.
- 9. Establish TMDLs for San Luis Obispo Creek for nutrients and pathogens.

# High Priority TMDL Activities for 02/03

Region 3 has limited resources available for region-wide TMDL activities (funded watershed-specific activities were discussed in *Section Two*). The description that follows indicates that more effort is needed to perform high priority activities than exists in the baseline budget or even with additional anticipated resources. The activities identified as *unfunded* and listed in order of priority would be the next efforts Region 3 would propose to fund with additional resources. *Table B-1 and Table B-2, Appendix Section B* show the schedule for all of Region 3's TMDLs. Region 3 will continue to seek funds for these high priority activities.

#### **Funded**

- TMDL development activities as scoped in *Section Two* for specific watersheds.
- Region-wide coordination of internal TMDL activities, review of technical approaches and products, and tracking progress of TMDL development. (1.0 PY)
- Statewide participation in development and implementation of statewide approach to TMDLs including, but not limited to, attendance at State Board TMDL Roundtable meetings, meetings with USEPA, attending conferences and workshops as both a participant and a presenter. (0.5 PY)
- Update 303(d) list and manage on-going assessment efforts for future updates (e.g. monitoring, GIS, contract studies). (1.0PY)

#### Unfunded

• Initiate or facilitate stakeholder participation to support TMDL development including: communicate with and educate stakeholders about TMDL needs and approaches, encourage more active stakeholder participation, establish management structure for stakeholder involvement (e.g., technical advisory committees, steering committees, citizen advisory committees) for each watershed/community where TMDL being or to be developed (1.0 PY).

- Conduct additional monitoring that may be identified during initial phases of TMDL Development (\$500,000 in contracts).
- GIS data management and analysis to support TMDLs. (1.0PY)

## Regulatory Activities/Programs

## **Description**

Regulatory programs and tools commonly used include effluent limitations established in NPDES permits or Waste Discharge Requirements, enforcement actions authorized by Porter-Cologne, Clean Water Act Section 401 Water Quality Certifications, surveillance and inspections, and Basin Plan Amendments (including adoption of TMDLs and best management practices to address nonpoint source pollution).

These tools are typically used to address point sources of pollution but are available to address nonpoint source pollution as well. Examples include adoption of a TMDL (with an implementation plan) in the Basin Plan or issuance of WDRs with effluent limitations in accordance with Tier III of the Nonpoint Source pollution management approach.

The following programs are implemented similarly on a region-wide basis but are assigned staff by watershed areas:

#### NPDES Permits and Waste Discharge Requirements

NPDES Permits are issued for discharges to surface waters. Waste Discharge Requirements (WDRs) are issued for land disposal facilities. The NPDES and WDR Orders prescribe conditions of discharge and establish monitoring programs designed to ensure protection of beneficial receiving water uses, both ground and surface waters. The Orders requires the collection system to be operated and maintained in a manner to prevent pollution of adjacent waters. Additionally, the Orders can require the Discharger to maintain a source control/pretreatment program to insure the wastewater coming into wastewater treatment plants will not result in impairment of receiving waters. Orders include regulation of storm water and bio-solids. Staff issues requirements, reviews Discharger self-monitoring reports, performs independent compliance inspections, conducts monitoring of the plants and receiving waters to insure compliance, and initiates enforcement action as needed. New legislation, commonly referred to as the "Migden Bill", became effective January 1, 2000. This bill requires mandatory minimum penalties for minor violations of NPDES permit conditions. This will result in increased staff effort to implement and will require redirection of resources currently used for permit oversight.

Ocean dischargers in the Monterey area are working on a pilot component of the Central Coast Ambient Monitoring Program. They have pooled funds to hire a consultant to assess the effectiveness of their current receiving-water monitoring programs. The consultant will make recommendations for revisions to monitoring strategies to more efficiently and effectively assess impact, while contributing information to an ambient monitoring program. One component of the program is to develop a region-wide framework for ambient monitoring which can later be adapted in other parts of the Region. Data quality objectives and electronic reporting are important considerations in this effort.

It should be pointed out that both the NPDES and WDR programs currently do not have sufficient funds to fully administer the programs. Region 3 is seeing a large increase in applications from wineries and anticipates that several new WDRs will be issued in 02/03. Staff is making an effort to streamline the process through development of boilerplates and general permits, but programmatic requirements often preclude using staff time for such activities. Additionally, other demands (e.g. Migden Enforcement, SB 390 (waiver legislation), AB 885 (septic system legislation)) may divert staff resources further. The result is that some anticipated commitments might not be achievable.

## NPDES Permits for Storm Water Discharges

NPDES permits are issued for discharges from municipal storm water conveyance systems, industrial facilities, and construction sites. Staff tracks notification to the Regional Board and coverage under the State Board-issued general permit for industrial and construction activities, provides technical assistance, and monitors and enforces compliance with these permits. The permits require dischargers to prepare and implement a Storm Water Pollution Prevention Plan and submit an annual report including water quality sampling data and pollution prevention efforts. Staff also provides technical assistance and public education regarding storm water quality control (e.g., workshops on erosion and sediment control for construction sites and monitoring and reporting for industrial facilities). Staff has issued one Phase I municipal storm water discharge permit for the City of Salinas. Staff is developing a strategy to address Phase II storm water regulations which will require small municipalities and construction sites of between one and five acres to have and comply with storm water discharge permits. Urban runoff management programs and practices are currently being developed and implemented in a few watersheds (See Section Two, Individual Watershed Descriptions). Region 3's current level of funding for these activities is limited. Region 3 staff will continue to seek opportunities to improve consistency and efficiency of these efforts in order to implement the required and necessary activities.

## Clean Water Act Section 401 Water Quality Certifications

The 401 Water Quality Certification program is severely under-funded. The office receives an average of 156 applications per year. Currently, the office receives 0.4 PY time per year for all activities relating to water quality certifications. As of June 2000, staff no longer has the option to waive waste discharge requirements in lieu of 401 certification; all Clean Water Act Section 404 and Nationwide Permits must be reviewed and either granted or denied certification. Adequately reviewing projects requires initial review of CEQA and other project documents,

working with applicants to develop appropriate mitigation measures, site inspections before, during and after project completion and review of any final documents. Time is also needed for enforcement. Staff estimates that at least 3 PY would be needed to address these issues.

Perhaps no other type of work has the impact on water quality than projects that occur within our waterways. Creeks, streams and rivers are very sensitive to changes and their response to change almost always results in degraded water quality. Large-scale projects such as flood control activities, gravel mining and massive clearing of riparian vegetation have resulted in severe problems with sediment, high water temperature, low dissolved oxygen and many other beneficial use impacts. There is simply no way to prevent degradation in water quality, let alone improve water quality, if our creeks and rivers are unstable.

Staff has found that most project applicants do not understand the dynamics of waterways and often propose projects that not only result in decreased water quality, but often worsen the very problem the project was designed to fix. This is especially the case with flood control and bank stabilization projects. In addition, most urban development along the central coast does not take into account water quality or changing hydrology in the landscape. This has led to flooding problems and serious erosion within our creek and rivers, which degrade water quality.

Staff is creating a series of standard conditions for certain types of projects. This effort should help ensure some level of water quality protection with the small amount of time granted for project review. This also creates consistency in the program. Basin Plan efforts are underway to create a Riparian Protection Policy as well. However, more resources are required to adequately address these issues, the technical aspects of 401 projects, and to educate project proponents and pursue enforcement actions.

#### Clean-up Branch

The following programs are implemented on a region-wide basis and are not included in the watershed descriptions.

#### Spills, Leaks, Investigation and Cleanup Program

Region 3 investigates reports (and oversees cleanups) of unauthorized discharges and spills from facilities and sites not regulated under Waste Discharge Requirements, NPDES permits or other state programs. These facilities can include petroleum and solvent spills, and illegal petroleum/solvent dumping sites. Region 3 obtains information regarding hazardous and non-hazardous waste discharge through several reporting programs. Proper response to reports of unauthorized discharges and spills includes completion of a spill report form; notification to other responsible agencies, or interested parties; site inspection to determine validity of the report and to assess the situation; initiation of regulatory or enforcement action (letters, cleanup or abatement orders, or waste discharge requirements); and oversight of clean up activities. This program includes a cost-recovery and a non-cost recovery component. The non-cost recovery program component is supported by General Funds and allows staff oversight where responsible parties are unknown. It also provides for initial screening of sites where responsible parties exist. Typically more than one hundred non-cost recovery sites are under evaluation currently. Sites with responsible parties and ongoing cleanup ultimately become cost-recovery sites, where

staff is reimbursed for its oversight. Currently, more than 30 cost-recovery sites exist and many more will be added. Three of the 30 are large-scale petroleum spill cleanups (Unocal's Avila Beach, Guadalupe Oilfield, and San Luis Obispo Tank Farm) by themselves utilize nearly 75 % of the Region's budget. These, coupled with several other important cleanup sites and an industry-wide push to clean up oilfield pollution problems, have resulted in a significant program budget deficiency. This program is very important in Region 3, particularly because the oil industry is pushing hard to investigate and clean up past petroleum pollution problems, and is willing to pay for Regional Board oversight to expedite cleanup. The program allows Region 3 staff to assist other agencies and work cooperatively at large-scale hazardous material releases resulting from spills, pipeline leaks and surface transportation accidents. The staff's role is primarily to provide immediate, on-site technical assistance concerning water quality in order to minimize the potential damage to the public health and safety, and the environment.

#### **Underground and Above Ground Tanks**

Staff assists with regulation of underground and above ground storage tanks by providing oversight of prevention, investigation and cleanup of contamination from leaking tanks. Staff typically oversees cases involving impact to surface and groundwater while the local agencies oversee impacts to soil. In some cases, Region 3 oversees both soil and groundwater cleanup. Staff carries out investigations and cleanup of leaky tanks in a manner similar to investigations and cleanups in the Spills, Leaks, Investigations, and Cleanup Program mentioned previously. Region 3 shares oversight responsibilities for aboveground tanks with DFG. Leaks attributed to aboveground storage tanks are reported to Region 3 by tank operators/owners, DFG, and other members of the public. Oversight entails investigation of problems and directing remedial actions to protect water quality.

#### Department of Defense (DOD)

Region 3 is involved in oversight of investigation and cleanup of water resources impacted or threatened by waste discharges from DOD facilities. A Memorandum of Agreement, signed by the US Department of Defense and State Officials, provides State oversight cost reimbursement. The funding provided by this Memorandum of Agreement is based on task-specific workplan agreements with the military. Funding is non-fluid in nature and cannot be directed away from the DOD program. This rigid funding structure tends to preclude this program's incorporation into the needs assessments inherent to comprehensive watershed management.

Regional Boards and the Department of Toxic Substances Control share the bulk of regulatory responsibility and reimbursement dollars allocated to the DOD program. The Regional Boards, the State Board and the Department of Toxic Substances Control have a Memorandum of Understanding specifying roles and responsibilities of each agency.

The primary federal facilities being addressed by this program include Vandenberg Air Force Base, former Ft. Ord Army Base, Fort Hunter Liggett, and Lompoc Branch US Disciplinary Barracks. These facilities must cleanup releases pursuant to requirements of the Federal Comprehensive, Environmental Response, Compensation, and Liability Act, the Clean Water Act, and Porter Cologne Water Quality Control Act.

#### Land Disposal

Region 3 has a Unit specifically dedicated to landfill permitting and oversight. A small unit of individuals versed in the subject best implements the specialized regulations that govern landfills. The Landfill Unit implements both state and federal landfill requirements at over 30 permitted landfills across the Region. Landfill regulation is coordinated with the California Integrated Waste Management board and County Health Departments.

For fiscal year 2000/2001 Central Coast Regional Board received hiring authority for 5.1 Personnel Year (PYs) for the Landfill Unit. Funding for the Landfill Unit primarily comes from a portion of the tipping fees paid by waste haulers at landfills. Additional funding is derived from the state's general fund and waste discharge fees paid by landfills. 1.1 PY of the funding is provided specifically for work on the Former Casmalia Hazardous Waste Landfill through an Interagency Agreement with the Department of Toxic Substances Control.

The Landfill Unit's three staff members provide regulatory oversight for 32 permitted sites. Eighteen of these 32 sites are active Class III (municipal solid waste) sites, with one active Class II (special waste) facility that receives primarily oilfield wastes. The remaining thirteen sites are either closed, inactive, or are preparing for final closure. Included in the thirteen are two closed Class I (hazardous waste) facilities.

#### High Priority Regulatory Program Activities for 02/03

Region 3 has limited resources available for these region-wide regulatory activities (funded watershed-specific activities were discussed in *Section Two*). The description that follows indicates that more effort is needed to perform high priority activities than exists in the baseline budget or even with additional resources. The activities identified as unfunded and listed in order of priority would be the next efforts Region 3 would propose to fund with additional resources. Region 3 will continue to seek funds for these high priority activities.

#### **Funded**

- NPDES, WDRs (Chapter 15 and Nonchapter 15) permit reissuances and inspections as indicated in *Section Two* for specific watersheds and shown in detail in *Section A of the Appendix*.
- Implement existing Underground Tanks regulatory activities (4.9 PY), Aboveground Tanks regulatory activities (0.5 PY), Department of Defense regulatory activities (4.6 PY), and Spills, Leaks, Investigation and Cleanup regulatory activities (6.20 PY).
- Basic review of CWA Section 401 Water Quality Certifications; site visits for large projects; issuance of certifications (0.4 PY)

#### Unfunded

• Implementation of a storm water management program to regulate small municipalities, construction sites and industrial facilities requiring permits per Phase II NPDES regulations (4 PYs)

- Spills, Leaks, Investigations and Cleanup Cost Recovery activities to improve oversight at existing sites and for fifteen to twenty new sites, including numerous oil-industry cleanup sites (3 PYs)
- Spills, Leaks, Investigation and Cleanup non-cost recovery regulatory activities specifically focused on facilities such as drug labs, dry cleaners and auto repair and dismantling operations (2 PYs)
- Chapter 15 activities specifically focused on oilfield land disposal and treatment activities and inactive mine operations (2 PYs)
- Development of general permits and boilerplates that could reduce staff time spent developing new WDRs and NPDES permits
- Adequate review of all CWA Section 401 Water Quality Certification applications; site visits for all projects before, during and after construction; enforcement actions; education and technical assistance (2.6 PYs)

# Section Four SFY 2002-03 Resource Allocation Summary

Dun waren Antivities	Navila ana WAAA	Control M/MA	Constal WAS	Courth a res 18/84 A	Daniannida	Total	Total
Program Activities  Watershed Management	Northern WWA	Central WIMA	Coastal WIMA	Southern WMA	Regionwide	Baseline	Untunaea
Stakeholder Support					0.4		
					0.4		
Integrated Plan/Chapter Update							
Program & Agency Coordination					0.1		
Watershed management Subtotal Pys Nonpoint Source					0.8	0.8	-2.2
Propostion 13 Project Solicitation and Contract	0.0			0.0		0.7	0.0
Management	0.3			0.2	0.2	0.7	-2.0
Program Development		0.1				0.7	
Implementation 319(h) RFP Project Solicitation & Contract		0.5	0.75	0.25	0.3	1.8	
Management	0.2	0.4	0.35	0.25	0.3	1.3	
Timber Harvest	0.7					0.7	
Nonpoint Source Subtotal Pys	1.2	1	1.1	1.2	0.7	5.2	-2.7
Monitoring							
Ambient Monitoring (e.g. Basin Plan, Mussel Watch, TSCP, CWA 305(b), CWA 303(d)							
BPTC Monitoring							
Core Regulatiory (Receiving Water)		0.3					
Ground Water Monitoring		0.1		0.1			
Nonpoint Source Monitoring				0.5			
TMDL Monitoring							
Watershed Monitoring		0.1		0.2			
Monitoring - Data Management		0					
Monitoring Subtotal Pys	0	0.5	0	0.8	3.4	4.7	-3.9

# **Section 4 Table, continued**

Assessment							
CWA Section 305(b) Water Quality							
Assessment							
CWA Section 305(b) Waterbody							
Assessment							<del>                                     </del>
Assessment (Other)							
BPTC Assessment							
Ground Water Assessment							
Nonpoint Source Assessment							
TMDL Assessment				0.2			
Watershed Assessment (e.g. state							
of the watershed reports				0.2			
Assessment Subtotal Pys	0	0.1	0	0.4	0	0.5	,
Planning							
Basin Plan Policy							
Basin Plan Water Quality							
Standards Amendments							
Basin Plan Triennial Review							
CWA Section 205(j) Grant Contract							
Mangement							
Basin Plan - Other							
Planning Subtotal Pys					1.5	1.5	-2
TMDL							
TMDL Development							
Implementation Planning							
Basin Plan Amendment							
Implementation Oversight &							
Tracking TMDI Cubicate Pro-						40.5	
TMDL Subtotal Pys						10.5	-2

# **Section 4 Table, continued**

						Total	Total
Program Activities	Northern WMA	Central WMA	Coastal WMA	Southern WMA	Regionwide	Baseline	Unfunded
Wetlands							
Wetlands Planning							
CWA Section 401 Water Quality							
Certification	0.1	0.1	0.1	0.1			
Wetlands Grant Project							
Management							
Wetlands Subtotoal Pys	0.1	0.1	0.1	0.1		0.4	-2.6
NPDES Wastewater							
NPDES Enforcement						1	
NPDES Inspections (Majors)							
NPDES Inspections (Minor)							
NPDES Monitoring Report Review							
NPDES Permitting Scheduled							
(Majors)							
NPDES Permitting Scheduled							
(Minors)							
NPDES Permitting Unscheduled							
(Majors)							
NPDES Permitting Unscheduled							
(Minors)							
NPDES Pretreatment Program							
NPDES - Other							
NPDES Subtotal Pys	1.4	1.3	1.6	1.3		5.6	-1
NPDES Storm Water							
NPDES Storm Water - Municipal				-			
NPDES Storm Water - Industrial	0.5	0.333	0.5	0.5			
NPDES Storm Water -							
Construction	0.5	0.333		0.5			
NPDES Storm Water - Phase II		0.333					
NPDES Storm Water Subtototal							
Pys	1	1		1	1	5	-4

# **Section 4 Table, continued**

Northern WMA	Central WMA	Coastal WMA	Southern WMA	Regionwide	Total Baseline	Total Unfunded
1.4	2.6	1.1	1.6	0	6.7	-1.3
				1	1	-1
				4.7	4.7	
				6.8		
				7.9		_
				4.2	4.2	-2
	I	1		5.4	5.4	
				0		
				1	1	
				1.5	1.5	
				1.5	1.5	
					73.6	-26.7

# **Appendices**

## **SECTION A**

Major National Pollutant Discharge Elimination System Permits and Compliance **Inspections** 

(including Pretreatment) Schedule Nonchapter 15 Permit Reissuance and Compliance Inspections Schedule **Chapter 15 Permit Reissuance and Compliance Inspections Schedule** 

#### Table A-1a

#### NPDES Permit and Inspection\* Schedule -WMI FY 02/03

	<b>Northern Watershed</b>		Reissue/
NPDES #	<u>Permittee</u>	<b>Expires</b>	Review Date
Major Permits			
14' B '			
Minor Permits	G. I. D. d. HITTED	02/04/02	E 1 02
	San Juan Bautista WWTP	02/04/03	Feb-03
CA0049077	Watkins-Johnson Co., Stewart Cleanup	12/01/02	Dec-02
	Central Watershed		
Major Permits			
CA0048551	Monterey Regional WPCA	12/06/02	Dec-02
Minor Permits			
CA0048101	Salinas Industrial WTP	10/23/02	Oct-02
CA0048101	Salinas Municipal Stormwater		Jun-03
CAS000003	Caltrans Stormwater		Jun-03
	Salinas Phase I MSYSW	2003	2003
	<b>Coastal Watershed</b>		
Minor Permits			
CA0047881	Morro Bay/Cayucos WWTP	01/26/03	May-03
	Southern Watershed		
Minor Permits	Southern Water Sheu		
1,20,000 2 01,0000	Summerland Sanitary District WWTP	12/05/02	Dec-02
2.100 1002 1	Summerium Summer J District 11 11 11	12,03,02	200 02

<sup>\*</sup>Region 3 plans to inspect each facility once a year; following are the numbers of each type of required inspection:

NPDES Majors = 42

NPDES Minors = 69

Pretreatment Inspections = 9

WDR Inspection, Category I = 4

WDR Inspection, Category II= 54 WDR Inspection, Category III= 263

Phase I Stormwater Construction General Permit = 83

Phase I Stormwater Industrial General Permit = 166

Phase I Stormwater Municipal Permit = 2

#### Table A-1b

# NPDES Permit and Inspection\* Schedule - WMI FY 03/04

	Northern Watershed		Reissue/
NPDES #	<u>Permittee</u>	<b>Expires</b>	Review Date
Major Permits			
CA0048216	Watsonville WWTP	10/22/03	Oct-03
Minor Permits			
	Central Watershed		
Major Permits			
CA0047953	Paso Robles WWTP	9/10/03	Sep-03
	Coastal Watershed		
	Southern Watershed		
Minor Permits			
CA0048089	Cuyama CSD WWTP	10/22/03	Oct-03
CA0049018	Point Argeullo Gaviota Oil/Gas Plant	12/10/03	Dec-03

<sup>\*</sup>Region 3 plans to inspect each facility once a year; following are the numbers of each type of required inspection:

Phase I Stormwater Construction General Permit = 83

Phase I Stormwater Industrial General Permit = 166

Phase I Stormwater Municipal Permit = 2

NPDES Majors = 42

NPDES Minors = 69

Pretreatment Inspections = 9

WDR Inspection, Category I = 4

WDR Inspection, Category II= 54

WDR Inspection, Category III= 263

	Northern Watershed		Reissue/
NPDES#	Permittee	Expires	Review Date
Major Permits		<del></del>	
CA0048194	Santa Cruz City DPW Santa Cruz WWTP	03/31/05	Mar-05
CAS049883	Santa Cruz city DPW Neary Lagoon Park & Stormdrain	10/22/04	Oct-04
Minor Permits			
CA0048267	CA State Parks Big Basin WWTP	05/19/05	May-05
CA0005274	Graniterock Company, Co.	05/19/05	May-05
CA0047791	Olive Springs Quarry, Inc.	05/19/05	May-05
CA0048739	RMC Pacific Materials Inc. RMC Lonestar Olympia Sand Plant	05/19/05	May-05
CA0048682	RMC Lonestar Santa Cruz Cement	05/19/05	May-05
CA0048488	US Abalone Silverking Oceanic Farms	05/19/05	May-05
	Coastal Watershed		
Major Permits			
CA0048151	Pismo Beach WWTP	07/09/04	Jul-04
CA0048003	South San Luis Obispo Co. SD	07/09/04	Jul-04
Minor Permits			
CA0049417	Ragged Point Inn	11/19/04	Nov-04
	Central Watershed		
Minor Permits			
CAS049981	Salinas, City of Stormwater Discharges	10/22/04	Oct-04
CA0049832	Texaco Exploration & Production	09/06/04	Sep-04
CA0005720	Uni-Kool Company	09/07/04	Sep-04
	Southern Watershed		
Major Permits			
CA0048143	Santa Barbara City PWD El Estero WWTP NPDES	09/08/04	Sep-04
CA0049972	Casmalia Resources	11/19/04	Nov-04

# 

Reissue/

NIDDES #	<u>Permittee</u>	Expires	Review Date
NI DES#		LXpires	INEVIEW Date
	Northern Watershed		
	Coastal Watershed		
Major Permits	Coastai watersned		
•	Carmel Area WWD	07/14/05	Jul-05
Minor Permits	Camer Area WWD	01/14/03	3ui-03
	Chevron Estero Marine Terminal	10/27/05	Oct-05
	Highlands Inn WWTP	03/23/06	Mar-06
	Highlands SA WWTP	03/23/06	Mar-06
	Central Watershed		
Major Permits	Contrar Watershed		
•	Duke Energy Moss Landing LLC	10/27/05	Oct-05
	Paso Robles WWTP	07/10/05	Jul-05
CA0007005	National Refractories Moss Landing	05/18/06	May-06
Minor Permits			-
CA0048941	Heritage Ranch CSD WWTP	02/02/06	Feb-06
CA0008069	Growers Ice Company	03/23/06	Mar-06
	Southern Watershed		
Major Permits			
CA0047364	Carpinteria SD WWTP	07/14/05	Jul-05
CA0048127	Lompoc Regional WWTP	05/18/06	May-06
Minor Permits			
	Mission Linen Supply Ambassador Laundry	11/29/05	Nov-05
	Spectra-Mat, Inc.	05/18/06	May-06
CA0049433	Cultured Abalone Aquaculture	05/18/06	May-06
	Table A-1e		
	NPDES Permit and Inspection* Schedule - WMI FY		
	06/07		
			Reissue/
NPDES#	Permittee	Expires	Review Date
	Northern Watershed		
	Trofthern watershed		
	Coastal Watershed		
	Company of Medical Company		
	Central Watershed		
	Southern Watershed		
Major Permits	2233		
-	Montecito SD WWTP	12/07/06	Dec-06

Table A-2a

Non Chapter 15 WDR Permit and Inspection\* Schedule - WMI FY 02/03

			Year	Proposed
	Northern Watershed		Last	Reissue
WDID No.	Order No.	<u>Discharger</u>	<u>Updated</u>	<u>Date</u>
Category I				
3 431010001	97-112	Glass TEK Joleen Way GW Remed.	1997	Dec-02
Category III				
3 351002001	88-23	Betabel Valley RV Park	1988	Jan-03
3 352004001	86-105	Cienega Winery	1986	Dec-02
3 351001001	87-115	San Benito CSA #22, Cielo Vista	1987	Jul-02
3 432034001	87-114	San Martin Mushroom Farm	1987	Jul-02
3 432033001	88-34	San Martin Tire Shop	1988	Apr-03
3 432038001	88-98	Tri-Pallett, Inc.	1988	Jun-03

## Table A-2a, continued

	Central Watershed			
Category III	97 129		1007	4 00
3 272076001	87-138	Canandaigua Gonzales Winery	1987	Aug-02
3 401008001	86-133	Country Care Convales Hospital	1986	May-03
3 279706001	98-02	Kendall-Jackson Winery	1998	Feb-02
3 401016001	87-182	Mustang Village MHP	1987	Nov-02
3 271031001	87-146	Prunetree Shopping Center (NAR 02/28/01)	1987	Oct-02
3 271020001	88-12	San Jerado WWTP	1988	Mar-03
	Coastal Watershed			
Category III	vv ater sileu			
3 271018003	97-10	Carmel Valley CSD White Oaks	1998	Nov-02
3 401011001	88-39	Daisy Hill Mobile Home Park	1988	Mar-03
3 400112001	85-073	Lopez Recreation Area	1985	Feb-03
3 352011001	86-109	Mcabee Trucking, Inc.	1986	Dec-02
3 271011001	87-175	Monterey Dunes Colony	1987	Nov-02
3 401032001	77-40	Nipomo CSD Folkerts Oaks	1977	Feb-03
3 401005001	87-102	Ocean Canyon Resorts	1987	Dec-02
3 401012001	88-43	Sea Oaks Mobile Home Park	1988	Mar-03
3 401042001	87-155	Sea Pines Golf Course	1987	Oct-02
3 401034001	88-41	Sunny Oaks Mobile Home Park	1988	Mar-03
	Southern Watershed			
Category I				
3 420109001	97-41	Santa Maria WWTP	1997	Nov-02
3 420116002	86-003	Jalama Beach County Park WWTP◆	1986	Jan-01
Category III				
3 422018001	88-06	Firestone Vineyards	1988	Apr-03
		Rosemary Farms		Dec-02
3 421005001	88-08	Synod Rancho La Scherpa	1988	Mar-03
3 422048001	97-01	United Foods Pictsweet Frozen Foods	1997	Sept-Oct-02
3 422022001	87-139	Zaca Mesa Winery	1987	Sept-Oct-02

<sup>\*</sup>Region 3 plans to inspect each facility once a year; following are the numbers of each type of required inspection:

Phase I Stormwater Construction General Permit = 83

Phase I Stormwater Industrial General Permit = 166

Phase I Stormwater Municipal Permit = 2

NPDES Majors = 42

NPDES Minors = 69

Pretreatment Inspections = 9

WDR Inspection, Category I = 4

WDR Inspection, Category II= 54

WDR Inspection, Category III= 263

# **Table A-2b**

#### Non Chapter 15 WDR Permit and Inspection\* Schedule - WMI FY 03/04

			Year	Proposed
	Northern Watershed		Last	Reissue
WDID No.	Order No.	<u>Discharger</u>	<u>Updated</u>	<u>Date</u>
Category I				
3 430100001	9-039	SCRWA WWTP	1999	May-04
Category II				
3 350100001	87-47	Hollister Domestic WWTP	1987	Mar-04
3 355011001	93-73	El Modeno Gardens	1993	Nov-03
Category III				
3 431004001	88-138	Casa de Fruta	1988	Sep-03
3 352001002	89-83	Hillsdale Rock Company	1989	Jun-04
3 440106001	89-71	Santa Cruz CSA Sand Dollar Beach	1989	May-04
3 441010001	89-64	Santa Cruz CSA Canon del Sol	1989	May-04
3 441009001	89-90	Santa Cruz CSA Trestle Beach	1989	Jun-04
3 351000001	89-58	Sunnyslope Ridgemark Estates WWTP	1989	Apr-04
	Central			
<i>C</i> . <b>II</b>	Watershed			
Category II	04.22		1004	M. 04
3 400113003	94-23	San Luis Obispo CSA Oak Shores	1994	Mar-04
Category III	90.97	Atana dan HCD Canta Managita Cabaal	1000	T 0.4
3 400114001 3 270803001	89-87	Atascadero USD Santa Margarita School	1989 1988	Jun-04
	88-37	Ca. National Guard Camp Roberts STP		Sep-03 Jul-03
3 272106001 3 272008002	88-96 88-82	Delicato Vineyards Dole Carrot Company	1988 1988	Jul-03 Jul-03
3 272008002	89-19	Duke Energy Moss Lading LLC	1988	Jui-03 Jan-04
3 401000001	89-19 89-84	Grant Development Resthaven Park	1989	Jan-04 Jun-04
3 270105001	89-84 89-18	Greenfield WWTP	1989	Feb-04
3 272050002	88-108	KCAC Asbestos Facility	1989	
3 401015001	89-74	Northshore Ski and Boat Club	1989	Sep-03 Jun-04
3 270125001	89-74 89-76	San Lucas WWTP	1989	Jun-04 Jun-04
3 402013001	89-25	San Luis Tallow	1989	Mar-04
3 401010001	88-153	Santa Margarita Lake Campground	1988	Oct-03
3 272096001	87-103	Sturdy Oil Co. Exxon SS	1987	Jan-04
3 271015001	89-29	The Bluffs Homeowners Association	1989	Feb-04
3 401029001	89-79	Woods Humane Society	1989	Jun-04
3 275000001	88-144	Zentchiku, Inc. Salinas Valley Cattle	1989	Jun-04
	Canatal			
	Coastal Watershed			
Category III				
3 400113004	88-172	San Luis Coastal USD Baywood	1988	Nov-03
3 400113006	88-170	San Luis Coastal USD Los Osos Elem.	1988	Nov-03
3 400113005	88-174	San Luis Coastal USD Sunnyside	1988	Nov-03
3 400113002	89-086	San Luis Coastal USD Los Osos Jr. High	1989	Jun-04
	Southern			
C 4	Watershed			

Category II

#### Table A2-b, continued

3 420103001	93-08	Guadalupe WWTP	1993	Sep-03
Category III				
3 421013001	88-111	Celite Lompoc Plant	1988	Jul-03
3 401023001	89-16	Fiero Lane Water Company	1989	Jan-04
3 401022001	89-06	Owens Development	1989	Feb-04
3 421014001	89-47	Pacifica Graduate Institute	1989	Apr-04

<sup>\*</sup>Region 3 plans to inspect each facility once a year; following are the numbers of each type of required inspection:

Phase I Stormwater Construction General Permit = 83

Phase I Stormwater Industrial General Permit = 166

Phase I Stormwater Municipal Permit = 2

NPDES Majors = 42

NPDES Minors = 69

Pretreatment Inspections = 9

WDR Inspection, Category I = 4

WDR Inspection, Category II= 54

WDR Inspection, Category III= 263

Table A-2c Non Chapter 15 WDR Permits and Inspections\* Schedule - WMI [FY 04/05]

	Northern		Year Last	Proposed Reissue
	Watershed			
WDID No.	Order No.	<u>Discharger</u>	<u>Updated</u>	<u>Date</u>
Category III				
3 442058001	89-120	Agrilink Foods Inc.	1989	Sep-04
3 272095001	90-022	Sunrise Mushrooms, Inc.	1990	Apr-05
	Central			
	Watershed			
Category II				
3 271001001	95-023	California Utilities Service	1995	Feb-05
3 270113001	95-025	Soledad, City of	1995	Feb-05
Category III				
3 272101001	89-117	Soledad Energy, LLC	1989	Jul-04
3 270120001	89-147	San Ardo Water District	1989	Nov-04
3 272073001	90-062	Western Farm Service, Inc.	1990	May-05
3 271027001	86-007	GMS Realty LLC	1986	May-05
3 271031001	87-146	Prunetree Shopping Center	1987	May-05
	Coastal			
	Watershed			
Category III				
3 401031002	80-001	San Luis Obispo CSA #01A	1980	Jan-05
3 400111003	95-001	South San Luis Obispo Co. SD	1995	Mar-05
	Southern Watershed			

Table A-2d

# Non Chapter 15 WDR Permit and Inspection\* Schedule – WMI FY 05/06

			Year	Proposed
	Northern		Last	Reissue
	Watershed			
WDID No.	Order No.	<u>Discharger</u>	<u>Updated</u>	<u>Date</u>
Category II				
3 432002001	95-53	Nature Quality Cold Storage	1995	Sep-05
3 441000001	96-03	Santa Cruz CSA Boulder Creek	1996	May-06
Category III				
3 442038001	91-31	Boyer Fertilizer	1991	May-06
3 352000003	91-25	Granite Rock Southside #1540	1991	Mar-06
3 432040001	90-89	Westside Transport	1990	Jul-05
	Central			
	Watershed			
Category I				
C to the H				
Category II 3 272123001	05.24	Golden State Vintners	1005	11.05
	95-34	Golden State vinthers	1995	Jul-05
Category III 3 270201001	07.50	Mantaura CWD Castura illa Dunia et	1007	0-4.05
	97-52	Monterey CWR Castroville Project	1997	Oct-05
3 275001001	87-38	Moonglow Dairy	1987	May-06
3 401033001	91-29	Rancho Paso MHP	1991	Mar-06
3 272064001	90-92	Soil Serv King City	1990	Sep-05
	Coastal			
	Watershed			
Category III				
3 422063001	90-98	Cambria Winery	1990	Oct-05
	Southern			
	Watershed			
Category II				
3 421017001	96-30	Gardner Ranch	1996	Jan-06
3 420705002	86-149	US Corps of Engs. Santa Barbara	1986	Mar-06
		Dredge		
Category III	01.77	P	1001	T 06
3 421015001	91-55	Dunn School	1991	Jun-06

<sup>\*</sup>Region 3 plans to inspect each facility once a year; following are the numbers of each type of required inspection:

NPDES Majors = 42

NPDES Minors = 69

Pretreatment Inspections = 9

WDR Inspection, Category I = 4

WDR Inspection, Category II= 54 WDR Inspection, Category III= 263

Phase I Stormwater Construction General Permit = 83

Phase I Stormwater Industrial General Permit = 166

Phase I Stormwater Municipal Permit = 2

Table A-2d Non Chapter 15 WDR Permit and Inspection\* Schedule – WMI FY 06/07

			Year	Proposed
	Northern Watershed		Last	Reissue
WDID No.	Order No.	Discharger	<u>Updated</u>	<u>Date</u>
Category II		_		
3 432017001	97-70	Conagra Inc., Gilroy Foods	1997	Feb-07
Category III				
3 352018001	91-67	Evergreen Supply Bixby Quarry	1991	Jul-06
3 432043001	91-80	Vintner's Showcase	1991	Nov-06
3 352017001	91-68	San Benito Supply Paicines	1991	Jul-06
3 431008001	91-101	Uvas Industries, Hall Subdivision	1991	Oct-06
	Central Watershed			
Category III				
3 400114002	92-13	Atascadero USD San Benito School	1992	Apr-07
3 272079002	92-06	John Pryor Salinas Facility	1992	Feb-07
3 271500001	92-22	Red Barn Flea Market	1992	Feb-07
	Coastal			
Category III	Watershed			
3 405000004	91-44	Cal Poly Beef Cattle Center	1991	Oct-06
3 401062001	91-41	Lucia Mar USD Lopez High School	1991	Sep-06
3 401032001	82-33	Nipomo CSD Montecito Verde II	1982	Jan-07
3 402017001	91-35	Paragon Edna Valley Winery	1991	Jul-06
3 401064001	92-27	Richard Bock Residence	1992	Jan-07
3 401004001	) <u>L</u> <u>L</u> 1	Remard Book Residence	1772	Juli 07
	Southern Watershed			
Category III	vacci siicu			
3 422043001	92-02	NH3 Santa Maria Facility	1992	Jan-07
3 422052001	92-01	Olocco Ag Services	1992	Jan-07
		<b>6</b> ** * * * * * * * * * * * * * * * * *		

<sup>\*</sup>Region 3 plans to inspect each facility once a year; following are the numbers of each type of required inspection:

Phase I Stormwater Construction General Permit = 83

Phase I Stormwater Industrial General Permit = 166

Phase I Stormwater Municipal Permit = 2

NPDES Majors = 42 NPDES Minors = 69

Pretreatment Inspections = 9

WDR Inspection, Category I = 4

WDR Inspection, Category II= 54

WDR Inspection, Category III= 263

# Table A-2e Non Chapter 15 WDR Permit and Inspection\* Schedule - WMI FY 07/08

	Northern		Year Last	Proposed Reissue
WDID No. Category II	Watershed Order No.	<u>Discharger</u>	<u>Updated</u>	<u>Date</u>
3 270129001	97-32	Canada Woods Reclamation Facility	1997	Jul-07
3 431018001	97-50	Lion's Gate Reserve	1997	Oct-07
3 279804003	98-60	Santa Lucia Golf Course	1998	Jul-07
Category III				
3 355010001	93-05	Gibson Farms Dryyard	1993	Feb-08
3 419706000	98-14	Pigeon Point Country Inn	1998	Jul-07
3 279804002	98-61	Rancho San Carlos - User	1998	Jul-07
	Central Watershed			
Category II				
3 400109001	87-96	San Miguel SD WWTP	1987	Sep-07
Category III				
3 270104001	83-02	Gonzales WWTP	1983	Nov-07
3 270103001	83-11	Monterey CSA Chualar	1983	Nov-07
3 272080002	92-49	Tanimura and Antle Chualar	1992	Jul-07
3 271002001	83-03	Watertek Indian Springs	1983	Nov-07
	Coastal Watershed			
Category II	,, mcc131100			
3 401076001	97-66	Cypress Ridge Sewer Facility	1997	Nov-07
	Southern			
Category II	Watershed			
3 401037001	86-47	Rantec Manufacturing Plant	1986	Nov-07
3 401037001	00-47	(NAR 06/15/01)	1700	1101-07
3 420113001	98-10	Santa Barbara Co. Parks Cachuma	1998	May-08
Category III				
3 401500003	93-15	Clover Residence	1993	Apr-08
3 422058002	92-60	Exxon Las Flores Canyon Plant	1992	Sep-07
3 402033001	97-65	Franzia Corbett Canyon Vineyards	1997	Nov-07
3 421016001	92-50	Laguna Blanca School	1992	Sep-07
3 420118001	92-93	Los Alamos WWTP	1992	Nov-07
3 401500004 3 405002001	93-17 92-137	Nielsen Residence One More Time	1993 1992	Apr-08 Nov-07
3 422047001	92-137		1992	Jul-07
3 401500005	93-19	R&S Crop Dusters Riolo Residence	1992	
3 422050001	92-57	Santa Maria Valley Crop Service	1993	Apr-08 Jul-07
3 4220530001	92-57	Simplot Soil Builders	1992	Jul-07 Jul-07
3 402036001	92-56	Spawnmate Arroyo Grande Mushrooms	1992	Jul-07 Jul-07
3 401500006	93-21	Szopinski Residence	1993	Apr-08
3 420121001	92-130	Vista Del Mar Union School	1992	Oct-07
3 422046001	92-76	Western Farm Service Santa Maria	1992	Jul-07
3 422046003	92-74	Western Farm Service Goleta	1992	Jul-07

Table A-3a

# Chapter 15 - WMI FY 02/03

			Review	Reissue
WDID No.	Order No.	<u>Discharger</u>	<u>Date</u>	<u>Date</u>
	Northern			
	Watershed			
	Central			
	Watershed			
3 270300006	88-83	Monterey Co. DPW San Ardo SWDS	03/06	03/06
3 270300002	88-78	Monterey Co. DPW Bradley SWDS	03/06	03/06
3 270300001	88-107	Monterey Co. Parks Lake San Antonio No. SWDS	03/06	03/06
3 270301005	87-149	U.S. Army, Fort Hunter Liggett Landfill	02/10	02/10
	Southern			
	Watershed			
3 560307002	87-154	Ventura S.D. Ozena Landfill	02/11	02/11

#### Table A-3b

## **Chapter 15 - WMI FY 03/04**

		Chapter 10 (1)1111 1 00/01		
			Review	Reissue
WDID No.	Order No.	<u>Discharger</u>	<u>Date</u>	<u>Date</u>
	Northern			
•••••	Watershed		0.4/0.4	0.4.0.4
3 440300002	94-29	Santa Cruz Co. DPW Buena Vista Site	04/04	04/04
3 440302001	94-20	W-4ill- City I ICII	04/02	04/02
3 440302001	94-20	Watsonville City Landfill	04/02	04/02
	Central			
	Watershed			
3 270303001	93-63	Monterey RWM Marina Site	03/07	03/07
3 270305001	94-27	Rancho Los Lobos Disposal Site	04/03	04/03
3 270304001	93-95	Salinas City DPW Crazy Horse Site	03/11	03/11
	Southern			
3 400311001	Watershed 89-75	California Valley CSD SWDS	04/04	04/04
3 420305001	93-80	•	03/11	03/11
		Lompoc City SWDS		
3 400310001	93-51	San Luis Garbage Company Cold Canyon	03/07	03/07
3 420303001	89-36	Santa Barbara Co. DPW Ventucopa Landfill	04/02	04/02
3 420301003	93-69	Santa Barbara Co. DPW Tajiguas SWS	03/11	03/11
3 420301002	94-32	Santa Barbara Co. DPW Foxen Canyon	04/04	04/04
3 420306001	94-26	USAF, Vandenberg SWDS	04/05	04/05

#### Table A-3c

# Chapter 15 - WMI FYs 04/05, 05/06, 06/07, and $07/08\,$

There are no Chapter 15 Waste Discharge Requirements scheduled to be reissued in these fiscal years.

#### Table A-3d

#### Chapter 15 -WMI FY 08/09

WDID No.	Order No. Northern Watershed	<u>Discharger</u>	<u>Facility</u>	Review <u>Date</u>	Reissue <u>Date</u>
3 270300007	Central Watershed 94-19	Monterey Co. DPW	Johnson Canyon Solids Waste Site	09/09	09/02
	Southern Watershed				

Table B-1 Schedule of All TMDLs for Region 3

REGION	WATER BODY TYPE	WATER BODY NAME	POLLUTANT/STRESSOR	TMDL START DATE	TECHNICAL TMDL DATE (IF APPLICABLE)	TMDL COMPLETION DATE (REGIONAL BOARD APPROVAL
3	В	Monterey Bay South				
			Metals	1998	2009	2013
			Pesticides	1998	2009	2013
3	В	Monterey Harbor				
			Metals	1998	2004	2007
_			Unknown Toxicity	1998	2009	2013
3	В	Morro Bay				
			Metals	1996	2003	2005
			Pathogens	1996	2002	2004
			Sedimentation/Siltation	1996	2000	2004
3	В	Moss Landing Harbor				
			Pathogens	2005	2008	2013
			Pesticides	2005	2009	2013
			Sedimentation/Siltation	2005	2008	2013
3	E	Carpinteria Marsh (El Estero Marsh)				
			Nutrients	2006	2009	2013
			Org. enrichment/Low D.O.	2006	2009	2013
			Priority Organics	2006	2009	2013
			Sedimentation/Siltation	2006	2009	2013
3	Е	Elkhorn Slough				
			Pathogens	2005	2008	2013
			Pesticides	2005	2008	2013
			Sedimentation/Siltation	2005	2008	2013
3	E	Goleta Slough				
			Metals	2006	2009	2013
			Pathogens	2006	2009	2011
			Priority Organics	2006	2009	2013
			Sedimentation/Siltation	2006	2009	2013
3	Е	Moro Cojo Slough				
			Pesticides	1998	2004	2007
			Sedimentation/Siltation	1998	2009	2013
3	Е	Old Salinas River Estuary				
			Nutrients	1998	2003	2007
_			Pesticides	1998	2004	2007
3	E	Salinas River Lagoon (North)	N	1000		
			Nutrients	1998	2003	2007
			Pesticides	1998	2004	2007
			Sedimentation/Siltation	1998	2002	2005
3	E	Salinas River Refuge Lagoon (South)				
			Nutrients	1998	2003	2007
			Pesticides	1998	2004	2007
_	<u> </u>		Salinity/TDS/Chlorides	1998	2003	2011
3	E	San Lorenzo River Estuary				
			Pathogens	1999	2003	2005
-			Sedimentation/Siltation	1998	2011	2013
3	E	Soquel Lagoon				
			Nutrients	2003	2011	2013
			Pathogens	2001	2003	2005

Table B-1, continued

REGION	WATER BODY TYPE	WATER BODY NAME	POLLUTANT/STRESSOR	TMDL START DATE	TECHNICAL TMDL DATE (IF APPLICABLE)	TMDL COMPLETION DATE (REGIONAL BOARD APPROVAL
			Sedimentation/Siltation	2006	2009	2011
3	L	Hernandez Reservoir				
			Mercury	1998	2003	2005
3	L	Nacimiento Reservoir				
			Metals	1997	2000	2000
3	L	Schwan Lake				
			Nutrients	2006	2009	2013
			Pathogens	2006	2009	2011
3	R	Aptos Creek				
			Pathogens	2001	2003	2005
			Sedimentation/Siltation	2006	2009	2011
3	R	Arroyo Burro Creek				
			Pathogens	2006	2009	2011
3	R	Blanco Drain				
			Pesticides	1998	2004	2007
3	R	Carbonera Creek				
			Nutrients	1993	1999	2000
			Pathogens	1999	2003	2005
			Sedimentation/Siltation	1998	2001	2003
3	R	Carpinteria Creek				
			Pathogens	2006	2009	2011
3	R	Chorro Creek	Ĭ			
			Metals	1996	2001	2002
			Nutrients	1996	2001	2003
			Sedimentation/Siltation	1996	2001	2003
3	R	Clear Creek				
			Mercury	1998	2003	2005
3	R	Espinosa Slough				
			Nutrients	1998	2003	2007
			Pesticides	1998	2004	2007
			Priority Organics	1998	2004	2007
3	R	Las Tablas Creek	, ,			
			Metals	1997	2001	2003
3	R	Las Tablas Creek, North Fork				
			Metals	1997	2001	2003
3	R	Las Tablas Creek, South Fork				
			Metals	1997	2001	2003
3	R	Llagas Creek				
			Nutrients	1998	2003	2005
			Sedimentation/Siltation	1998	2003	2005
3	R	Lompico Creek			1	132
		,	Nutrients	1993	1999	2000
			Pathogens	1999	2003	2005
			Sedimentation/Siltation	1998	2001	2003
3	R	Los Osos Creek			1	133
			Nutrients	1996	2001	2003
			Priority Organics	1996	2001	2002
			Sedimentation/Siltation	1996	2001	2003

Table B-1, continued

REGION	WATER BODY TYPE	WATER BODY NAME	POLLUTANT/STRESSOR	TMDL START DATE	TECHNICAL TMDL DATE (IF APPLICABLE)	TMDL COMPLETION DATE (REGIONAL BOARD APPROVAL
			Sedimentation/Siltation	1996	2001	2003
3	R	Mission Creek				
			Pathogens	2006	2009	2011
			Unknown Toxicity	2006	2011	2013
3	R	Pajaro River				
			Nutrients	1998	2003	2005
			Sedimentation/Siltation	1998	2003	2005
3	R	Rider Gulch Creek	0 " ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	1000		2005
			Sedimentation/Siltation	1998	2003	2005
3	R	Salinas Reclamation Canal	D. C. I	1000	0000	2007
			Pesticides	1998	2003	2007
			Priority Organics	1998	2003	2007
3	R	Salinas River	Nicia	1000	0000	2007
			Nutrients	1998	2003	2007
		<u> </u>	Pesticides	1998	2004	2007
		<u> </u>	Salinity/TDS/Chlorides	1998	2003	2011
3		O Antonio Orask (Ot- Barkers O 245 24)	Sedimentation/Siltation	1998	2002	2005
3	R	San Antonio Creek (Santa Barbara Co_315.31)	Codimentation/Ciltation	2006	2009	2013
3	R	Con Donito Divor	Sedimentation/Siltation	2006	2009	2013
3	K	San Benito River	Sedimentation/Siltation	1998	2003	2005
3	R	San Lorenzo River	Sedimentation/Silitation	1998	2003	2005
3	I N	San Lorenzo River	Nutrients	1993	1999	2000
			Pathogens	1999	2003	2005
			Sedimentation/Siltation	1998	2001	2003
3	R	San Luis Obispo Creek (Below W. Marsh Street)	Sedimentation/Silitation	1990	2001	2003
3	IX.	San Euls Obispo Creek (Below W. Marsh Offeet)	Nutrients	1993	2002	2004
			Pathogens	1993	2003	2004
			Priority Organics	1998	2001	2002
3	R	Santa Ynez River	Thomy Organico	1000	2001	2002
- U		Cana moz ravoi	Nutrients	2008	2011	2013
			Salinity/TDS/Chlorides	2008	2011	2013
			Sedimentation/Siltation	2008	2011	2013
3	R	Shingle Mill Creek	Countries nation, Cination	2000		20.0
			Nutrients	1998	1999	2000
			Sedimentation/Siltation	1998	2001	2003
3	R	Tembladero Slough				
	İ	i i	Nutrients	1998	2005	2007
			Pesticides	1998	2004	2007
3	R	Valencia Creek				
			Pathogens	2001	2003	2005
			Sedimentation/Siltation	2006	2009	2011
3	R	Waddell Creek, East Branch				
			Nutrients	2001	2005	2011
3	R	Watsonville Slough				
			Metals	1999	2003	2005
			Oil and grease	1999	2003	2005
			Pathogens	1999	2003	2005
			Pesticides	1999	2009	2011
			Sedimentation/Siltation	1998	2003	2005
3	X	Pacific Ocean at Point Rincon				
			Pathogens	2006	2009	2011

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Table B-2

							Development		Implementation Planning		Basin Planning		Implementation	
TMDL Project	Waterbody	Hydrologic Unit	Pollutant(s) Stressor(s)	Stakeholder Participation	Water Quality Program Integration	Interagency Coordination	Start	End	Start	End	Start	End	Start	End
Bolsa Neuva- Pathogens	Elkhorn Slough, Moss Landing Harbor	306	Pathogens											
Bolsa Neuva- Pesticide	Elkhorn Slough	306	Pesticide											
Bolsa Neuva-Siltation	Elkhorn Slough, Moro Cojo Slough, Moss Landing Harbor	306,309	Siltation											
Chorro Creek-Metals	Chorro Creek	310	Metals	Low to Medium	SLIC	CA National Guard					Delist 2001/02	2001/02		
Clear Creek- Hernandez Reservoir Metals	Clear Creek, Hernandez Reservoir	305	Metals	tbd	NPS	US-BLM	2001/02	2002/03	2001/02	2002/03	2006/07	2007/08		
Las Tablas Creek- Nacimiento Reservior Mercury	Las Tablas Creek,	309	Mercury	tbd	NPDES SS WW	US-EPA (possible Superfund)				2001/02	2001/02	2002/03		
Monterey Bay South- Pesticide	Monterey Bay South	309	Pesticide											
Monterey Bay South- Metals	Monterey Bay South	309	Metals				2001/02	2005/06				2007/08		
Monterey Harbor- Metals	Monterey Harbor	309	Metals	tbd			2001/02	2004/05	2002/03	2005/06	2005/06	2006/07		
Monterey Harbor- Unknown Toxicity	Monterey Harbor	309	Unknown Toxicity											
Morro Bay-Metals	Morro Bay	310	Metals	Low	NPDES SS NPS	Army Corps of Engineers NEP	2001/02	2003/04		2003/04		2004/05		
Morro Bay-Nutrients	Los Osos Creek, Chorro Creek	310	Nutrients	Medium	NPSES SW NPDES WW NPS SWAMP	CA Men's Colony CA Farm Bureau San Luis Coastal RCD NC Cooperative Extension				2001/02	2001/02	2002/03	2004/05	
Morro Bay- Pathogens	Morro Bay	310	Pathogens	High	NPDES WW NPDES SS NPS	NEP DHS Farm Bureau USFWS LOCSD City of Morro Bay	2001/02	2002/03	2002/03	2003/04	2001/02	2002/03		2003/04

# Table B-2, continued

							Develo	opment	Implementat	tion Planning	Basin F	Planning	Impleme	ntation
TMDL Project	Waterbody	Hydrologic Unit	Pollutant(s) Stressor(s)	Stakeholder Participation	Water Quality Program Integration	Interagency Coordination	0	-	0		0	-	0	
Morro Bay-Siltation	Chorro Creek, Los Osos Creek, Morro Bay		Sediment/Siltatio	High	NPS	USEPA	Start	End	Start	End 2000/01	Start 2001	End 2001/02	Start 2002/03	End 2004/05
Pajaro River- Nutrients	Llagas Creek, Pajaro River	305	Nutrients	Medium	NPS	CDFG	2001/02	2002/03	2002/03	2003/04	2002/03	2004/05	2005/06	
Salinas River-	Espinosa Slough,	309	Nutrients	Medium	NPS	CDFG	2001/02	2003/04	2002/03	2004/05	2007/08	2007/08		
Salinas River- Pesticides	Blanco Drain, Espinosa Slough, Moro Cojo Slough, Moss Landing Harbor, Old	306,309	Pesticides and Priority Organics	Medium	NPS NPDES SS	CDFG DPR NMFS								
	Salinas River Estuary, Salinas Reclamation Canal, Salinas River, Salinas River Lagoon (North), Salinas River Refuge Lagoon (South)						2001/02	2004/05	2004/05	2005/06	2005/06	2007/08		
Salinas River-	Salinas River	309	Siltation	Medium	NPS	CDFG	2001/02	2002/03	2002/03	2003/04	2002/03	2003/04	2004/05	
San Antonio Creek- Siltation			Siltation											
San Lorenzo River- Nutrients	Carbonera Creek, Lompico Creek, San Lorenzo River, Shingle Mill Creek	304	Nutrients											2013/14
San Lorenzo River- Siltation	Carbonera Creek, Lompico Creek, San Lorenzo River, San Lorenzo River Estuary, Shingle Mill Creek	304	Siltation				2000/01	2000/01	2000/01	2001/02	2002/03	2003/04	2004/05	20.0
San Luis Obispo Creek-Nutrients	San Luis Obispo Cr, San Luis Obispo Creek (Below W. Marsh Street)	310		Moderate 6/2001 - Presentation 9/2001 - Info Booth at Creek Day 9/2001 - Farm Bureau NESW letter 10/2001 - Presentation to	NPDES *Coordinate Permit renewal and Redpener clause *Coordinate with new permit for reuse *Cal Poly;coordinate with WDR	*Farm Bureau -coordination with outreach  *USF&W -will coordinate WRT targets								
				City		18	2001/02	2001/02	2000/01	2001/02	2001/02	2002/03	2003/04	

	Table B-2, continued													
						·	Development Implementation Planning			Basin F	Planning	Impleme	ntation	
TMDL Project	Waterbody	Hydrologic Unit	Pollutant(s) Stressor(s)	Stakeholder Participation	Water Quality Program Integration	Interagency Coordination	Start	End	Start	End	Start	End	Start	End
Santa Cruz County- Pathogens	Aptos Creek, Carbonera Creek, Lompico Creek, San Lorenzo River, San Lorenzo River Estuary, Soquel Lagoon, Valencia Creek, Schwan	304	Pathogens	Medium	NPDES SS NPS	Santa Cruz County	2001/02	2003/04	2002/03	2003/04	2002/03	2003/04	2004/05	
Valencia Creek and Aptos Creek-Siltation	Aptos Creek,	304	Siltation				2001/02	2003/04	2004/05					
Watsonville Slough- Oil and Grease	Watsonville Slough Galighan Slough Harkins Slough Struve Slough	305	Oil and Grease	Medium	anticipate: NPDES-SS (Phase II Stormwater)		2001/02	2003/04	2002/03	2006/07	2006/07	2007/08		
Watsonville Slough- Pathogens	Watsonville Slough	305	Pathogens	Medium	NPS		2002/03	2004/05	2003/04	2007/08				
Watsonville Slough- Pesticides	Watsonville Slough Galighan Slough Harkins Slough Struve Slough	305	Pesticides	Medium	NPS	anticipate DPR and CAFG	2001/02	2003/04	2002/03	2006/07	2006/07	2007/08		

**Basin Planning Schedule of Activities** 

Table C

Surface Water Issues	Estimated Completion Date	Cost
Develop Region-Wide Nonpoint Source	07/02	0.12 PY
Management Measures	07/02	0.1211
Create a Basin Plan Index and Glossary	07/02	0.12 PY
Revise Chapter 6 of Basin Plan	07/02	0.12 PY
Revise Turbidity Objective	12/02	0.12 PY
Develop Riparian Corridor Protection Policy	12/02	0.12 T T
Incorporate an Enterococcus standard for water	06/03	0.12 T T 0.04 PY
contact recreation in ocean waters	00/03	0.0411
Basin Plan Waiver Policy Revision (SB 390)	06/03	0.04 PY
Dasin Flair Walver Folicy Revision (SB 390)	00/03	0.04 F 1
Incorporate an E. Coli standard for water contact	12/03	0.04 PY
recreation in surface waters		
Clarify Narrative Objective for Taste/Odors	06/04	0.04 PY
Clarify Chapter 5, page V-9, Section IV.C.1.,	06/04	0.04 PY
Areas of Special Biological Significance.		
Develop a regional onsite wastewater	06/04	0.30 PY
management policy consistent with AB 885.		
Shall include at a minimum: maintenance guidelines, repair standards, and monitoring requirements, Update On-Site Septic Tank Policy/Update MOUs, Develop Septage Disposal Policy, and Update Mound System Guidelines.		
Develop region wide nutrient criteria consistent with federal Regional Technical Advisory Group (RTAG) and a State Regional Technical Advisory Group (STRTAG).	12/04	0.30 PY
Include nutrient water quality objectives for Franklin Creek, Santa Monica Creek, Lopez Lake, and Perfumo Creek, Develop Ammonia Objective, Develop Narrative Biological Objective (Nitrogen) to Protect from Dominance of Nuisance Species, and Develop Nitrogen Water Quality Objectives to Protect Rare, Threatened, or Endangered Species Beneficial Use.		
Ground Water Issues		
Revise Chapter 6 of the Basin Plan - include assessment of Pajaro Hydrologic Unit and Salinas	07/02	0.15
Hydrologic Unit		
Create a Basin Plan Index/Glossary	07/02	0.05

Table C, continued

Update Groundwater Basin	12/02	0.05
configurations		
Revision and/or clarification of Basin Plan	12/02	0.15
narrative groundwater objectives; clarification		
of related tables.		
Develop Region-wide Nitrogen Management	12/02	0.15
measures for GW basins		
May ultimately need to consider development of		
basin-specific management measures for some		
groundwater basins.		
Fertilizer/pesticide backflow prevention measures	12/02	0.05
Develop wellhead protection policy (a	12/03	0.15
protective measure for sensitive groundwater		
resources)		
Identify existing beneficial uses (BU's) for	06/03	0.15
groundwaters of the Region/determine		
appropriate BU's for shallow groundwater		
Review and/or develop groundwater objectives for	06/04	0.35
groundwater basins of the Region.		
Salts objectives - investigate the need for a region-	06/04	0.35
wide salts policy		

**Table D-1: Nonpoint Source Management Measure Categories and Pollution Problems by Waterbody** 

Waterbody	Cal Water Number	Agriculture	Silviculture	Urban	Marinas and Boats	Hydromodification	Wetlands and Vegetative Trtmt
30400-Scotts Valley (60 Acres)				Priority Organics			
30411-Waddell Creek, East Branch (3.51 Miles)				Nutrients			
30412-Antonellis Pond (8 Acres)				Siltation			
30412-Clear Creek (R3) (2 Miles)						Trace Elements	
30412-Lockhart Gulch Creek (3 Miles)						Siltation	
30412-Santa Cruz Harbor (38 Acres)					Metals		
30412-Kings Creek (7.07 Miles)				Pathogens/Path.Indicators		Siltation	
30412-Boulder Creek (7.56 Miles)				Nutrients		Siltation	
30412-Bennett Creek (1.83 Miles)						Chromium	
30412-San Lorenzo River (26.59 Miles)			Siltation	Metals Nutrients Pathogens/Path.Indicators Siltation		Siltation	Siltation
30412-Shingle Mill Creek (1.55 Miles)				Nutrients Siltation			
30412-Bear Creek(R3) (6.32 Miles)				Pathogens/Path.Indicators		Siltation	
30412-Newell Creek (8.29 Miles)				Metals Pathogens/Path.Indicators Siltation			
30412-Lompico Creek (4.48 Miles)				Nutrients Pathogens/Path.Indicators Siltation		Siltation	Siltation
30412-Zayante Creek (9.21 Miles)						Siltation	
30412-Bean Creek (8.91 Miles)		Nutrients		Pathogens/Path.Indicators		Siltation	
30412-Losckhart Gulch Creek (2.73 Miles)						Siltation	
30412-Carbonera Creek (10.11 Miles)				Nutrients Pathogens/Path.Indicators Siltation			
30412-Branciforte Creek (5.78 Miles)				Pathogens/Path.Indicators		Siltation	
30412-San Lorenzo River Estuary (709.16 Acres)				Pathogens/Path.Indicators		Other Habitat Alterations Siltation	
30412-Schwan Lake (23.49 Acres)				Nutrients Pathogens/Path.Indicators			
30413-Corcoran Lagoon (26 Acres)				High Coliform Count Pathogens/Path.Indicators			
30413-Moran Lake (8 Acres)				High Coliform Count Pathogens/Path.Indicators Siltation			
30413-Trout Gulch (8 Miles)						Siltation	
30413-Soquel Creek, West Branch (6.13 Miles)						Siltation	
30413-Soquel Lagoon (0.64 Acres)				Nutrients Pathogens/Path.Indicators Siltation			
30413-Aptos Creek (8.41 Miles)		Pathogens/Path.Indicators Siltation		Pathogens/Path.Indicators Siltation		Siltation	Siltation
30413-Trout Gulch (3.98 Miles)						Siltation	

Waterbody	Cal Water Number	Agriculture	Silviculture	Urban	Marinas and Boats	Hydromodification	Wetlands and Vegetative Trtmt
30413-Valencia Creek (6.19 Miles)		Pathogens/Path.Indicators Siltation	Pathogens/Pa	ath.Indicators Siltation		Siltation	Siltation
20500 67 - 17 17 - (250 1		XV:		n: : 0 :			
30500-Gilroy-Hollister (350 Acres)		Nitrates Nutrients Priority Organics		Priority Organics Tetrachloroethylene/PCE			
30510-Gallighan Slough (1 Acres)				High Coliform Count Pathogens/Path.Indicators Trace Elements		Flow Alteration	
30510-Hanson Slough (1 Acres)		Flow Alteration Pesticides Siltation				High Coliform Count Pathogens/Path.Indicators	
30510-Harkins Slough (8 Acres)		Flow Alteration Pesticides Siltation				High Coliform Count Pathogens/Path.Indicators	
30510-Pinto Lake (121 Acres)				High Coliform Count Pathogens/Path.Indicators			
30510-Rider Gulch Creek (2 Miles)		Salinity/TDS/Chlorides Siltation					
30510-Rider Creek (1.77 Miles)		Siltation	Siltation	Siltation		Siltation	Siltation
30510-Pajaro River (32.16 Miles)		Algae Flow Alteration Nutrients Organic Enrichment/Low DO Pathogens/Path.Indicators  Pesticides Priority Organics Salinity/TDS/Chlorides Siltation Suspended Solids Turbidity		Nutrients Other Habitat Alterations Pathogens/Path.Indicators Pesticides Priority Organics Salinity/TDS/Chlorides Siltation Metals Suspended Solids Turbidity		Flow Alteration  Mercury Metals Nutrients  Organic Enrichment/Low DO Other Habitat Alterations Siltation Algae Turbidity	Organic Enrichment/Low DO Other Habitat Alterations Siltation Algae
30510-Watsonville Slough (6.16 Miles)		Metals Nutrients Pathogens/Path.Indicators Pesticides Priority Organics Siltation Turbidity		Copper Lead Metals Nutrients Oil And Grease Pathogens/Path.Indicators Priority Organics Turbidity			Turbidity
30520-Llagas Creek (Above Chesbro Res) (15 Miles)						Siltation	
30520-Uvas Creek Downstream (13 Miles)						Siltation	
30530-Alamias Creek (7.17 Miles)				Siltation			
30530-Little Llagas Creek (7.16 Miles)				Siltation			
30530-Live Oak Creek (3.26 Miles)						Metals	
30530-Llagas Creek (19.37 Miles)		Nutrients Pathogens/Path.Indicators Pesticides Priority Organics Siltation		Nutrients Pathogens/Path.Indicators Pesticides Priority Organics		Siltation	Nutrients Siltation
30530-Pacheco Creek (25.11 Miles)			Î			Siltation	

Waterbody	Cal Water Number	Agriculture	Silviculture	Urban	Marinas and Boats	Hydromodification	Wetlands and Vegetative Trtmt
30530-San Benito R (116.62 Miles)						Mercury	
30530-Tres Pinos Creek (30.98 Miles)		Siltation					
30540-Tequisquita Slough (300 Acres)		Siltation					
30550-San Benito River (86 Miles)		Siltation					
30550-Hernandez Reservoir (626.48 Acres)						Mercury	
30550-Pescadero Creek (S. Benito R.) (13.95 Miles)		Siltation					
30600-Langley Area Groundwater Basin (27 Acres)		Nitrates Nutrients					
30600-Elkhorn Slough (67.52 Acres)		Nutrients Pathogens/Path.Indicators Pesticides Priority Organics Siltation				Pesticides Flow Alteration Siltation	Pesticides
30600-Moss Landing Harbor (60.48 Acres)		Nutrients Pathogens/Path.Indicators Pesticides Priority Organics Siltation			Pathogens/Path.Indicators	Siltation	Siltation
30700-Carmel River Estuary (42 Acres)				High Coliform Count			
30/00-Carmer River Estuary (42 Acres)				_			
				Nutrients			+
30700-Carmel Valley (10 Acres)	+	Priority Organics	1	Pathogens/Path.Indicators	<del>                                     </del>		<del> </del>
50/00-Carmer variey (10 Acres)		Tetrachloroethylene/PCE					
30700-Carmel River (42.36 Miles)		Tetracinoroethylene/FCE		Siltation	1		
50/00-Carmer River (42.30 lymes)				Sittation	1		
30800-Big Sur River Estuary (5 Acres)				High Coliform Count Pathogens/Path.Indicators			
30900-Salinas Valley, Eastside Aquifer (124 Acres)		Nitrates		r autogens/ r atti.mutcators			
		Nutrients					
30900-Salinas Valley, Forebay (167 Acres)		Nitrates Nutrients Priority Organics					
		Salinity/TDS/Chlorides					
30900-Salinas Valley, Pressure (124 Acres)		Nitrates Nutrients Priority Organics Salinity/TDS/Chlorides		Salinity/TDS/Chlorides			
30900-Salinas Valley, Upper Valley Aquifer (205 Acres)		Nitrates		Priority Organics			
20010 0110 11 12 12 12	ļ	Nutrients			4		
30910-Old Salinas River (5 Miles)		Chlordane DDT					
		Dieldrin Endosulfan				Nutrients Salinity/TDS/Chlorides	
		Endrin Group A Pesticides Pesticides Toxaphene					
30911-Blanco Drain (15.29 Miles)		Nutrients Pesticides		Copper Priority Organics	1		

Waterbody	Cal Water Number	Agriculture	Silviculture	Urban	Marinas and Boats	Hydromodification	Wetlands and Vegetative Trtmt
		Priority Organics					
30911-Espinosa Slough (1.45 Miles)		Nutrients		Nutrients			
		Pesticides		Pesticides			
		Priority Organics		Priority Organics			
30911-Old Salinas River Estuary (92.94 Acres)		Nutrients					
		Pesticides					
30911-Salinas Reclamation Canal (9.5 Miles)		Pesticides		Pesticides			
		Priority Organics		Priority Organics			
30911-Salinas River (187.21 Miles)		Nutrients		Siltation		Pesticides	Pesticides
		Pesticides		Salinity/TDS/Chlorides			
		Salinity/TDS/Chlorides Siltation					
30911-Salinas River Lagoon (North) (196.61		Nutrients					
Acres)		Nutrients					
,		Pesticides				Siltation	
		Siltation					
30911-Salinas River Refuge Lagoon (South) (30		Nutrients					
Acres)							
		Pesticides				Pesticides	Pesticides
		Salinity/TDS/Chlorides					
30911-Tembladero Slough (5.03 Miles)		Nutrients		Nutrients			
		Pesticides		Pesticides			
	<del>                                     </del>	Priority Organics		Priority Organics	4		
30913-Moro Cojo Slough (62.49 Acres)		Nutrients		Cadmium			
		Organic Enrichment/Low DO		Metals		Nutrients	Nutrients
		Pesticides		Nutrients			
		Priority Organics		Organic Enrichment/Low			
		, , , , , , , , , , , , , , , , , , ,		DO			
		Siltation		Pesticides			Organic Enrichment/Low
							DO
				Priority Organics			Siltation
20050 FIF				Siltation			
30950-El Estero Lake (33 Acres)				Siltation			
30950-Laguna Del Rey (17 Acres)				Nutrients Siltation			
30950-Roberts/Laguna Grande Lake (136 Acres)				Nutrients			
30930-Roberts/Laguila Grande Lake (130 Acres)				Siltation			+
30950-Seaside Area Groundwater Basin (50	+	+		Priority Organics			
Acres)				Filority Organics			
30950-Monterey Bay South (116.01 Acres)		Pesticides					
30950-Monterey Harbor (893.18 Acres)	†		1	Copper			<del> </del>
23,22 2,20,000 (0,3,10,10,10,0)				Metals			
				Zinc			
30981-Atascadero Lake (74 Acres)	1			High Coliform Count		Metals	
, ,				Nutrients	Copper		
				Pathogens/Path.Indicators	Metals		
30981-San Marcos Creek (13.02 Miles)		Siltation			Zinc		
30981-Las Tablas Creek, North Fork (6.47 Miles)							
30981-Las Tablas Creek, South Fork (4.7 Miles)							
30981-Las Tablas Creek (5.72 Miles)				Mercury		Mercury	

Waterbody	Cal Water Number	Agriculture	Silviculture	Urban	Marinas and Boats	Hydromodification	Wetlands and Vegetative Trtmt
				Metals		Metals	
						Mercury Metals	
						Chromium	
30982-Nacimiento Reservoir (5735.74 Acres)						Mercury	
						Metals	
31011-San Carpoforo Creek (10.62 Miles)		Siltation				Nickel	
31013-San Simeon Creek (5.61 Miles)		Nutrients				Siltation	
31013-Pico Creek (1.09 Miles)			Į			Mercury	
31016-Cayucos Creek (6.77 Miles)		Siltation				Metals	
31017-Whale Rock Reservoir (597 Acres)		Siltation					
31018-Toro Creek (10.99 Miles)		Siltation				Metals	
31021-Little Morro Creek (7.43 Miles)		Siltation				Metals	
31021-Morro Creek (13.3 Miles)	i	Siltation					
31022-Chorro Valley (20 Acres)		Nitrates	Î				
		Nutrients					
31022-Los Osos Valley (20 Acres)		Nutrients	1	Nitrates			
31022-203 0303 valley (20 / teres)		rutions		Nutrients		Metals	
31022-San Luisito Creek (6.73 Miles)				rutionts		Wetais	
31022-Chorro Creek (14.27 Miles)		Algae		Organic Enrichment/Low DO	1		
		Flow Alteration Nutrients		Flow Alteration Siltation			
		Organic Enrichment/Low		Thermal Modifications		Metals	
		DO Pathogens/Path.Indicators Siltation		Nutrients		Algae Organic Enrichment/Low DO	Turbidity
		Thermal Modifications Turbidity		Algae		Chromium Flow Alteration Thermal Modifications	Siltation
31022-Morro Bay (2069.13 Acres)		Flow Alteration Nutrients Pathogens/Path.Indicators Siltation		Flow Alteration Metals Nutrients Pathogens/Path.Indicators		Metals Nickel Siltation Turbidity	
				Siltation	Metals	Metals	
31022-San Bernardo Creek (6.9 Miles)					Pathogens/Path.Indicators	Siltation	
31023-Los Osos Creek (15.75 Miles)		Nutrients Other Habitat Alterations Pathogens/Path.Indicators		Priority Organics Siltation			
		Priority Organics				Metals	
		Siltation Turbidity				Siltation Other Habitat Alterations	Other Habitat Alterations Siltation
31024-Laguna Lake (201 Acres)	+	Nutrients	1	Siltation	₹	Turbidity	Turbidity
5102 i Euguna Earc (201 /icies)		Siltation		Simmon		1 aroratty	Tarolatty
31024-San Luis Obispo Crk.(Above W.Marsh St., (10 Miles)	)	High Coliform Count		Nutrients	1		
(10 111100)		Pathogens/Path.Indicators Siltation					
31024-San Luis Obispo Valley (15 Acres)	+	Priority Organics	+	Overdraft	+		
31024-3an Luis Obispo Vaney (13 Acres)		Tetrachloroethylene/PCE		Priority Organics			
31024-San Luis Obispo Cr (1.58 Miles)		Nutrients Siltation		Nutrients Siltation			

Waterbody	Cal Water Number	Agriculture	Silviculture	Urban	Marinas and Boats	Hydromodification	Wetlands and Vegetative Trtmt
31024-San Luis Obispo Creek (Below W. Marsh)		Nutrients		Metals			
(9.57 Miles)		Pathogens/Path.Indicators		Nutrients			
		Priority Organics		Pathogens/Path.Indicators			
		Siltation		Priority Organics			
				Siltation		Priority Organics	Siltation
31026-Pismo Creek (5.47 Miles)		Siltation					
31031-Arroyo Grande Creek, Upstream (6 Miles)		Siltation					
31032-Arroyo Grande Valley-Nipomo Mesa (90 Acres)				Priority Organics	1		
110100)							
31200-Cuyama Valley (105 Acres)	1		1	Priority Organics	1		
31200-Santa Maria River Valley (265 Acres)		Nitrates		Other Inorganics			
51200 Banka Maria Taver vanie, (200 Heres)		Nutrients		Priority Organics			
		Priority Organics		Salinity/TDS/Chlorides			
		Salinity/TDS/Chlorides					
		Tetrachloroethylene/PCE					
		Trichloroethane/TCA					
31210-Oso Flaco Lake (320 Acres)		Siltation			1		
31210-Santa Maria River (49.27 Miles)		Siltation					
31230-Twitchell Reservoir (3070 Acres)		Siltation					
31230-Huasna River (18.2 Miles)		Siltation					
31300-San Antonio Creek (Hyd 313) (30 Miles)		Siltation					
31300-San Antonio Creek Valley (25 Acres)				Metals			
				Pesticides			
				Priority Organics			
31300-San Antonio Creek (Hyd313) (34.63 Miles)		Siltation					
31400-Santa Ynez River Valley (123 Acres)		Salinity/TDS/Chlorides		Priority Organics			
31410-Santa Ynez River (55.95 Miles)		Nutrients Salinity/TDS/Chlorides		Nutrients Salinity/TDS/Chlorides			
		Siltation		Siltation			
31420-Salsipuedes Creek,S.Bar. (9 Miles)		Siltation		Siltation			
31420-Santa Rosa Creek (R3) (7.71 Miles)		Sittation				Siltation	
51420-Santa Rosa Creek (RS) (7.71 Wiles)						Sittation	
31420-El Jaro Creek (11.25 Miles)		Siltation			1		
31420-Salsipuedes Creek, S. Bar. (9.2 Miles)		Siltation					
31500-Santa Barbara South Coast (25 Miles)				High Coliform Count Pathogens/Path.Indicators		Metals Salinity/TDS/Chlorides	
31510-Tecolote Creek (6.98 Miles)		Siltation		J		,	
31510-Canada Del Refugio (6.81 Miles)	1	Siltation					
31531-Goleta Slough/Estuary (400 Acres)	1			Metals			
				Pathogens/Path.Indicators			
				Siltation			
31531-Goleta Slough (196.39 Acres)				Metals			
				Pathogens/Path.Indicators			
				Priority Organics Siltation			
31532-Santa Barbara Basin (20 Acres)	<del> </del>	+	1	Priority Organics	<del> </del>	+	
31532-Santa Barbara Basin (20 Acres) 31532-Santa Barbara Harbor (78 Acres)	<del>                                     </del>	+	1	High Coliform Count	1		
2122-Bailta Daivara Harbor (78 Acres)	Ī	ľ		Pathogens/Path.Indicators		I	I

Waterbody	Cal Water Number	Agriculture	Silviculture	Urban	Marinas and Boats	Hydromodification	Wetlands and Vegetative Trtmt
31532-Arroyo Burro Creek (6.14 Miles)				Pathogens/Path.Indicators			·
31532-Mission Creek (8.59 Miles)				Pathogens/Path.Indicators			<u> </u>
				Unknown Toxicity	Metals		
31534-Carpinteria Creek (9.82 Miles)		Pathogens/Path.Indicators		Pathogens/Path.Indicators			
31534-Carpinteria Marsh (El Estero Marsh) (1458.91 Acres)		Nutrients		Nutrients			
		Organic Enrichment/Low DO		Other Habitat Alterations	·		
		Priority Organics		Priority Organics			
		Siltation		Siltation			
31700-San Juan Creek (R3) (43 Miles)		Siltation					
31700-San Juan Creek (60.57 Miles)		Siltation					
31700-Estrella River (28.39 Miles)		Siltation					
				<u> </u>	]		
		<u> </u>					
		<u> </u>					

#### Appendix Section D, Table D-2

Region 3's goals for implementing the NPS program include support for the overall goals of the WMI and the following program goals:

- 1. The state-wide goal to improve water quality by implementing the management measures identified in the California Management Measures for Polluted Runoff Report by 2013; and the following region-wide goals;
- 2. Continue or increase current level of nonregulatory activities in targeted watersheds;
- 3. Expand nonpoint source pollution management efforts that address impacts of sedimentation, nutrients and pesticides from agricultural activities in the Salinas River Watershed;
- 4. Expand nonpoint source pollution management throughout the region; and
- 5. Expand outreach activities to address urban runoff issues, including sedimentation and pathogens.

**Table D-2 NPS Goals and Objectives** 

Objective Fulfills	NPS Plan	2002-03	2003-04	2004-05	2005-06	2006-07	Measures
						2000-07	ivieasures
		Х	X	Х	X	X	all
1-5		Х	Х	Х	X	Х	all
1,2,4,5		Х	Х				3.1-3.6
1-5		х	х	х	х	х	all
1,3,4,5			Х	Х	Х	Х	all
		Х	X				
1 2 4 5							
1,2,4,5		X	X				
				Х	X	Х	
1-5		Х	Х				1A, 1C, 1D, 1E, 1F
1-5		Х	Х				
1,2,4		Х	Х				
4.0.4.5							
1,2,4,5							
							1,3,4,5,6
	1-5 1,2,4,5 1-5 1,3,4,5 1,2,4,5 1,2,4,5 1-5 1-5 1,2,4,5 1,2,4,5	1-5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1-5 1,2,4,5 1-5 1,2,4,5 1,2,4,5	1-5 X 1,2,4,5 X 1-5 X 1,3,4,5 X 1,2,4,5 X 1,2,4,5 X 1,2,4,5 X 1,2,4,5 X 1,2,4,5 X 1,2,4,5 X	1-5       X       X         1,2,4,5       X       X         1-5       X       X         1,3,4,5       X       X         1,2,4,5       X       X         1,2,4,5       X       X         1-5       X       X         1,2,4       X       X         1,2,4,5       X       X         1,2,4       X       X         1,2,4,5       X       X         1,2,4,5       X       X         1,2,4,5       X       X         1,2,4,5       X       X	1-5       X       X       X         1,2,4,5       X       X       X         1,3,4,5       X       X       X         1,2,4,5       X       X       X         1,2,4,5       X       X       X         1-5       X       X       X         1,2,4       X       X       X         1,2,4,5       X       X       X         1,2,4       X       X       X         1,2,4,5       X       X       X         1,2,4,5       X       X       X         1,2,4,5       X       X       X         1,2,4,5       X       X       X	1-5       x       x       x       x         1,2,4,5       x       x       x       x         1-5       x       x       x       x         1,3,4,5       x       x       x       x         1,2,4,5       x       x       x       x         1,2,4,5       x       x       x       x         1-5       x       x       x       x         1,2,4       x       x       x       x         1,2,4,5       x       x       x       x       x         1,2,4,5       x	1-5       X       X       X       X       X         1,2,4,5       X       X       X       X       X         1,3,4,5       X       X       X       X       X         1,2,4,5       X       X       X       X       X         1,2,4,5       X       X       X       X       X       X         1-5       X

Table D-2, continued

		table D-2, cont	mucu					
Objective	Goal that the Objective Fulfills	Page of State NPS Plan	2002-03	2003-04	2004-05	2005-06	2006-07	Management Measures
Reestablish healthy steelhead trout habitat in								
Chorro and Los Osos Creeks and ensure bay								
water quality to support viable commercial								
shellfish industry, safe recreational uses,								
healthy eelgrass beds, and thriving fish and								
shellfish populations	1,2,4,5		Χ	Х	Х	Х	Х	1,3,4,5,6
Ensure integrity of broad diversity of natural								
habitats and associated native wildlife species								
in the bay and watershed	1,2,4,5		Х	Х	Х	Х	Х	1,3,4,5,6
Maintain watershed functional integrity								
through appropriate riparian protection and								
restoration	1,2,4,5		Х	Х	Х	Х	Х	1,3,5,6
Protect social, economic, and environmental								
benefits provided by the bay and watershed								
through comprehensive resources								
management planning. Promote public								
awareness and involvement in estuarine								
management issues through education								
outreach and use of volunteers in ongoing bay								
monitoring and other programs.			Χ	Х	Х	Х	Х	1,3,4,5,6
San Luis Obispo	1,2,4,5		Х	Х				1,3,4,5,6
See Regionwide								
Santa Maria	1,2,4,5		Х	Х				1,3,4,5,6
See Regionwide								
Santa Ynez	1,2,4,5		X	Х				1,3,4,5,6
See Regionwide								
South Coast								
Provide funding to implement stream, marsh,								
estuary and riparian restoration, achieve								
compliance with bacterial water quality								
standards and resore currently-impaired								
beneficial use.	1,2,4,5	l	Х	Х				3,5,6

# Table D-3 Waivers of Waste Discharge

• None issued for Nonpoint Source

#### **TABLE D-4: KEY PARTNERS**

Existing or Potential Partner Agency:	MOU/MAA Title Content of potential/revised agreements:	Target date for review (existing) or adoption (potential):	Management Measure Categories:			
Salinas River Watershed						
Water Quality Protection Program, MBNMS	<ul> <li>MOU Content:</li> <li>Regional Board input into WQPP priorities</li> <li>Assistance with development and implementation of Action Plans</li> </ul>	Continuing with current agreement	Ag, Urb, Marinas and Boating, Wetlands			
Morro Bay Watershed						
Morro Bay National Estuary Program	Content: Funding conduit for federal funds to support Regional Board staff person for NEP; program oversight and technical assistance		Ag, Urb, Marinas and Boating, Wetlands			
San Lorenzo River Watershed						
County of Santa Cruz	<ul> <li>Content:</li> <li>MOU addressing implementation of alternative onsite wastewater technology</li> </ul>	Target Date = 6/2000				
SLR RCD	319h contract, erosion control education and implementation of erosion control actions	Ongoing				

**Table D-5 Proposed 2002-03 NPS Resource Allocation** 

Task	Funding Source	Product	Management Measure(s)		Cost
Participation in State-wide coordination planning and implementation	319	NPS Program progress reports, workplan		Regionwide	0.7 PY
Public education and technical assistance	319/BCP81	Presentation materials FAQ sheets on NPS/TMDLs, presentation, site visits, implementation of MMs/Mps, improved communication and coordination	1-6	Regionwide	1.0 PY
Solicit and manage NPS grant projects	319/Proposition 13	Grants awarded and contracts implemented	1-6	Regionwide	2.0 PY
Address priority watershed issues (described in <i>Section Two</i> )	319/BCP81	Implementation of MP's to reduce nutrients, bacteria, sediments,etc. development of NPS/TMDL Implementation Plans	1-6	Regionwide (see Section Two for activities in specific watersheds)	0.8 PY
		Review THP, field inspections, implementaion of BMP's to reduce		Northern WMA  (San Lorenzo River Watershed,	
Timber Harvest	Harvest	nutrients and sediments	2	other)	0.7 PY

Table D-6 NPS Resource Needs 02-06

Task	Product	Management Measure(s)	Geographic Area	Fiscal Year	Cost
Conduct nonpoint source inspection		All	Regionwide	02-06	1 PY
Establish municipal urban runoff	Small cities workshops,	/ Wi	regionwide	02 00	' '
programs	development of programs	3.1-3.6	Regionwide	02-06	2 PY
Conduct nonpoint source enforcement		All	Regionwide	02-06	0.5 PY
Develop and implement strategy for welands protection and restoration		5,6	Regionwide	02-06	0.2 PY
Develop and implement strategy for regulation of in-stream mining		5,6	Regionwide	02-06	0.2 PY
Implementaion of forestry MM related to road construction and management, streamside management areas and fire management.	Forestry Management Measures	2	San Lorenzo River Watershed	02-06	0.2 PY
Public education and technical asistance	Implementation and tracking of management measures Increased efforts of Farm Bureau Nonpoint Source Initiative pilot projects, development of a San Benito River Management Plan	1G	Salinas, Pajaro River Watershed	02-06	0.2 PY
Develop strategy to address importing water/ground water elevation rise	Implementation and tracking of management measures	5	Pajaro River Watershed	02/04	0.1 PY
Develop implementation strategies based on Paso Robles ground water study	Implementation Strategies	1,3	Salinas River Watershed	02/03	0.2 PY

Table D-7 Region 3 Priority Projects and F	unding	Sou	rces	( A	- Hi	gh P	riori	ty, B-	Med	lium	Prio	rity,	X-L	)esii	able	e but	t not	high	n prio	rity at t	his ti	me)
Project Type and Description	2			The Market Street	Sally Way Way	Elkhor, Nie Wes	100 M	Waters	7	Santa V. Miss Week	South Strings Washad	Parks all Mark Mark Mark Mark Mark Mark Mark Mark	OVIN CHES WHENCE	\$ 20 00 00 00 00 00 00 00 00 00 00 00 00	12000 13 (NO) (NO) (SA)	7 Sing in 1984 1984 1986 1986 1986 1986 1986 1986 1986 1986	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Region (1979) Palming (1979)	Stapsing & Sand   Sand	in Service	2000	7
Watershed Planning	_																					
Develop watershed management plans Develop links between watershed planning and city and county general plans		Х	X	B B	X	X	В	В	В	B B	X			*		*						
Assessment																						
Investigate loading contributions from septic systems		Х		В	Х	Α				В				*		*		ſ				
Identify and evaluate opportunities to promote recovery and restoration of steelhead trout	Ī	Х			Χ		В	Χ	Х	В								Ī	*			
Assess effectivemess of ag MPs	F		х	Х	X	В	A	Α	Α	A				*		*		ľ	*			
Investigate nitrogen and salt loading contributions to ground and surface water	f			В	В		, ,	В	В	В								ŀ				
ounce made.	L																	L				
Implement MPs/Improve Water Quality	F																	-				
TMDL Implementation		В	Х	Χ	Χ	Χ	Α	Х	Χ	Χ								L	*			
Land acquisition for watershed/water quality protection and improvement		В	В	Α			В	В	В	В				*					*			
Beneficial groundwater recharge/restore natural systems of recharge		В	Χ	Α	Χ			Α						*	*							
Implementation of management measures consistent with existing plans	-	В	Α	Α	В	В	В	В	В	В			*	*			*	ľ	*			
Implementation of management measures consistent with the													*	*			*	}	*			
State's Plan for Nonpoint Source Pollution Implementation of management measures consistent with CCMP	}	В	В	Α	В	В	Α	Α	Α	Α								ŀ	<u>~</u>			
actions						В							*	*			*					
Implement agricultural nutrient management BMPs	<u> </u>	Х	Α	Α	Α	Χ	Α	Χ	Х	Χ	Χ		*	*			*		*			
Implementation of water quality plans in Farm Bureau pilot project watersheds			Α	Α	В	В	Χ						*	*			*					
Projects to reduce agricultural impacts to coastal water quality	ſ		Α	Α	Α			Α	Α	В			*	*			*					

 Table D-7, continued ( A- High Priority, B-Medium Priority, X-Desirable but not high priority at this time)

Project Type and Description	_	1.48	The Months of the Color of the	Sally Programmed	Elhon Pierwood	00 15 05 15 10 10 10 10 10 10 10 10 10 10 10 10 10		Sale Care Care Care Care Care Care Care Car	Santa Vine Mac West	South String W.	5/3. 1/2. (Cost 1/4.)   1/3/6/3/6/3/6/3/6/3/6/3/6/3/6/3/6/3/6/3/	CW Nates Pare Water	2 / Solico /	8000 100 100 100 100 100 100 100 100 100	Policy College	San 19 19 19 19 19 19 19 19 19 19 19 19 19	<b>Real</b> (1997) Parity (1998)	Supple Residence Comments	mental England	7   50.00	P
Habitat Restoration/Beneficial Use Enhancement			1														7				
Restore river channels and habitat following impacts from mining	L	Α	Х		Χ							*				L					
Protection and restoration of steelhead trout habitat	Α	Α	В		В	Χ	Χ	Х				*	*					*			
Protection and restoration of wetlands and riparian areas  Address impacts to Pajaro River and its tributaries due to in-	Α	Α	Α	В	В	Α	Α	Α	Α			*	*				]	*			
stream mining		Α										*						Ш			
Wildlife habitat restoration	Χ	Х			Χ	В	В	В	В			*						*			
Water Conservation and Management																_	-				
Mitigate groundwater overdraft	Х	Α	Α	В	Χ		Α					*	*								
Capitalize wetlands mitigation banks	Х	Х																*			
Reduce impervious surfaces and increase infiltration/urban runoff reduction BMPs	В	В	Α		Χ	Α			В			*	*					*			
Education and Outreach																	-				
Septic tank education/outreach	В	Х	Χ		Χ		Χ		Α	Χ		*			*	*		*			
Implement watershed education/outreach	В	В	Χ	Χ	Χ	В	В	В	В	Χ		*	*					*			
Conduct Farm Water Quality Planning short courses		В	Х	Χ	Х	Χ	В	В	В			*	*								
Short course for road design and installation	В	Х				Α	Χ	Х	Х			*	*				1				
Conduct Ranch Water Quality Planning short courses	Χ	В	Х		Х	Χ	В	Χ	Α												

 Table D-7, continued ( A- High Priority, B-Medium Priority, X-Desirable but not high priority at this time)

Project Type and Description

nplementation of Farm Water Quality Plans	
nplementation of Ranch Water Quality Plans	
nplementation of Manure/Livestock Management Plan (N or control of bacteria and nutrients	/ILMP)
stablish conservation buffers on agricultural lands	
educe polluted runoff from AFOs	
rojects to reduce sediment from roads	
odress beach closures from stormwater, sewage, septic ystems/improvements to existing sewer and septic system rotection of coastal water quality	ms for
torm water and runoff pollution reduction programs for rotection of coastal water quality	
npiementation of projects for onsite wastewater disposar ystems	
nprementation or wastewater management Plan (www.in ontrol of bacteria and nutrients associated with wastewat isposal	
nplementation of Nitrate Management Plan (NMP)associ	ated
nplement measures to minimize impacts to aquatic and rabitats from flooding (control measures)	ripariar
nplement erosion control MPs (natural/non-structural e.gones) to reduce erosion while increasing wildlife habitat	. buffe
nplement mitigation measures for floodplain developmen leduce chronic flooding/protect stream corridors/protect r nd wetlands habitat	
construct wetlands for treatment of stormwater or wastew	ater
urchase conservation Easements	

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	В			Х	Х	В	В	Χ									*				
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				Α	В	Χ	Х	Χ			*	*					*				
		Х			В	Х	Χ	Α			*										
Х	X				Χ	Α	Α	Х			*										
Х	В	Х			Х	X	Х	Х			*						*				
В	В	х	х	Х	Х	Х	Х	В			*						*				
Χ	В	Х			Α	Χ	Χ	Χ			*						*				
В	Α	Х		Χ	Α	Χ	Χ	Χ			*	*									
Х	х	В		Х	В	В	В	В			*	*			*		*				
Χ	В	В			Χ	Χ	Χ	Х				*					*			_	