Appendix A

AB 982 PUBLIC ADVISORY GROUP MEMBERS

MEMBER	ALTERNATE
Tess Dunham California Farm Bureau Federation	Brad Luckey Imperial Irrigation District
Paul Martin Western United Dairymen	David Albers Milk Producers Council
William J. Thomas California Livingston & Mattesich Law Corporation	Susan La Grande California Cattlemen's Association
Mark Rentz California Forestry Association	Mark Pawlicki Simpson Timber Company
Cliff Moriyama California Building Industry Association	Sat Tamaribuchi The Irvine Company
Jim Scanlin Alameda County Stormwater Program	Armand Ruby Larry Walker and Associates
Craig Johns California Resource Strategies	Dave Arrieta DNA Associates
Patti Krebs Industrial Environmental Association	David Ivester Bay Planning Coalition Randal A. Friedman U.S. Navy Region Southwest Environmental Department
Roberta Larson California Association of Sanitation Agencies	Vicki Conway County Sanitation Districts of Los Angeles
Herb Nakasone Orange County Public Facilities & Resource Department	Jeff Pratt Ventura County Public Works Agency
David Tucker City of San Jose Environmental Services Department	Dave Kliff City of Newport Beach
David Bolland Association of California Water Agencies	Lynda Smith Metropolitan Water District of Southern California

MEMBER	ALTERNATE
Linda Sheehan Pacific Region Office, The Ocean Conservancy	Lena Brook Clean Water Action
Jonathan Kaplan Waterkeepers Northern California	Bill Jennings Deltakeeper
Bob Caustin Defend the Bay	Mary Lynne Calkins Defend the Bay
Alan Levine Coast Action Group	John Robinson Heal the Ocean
Marco Gonzales Surfrider Foundation	Teresa M. Olle CALPIRG
Leslie Mintz Heal the Bay	Shelley Luce Heal the Bay
Bruce Reznik San Diego Baykeeper	Stephanie Pacey San Diego Baykeeper
Toni Danzig Coastal Watershed Council	Greg Gauthier Coastal Watershed Council
Barbara Vlamis Butte Environmental Council	Allen Harthorn Friends of Butte Creek
Lynn Barris Butte Environmental Council	Leah Wills Forest Community Research
David Beckman Natural Resources Defense Council	Steve Fleischli Santa Monica Baykeeper
Conner Everts Southern California Watershed Alliance	Suzanne Michel Southern California Watershed Alliance

Appendix B

TOTAL MAXIMUM DAILY LOAD (TMDL) INITIATIVE ACTION PLAN

TOTAL MAXIMUM DAILY LOADS (TMDL) INITIATIVE ACTION PLAN

Edition 2.0

October 2002

STATE WATER RESOURCES CONTROL BOARD
California Environmental Protection Agency

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TMDL INITIATIVE ACTION PLAN

Edition 2.0 October 2002

I. PURPOSE/GOALS

The Total Maximum Daily Load (TMDL) Initiative has been established to ensure that the TMDL effort in California results in tangible water quality improvements in the shortest possible time with the ultimate objective of restoring and maintaining the water quality standards of these waters. The purpose of the TMDL Initiative Action Plan is to identify strategies and specific actions to be taken to meet the three goals of the TMDL Initiative: (1) improve TMDL program performance: (2) enhance communication among the State Water Resources Control Board (State Board), Regional Water Quality Control Boards (Regional Boards), and stakeholders; and (3) enhance collaboration and support among all stakeholders, including the State and Regional Boards, other regulatory and resource agencies, the regulated community, and the public. Because the strategies and actions needed to support these goals are expected to change to some degree over time, this Action Plan is a dynamic planning document that will be revised in subsequent editions. Edition 1.0 (October 2001; revised December 2001) focused on strategies and actions to promote statewide TMDL efforts in the near-term. Edition 2.0 is a continuation of these strategies and actions and reflects progress, new information, and unforeseen circumstances associated with implementing Edition 1.0. Cases where progress has been limited or delayed are indicated within specific action areas and actions. We will continue to review, update, and revise the strategies and actions annually. Most importantly, we will evaluate the strategies and actions relative to effective and timely attainment of the goals of the TMDL Initiative and the ultimate objective to attain water quality standards.

II. TMDL DEFINED

A TMDL has essentially two meanings (*Guidance for Water-Quality-based Decisions: The TMDL Process*, US EPA, 1991, EPA440-4-91-001):

- The TMDL process is used for implementing state water quality standards – that is, it is a planning process that will lead to the goal of meeting the water quality standards; and
- The TMDL is a numerical quantity determining the present and near future maximum load of pollutants from point and nonpoint sources as well as from background sources, to receiving water bodies that will not violate the state water quality standards with an adequate margin of safety. The permissible load is then allocated among point and nonpoint sources.

The former is essentially the means by which the latter is accomplished. As used in this Action Plan, the term TMDL means the TMDL process to design and implement programs, policies, and actions that result in correcting water quality impairments and sustaining water quality improvements. A complete TMDL includes documentation that satisfies the Clean Water Act Section 303(d) requirements and State law pertaining to water quality management, amendments to Basin Plans, California Environmental Quality Act (CEQA), and administrative requirements. As such, a TMDL includes measurable features that describe attainment of the applicable water quality standard including the maximum allowable pollutant load, and an allocation of the responsibility to take corrective and preventive actions, including an implementation plan.

The timelines and documentation associated with a complete TMDL, as used in this Action Plan, are more extensive than those associated with merely calculating the maximum pollutant load.

More importantly, the complexity of designing and implementing integrated efforts to achieve water quality improvements is far greater than calculating loads. Therefore, the workload and time requirements associated with this Action Plan envision time frames that often extend several years into the future. This Action Plan also envisions involvement of stakeholders in the TMDL process, and therefore contains many features designed to communicate with and engage stakeholders in the process. These more expansive characteristics of a TMDL are implicit in the definition of a TMDL as used in this Action Plan. A TMDL may also address more than one pollutant/water body combination listed on the 303(d) list of impaired waters. The 1998-303(d) list contains 1472 pollutant/water body combinations, and it is estimated that 400 to 800 TMDL projects will be needed to address all of these listings.

III. CURRENT PROGRAM DESCRIPTION

Currently, 94.5 Personnel Years (PYs) are dedicated to TMDL development; 28.5 PYs are supported through federal grants and the balance is funded through the State General Fund. Total direct support for TMDL work amounts to $11.5 million per year, of which $8.9 million is for staff and $2.6 million is for contract support. An additional 21 PYs are dedicated to implementation of TMDLs addressing nonpoint source problems. Executive management oversight and program direction is provided by statewide coordination through the Management Coordinating Committee (MCC), comprised of State Board Executive management and Regional Board Executive Officers. Direct program management is provided by the Statewide TMDL Program Manager along with the TMDL Roundtable comprised of managers directly responsible for TMDL efforts at the State and Regional Boards.

TMDL work is planned and scheduled on an annual and five-year basis. In addition, at each revision of the impaired waters list a long-term schedule and priorities for TMDL development is established. The one- and five-year schedules are consistent with the long-term priorities but we may modify the schedule to take advantage of opportunities that arise. Work is being conducted in all regions and at the State Board. In some cases, court supervised consent decrees have established schedules for development of technical work leading to the federally required total load calculation. In the North Coast Region (Region 1), this schedule precludes the ability to develop Basin Plan amendments and a complete TMDL as described above, given the current level of support. In the Los Angeles Region (Region 4), the consent decree schedule has allowed for developing TMDLs as Basin Plan amendments to date, but the pace accelerates in coming years and under the current staffing level most, if not all, future work may be truncated to load calculations and allocations without implementation plans and Basin Plan amendments. In the Santa Ana Region (Region 8), all consent degree schedule dates have been met. In these consent decree cases, the U.S. Environmental Protection Agency (USEPA) is required to establish the technical load calculations as TMDLs that meet federal requirements. These USEPA-established TMDLs do not include the management and implementation features included in State-adopted TMDLs.

IV. CURRENT TMDL PROGRAM COMMITMENT

Commitments to complete TMDL work are established annually in the TMDL workplan that reflects allocated resources. The five-year, and long-term schedules are planning tools and are contingent on availability of resources. Currently the State Board estimates that adhering to the long-term schedule would require more than doubling the current level of support. Currently,

there are 160 active TMDL projects statewide that encompass over 680 impairment listings. Attachment 1 includes a table that indicates their status in terms of project phase. TMDL project phases are described in the following table.

TMDL Project Phases		
Phase	**Description**	**Product(s)**
Zero	Definition of project, pollutant(s)/waterbody(s), justification	Project Definition
One	Compile existing information, identify data needs, develop monitoring and analyses plans	Project Plan
Two	Data collection and analyses	Progress Report(s) Study Report(s)
Three	Project report(s) w/ data and analysis findings May include impairment assessment, source and loading analysis, implementation alternatives.	Preliminary Project Report(s)
Four	Develop recommendations for regulatory action, compile results/ findings	Project Report (phases 2-4 inclusive)
Five	Regional Board regulatory action process May include workshop(s), hearing(s), referral back to staff.	Basin Plan Amendment or other regulatory action (eg, permit)
Six	Other regulatory approval	State Board, OAL, USEPA Approval
Seven	Implementation	Clean Water

This Action Plan describes activities above and beyond these existing commitments. To carry out these new activities staff will need to be redirected from existing. In some cases this may lead to temporarily slowing the pace of TMDL development in the regions and may require adjusting this year's workplan commitments. However, it is believed that all the activities described in this Action Plan will quickly result in enhancements to the overall effort and expedite the pace of TMDLs in the near future.

V. STRATEGIES

In this edition of the Action Plan, we present nine strategies for meeting the goals of the TMDL Initiative and the Strategic Plan. These strategies are interrelated and dynamic, and may be integrated, deleted, or augmented in subsequent editions of the Action Plan. Brief descriptions of the nine strategies are presented below. The actions, tasks, products, and due dates for each strategy are presented in Section VII.

A. TMDL Program Structure and Management

We will assess the current program structure related to TMDL efforts, identify and establish improvements, and establish organizational modifications to address them. We will identify the interrelationship of TMDL efforts with other water quality programs and establish mechanisms to ensure effective program collaboration and integration. The role of management advocates

with responsibility for TMDL efforts and integration of TMDL efforts with other water quality programs will be defined, and individuals will be assigned to these new roles. We will establish communication procedures and expectations within the TMDL program and related programs.

B. Information Management

We will establish a user-friendly information management system as part of the existing System for Water Information Management (SWIM) and enhancements to SWIM. This system will include data on all TMDL projects, with more detail for TMDL projects within a 3-year planning horizon, and even more detail associated with tasks in the active fiscal year. The latter will be part of an effort to produce electronic workplans (e-workplans). The information and data in the system will also be used to produce fact sheets, workplans, and other reports for specific TMDL projects. Intranet and Internet web sites will be established for access to the information and relevant products. Contract mechanisms such as master contracts and tracking mechanisms will also be built into the system.

C. TMDL Toolbox and Guidelines

We will produce tools and guidelines for listing and delisting impaired water bodies, developing TMDLs, and implementing the TMDL program. These products will include technical tools, methods and procedures for their use, and regulatory and policy tools, guidelines, and procedures for their use. Tools and guidelines will be produced for 303(d) listings, categorical TMDLs (pathogens, pesticides, metals, etc.), and TMDL process elements (numeric targets, source analysis, linkage analysis, allocations, implementation plan, etc.).

D. Outreach, Communication, and Participation

We will develop tools, mechanisms, and procedures to enhance external (other agencies, stakeholders, and public) outreach, communication, and participation. Successful development of TMDLs will require participation and support of various stakeholders. Inherent to this participation and support is the need to ensure that stakeholders are informed of and understand the issues associated with developing the TMDLs. These efforts will include creating and identifying opportunities to enhance collaboration and cooperation with other agencies and stakeholders, more effectively describing and reporting on TMDL activities, and providing forums for information exchange. Actions will include general and specific outreach and communication efforts, stakeholder participation and collaboration, and coordination and collaboration with other agencies.

E. Implementation Planning

Implementation Planning refers to actions that are part of developing an implementation plan for a TMDL including actions that may be implemented prior to completion of the TMDL. We will pursue opportunities for implementation actions using existing authorities, program integration, process improvements, and stakeholder assistance and collaboration. Such opportunities may include: evaluating actions already taking place that may be recognized in the implementation plan for a TMDL; groundtruthing or pilot testing potential actions that may or are being considered for an implementation plan; and identifying and evaluating actions that if implemented may negate the need for a TMDL, such as implementation of existing technology-

based requirements or enhancements of them, or clean-up and abatement of hotspots or illicit discharges. Early Implementation will not be early implementation of TMDLs that do not exist, nor will it be used in lieu of TMDLs where TMDLs are needed.

F. Monitoring and Assessment

We will continue to design and implement a comprehensive statewide Surface Water Ambient Monitoring Program (SWAMP) to improve identification of impaired or threatened waters. We will augment SWAMP, where appropriate, with monitoring required by or associated with other water quality programs (NPDES, Storm Water, Nonpoint Source programs, etc.) and with monitoring conducted by other agencies (U.S. Geological Survey, Department of Water Resources, Department of Pesticide Regulation , etc.).

G. Basin Planning

We will streamline and improve the existing basin planning process through training, enhanced coordination and communication, and resourcefulness. We will also pursue options to revise or modify the existing process.

H. TMDL Implementation

We will establish procedures and requirements to implement TMDLs in general and to implement specific TMDLs. We will establish procedures to track and enforce TMDL implementation actions and to monitor effectiveness of actions. We will also establish adaptive management procedures to ensure that implementation actions result in attainment of water quality standards. We will use and enhance existing regulatory mechanisms, and where necessary, establish new ones or seek collaboration with other agencies with applicable authorities.

I. Budget Development and Management

We will address budget issues relevant to TMDL efforts. They include: assessment and management of existing budget allocations; use or redirection of funds associated with other programs; development of initiatives to seek additional resources through the State budget process; and development of initiatives to seek resources through external sources such as dischargers or other collaborators.

VII. ACTIONS TO IMPLEMENT THE STRATEGIES

Described below for each strategy are actions, tasks, products/deliverables, and due dates. With each edition of the Action Plan, these elements will be updated and expanded. Attachment 2 provides a compilation of all the actions and products and the timeline for them.

A. TMDL Program Structure and Management

We will articulate and solidify expectations for TMDL development, products, and timelines, and communicate these expectations to all staff involved in TMDL development. The current program structure related to TMDL efforts will be assessed, and improvements

and organizational options to address them will be identified and established. We will identify the interrelationship of TMDL efforts with other water quality programs and establish mechanisms to ensure effective program collaboration and integration. Roles and responsibilities of management and staff within the TMDL program and other water quality programs will be articulated. The role of management advocates with responsibility for TMDL efforts and integration of TMDL efforts with other water quality programs will be defined, and individuals will be assigned to these new roles. We will establish communication procedures and expectations within the TMDL program and related programs.

Action 1: Program Structure Assessment and Improvement

Description: The expectations of the TMDL Program at the State Board and the Regional Boards will be articulated. Expectations for products, timelines, tracking and documentation, and legal commitments will be communicated to all staff. Integral to this effort will be the identification and truncation of non-essential activities that impede the pace of TMDL production. The TMDL program structure will be reviewed and evaluated accordingly. Improvements and options will be identified and established.

Tasks:
- Articulate expectations regarding TMDL program objectives and products.
- Assess current program structure, including roles and responsibilities of State and Regional Board TMDL Team members and staff of related programs.
- Identify needed improvements in program structure and present organizational options to address them to MCC.
- Implement program improvements approved by MCC.

Product/Deliverable	Due Date
Statement of expectations	October each year
Assess program structure	October each year

Action 2: Program Integration

Description: TMDL efforts encompass activities associated with nearly all other water quality programs. We will establish a clear understanding of these interrelationships (particularly the NPDES and Nonpoint Source Programs) and establish mechanisms to ensure effective collaboration and integration of program efforts, and to prevent conflicts or redundancies between these programs and TMDL efforts.

Tasks:
- Identify programs (e.g., NPDES Wastewater, NPDES Storm Water, and Nonpoint Source programs) associated with TMDLs in general and with specific TMDL projects.
- Describe interrelationships between TMDLs and these programs.
- Identify roles and responsibilities of these programs and program staff, and establish management advocates or other mechanisms to ensure effective collaboration and integration, and to prevent conflicts or redundancies between these programs and TMDL efforts.

Product/Deliverable	Due Date
Matrix of TMDL projects and affected programs	Annual update in June
Identify key roles and responsibilities to maintain and improve integration	Annual update in June
Assign staff or functions as necessary to ensure integration	July each year

Action 3: Program Management

Description: We will review the roles and responsibilities of management and staff within the TMDL program at the State Board and Regional Boards. This will include the Statewide TMDL Program Manager, the TMDL Program Coordinator, the TMDL Roundtable, TMDL Management Advocates, and others as necessary. The role of TMDL Management Advocates will be defined. We will identify key individuals to serve as management advocates with responsibility for TMDL efforts (including the TMDL Initiative and this Action Plan), and integration and coordination of TMDL efforts with other water quality programs and the Strategic Plan. We will establish communication procedures and expectations with the TMDL program and interrelated programs.

Tasks:

- Review management roles and responsibilities.
- Define the role and responsibilities for management advocates.
- Identify management advocates.
- Establish management advocates expectations for TMDL efforts and products (including the TMDL Initiative and this Action Plan) and integration and coordination of TMDL efforts with other water quality programs and the Strategic Plan.

Product/Deliverable	Due Date
Roles and responsibilities of management advocates	Annual update in October
TMDL program management description	Annual update in October

Action 4: Internal Communication

Description: The importance and complexity of the TMDL program and its interrelationship with other water quality programs calls for effective internal communication. Communication expectations and procedures within the TMDL program and interrelated programs will be established.

Tasks:

- Convene monthly TMDL Roundtable of State and Regional Board management advocates/program coordinators.
- Convene annual, two-day TMDL symposiums.
- Identify key communication expectations (management to staff, program to program, State Board to Regional Boards, etc.) and pathways.
- Establish communication procedures.

Product/Deliverable	Due Date
TMDL Roundtable Agenda and Minutes	Monthly
Communication Procedures/Improvements	Annual update in October
TMDL Symposium	Annually

B. Information Management

We will establish a user-friendly information management system as part of the existing System for Water Information Management (SWIM) and enhancements to SWIM. This system will include data on all TMDL projects, with more detail for TMDL projects within a 3-year planning horizon, and even more detail associated with tasks in the active fiscal year. The latter will be part of an effort to produce electronic workplans (e-workplans). The information and data in the system will also be used to produce fact sheets, workplans, and other reports for specific TMDL projects. Intranet and Internet web sites will be established for access to the information and relevant products.

Action 1a: Database Enhancement - Phase One

Description: An existing database in MS Access will be converted to Oracle as part of development of SWIM and e-workplans. The database will include relevant information for all TMDL projects underway. This will include specific tasks/products that will be conducted/produced during the current fiscal year, and associated personnel and contract resources. Projected tasks/products and associated personnel and contract resources for the next two fiscal years will also be entered into the database. Some of the tasks and deliverables in Edition 2.0 are the same as in Edition 1.0 due to unforeseen circumstances and resource constraints.

Tasks:

- Convert database to Oracle with enhanced (early) milestones/tasks fields and prepare user guide.
- Define reporting needs, incorporate appropriate formats for reports into database, and revise user guide.
- Enter data for FYs 2002/03 and 2003/04.
- Produce report(s) based on FYs 2002/03 and 2003/04.

Product/Deliverable	Due Date
Complete database conversion and user guide	December 2002
Reports formats and revised user guide	January 2003
Complete data entry for FYs 2002/03 and 2003/04	March 2003

Action 1b: Database Enhancement - Phase Two

Description: The database will be enhanced for planning, reporting, contract tracking, and implementation purposes. Additional information/data fields will include:

- TMDL project problem definition, approach description, major work focus, and weak link(s) or obstacle(s).
- Water quality programs affected.
- Type/extent of stakeholder participation (e.g., mail list, staff workshops, watershed stewardship group with Regional Board lead, Watershed Group with Regional Board participant, TAC, PAG, etc.)
- Interagency coordination required/desired.
- Early implementation focus -- status, opportunities, projects, regulatory options
- Contract tracking information field (e.g., contract #, amount, scope, contractor)
- Implementation milestones (e.g., projects, contacts, lead, duration, Nonpoint Source Management Measures, PYs, contracts, fund source).
-

The additional information and data associated with these enhancements will be used to produce workplans and fact sheets for TMDL projects and improved justification for project tasks, costs, and timing.

Tasks:
- Define and create enhanced information/data fields and revise user guide.
- Enter additional information/data.
- Define/design enhanced reports/products, incorporate appropriate formats into database, and revise user guide.
- Produce TMDL project workplans/fact sheets.

Database Enhancement - Phase Two Action and tasks are delayed until FY 2003/04 or at such time SWIM funding is available.

Action 2: E-Workplan

Description: An important application of the database will be production of electronic workplans (e-workplans). The information/data in the database associated with TMDL phase (TMDL development, implementation planning, basin planning, and implementation), milestones, tasks, costs, and timelines will be used to generate reports that will serve as the annual fiscal year workplans for the TMDL program.

Tasks:
- Generate draft e-workplan for FY 2002/03.
- Revise FY 2002/03 data to reflect FY 2002/03 budget.
- Produce final e-workplan for FY 2002/03.

Product/Deliverable	Due Date
Draft FY 2003/04 e-workplan	April 2003
Revise FY 2003/04 data	June 2003
FY 2003/04 e-workplan	July 2003

Action 3: Intranet/Internet Web Pages

Description: Produce appropriate Intranet/Internet access to database, e-workplans, and other products.

This is an ongoing action. Intranet/Internet web pages are updated regularly.

Action 4: Tracking Reports

Description: TMDL program workplans will be regularly developed to describe the intended work in the upcoming fiscal year. Reports on the progress of this work will be produced and reviewed on a regular basis.

Tasks:

- Develop annual workplan
- Prepare midyear and year-end reports

Product/Deliverable	Due Date
Annual Workplan	June each year
Midyear Report	January each year
Year-End Report	July each year.

C. TMDL Toolbox and Guidelines

We will produce tools and guidelines for listing and delisting impaired water bodies, developing TMDLs, and implementing the TMDL program. These products will include technical tools, methods and procedures for their use, and regulatory and policy tools, guidelines, and procedures for their use. Tools and guidelines will be produced for 303(d) listings, categorical TMDLs (pathogens, pesticides, metals, etc.), and TMDL process elements (numeric targets, source analysis, linkage analysis, allocations, implementation plan, etc.).

Action 1: Impaired Water Bodies Listing/Delisting Tools and Guidelines

Description: The State Board has stated its intent to develop a policy to guide those involved in the listing and delisting of impaired waters (pursuant to Clean Water Act Section 303(d)). The 2002 listing process is currently underway and an official policy cannot be developed in time to apply to the current list process. The 2002 listing effort will instead be used as a scoping mechanism to develop an official policy. The policy will seek to provide consistency among the regions and DWQ in the assessment of data, and in the prioritization of listed waters. The State Board also will address aspects of data quality and sufficiency. The policy will be developed with public participation, particularly through the AB 982 Public Advisory Group (PAG).

Tasks:

- Summarize key public comments on 2002 list.
- Develop working draft listing policy.
- Conduct public workshops on working draft.
- Develop draft policy.
- Conduct State Board public hearing process (hearing, workshop, response to comments, and adoption).
- Provide Regional Board training and technical support for new policy.

Product/Deliverable	Due Date
Working draft policy	February 2003
Review and feedback by PAG and Regions	March 2003
Public Notice Draft Policy	April 2003
Revised Draft policy	September 2003
State Board consideration	November 2003

Action 2: Categorical TMDL Tools and Guidelines

Description: Tools and guidelines for developing and implementing categorical TMDLs (pathogens, pesticides, metals, etc.) will be produced by forming workgroups of State and Regional Board staff with experience and/or expertise in categorical TMDLs. These will include: how to address the programmatic and technical aspects of TMDL development, including criteria for level of effort (how much is enough); identification of the TMDL elements that are significant and/or pose particular problems (coordinate with Action 3); stakeholder involvement opportunities and issues; interagency issues (collaboration/conflict); and early implementation opportunities. Key to the success of these workgroups will be provision for meeting management, facilitation, and product production support (contract).

Tasks:

- Compile relevant literature, existing products, and existing tools.
- Identify additional tools, needs, and issues, and schedule for their production, evaluation, and/or resolution.
- Complete compilation of technical tools, methods, and procedures for their use, and regulatory and policy tools, guidelines, and procedures for their use.
- Establish standing workgroups or "strike teams" to aid the use of tools and guidelines and to update/revise them as necessary.

Product/Deliverable	Due Date
Compilation of existing tools	December 2002
Identification of additional tools, needs, and issues	January 2003
Complete compilation of tools and guidelines	June 2003
Establish standing workgroup or "strike teams"	October 2003

Action 3: TMDL Elements Tools and Guidelines

Description: Complete TMDLs consist of several elements: problem statement, numeric targets, source analysis, linkage analysis, allocations, margin of safety, implementation plan, and monitoring/re-evaluation plan. Tools and guidelines for these elements and other general TMDL issues will be produced by workgroups of State and Regional Board staff with experience and/or expertise in these elements. This action area will be coordinated closely with Action 2.

Tasks:

- Compile relevant literature, existing products, and existing tools.
- Identify additional tools, needs, and issues, and schedule for their production, evaluation, and/or resolution.
- Complete compilation of technical tools, methods, and procedures for their use, and regulatory and policy tools, guidelines, and procedures for their use.

Product/Deliverable	Due Date
Compilation of existing tools	December 2002
Identification of additional tools, needs, and issues	January 2003
Complete compilation of tools and guidelines	June 2003

Action 4: TMDL Program Guidelines

Description: The products of the workgroups dedicated to categorical TMDL tools and TMDL elements will be coalesced into consolidated guidelines for developing TMDLs. This effort will require coordinating the efforts of these workgroups, compiling their recommendations, and developing the consolidated guidelines. Products of the workgroups will be implemented as soon as possible and in some cases will precede establishment of the consolidated guidelines. Attachment 3 contains a schedule for producing TMDL guidelines via the combination of Actions 2, 3, and 4.

Tasks:

- Coordinate efforts of categorical and TMDL element workgroups.
- Develop consolidated TMDL development guidelines.
- Conduct approval mechanism for guidelines.

Product/Deliverable	Due Date
Develop consolidated TMDL development guidelines	July 2003
Establish final TMDL development guidelines	January 2004

D. Outreach, Communication, and Participation

We will develop tools, mechanisms, and procedures to enhance external (other agencies, stakeholders, and public) outreach, communication, and participation. Successful development of TMDLs will require participation and support of various stakeholders. Inherent to this participation and support is the need to ensure that stakeholders are informed of and understand the issues associated with developing the TMDLs. These

efforts will include creating and identifying opportunities to enhance collaboration and cooperation with other agencies and stakeholders, more effectively describing and reporting on TMDL activities, and providing forums for information exchange. Actions will include general and specific outreach and communication efforts, stakeholder participation and collaboration, and coordination and collaboration with other agencies.

Action 1: Public Advisory Group (PAG) Involvement and Collaboration

Description: We will seek advice on the TMDL Initiative and this Action Plan from the Public Advisory Group (PAG) that has been established pursuant to AB 982 to assist in the evaluation of TMDL program structure and effectiveness. In the spirit of enhancing collaboration between the PAG and the State Board, we will seek PAG comments on developing and implementing the strategies and actions of each edition of this Action Plan. Areas where we seek assistance from the PAG include, but are not limited to, implementing opportunities to improve the basin planning process, developing legislative reports, pursuing needed legislative changes to support or improve TMDLs or the TMDL process (e.g., budget initiatives, basin planning), and engaging other agencies in TMDL development and early implementation.

Tasks:

- Cross-reference Action Plan strategies and actions with PAG consensus recommendations.
- Solicit input from PAG on developing, evaluating, and implementing existing and additional Action Plan strategies and actions.
- Establish tasks for the PAG as part of the Action Plan strategies and actions.

Product/Deliverable	**Due Date**
Distribute Action Plan for PAG review.	October each year
Receive and consider comments from PAG in revising future additions of the Action Plan.	November each year
Establish tasks for the PAG	November each year

Action 2: Stakeholder Involvement and Collaboration

Description: Identify and create opportunities to enhance involvement and collaboration with stakeholders. These efforts will include improved outreach and communication associated with Action 3 and improved descriptions and use of stakeholder involvement and collaboration opportunities and mechanisms. Integral to this effort will be the recognition that stakeholders may bring information and expertise to the table. For each TMDL project, we will strive for the most focused and efficient process that allows all stakeholders to effectively participate and ensures balanced representation on any recognized "watershed" or stakeholder forum. Mechanisms will range from compilation and maintenance of interested parties lists to formally recognized and facilitated forums.

Tasks:

- As part of the overall TMDL guidance document, prepare compendium of stakeholder involvement opportunities and mechanisms, with recommendations.

- Provide training in public process facilitation and negotiation/conflict resolution for staff and stakeholders.

Product/Deliverable	Due Date
Compendium of stakeholder mechanisms	February 2003
Training	Ongoing

Action 3: Outreach and Communication

Description: Methods that Regional Boards are using for outreach and communication will be surveyed and described. Key stakeholders will be identified. Other approaches to outreach and public process will be evaluated and training in outreach and public process will be provided. Methods for documenting and tracking public involvement in TMDL development will be evaluated and established where feasible. We will develop informational items that can be used to communicate current activities in TMDL development. Web based bulletin boards will be evaluated and developed where feasible. Lists of interested parties (other agencies, stakeholders, and public) will be established and mechanisms to communicate with them (e.g., reports, web site) will be evaluated and established. We will compile relevant information on the TMDL program and TMDL projects. This action area will be coordinated with the information management actions described under Strategy B above.

Tasks:
- Report on outreach methods and other available public process techniques.
- Develop and offer outreach training.
- Develop and distribute informational materials, in coordination with OLPA, including TMDL fact sheets for each TMDL unit.
- Enhance TMDL web site.
- Convene biennial or triennial TMDL conferences with State and Regional Board staff and stakeholders.

Product/Deliverable	Due Date
Methods report	March 2003
Outreach materials	Ongoing
Training module	June 2003
TMDL project fact sheets	June 2003
Enhanced TMDL web site	June 2003
TMDL conference schedule	June 2003

Action 3: Interagency Coordination and Collaboration

Description: Opportunities to enhance coordination and collaboration with other agencies will be pursued. Our TMDL efforts overlap authorities and programs of other agencies. Certain TMDLs are dependent on efforts by these other agencies (e.g., pesticide TMDLs and the USEPA and DPR). In some cases, actions by other agencies may even conflict with or create barriers to TMDL efforts. These opportunities, overlaps, conflicts, and barriers will be identified and appropriate resolutions, agreements, etc. will be pursued.

Tasks:

- Identify opportunity/need for coordination and collaboration with other agencies.
- Identify specific opportunities, overlaps, conflicts, and barriers.
- Pursue appropriate resolutions, agreements, etc.

Product/Deliverable	Due Date
Matrix of agencies and opportunities	Annual update in April
Establish and review resolutions, etc.	Annual update in April

E. Implementation Planning

Implementation Planning refers to actions that are part of developing an implementation plan for a TMDL including actions that may be implemented prior to completion of the TMDL. We will pursue opportunities for early actions that promote or possibly eliminate the need for TMDLs using existing authorities, program integration, process improvements, and stakeholder assistance and collaboration. Such opportunities may include: evaluating existing actions that may be recognized in the implementation plan for a TMDL; groundtruthing or pilot testing potential actions that may or are being considered for an implementation plan; and identifying and evaluating actions that if implemented may negate the need for a TMDL, such as implementation of existing technology-based requirements or enhancements of them, or clean-up and abatement of hotspots or illicit discharges. Early Implementation will not be early implementation of TMDLs that do not exist, nor will it be used in lieu of TMDLs where TMDLs are needed.

Action 1: Implement Existing Authorities

Description: Pursue opportunities for early action through existing authorities and program integration including implementation and evaluation of existing requirements.

Tasks:

- Review and clarify technology-based requirements for wastewater and stormwater discharges subject to NPDES permits for control of pollutants causing impairment.
- Review and clarify best management practices for nonpoint source discharges for control of pollutants causing impairment.
- Identify toxic hot spots and/or illicit discharges (particularly those currently subject to regulatory action by a Regional Board) that are causing or may be contributing to water quality impairment.

- Assimilate regulatory requirements/pollutant control information into a matrix or other suitable framework that provides access to such information.
- Pursue stakeholder participation (e.g., Stormwater Quality Task Force) in this process.
- Apply and track existing requirements on a TMDL pollutant category or project-specific basis.

Product/Deliverable	Due Date
Matrix of regulatory requirements/pollutant control information	Annual updates in April
Stakeholder participation	Annual updates in April
Use of existing authorities/requirements	Annual updates in April

Action 2: Evaluate Potential Actions

Description: Evaluate (ground truth or pilot test) potential actions for consideration in TMDL implementation plans.

Tasks:
- Identify potential actions for consideration in TMDL implementation plans on a TMDL pollutant category or project-specific basis (clean-up of PCBs within a storm drain).
- Implement and track special studies or pilot projects to evaluate such potential actions.
- Solicit stakeholder participation/assistance including creation of incentives/rewards.
- Assimilate potential action information into accessible framework.

Product/Deliverable	Due Date
List of potential actions	Annual updates in April
List/status of special studies or pilot projects	Annual updates in April
Compilation of potential action information	Annual updates in April

F. Monitoring and Assessment

We will continue to design and implement a comprehensive statewide Surface Water Ambient Monitoring Program (SWAMP) to improve identification of impaired or threatened waters. We will augment SWAMP, where appropriate, with monitoring required by or associated with other water quality programs (NPDES, Storm Water, Nonpoint Source programs, etc.) and with monitoring conducted by other agencies (U.S. Geological Survey, Department of Water Resources, Department of Pesticide Regulation, etc.). We will also improve assessment methods and refine environmental indicators. Decision support tools to identify when sufficient information exists for TMDL activities will be developed.

SWAMP has several key on-going annual tasks, including (1) development of an annual workplan, (2) contracting, (3) monitoring implementation, (4) data management, and (5) quality assurance. Additional tasks for FY 2002/03 include (1) scientific peer review, (2) Web-site development, (3) population of the database, and (4) initial coordination with other monitoring programs.

G. Basin Planning

We will streamline and improve the existing basin planning process based on the new Administrative Procedures Manual chapter on basin planning using the through training, enhanced coordination and communication, and resourcefulness. We will also pursue options to revise or modify the existing process.

Action 1: Streamlining TMDL Basin Planning Requirements

Description: Complete TMDLs often require Basin Plan Amendments. Tools and guidelines for Basin Plan Amendments will be produced by workgroup(s) of State and Regional Board staff with experience and/or expertise in these elements.

Tasks:

- Compile relevant literature, existing products, and existing tools.
- Identify additional tools, needs, and issues, and schedule for their production, evaluation, and/or resolution.
- Complete compilation of technical tools, methods, and procedures for their use, and regulatory and policy tools, guidelines, and procedures for their use.

Product/Deliverable	Due Date
Compilation of existing tools	December 2002
Identification of additional tools, needs, and issues	January 2003
Complete compilation of tools and guidelines	June 2003

Action 2: TMDL Basin Planning Guidelines

Description: The products of the Basin Planning Workgroup will be dedicated to TMDL elements and will be coalesced into consolidated guidelines for developing TMDLs. This effort will require coordinating the efforts of the Workgroup, compiling the recommendations, and developing the consolidated guidelines. Products of the workgroup will be implemented as soon as possible and in some cases will precede establishment of the consolidated guidelines.

Tasks:

- Develop definitions and standard nomenclature for TMDLs.
- Define necessary elements of a Basin Plan Amendment.
- Determine requirements of each element.
- Define regulatory and non-regulatory actions that can establish and implement a TMDL, including when a Basin Plan Amendment is required and when it is not.

Product/Deliverable	Due Date
Develop definitions and standard nomenclature for TMDLs	December 2002
Elements of a Basin Plan Amendment	December 2002
Determine requirements of each element	April 2003
Define regulatory actions and non-regulatory actions	June 2003

H. TMDL Implementation

We will establish procedures and requirements to implement TMDLs in general and to implement specific TMDLs. We will establish procedures to track and enforce TMDL implementation actions and to monitor effectiveness of actions. We will also establish adaptive management procedures to ensure that implementation actions result in attainment of water quality standards. We will use and enhance existing regulatory mechanisms, and where necessary, establish new ones or seek collaboration with other agencies with applicable authorities.

No specific actions, tasks, products, due dates, etc are included in this edition. However, actions, tasks, and products pertinent to this action area will be implemented and produced within action areas B. Information Management, C. TMDL Toolbox and Guidelines, and E. Implementation Planning.

I. Budget Development and Management

We will address budget issues relevant to TMDL efforts. They include: assessment and management of existing budget allocations; use or redirection of funds associated with other programs; development of initiatives to seek additional resources through the State budget process; and development of initiatives to seek resources through external sources such as dischargers or other collaborators.

Action 1: TMDL Budget Management

Description: We have documented allocation and use of existing TMDL funds and revise the Budget Development and Administration System (BDAS) to reflect allocated resources and to conform to the TMDL program workplan. We will review resource allocations, BDAS, and the TMDL program workplan annually and resolve inconsistencies. We will also establish procedures and provide training for TMDL budget management.

Tasks:

- Establish procedures for TMDL budget management.
- Review resource allocations, BDAS, and the TMDL program workplan and resolve inconsistencies.
- Provide training for TMDL budget management.

Product/Deliverable	Due Date
TMDL Budget Management Procedures	August 2003
Resolution of budget inconsistencies	October each year
TMDL budget management training	To be determined

Action 2: Program Fund Integration

Description: TMDL efforts encompass activities associated with nearly all other water quality programs (e.g., NPDES, Storm Water, and Nonpoint Source programs). We will identify tasks within these programs that are part of or affect TMDLs (e.g., pollutant source

identification, evaluation of pollution prevention or control actions). Where appropriate, we will use or redirect funds associated with these other programs for these tasks.

No specific actions, tasks, products, due dates, etc are included in this edition. However, tasks, and products pertinent to this action will be implemented and produced within action area A. Program Structure and Management, Action 2: Program Integration.

Action 3: State Budget Initiatives

Description: We will continue to use the Budget Change Proposal procedures to seek additional state resources to enhance development and implementation of TMDLs.

No specific actions, tasks, products, due dates, etc are included in this edition. However, tasks, and products pertinent to this action will be implemented and produced within the State Board's budget development process.

Action 4: External Source Support

Description: We will pursue and implement agreements with other agencies and dischargers to use and share their resources for development and implementation of TMDLs.

No specific actions, tasks, products, due dates, etc are included in this edition. However, tasks, and products pertinent to this action will be pursued on a TMDL project basis.

Attachment 1

Status of Active TMDL Projects

Region 1

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
Albion River Sediment	Sediment	X	X	X	X		Oct-03		
	Albion River								
Big River Sediment	Sediment	X	X	X	X		Oct-03		
	Big River								
Middle Fork Eel River	Sediment, Temperature	X	X	X			Dec-07		
	Middle Fork Eel								
North Fork Eel River	Sediment, Temperature	X	X	X			Dec-07		
	North Fork Eel								
South Fork Eel River	Sediment, Temperature	X	X	X			Dec-07		
	South Fork Eel								
Elk River Sediment	Sediment	X	X				Oct-03		
	Elk River								
Freshwater Creek Sediment	Sediment	X	X				Oct-03		
	Freshwater Creek								
Garcia River Sediment	Sediment	X	X	X	X	X	Nov-01	X	X
	Garcia River								
Gualala River Sediment	Sediment	X	X	X			Dec-04		
	Gualala River								
Klamath River	Nutrients, Temperature, Low Dissolved Oxygen	X	X				Dec-06		
	Klamath OR border to Iron Gate Dam								
	Klamath Iron Gate Dam to Scott R.								
	Klamath from Scott R. to Trinity R.								
	Klamath from Trinity R. to ocean								
Upper Lost River	Nutrients, Temperature	X	X				Jun-04		
	Upper Lost R to OR								
Lower Lost River	Nutrients, Temperature	X	X				Jun-05		
	Lower Lost R and Tulelake								
Mattole River Sediment	Sediment	X	X	X			Dec-04		
	Mattole River								
Mattole River Temperature	Temperature	X	X	X			Dec-04		
	Mattole River								

Attachment 1

Status of Active TMDL Projects

Region 1

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
Navarro River Sediment	Sediment	X	X	X			Dec-04		
	Navarro River above Philo								
	Navarro River below Philo								
Navarro River Temperature	Temperature	X	X	X			Dec-04		
	Navarro River above Philo								
	Navarro River below Philo								
Noyo River Sediment	Sediment	X	X	X	X		Oct-03		
	Noyo River								
Redwood Creek Sediment	Sediment	X	X	X	X		Jun-06		
	Redwood Creek above Park Boundary								
	Redwood Creek below Park Boundary								
Salmon River	Nutrients, Temperature	X	X				Jun-04		
	Salmon River								
Scott River	Sediment, Temperature	X	X				Sep-05		
	Scott River								
Shasta River	Nutrients, Organic enrichment/Low DO	X	X				Dec-05		
	Shasta River								
Ten Mile River Sediment	Sediment	X	X	X	X		Oct-03		
	Ten Mile River								
Trinity River Sediment	Sediment	X	X	X			Jun-06		
	Trinity River								
South Fork Trinity River	Sediment	X	X	X			Jun-06		
	South Fork Trinity River								
Van Duzen River Sediment	Sediment	X	X	X			Dec-07		
	Van Duzen River								

Attachment 1

Status of Active TMDL Projects

Region 2

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
South San Francisco Bay Copper	Copper	X	X	X	X	X	May-02	X	X
	South SF Bay								
South San Francisco Bay Nickel	Nickel	X	X	X	X	X	May-02	X	X
	South SF Bay								
San Francisco Bay Mercury	Mercury	X	X	X	X	X	Feb-03		
	Richardson Bay								
	Central SF Bay								
	Lower SF Bay								
	South SF Bay								
	San Pablo Bay								
	Carquinez Strait								
	Sacramento San Joaquin Delta								
	Suisun Bay								
San Francisco Bay PCBs	PCBs	X	X	X	X		Jun-04		
	Richardson Bay								
	Central SF Bay								
	Lower SF Bay								
	South SF Bay								
	San Pablo Bay								
	Carquinez Strait								
	Sacramento San Joaquin Delta								
	Suisun Bay								
San Francisco Bay Copper	Copper	X	X	X			Jun-04		
	Richardson Bay								
	Central SF Bay								
	Lower SF Bay								
	San Pablo Bay								
	Carquinez Strait								
	Sacramento San Joaquin Delta								
	Suisun Bay								
San Francisco Bay Nickel	Nickel	X	X	X			Jun-04		
	Richardson Bay								
	Central SF Bay								
	Lower SF Bay								

Attachment 1

Status of Active TMDL Projects

Region 2

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
	San Pablo Bay								
	Carquinez Strait								
	Sacramento San Joaquin Delta								
	Suisun Bay								
San Francisco Bay Exotic Species	Exotic Species	X	X	X			Jun-06		
	Richardson Bay								
	Central SF Bay								
	Lower SF Bay								
	South SF Bay								
	San Pablo Bay								
	Carquinez Strait								
	Sacramento San Joaquin Delta								
	Suisun Bay								
San Francisco Bay Region Urban Creeks Diazinon	Diazinon	X	X	X	X		Jun-03		
	36 Urban Creeks								
Tomales Bay Pathogens	Pathogens	X	X	X	X		Jun-04		
	Tomales Bay								
Guadalupe River Watershed Mercury	Mercury	X	X				Jun-05		
	Calero Reservoir								
	Guadalupe Reservoir								
	Alamitos Creek								
	Guadalupe Creek								
	Guadalupe River								
Napa River Sediment & Nutrients	Sediment/Nutrients	X	X	X			Jun-05		
	Napa River								
San Francisquito Creek Sediment	Sediment	X	X	X			Jun-05		
	San Francisquito Creek								
Sonoma Creek Sediment & Nutrients	Sediment/Nutrients	X	X				Jun-06		
	Sonoma Creek								
Tomales Bay / Walker Creek Mercury	Mercury	X	X				Jun-05		
	Tomales Bay								

Attachment 1

Status of Active TMDL Projects

Region 2

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
	Walker Creek								
Lagunitas Creek Sediment	Sediment	x					Jun-06		
	Lagunita Creek								
Pescadero / Butano Creeks Sediment	Sediment	x					Jun-06		
	Butano Creek								
	Pescadero Creek								

Attachment 1

Status of Active TMDL Projects

Region 3

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
Clear Creek-Hernandez Reservoir Mercury	Mercury	X	X	X			Jun-07		
	Clear Creek								
	Hernandez Reservoir								
Las Tablas Creek-Nacimiento Reservoir Mercury	Mercury	X	X	X	X	X	Dec-02		
	Las Tablas Creek								
	Nacimiento Reservoir								
Monterey Harbor Metals	Metals	X	X				Jun-07		
	Monterey Harbor								
Morro Bay Metals	Metals	X	X	X			Dec-05		
	Morro Bay								
Chorro/Los Osos Creeks Nutrients and Dissolved Oxygen (formerly Morro Bay Nutrients)	Nutrients, Dissolved Oxygen	X	X	X	X	X	Dec-02		
	Chorro Creek								
	Los Osos Creek								
Morro Bay Pathogens	Pathogens	X	X	X	X	X	Dec-02		
	Morro Bay								
	Chorro Creek								
	Los Osos Creek								
Morro Bay Siltation	Siltation	X	X	X	X	X	May-02	X	X
	Morro Bay								
	Chorro Creek								
	Los Osos Creek								
Pajaro River Nutrients	Nutrients	X	X	X	X		Jun-07		
	Pajaro River								
	Llagas Creek								
Pajaro River Siltation	Siltation	X	X				Jun-07		
	Pajaro River								
	Llagas Creek								
	San Benito River								
	Rider Gulch Creek								
Salinas River Nutrients	Nutrients	X	X				Jun-07		
	Salinas River								
	Old Salinas River Estuary								
	Salinas River Lagoon (North)								
	Espinosa Slough								

Attachment 1

Status of Active TMDL Projects

Region 3

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
	Tembladero Slough								
Salinas River Pesticides	Pesticides, Priority Organics	x	x				Jun-07		
	Salinas River								
	Old Salinas River Estuary								
	Salinas River Lagoon (North)								
	Salinas River Refuge Lagoon (South)								
	Tembladero Slough								
	Moro Cojo Slough								
	Blanco Drain								
	Salinas Reclamation Canal (Pesticides)								
	Salinas Reclamation Canal (Priority Organics)								
	Salinas Reclamation Canal (Priority Organics)								
	Espinosa Slough (Priority Organics)								
Salinas River Salinity	Salinity	x	x				Jun-11		
	Salinas River								
	Salinas River Refuge Lagoon (South)								
Salinas River Siltation	Siltation	x	x	x	x		Jun-05		
	Salinas River								
San Lorenzo River Nutrients	Nutrients	x	x	x	x		Sept-00	x	x
	San Lorenzo River								
	Carbonera Creek								
	Lompico Creek								
	Shingle Mill Creek								
Santa Cruz County Pathogens (formerly two projects- San Lorenzo River Pathogens and Valencia and Aptos Creeks Pathogens)	Pathogens	x	x				Jun-07		
	Carbonera Creek								
	Lompico Creek								
	San Lorenzo River								
	San Lorenzo River Estuary								
	Soquel Lagoon								
	Valencia Creek								
	Aptos Creek								
	Schwan Lake								
San Lorenzo River Siltation	Siltation	x	x	x	x	x	Sept-02		
	Carbonera Creek								

Attachment 1

Status of Active TMDL Projects

Region 3

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
	Lompico Creek								
	San Lorenzo River								
	San Lorenzo River Estuary								
	Shingle Mill Creek								
San Luis Obispo Creek Nutrients	Nutrients	X	X	X	X	X	Jun-04		
	San Luis Obispo Creek								
San Luis Obispo Creek Pathogens	Pathogens	X	X	X	X		Jun-04		
	San Luis Obispo Creek								
Valencia and Aptos Creek Siltation	Siltation	X	X				Jun-11		
	Aptos Creek								
	Valencia Creek								
Wadell Creek Nutrients	Nutrients	X	X				Jun-08		
	Wadell Creek								
Watsonville Slough Metals	Metals	X	X	X			Jun-05		
	Watsonville Slough								
Watsonville Slough Oil and Grease	Oil and Grease	X	X	X			Jun-05		
	Watsonville Slough								
Watsonville Slough Pathogens	Pathogens	X	X				Jun-05		
	Watsonville Slough								
Watsonville Slough Siltation	Siltation	X	X				Jun-05		
	Watsonville Slough								
Watsonville Slough Pesticides	Pesticides	X	X				Jun-11		
	Watsonville Slough								

Attachment 1

Status of Active TMDL Projects

Region 4

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
Ballona Creek Coliform	Coliform and effects in Ballona Creek & Estuary	X	X	X	X	X	Jun-03		
	4 Listings								
Ballona Creek Historic Pesticides	PCBs, DDT, ChemA, Chlordane, Dieldrin in Ballona Creek & Esturay	X	X				Mar-04		
	11 Listings								
Ballona Creek Metals	Metals (Pb, Ag, As, Cu, Cd) in Ballona Creek, Estuary & Wetlands	X	X				Mar-04		
	9 Listings								
Ballona Creek Trash	Trash in Ballona Creek and Wetlands	X	X	X	X	X	Sep-02	X	X
	2 Listings								
Calleguas Creek Chloride	Chloride in Calleguas Creek & Tributaries	X	X	X	X	X			
	7 Listings								
Calleguas Creek Salts	TDS, Boron & Sulfate in Calleguas Creek & Tributaries	X					Dec-03		
	28 Listings								
Calleguas Creek Nutrients	Nitrogen and its effects in Calleguas Creek & Tributaries	X	X	X	X	X	Oct-02	X	X
	36 Listings								
Dominguez Channel Coliform	Coliform in Dominguez Channel & Estuary, Torrance Carson Channel & Wilmington Drain	X	X				Dec-03		
	4 Listings								
Los Angeles Harbor Coliform	Coliform in Los Angeles Harbor and Cabrillo Beach	X					Mar-04		
	2 Listings								
Los Angeles River Coliform	Coliform in the Los Angeles River & Tributaries	X	X	X	X	X	Jun-03		
	11 Listings								
Los Angeles River Metals	Metals (Cu,Pb,Zn,Se) in Los Angeles River & Tributaries	X					Mar-03		
	12 Listings								
Los Angeles River Nutrients	Nitrogen and its effects in Los Angeles River & Tributaries	X	X	X	X	X	Feb-03	X	
	32 Listings								
Los Angeles River Trash	Trash in Los Angeles River & Tributaries	X	X	X	X	X	Sep-01	X	X
	10 Listings								
Malibu Creek Coliform	Coliform and effects in Malibu Creek, Tributaries and Lagoon	X	X	X	X	X	Jan-03	X	
	11 Listings								
Malibu Creek Metals	Metals (Pb, Cu, Hg, Zn, Se,) in Malibu Creek Tributaries and Lakes	X					Dec-04		
	16 Listings								
Malibu Creek Nutrients	Nutrients and effects in Malibu Creek, Lagoon, Tributaries and Lakes	X	X	X	X	X	Jan-03	X	
	22 Listings								

Attachment 1

Status of Active TMDL Projects

Region 4

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
Marina del Rey Harbor Coliform	Coliform and effects in Marina del Rey Harbor	X	X	X	X	X	Jun-03		
	3 Listings								
Marina del Rey Harbor Historic Pesticides	Historic Pesticides & PCBs and effects in Marina del Rey Habor	X	X	X	X		Mar-05		
	7 Listings								
Marina del Rey Metals	Metals (Pb, Cu, Zn) in Marina del Rey Harbor	X	X	X	X		Mar-05		
	3 Listings								
McGrath Beach Coliform	Coliform & effects in McGrath Beach, Mandalay Beach and Surfers Knoll	X	X	X	X	X	Jun-03		
	4 Listings								
San Gabriel River East Fork Trash	Trash in East Fork of San Gabriel River	X	X	X	X	X	May-02	X	X
	1 Listing								
San Gabriel River Coliform	Coliform in San Gabriel River & Tributaries	X					Dec-03		
	5 Listings								
San Gabriel River Nutrients	Nitrogen and effects in San Gabriel River & Tributaries	X	X	X	X	X	Jun-03		
	16 Listings								
Santa Clara River Chloride	Chloride in Santa Clara River	X	X	X	X	X	Oct-02	X	
	4 Listings								
Santa Clara River Nutirents	Nitrogen and effects in Santa Clara River & Tributaries	X	X	X	X	X	Mar-03		
	19 Listings								
Santa Monica Bay Beaches Coliform	Coliform and effects in Santa Monica Bay Beaches	X	X	X	X	X	Sep-02		
	62 Listings								
Santa Monica Bay Nearshore & Offshore Zone Metals	Metals (Hg, Cd, Cu, Pb, Ni, Ag, Zn)								
	7 Listings								
Ventura River Algae	Algae in Ventura River and Estuary								
	4 Listings								

Attachment 1

Status of Active TMDL Projects

Region 5

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
Sacramento-San Joaquin Delta Estuary Chlorpyrifos & Diazinon	Chlorpyrifos/ Diazinon	X	X				Dec-04		
	Sacramento-San Joaquin Delta Estuary								
Cache Creek Mercury	Mercury	X	X				Jan-05		
	Cache Creek								
Sacramento River & Feather River Diazinon	Diazinon	X	X	X	X	X	Jun-03		
	Sacramento River & Feather River								
Harley Gulch Mercury	Mercury	X	X						
	Harley Gulch								
Bear Creek Mercury	Mercury	X	X				Jan-05		
	Bear Creek								
Sacramento-San Joaquin Delta Estuary Mercury	Mercury	X	X				Jan-05		
	Sacramento-San Joaquin Delta Estuary								
Sacramento River Mercury	Mercury	X	X				Jan-07		
	Sacramento River								
San Joaquin River DDT and Group A pesticides	DDT and Group A pesticides (including aldrin,dieldrin, chlordane, endrin, heptachlor epoxide, hexachlorocyclohexane (including lindane), endosulfan, and toxaphene	X	X				after 2015		
	San Joaquin River								
Sulphur Creek Mercury	Mercury	X	X				Jan-05		
	Sulphur Creek								
Clear Lake Mercury	Mercury	X	X	X	X	X	Dec-02		
	Clear Lake								
San Joaquin River Salt and Boron	Salt and Boron	X	X	X	X		Jun-03		
	San Joaquin River								
Merced, Tuolumne, and Stanislaus Rivers Diazinon and chlorpyrifos	Diazinon	X	X				Jun-05		
	Merced, Tuolumne and Stanislaus								

Attachment 1

Status of Active TMDL Projects

Region 5

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
	Chlorpyrifos								
	Merced								
San Joaquin River Diazinon and Chlorpyrifos	Diazinon/ Chlorpyrifos	x	x	x	x		Jun-03		
	San Joaquin River								
Sacramento Area Urban Creeks Chlorpyrifos & Diazinon	Chlorpyrifos/ Diazinon	x	x	x			Dec-03		
	Sacramento Area Urban Creeks								
Sacramento-San Joaquin River Delta Estuary (San Joaquin River) Low Dissolved Oxygen	Low Dissolved Oxygen	x	x	x			Jun-04		
	Sacramento-San Joaquin River Delta Estuary (San Joaquin River)								

Attachment 1

Status of Active TMDL Projects

Region 6

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
Bear Creek Sedimentation	Sediment	X					Jun-06		
	Bear Creek								
Blackwood Creek Sedimentation	Sediment	X	X	X			Jun-07		
	Blackwood Creek								
Bodie Creek Metals	Metals	X					Jun-06		
	Bodie Creek								
Bridgeport Reservoir Nutrients and Sedimentation	Nutrients/Sediment	X	X	X			Jun-06		
	Bridgeport Reservoir								
Bronco Creek Sedimentation	Sediment	X	X				Jun-06		
	Bronco Creek								
Clearwater Creek Sedimentation	Sediment	X					Jun-06		
	Clearwater Creek								
Crowley Lake Nutrients	Nutrients	X	X				Jun-06		
	Crowley Lake								
Gray Creek Sedimentation	Sediment	X	X				Jun-06		
	Gray Creek								
Haiwee Reservoir Copper	Copper	X	X	X	X	X	Jun-03		
	Haiwee Reservoir								
Heavenly Valley Creek Sedimentation	Sediment	X	X	X	X	X	Jan-01	X	X
	Heavenly Valley Creek								
Indian Creek Reservoir Phosphorus	Phosphorus	X	X	X	X	X	Jul-02	X	
	Indian Creek Reservoir								
Lake Tahoe Nutrients and Sedimentation	Nutrients/Sediment	X	X				Jun-06		
	Lake Tahoe								
Mammoth Creek Metals	Metals	X	X				Jun-09		
	Mammoth Creek								
Monitor Creek Metals	Metals	X	X				Jun-11		
	Monitor Creek								

Attachment 1

Status of Active TMDL Projects

Region 6

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
Squaw Creek Sedimentation	Sediment	X	X	X			Jun-05		
	Squaw Creek								
Susan River Toxicity	Toxicity	X					Jun-08		
	Susan River								
Tinemaha Reservoir Copper	Copper	X	X				Jun-05		
	Tinemaha Reservoir								
Truckee River Sedimentation	Sediment	X	X	X	X		Jun-06		
	Truckee River								
Ward Creek Sedimentation	Sediment	X	X	X			Jun-07		
	Ward Creek								

Attachment 1

Status of Active TMDL Projects

Region 7

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
Alamo River Pesticides	Pesticides	X	X				Jun-11		
	Alamo River								
Alamo River Sedimentation/ Siltation	Sedimentation/Siltation	X	X	X	X	X			
	Alamo River						Jun-01	X	X
Coachella Valley Stormwater Pathogens	Pathogens	X	X				Jun-05		
	Coachella Valley								
	Stormwater Channel								
	(Whitewater River)								
Imperial Valley Drains Selenium	Selenium						Jun-10		
	Imperial Valley Drains								
Imperial Valley Drains Sedimentation/ Siltation	Sedimentation/Siltation	X	X				Jan-04		
	Imperial Valley Drains								
New River Pathogen	Pathogen	X	X	X	X	X	Oct-01	X	
	New River								
New River Sedimentation/ Siltation	Sedimentation/Siltation	X	X	X	X	X	Jun-02	X	
	New River								
Palo Verde Pathogens	Pathogens	X	X	X			Nov-03		
	Palo Verde Outfall Drain								
	and tributaries								
Salton Sea Nutrients	Nutrients	X	X	X			Nov-04		
	Salton Sea								
	Alamo River								
	New River								
	Coachella Valley								
	Storm Drains								
	Imperial Valley Drains								

Attachment 1

Status of Active TMDL Projects

Region 8

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
Prado Area Streams Pathogen TMDL	Pathogen	X	X				Jan-04		
	Chino Cr., R1								
	Cucamong Cr., R1								
	Santa Ana Riv., R3								
Big Bear Lake Watershed Sediment TMDL	Sediment	X	X				Jun-04		
	Big Bear Lake								
	Rathbone Cr.								
Big Bear Lake Watershed Nutrient TMDL	Nutrient	X	X				Jun-04		
	Big Bear Lake								
	Rathbone Cr.								
	Summit Cr.								
	Grout Cr.								
Big Bear Lake Watershed Pathogen TMDL	Pathogen	X	X				Jun-04		
	Knickerbocker Cr.								
Lake Elsinore Sediment TMDL	Sediment	X	X	X	X	X	Mar-03		
	Lake Elsinore								
Lake Elsinore Toxics TMDL	Toxics	X	X				Aug-04		
	Lake Elsinore								
Canyon Lake Pathogen TMDL	Pathogen	X	X				Aug-04		
	Canyon Lake								
Lake Elsinore Watershed Nutrient TMDL	Nutrient	X	X	X	X	X	Nov-03		
	Lake Elsinore								
	Canyon Lake								
Newport Bay Watershed Selenium TMDL	Selenium	X	X	X			Sep-05		
	San Diego Cr.								
	Upper Newport Bay								
	Lower Newport Bay								
	(promulgated by USEPA on 6/02)								
Newport Bay Watershed Diazinon and Chlorpyrifos TMDL	Diazinon and Chlorpyrifos	X	X	X	X	X	Apr-03		

Attachment 1

Status of Active TMDL Projects

Region 8

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
	San Diego Cr.								
	Upper Newport Bay								
	Lower Newport Bay								
	(promulgated by USEPA on 6/02)								
Newport Bay Watershed Metals TMDL	Metals	X	X	X			Jun-07		
	San Diego Cr.								
	Upper Newport Bay								
	Lower Newport Bay								
	(promulgated by USEPA on 6/02)								
Newport Bay Watershed Organochlorine compounds TMDL	Organochlorine compounds	X	X	X			Jun-07		
	San Diego Cr.								
	Upper Newport Bay								
	Lower Newport Bay								
	(promulgated by USEPA on 6/02)								
Rhine Channel Toxics TMDL	Toxics	X	X	X			Jul-06		
	Rhine Channel								
	(Cu, Pb, Se, Zn, Hg, Cr, chlordane, dieldrin, DDT, PCBs								
	(promulgated by USEPA on 6/02)								
Newport Bay Watershed Nutrient TMDL	Nutrient	X	X	X	X	X	Oct-98	X	X
	San Diego Cr.								
	Upper Newport Bay								
Newport Bay Watershed Sediment TMDL	Sediment	X	X	X	X	X	Oct-98	X	X
	San Diego Cr.								
	Upper Newport Bay								
	Lower Newport Bay								
Newport Bay Watershed Coliform TMDL	Coliform	X	X	X	X	X	Apr-99	X	X
	Upper Newport Bay								
	Lower Newport Bay								

Attachment 1

Status of Active TMDL Projects

Region 9

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
Chollas Creek - Diazinon	Diazinon	X	X	X	X	X	Aug-02		
	Chollas Creek								
Rainbow Creek - Nutrients	Nutrients	X	X	X	X	X	Jan-03		
	Rainbow Creek								
Chollas Creek - Metals	Metals	X	X				Dec-04		
	Chollas Creek								
San Diego Bay, Shelter Island Yacht Basin - Copper	Copper, dissolved	X	X	X			Apr-03		
	San Diego Bay								
San Diego Bay, near Chollas Creek - Degraded Benthic Community and Sediment Toxicity	Unknown	X	X				Dec-05		
	San Diego Bay								
San Diego Bay, at 7th Street Channel - Degraded Benthic Community and Sediment Toxicity	Unknown	X	X				Dec-05		
	San Diego Bay								
Mission Bay - Bacterial Indicators	Bacterial Indicators	X	X				Dec-05		
	Mission Bay								
San Diego Bay, vicinity of B Street and Broadway Piers - Degraded Benthic Community and Sediment Toxicity	Unknown	X	X				Dec-07		
	San Diego Bay								
San Diego Bay, near Grape Street - Degraded Benthic Community and Sediment Toxicity	Unknown	X	X				Dec-07		
	San Diego Bay								
San Diego Bay, near Switzer Creek - Degraded Benthic Community and Sediment Toxicity	Unknown	X	X				Dec-07		
	San Diego Bay								

Attachment 1

Status of Active TMDL Projects

Region 9

TMDL Project	Pollutant(s)/Waterbody(s)	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		Phase 6	Phase 7
						Check if Initiated	Date Completed or Anticipated		
San Diego Bay, near Sub Base - Degraded Benthic Community and Sediment Toxicity	Unknown	x	x				Dec-07		
	San Diego Bay								
San Diego Bay, at 32nd St. Naval Station - Degraded Benthic Community and Sediment Toxicity	Unknown	x	x				Dec-07		
	San Diego Bay								
San Diego Bay, near Coronado Bridge - Degraded Benthic Community and Sediment Toxicity	Unknown						Dec-07		
	San Diego Bay								
San Diego Bay, at 24th Street Marine Terminal - Degraded Benthic Community and Sediment Toxicity	Unknown						Dec-07		
	San Diego Bay								

Appendix C

SWAMP Monitoring Activities
FY 2001-02 and FY 2002-03

REGION 1: NORTH COAST REGION

WATERSHED	WATER BODY	MONITORING LOCATION
Klamath River Hydrounit	Klamath River	at Klamath Glenn at Orleans at Martins Ferry below Horse Creek at Gottville access below Iron Gate at Weitchpec at Seiad Valley
	Scott River	at Steel Head at Fort Jones upstream Etna Creek at Callahan
	Yreka Creek	at Anderson Road
	Shasta River	at Highway 263 at Highway 3 near Big Springs near Edgewood at Montegue
Trinity River Hydrounit	Trinity River	at Hoopa at Weitchpec at Salyer at Douglas City at Poker Bar at Lewiston
	Trinity River North Fork	at Helena
	Trinity River South Fork	near Salyer
Redwood Creek Hydrounit	Redwood Creek	at Orick
Trinidad Hydrounit	Little River	at Crannel
Mad River Hydrounit	Mad River	at Blue Lake at Butler Valley at Ruth at Ruth Lake Outlet Works
	Ruth Lake	Station #1 Station #2

WATERSHED	WATER BODY	MONITORING LOCATION
Eureka Plain Hydrounit	Jacoby Creek	near Bayside Upper Station
	Freshwater Creek	near Freshwater corners Upper Station
	Elk River	near Elk River
	Elk River North Fork	upstream Jones
	Elk River South Fork	at Highway 1
	Salmon Creek	at Highway 1
Eel River Hydrounit	Van Duzen River	at Highway 101 at Bridgeville near Dinsmore
	Yager Creek	at Carlotta
	Eel River	at Holmes above Dyerville above Dos Rios near Alder Point near Hearst at Van Arsdale Reservoir
	Eel River North Fork	near Mina
	Eel River Middle Fork	at Dos Rios
	Eel River South Fork	downstream Bull Creek near Benbow near Branscomb
	Elder Creek	at Eel River
	Lake Pillsbury	Station #1 Station #2 at Outlet Works Station
Mendocino Coast Hydrounit	Gualala River	at Gualala Regional Park

WATERSHED	WATER BODY	MONITORING LOCATION
Russian River Hydrounit	Russian River	at Guerneville at Healdsburg Memorial Beach at Cloverdale at Johnson's Beach at Tamadge
Smith River Hydrounit	Smith River	below Dr. Fine Bridge above South Fork
	Smith River South Fork	above Hiouchi

REGION 2: SAN FRANCISCO BAY REGION

WATERSHED	WATER BODY	MONITORING LOCATION
South Bay Hydrounit	Arroyo de las Positas	at El Charro at Airway Boulevard Exit at Airway 2 at N. Livermore Avenue at Arroyo de las Positas
	Cottonwood Creek	at Cottonwood
	Collier Canyon Creek	at Collier Canyon
	Cayetano Creek	at Cayetano
	Altamont Creek	at Altamont Creek at Altamont Pass
	San Mateo Creek	
	San Leandro Creek	at Empire Road at San Leandro BART at Root Park at Chabot Park at Canyon School at Huckleberry at Lake Chabot
	Redwood Creek	at West Fork Redwood Creek at East Fork Redwood Creek
	Moraga Creek	at Moraga
	Indian Creek	at Indian
	Kaiser Creek	at Kaiser
	Alameda Creek	at Lake Del Valle

WATERSHED	WATER BODY	MONITORING LOCATION
Marin Coastal Hydrounit	Olema Creek	at Olema Low at Olema Town at Vedanta at Truttman at Giacomini Gulch at Blue Line
	Lagunitas Creek	at Gallagher's Ranch at Bon Tempe Reservoir at Nicasio Reservoir at Below Tocaloma at Taylor Park at Irving Bridge at Shafter Bridge
	Halleck Creek	at Halleck
	Nicasio Creek	at Nicasio
	Cheda Creek	at Cheda
	Devils Gulch	at Devils Gulch
	San Geronimo Creek	at Inkwells at White Horse Bridge at Papermill Creek Saloon at Creamery Gulch at Water Treatment Plant
	Woodacre Creek	at Woodacre Creek
	Big Carson Creek	at Big Carson 1
	Big Carson Creek tributaries	at Big Carson 2
	Bon Tempe Creek	at Bon Tempe
	Little Carson Creek	at Little Carson
	Cataract Creek	at Cataract

WATERSHED	WATER BODY	MONITORING LOCATION
Marin Coastal Hydrounit	Keyes Creek	at Keyes at Tomales at Keyes at Irvin Road
	Chileno Creek	at Chileno Canyon at Chileno Valley at Laguna Lake
	Walker Creek	at Walker Creek at Walker Canyon at Walker Creek Ranch at Soule Joule Reservoir
	Verde Canyon Creek	at Verde Canyon
	Salmon Creek	at Gambonini Mine at Salmon Creek
	Arroyo Sausal	at Soulejule at Arroyo Sausal at Cheese Factory
San Pablo Hydrounit	San Pablo Creek	at 3rd Avenue Bridge at 20th Street at Road 20 at San Pablo City Park at Cemetery Bridge at Orinda Village at Camino Encinas at Bear Creek Road
	Appian Way Creek	at Appian Way
	Wilkie Creek	at De Anza School
	Castro Creek	at Castro Ranch
	South Fork Bear Creek	at Christmas Tree Farm
	Bear Creek	at Briones 1 at Briones 2

WATERSHED	WATER BODY	MONITORING LOCATION
San Pablo Hydrounit	Lauterwasser Creek	at Lauterwasser
	Wildcat Creek	at Richmond Parkway at 3rd Avenue at Davis Park at Vale Road at Alvarado Park at Jewel Lake Outlet at Lone Oak at Botanic Garden at Big Springs Picnic Area at Possum Picnic Area
	Petaluma River	
Suisun Hydrounit	Suisun Creek	at Cordelia at Rockville at Putah South Canal- downstream at Putah South Canal-upstream at Lake Curry Road
	Wooden Valley Creek	at Wooden Valley at East Wooden Valley
	White Creek	at White Creek
	Gordon Valley Creek	at Gordon Valley
	Suisun Creek	at Upper Suisun
	Mt. Diablo Creek	
	Kirker Creek	
San Mateo Hydrounit	Butano Creek	at Lower Butano at Cloverdale Coast Ranch at Girl Scout Camp at Butano Falls

WATERSHED	WATER BODY	MONITORING LOCATION
San Mateo Hydrounit	Little Butano Creek	at Little Butano
	Pescadero Creek	at Water Lane at Community Church at Cloverdale Road at Pesky Ranch at USGS Gage at Loma Mar at Water Treatment Plant at Towne Fire Road (Steve Young) at Portola at Headwaters
	Honsinger Creek	at Honsinger
	Jones Gulch	at Jones Gulch
	Tarwater Creek	at Tarwater
	Peters Creek	at Peters Creek
	Slate Creek	at Slate
	Oil Creek	at Oil
	Waterman Creek	at Waterman
	San Gregorio Creek	at USGS Gage
	El Corte de Madera	at El Corte de Madera Low at Star Hill Road
	San Gregorio Creek	at Boysville at Upper San Gregorio
	Harrington Creek	at Harrington

WATERSHED	WATER BODY	MONITORING LOCATION
San Mateo Hydrounit	La Honda Creek	at La Honda Low at Spanish Ranch at Sky Londa
	Alpine Creek	at Alpine Low at Mindego at Heritage Grove
Santa Clara Hydrounit	Permanente Creek	at Lower Permanente at Crittenden Middle School at Permanente at Diversion Channel at Loyola Corners
	East Fork Permanente Creek	at Rancho San Antonio
	West Fork Permanente Creek	at West Fork Permanente
	Hale Creek	at Hale Creek at Covington
	Stevens Creek	at La Avenida at Landels School at Below Divergence Channel at "Belleville"/ Barranca at Chestnut Picnic Area/ USGS Gage at Moss Rock at Upper Park 1 at Upper Park 2 at Stevens Creek Reservoir
	Coyote Creek	at Lake Anderson

REGION 3: CENTRAL COAST REGION

WATERSHED	WATER BODY	MONITORING LOCATION
Big Basin Hydrounit	Gazos Creek	at Highway 1
	Wadel Creek	at Highway 1
	Scott Creek	at Highway 1 downstream of Mill Creek
	Bear Creek	upstream of San Lorenzo River
	Boulder Creek	upstream of San Lorenzo River
	Newell Creek	at Rancho Rio Road
	San Lorenzo River	at Laurel Street at Crossing Street at Highland County Park at Bear Creek Road
	Zayante Creek	at Graham Hill Road
	Aptos Creek	at Winfield Drive at Aptos County Park
	Soquel Creek	at Fanmar Way at Olive Springs Road
	Valencia Creek	upstream Aptos Creek
Pajaro River Hydrounit	Corralitos Creek (Salsipuedes Creek)	at Riverside Drive
	Harkins Slough	at San Andreas Road
	Pajaro River	at Frazier Lake Road at Chittenden Gap at Murphy's Crossing at Betabel Road at Thuwatcher Bridge

WATERSHED	WATER BODY	MONITORING LOCATION
Pajaro River Hydrounit	Watsonville Slough	at San Andreas Road at Tide gate
	Llagas Creek	at Bloomfield Avenue at Holsclaw Road
	Uvas Creek	at Bloomfield Avenue
	Pacheco Creek	at Highway 156
	Tequisquita Slough	
	Hernandez Reservoir	at Reservoir
	San Benito River	at Y Road Below Hernandez Reservoir
	Tres Pinos Creek	at Shore Road
Santa Lucia Hydrounit	Willow Creek	at Highway 1
	Big Sur River	at Pfeiffer Big Sur State Park at Andrew Molera State Park
	Garapata Creek	at Highway 1
	Limekiln Creek	at Highway 1
	Little Sur River	at Highway 1
	Mill Creek	at Highway 1
Carmel River Hydrounit	San Jose Creek	at Highway 1
	Tularcitos Creek	at Carmel Valley Road
	Carmel River	at Highway 1 at Schulte Road at Esquline Road at Cachagua Community Park

WATERSHED	WATER BODY	MONITORING LOCATION
Estero Bay Hydrounit	San Carpoforo Creek	at Highway 1
	Arroyo de la Cruz Creek	at Highway 1
	San Simeon Creek	at State Park Campground Bridge at San Simeon Creek Road
	Santa Rosa Creek	at Moonstone Drive at Santa Rosa Creek Road
	Villa Creek	at Highway 1
	Cayucos Creek	at Highway 1
	Old Creek	at Old Creek Road
	Toro Creek	at Highway 1
	Morro Creek	downstream of Highway 1
	Prefumo Creek	at Los Osos Valley Road
	San Luis Obispo Creek	at San Luis Bay Drive at Los Osos Valley Road at Mission Plaza at Cuesta Park
	Stenner Creek	at Nipomo Street
	Arroyo Grande Creek	at 22nd Street at Fair Oaks at Biddle Park at Strother Park

WATERSHED	WATER BODY	MONITORING LOCATION
Estero Bay Hydrounit	Coon Creek	at Coon Creek Trail
	Pismo Creek	upstream Highway 101
	Los Berros Creek	at Highway 1
San Antonio Hydrounit	San Antonio Creek	at Vandenberg Air Force Base at San Antonio Creek Road West at Rancho de las Flores Road
Santa Ynez Hydrounit	Salsipuedes Creek(314)	at Santa Rosa Road
	San Miguelito Creek	at North Street
	Santa Ynez River(lower)	at Vandenberg Air Force Base at Floordale
	Santa Ynez River (middle)	at Highway 246 at Avenue of the Flag
	Santa Ynez River (upper)	at Highway 154 at Paradise Road
	Lake Cachuma	at Lake
South Coast Hydrounit	Bell Creek	at Baccara Resort access road
	Canada de la Gaviota	at State Park entrance
	Canada del Refugio	at State Park entrance
	Dos Pueblos Canyon Creek	at Highway 101
	El Capitan Creek	at State Park entrance
	Jalama Creek	at County Park
	Los Carneros Creek	at Hollister Road

WATERSHED	WATER BODY	MONITORING LOCATION
South Coast Hydrounit	Tecolote Creek	at Baccara Resort access road
	Atascadero Creek(315)	at Ward Drive at Patterson Drive
	Devereux Slough	at Golf Course
	Glenn Annie Creek	at Los Carneros Road
	Goleta Slough	at Airport
	Maria Ynacio Creek	at Patterson Drive
	San Jose Creek	at Hollister Road
	San Pedro Creek	at Drive in next to Hwy 217
	Arroyo Burro Creek	at Cliff Drive at Hope Street
	Mission Creek	at Amtrak Station at Foothill
	Montecito Creek	at Via Real
	San Ysidro Creek	at Via Real
	Santa Barbara Harbor	at Harbor
	Romero Creek	at Via Real
	Sycamore Creek	at Punta Gorda
	Arroyo Paredon	at Via Real
	Carpinteria Creek	Downstream Carpenteria Avenue at Foothill

WATERSHED	WATER BODY	MONITORING LOCATION
South Coast Hydrounit	Franklin Creek	at Carpenteria Avenue
	Rincon Creek	at Bates Road
	Santa Monica Creek	at Carpenteria Avenue
	Toro Canyon Creek	at Via Real

REGION 4: LOS ANGELES REGION

WATERSHED	WATER BODY	MONITORING LOCATION
Santa Clara-Calleguas Hydrounit	Sespe Creek	at Rose Valley Road at Highway 126 Site #403STCO70: description unknown at this time Site #403STC002: description unknown at this time
	Piru Creek	at Mutau Flat Road at Piru Canyon Road at Highway 126 at Gold Hill Road Site #403STCO69: description unknown at this time Site #403STC071: description unknown at this time Site #403STC077: description unknown at this time Site #403STC025: description unknown at this time
	Santa Clara River	at Farm Road at Valencia by Publicly Owned Treatment Works (POTWs) at Fillmore / A Street at Newhall Ranch Property east of Blue Cut at Newhall Ranch- Blue Cut Site #403STC068: description unknown at this time Site #403STC072: description unknown at this time Site #403STC074: description unknown at this time Site #403STC082: description unknown at this time

WATERSHED	WATER BODY	MONITORING LOCATION
Santa Clara-Calleguas Hydrounit	Santa Paula Creek	at Canyon Irrigation just north of confluence with Mudd Creek and south of Steckel Park Site #403STCO28: description unknown at this time
	Bouquet Canyon Creek	at Forest Service Road at Newhall Ranch Road Site #403STC023: description unknown at this time
	Tule Creek (tributary to Sespe Creek)	Site #403STC026: description unknown at this time
	Piedra Blanca (tributary to Sespe Creek)	Site #403STCO30: description unknown at this time
	Elizabeth Lake Canyon Creek	Site #403STCO29: description unknown at this time
	Santa Paula Creek tributary	at Ferndale Road
	Unknown tributary	Site #403STC010: description unknown at this time
	San Francisquito Canyon Creek	5 miles above intersection of San Francisquito Road and Copperhill Road (first stream crossing)
	Castaic Creek	at Lake Hughes Road just below Castaic Lagoon
	Santa Clara River Estuary	west of Harbor Boulevard
	Calleguas Creek	Camrosa POTW

WATERSHED	WATER BODY	MONITORING LOCATION
Santa Clara-Calleguas Hydrounit	Calleguas Creek Estuary	at Highway 1 Crossing
	Revolon Slough	at Wood Road
	Beardsley Wash	at Central Avenue
	Conejo Creek	Camarillo POTW
	South Branch Arroyo Conejo	at Hillcrest
	Arroyo Santa Rosa	at Santa Rosa Road
	North Fork Arroyo Conejo	at Lynn Road
	Arroyo Las Posas (Simi Las Posas)	at Tierra Rejada
	Arroyo Simi	at Los Angeles Avenue
	Tapo Canyon	at Los Angeles Avenue between Sycamore and Sequoia
Malibu Hydrounit	Arroyo Sequit Creek	at Mullholand Drive – first time road crosses stream just above Leo Carrillo State Campground just above Pacific Coast Highway (PCH)
	San Nicholas Canyon Creek	just above PCH by stairs on property 33905 same property upstream at bridge crossing
	Lachusa Canyon Creek	above PCH –Near 32800 PCH Decker to Foose where crosses stream

WATERSHED	WATER BODY	MONITORING LOCATION
Malibu Hydrounit	Los Alisos Creek	above PCH just north of Decker Canyon Decker Canyon Road where road crosses stream for the first time
	Encinal Canyon Creek	Encinal Canyon Road first time crosses road just above PCH –site is near stand of Eucalyptus trees
	Trancas Canyon Creek	just above PCH just south of Trancas Market Trancas Canyon Road to Paseo Canyon
	Dume Creek/ Zuma Canyon Creek	at Zuma Beach parking lot where stream crosses exit road
	Dume Creek/ Zuma Canyon Creek	at Bonsall Road where stream crosses road
	Ramirez Canyon Creek	Paradise Cove just below PCH additional site to be determined
	Escondido Canyon Creek	Latigo Canyon Road to Maguire to Escondido Canyon Road to Creek above PCH just south of Via Escondido and Geoffrey's Restaurant

WATERSHED	WATER BODY	MONITORING LOCATION
Malibu Hydrounit	Latigo Canyon Creek	Latigo Canyon Road where first hairpin curve is and road crosses stream additional site to be determined
	Solstice Canyon Creek	above PCH right near parking lot for Beaurivage Restaurant at first wood bridge in park where upper road meets lower road at waterfall at Tropical Terrace
	Puerco Canyon Creek	Stream goes under Malibu Road right near 24712 Malibu Road – sample upstream of road additional site to be determined
	Marie Canyon	Stream goes under Malibu Road right near 24572 Malibu Road – sample upstream of road
	Malibu Canyon	Serra Retreat / Mariposa del Oro at Arizona Crossing
	Cold Creek	Piuma Road at marker 27
	Las Virgenes Creek	Malibu Creek State Park near water line
	Medea Creek	additional site to be determined
	Triunfo Creek	near sign for Community Center and kids camp and horse stables

WATERSHED	WATER BODY	MONITORING LOCATION
Malibu Hydrounit	Malibu Lagoon	PCH and Cross Creek in State Park
	Corral Canyon Creek	just above PCH just south of Fish & Seafood Restaurant up path south of stream round 2 bends until first stream crossing
	Carbon Canyon Creek	just above PCH just south of fire station and Corral Canyon Road up Carbon Canyon Road near white picket fence
	Sweetwater Canyon Creek	across street from Malibu Beach Inn located at 22878 PCH – just south of hotel additional site to be determined
	Las Flores Canyon Creek	just above PCH Las Flores Canyon Road upstream to where it crosses the creek the first time near a maintenance yard and a school
	Piedra Gorda Canyon Creek	at Big Rock Canyon Road at the first hairpin turn where creek goes under road just above PCH at Big Rock Canyon Road

WATERSHED	WATER BODY	MONITORING LOCATION
Malibu Hydrounit	Pena Canyon Creek	just above PCH at Pena Canyon Road (private road) upstream past the last house by fork
	Tuna Canyon Creek	just above PCH at Tuna Canyon Road from the ocean, the first time the road crosses the creek at a big hairpin curve
	Topanga Canyon Creek	on Topanga Canyon Road at first stream crossing at Greenleaf at Old Topanga Canyon Road near Inn of the Seventh Ray Restaurant
	Topanga Lagoon	at Topanga State Beach
Los Angeles-San Gabriel Hydrounit	Santa Ynez Canyon	Palisades Drive at Santa Ynez Canyon State Park up by the dam to the reservoir Palisades Drive at Santa Ynez Canyon State Park up by the first culvert the stream crosses by bridge of k rail and railroad ties
	Santa Monica Canyon Creek	at second bridge past PCH at E. Channel Drive and Almalfi just below confluence with Sullivan Canyon Creek and Mandeville Canyon Creek

WATERSHED	WATER BODY	MONITORING LOCATION
Los Angeles-San Gabriel Hydrounit	Rustic Canyon Creek	at Evans Road / Will Rogers State Park at Rustic Road
	Sullivan Canyon Creek	at Ranch Road and Culvert just above confluence with Santa Monica Canyon Creek and Mandeville Canyon Creek
	Mandeville Canyon Creek	just above confluence with Santa Moncia Canyon Creek and Sullivan Canyon Creek additional site to be determined
	Ballona Creek	at daylight – Cochran at Benedict Canyon confluence at Centinela confluence at Sepulveda confluence
	Agua Amarga draining into Lunada Bay	at Via Rivera Paseo del Mar and Paseo Lunado
	Stream Draining into Malaga Cove	Rosita Place near Towne and Country Nursery School Paseo del Mar
	Stream Draining into Abalone Cove	at Abalone State Park and Marine Reserve to the south
	within the Los Angeles/Long Beach harbor areas	30 stations will be determined and will be random in design
	Machado Lake	5 stations will be chosen for this lake in a directed design

WATERSHED	WATER BODY	MONITORING LOCATION
Los Angeles-San Gabriel Hydrounit	Dominguez Channel Estuary	9 stations within the estuary to be determined by current NPDES monitoring locations
	Dominguez Channel above Estuarine Influence	Directed station above tidal influence – exact location to be determined
	Madrona Marsh	3 directed stations within the marsh to be determined

REGION 5: CENTRAL VALLEY REGION

WATERSHED	WATER BODY	MONITORING LOCATION
San Joaquin Valley Floor Hydrounit	San Joaquin River	at Crows Landing
	Merced River	at Hatfield Park
	Bear Creek	at Bert Crane Road
	Turner Slough	at Fourth Avenue
	Deep Slough	at Green House Road
	Harding Drain	at Carpenter Road
	Stanislaus River	at Caswell State Park
	Lone Willow Slough	at Road 9
	Tuolumne River	at Shiloh Fishing Access
Delta-Mendota Canal Hydrounit	San Joaquin River	at Sack Dam at Lander Avenue at Freemont Ford at Airport, near Vernalis at Patterson at Maze at Hills Ferry
	Salt Slough	at Lander/ Highway 165
	Discharge from San Luis Drain	at Discharge
	Mud Slough	Upstream Downstream
	Orestimba Creek	at River Road
	Grayson Road Drain	at Grayson Road

WATERSHED	WATER BODY	MONITORING LOCATION
Delta-Mendota Canal Hydrounit	Ingram Creek	at River Road
	Hospital Creek	at River Road
	Solado Creek	at Highway 33
	Del Puerto Creek	at Vineyard
North Valley Floor Hydrounit	Lone Tree Creek	at Austin Road
	French Camp Slough	at Airport Way
	Pixley Slough	at Davis Road
	Bear Creek	at Thornton Road
	Mokelumne River	at Van Assen County Park at South Comanche Shore Recreational Park
	Calaveras River	at Highway 88
San Joaquin Delta Hydrounit	Mokelumne River	at New Hope Road
	New Jerusalem Tile Drain	at San Joaquin River
	Consumnes River	at Twin Cities Road
	Tom Payne Slough	at Paradise Road
	Old River	at Tracy Boulevard
	Mt. House Creek	at Byron Highway
North Diablo Range Hydrounit	Corral Hollow Creek	
Upper Calaveras Hydrounit	New Hogan Reservoir	at Acorn East at Wrinkle Cove
	Calaveras River	at Monte Vista Trail Head

WATERSHED	WATER BODY	MONITORING LOCATION
Upper Calaveras Hydrounit	San Antonio Creek	at Sheep Ranch Road
	Calaveritas Creek	at Highway 49
	N. Fork Calaveras River	at Gold Strike Road
Middle Sierra Hydrounit	Lake Amador	at Lake Amador Boat Launch
	Jenkinson Lake	at Pinecone Campsites 1-30 at Mormon Emigrant Trail
	Consumnes River	at Gold Beach Park at Highway 49 at Michigan Bar Road
	N. Fork Mokelumne River	at Highway 26
	Mokelumne River	at Highway 49
	Sutter Creek	at Highway 49
Lakeview Hydrounit	New Pine Creek	at USFS boundary at Goose Lake confluence
	Willow Creek	at USFS boundary at Goose Lake confluence
	Lassen Creek	at USFS boundary at Goose Lake confluence
	Davis Creek	at USFS boundary
Pit River Hydrounit	Joseph Creek	at USFS boundary at Pit River confluence
	Thomas Creek	at USFS boundary (Cedar Pass) at Highway 299 at Pit River confluence

WATERSHED	WATER BODY	MONITORING LOCATION
Pit River Hydrounit	Parker Creek	at USFS boundary at U.S. Fish and Wildlife Service Diversion at Pit River confluence
	Pine Creek	at inflow to Pine Creek Reservoir at USFS Road 42N05
	Fitzhugh Creek	at Bureau of Land Management boundary (near Lt. Juniper Res) at North Fork/South Fork confluence at South Fork/North Fork confluence
	Mill Creek	at USFS boundary at South Fork Pit River confluence (at Jess Valley)
	East Creek	at Patterson Guard Station at Mill Creek confluence (at Jess Valley)
	Cedar Creek	at Smith Flat
	Rattlesnake Creek	at Highway 299
	Canyon Creek	at County Road 71 at Pit River confluence
	Turner Creek	at Pit River confluence
	Washington Creek	at Turner Creek confluence
	Stone Coal Creek	at Pit River confluence
	Dutch Flat Creek	at USFS boundary

WATERSHED	WATER BODY	MONITORING LOCATION
Pit River Hydrounit	Rush Creek	at Highway 299
	Ash Creek	at USFS Road 39N50 at Highway 299 at Pit River confluence
	Butte Creek	at Highway 299
	Willow Creek	at Highway 139 (near Hayden Hill at County Road A-2
	Juniper Creek	at County Road 417
	Horse Creek	at Little Valley
	Beaver Creek	at County Road 404 at Pittville
Feather River Hydrounit	North Fork Feather River	above Lake Almanor (near Chester) at North Fork Feather River confluence
	Hamilton Branch	above Lake Almanor (near Road A13 crossing)
	Butt Creek	near confluence with Butt Reservior
	Wolf Creek	at Indian Creek confluence
	Lights Creek	at Indian Creek confluence
	Indian Creek	at Red Clover Creek confluence at Taylorsville Bridge at Spanish Creek confluence
	Spanish Creek	at Rock Creek confluence

WATERSHED	WATER BODY	MONITORING LOCATION
Feather River Hydrounit	Greenhorn Creek	at Spanish Creek confluence
	Red Clover Creek	at Last Chance Creek confluence
	Last Chance Creek	at Red Clover Creek confluence
	Middle Fork Feather River	at Beckworth (Highway A23) at Nelson Creek confluence
	Sulphur Creek	at Middle Fork Feather River confluence
	Jamison Creek	at Middle Fork Feather River confluence
Marysville Hydrounit	Dry Creek	at Rio Linda at Cook Riolo Road at Atkinson Road at Station A at Station B
	Antelope Creek	at Sunset Boulevard at Sierra College Boulevard
	Secret Ravine	at Loomis Park
	Miner's Ravine	at Auburn Folsom Boulevard at Station A at Station B
	Linda Creek	at Champion Oaks
	Auburn Ravine	at Moore Road at Highway 65 at Fowler Road at Station A at Palm Avenue

WATERSHED	WATER BODY	MONITORING LOCATION
Marysville Hyudrounit	Tributary to Coon Creek	at Station A at Station B
	Pleasant Grove Creek	South Branch at Pleasant Grove Boulevard at Petigrew Road at Fiddyment Road at Industrial Boulevard
	Butte Creek	at Aguas Frias Road at Durham Dayton Highway at Highway 99
	Jack Slough	at Doc Adams Road at Woodruff Road at Loma Rica Road
Colusa Basin Hydrounit	Main Drainage Canal	at Farris Road
	Main Drainage Canal Lateral	at Farris Road at South Avenue at West Biggs at Ord Ranch Road at Gridley
	Wadsworth Canal	at East Butte Road
	Wadsworth Canal Lateral	at Nuestro Road at Paseo Road at Eager/Larkin Road
	Live Oak Slough	at Clark Road
	Gilsizer Slough	at O'Banion Road
Kings River Hydrounit	Hume Lake	at Hume Lake
	Ten Mile Creek	Hume Lake to Highway 180

WATERSHED	WATER BODY	MONITORING LOCATION
Kings River Hydrounit	Kings River, Upper	East of confluence with Grizzly Creek to Kings Canyon National Park
South Valley Floor Hydrounit	Kings River, Lower	Fresno Weir, NE of Centerville Peoples Weir, west of Highway 99
	Kings River, Lower North Fork	Island Weir east of Highway 41 to NE of Five Points
	Kings River, Lower South Fork	Stratford to SW of Lemoore
	Kern River, Lower	Oildale to Bakersfield
	Kaweah River, Lower	Southwest of Lake Kaweah to inflow of Elk Bayou
	Tule River, Lower	West of Lake Success to inflow of Elk Bayou
	Kern River, Lower	Intersection of Highway 178 and Rancheria Road to Oildale
Kaweah River Hydrounit	Kaweah River, Upper	Highway 198 Bridge south of Sequoia National Park
	Lake Kaweah	Lake Kaweah
Southern Sierra Hydrounit	Tule River, Upper	below confluence with North and South Forks to Lake Success
	Lake Success	Lake Success
Kern River Hydrounit	Kern River, Upper	North of Kernville to Lake Isabella on Highway 178 Lake Isabella to mouth of Kern River Canyon, Highway 178

WATERSHED	WATER BODY	MONITORING LOCATION
Kern River Hydrounit	Lake Isabella	Lake Isabella
Ahwahnee Hydrounit	Fresno River	below Sugar Pine to above confluence of Coarsegold Creek
	Nelder Creek	upstream from confluence with Lewis Fork
	Crooks Creek	upstream from the confluence with Fresno River
	China Creek	upstream from the confluence with Fresno River
	Peterson Creek	upstream of confluence with Miami Creek
	Miami Creek	upstream of confluence with Peterson Creek
	Coarsegold Creek	south Coarsegold to upstream from confluence with Fresno River
	Hensley Lake	Hensley Lake

REGION 6: LAHONTAN REGION

WATERSHED	WATER BODY	MONITORING LOCATION
Surprise Valley Hydrounit	Bidwell Creek	above Fort Bidwell, at gaging station
	Mill Creek	at Upper Lake
	Cedar Creek	at Cedarville
Susanville Hydrounit	Susan River	above confluence with Willard Creek near Litchfield
West Fork Carson River Hydrounit	West Fork Carson River	at Hope Valley
East Fork Carson River Hydrounit	Monitor Creek	at below Henan Reservoir above Lexington Canyon below Lexington Canyon
	Goskey Creek	above Highway 89
	East Carson River	below Markleeville
	Hot Springs Creek	above State Park
West Walker River Hydrounit	West Walker River	at Coleville
	Deep Creek	above confluence with West Walker River
East Walker River Hydrounit	Robinson Creek	above Twin Lakes below Barney Lake
	Buckeye Creek	above Eagle Circle
	Virginia Creek	at Conway Summit
	Green Creek	above campground
	East Walker River	at California/Nevada state line

WATERSHED	WATER BODY	MONITORING LOCATION
Owens Hydrounit	Mammoth Creek	at Twin Lakes at Highway 395 at Old Mammoth Road
	Hilton Creek	at Highway 395
	Rock Creek	above diversion
	Convict Creek	at lower Sierra Nevada Aquatic Research Lab site
Indian Wells Hydrounit	North Haiwee Reservoir	various locations on reservoir
	South Haiwee Reservoir	various locations on reservoir
Amargosa Hydrounit	Mesquite Spring	at campground
Antelope Hydrounit	Little Rock Reservoir	near dam
Mojave Hydrounit	Mojave River	at Upper Narrows at Forks Dam
	Deep Creek	above Deep Creek Lake
	Holcomb Creek	at Crabflats Road
	Crab Creek	at Crab Creek Road
	Sheep Creek	below Lake Arrowhead Scout Camp
Lake Tahoe Hydrounit	Heavenly Valley Creek	below ski area
	Hidden Valley Creek	at lower reach
	Saxon Creek	above USFS Road 8189
	Taylor Creek	below Fallen Leaf Dam

WATERSHED	WATER BODY	MONITORING LOCATION
Lake Tahoe Hydrounit	Trout Creek	above Pioneer Trail
	Cold Creek	above Pioneer Trail
Mono Hydrounit	Parker Creek	at bench below Parker Lake
	Rush Creek	at Rush Creek bottomlands

REGION 7: COLORADO RIVER BASIN REGION

WATERSHED	WATER BODY	MONITORING LOCATION
Homer Hydrounit	Colorado River	at Nevada state line at Parker Dam at Imperial Dam above Imperial Dam (USGS Station)
Chemehuevis Hydrounit	Lake Havasu	above Parker Dam
Colorado Hydrounit	Taylor Lake	at exit area to the Colorado River
	Ferguson Lake	at discharge into the Colorado River
	Squaw Lake	at discharge into the Colorado River
	Palo Verde Lagoon (LG1)	Above Palo Verde Lagoon
	Palo Verde Outfall Drain (PVOD2)	Below Palo Verde Lagoon at discharge into the Colorado River
Yuma Hydrounit	Reservation Main Drain 4	USGS gage station
Imperial Hydrounit	Alamo River	Outlet at Drop 3 at Drop 6 at Drop 6A at Drop 8 at Drop 10 at International Boundary
	New River	Outlet at Drop 2 at Evan Hughes Highway at International Boundary
	Rice Drain	at discharge into New River
	Rice Drain #3	at discharge into New River
	Fig Drain	at discharge into New River

WATERSHED	WATER BODY	MONITORING LOCATION
Imperial Hydrounit	Gresson Drain	at discharge into New River
	Salton Sea	Drain S1 (W Drain) Drain S2 (Niland 4) Drain S3 (Tri Folium TD1)
	Salt Creek	Slough
Salton Sea Hydrounit	Salton Sea	USGS2 USGS3 USGS5 USGS7 USGS10 USGS9 Drain NE1 (USGS8) Drain NE2) Drain NW1(Torrez Martinez 1) Drain NW2 (Torrez Martinez 2)
Anza Borrego Hydrounit	Salton Sea	Drain SW1 (San Felipe Creek)
East Salton Hydrounit	Salton Sea	Drain (Salt Creek mouth)
Whitewater Hydrounit	Coachella Valley Stormwater	Northern bridge before Salton Sea
	Coachella Valley 52	Under bridge, 52nd Street at Coachella Valley

REGION 8: SANTA ANA REGION

WATERSHED	WATER BODY	MONITORING LOCATION
Santa Ana River Hydrounit	Anaheim Bay	30 sites
	Huntington Harbor	30 sites
San Jacinto Valley Hydrounit	Lake Elsinore	30 sites
	Canyon Lake	60 sites

REGION 9: SAN DIEGO REGION

WATERSHED	WATER BODY	MONITORING LOCATION
Penasquitos Hydrounit	Los Penasquitos Creek	just above tidal influence
	Tecolote Creek	just above tidal influence
	Rose Creek	just above tidal influence
	Poway Creek (Alternate)	just above confluence with Rattlesnake Creek
	Soledad Canyon Creek	near Sorrento Valley Road
Carlsbad Hydrounit	Escondido Creek	in San Elijo Canyon
		just above tidal influence
	Loma Alta Creek	just above tidal influence
	San Marcos Creek	just upstream of Lake San Marcos and confluence with Los Posas Creek
		just above tidal influence (Batiquitos Lagoon)
	Encinitas Creek	Urban stream site (near Camino Real)
	Cottonwood Creek	just above tidal influence
	Aqua Hedionda Creek	just above confluence with Buena Creek
	Buena Vista Creek	just above tidal influence
	Buena Creek	near S. Santa Fe Avenue
San Juan Hydrounit	San Juan Creek	above Arroyo Trabuco above Arroyo Trabuco
	Aliso Creek	above English Canyon at mouth of creek

WATERSHED	WATER BODY	MONITORING LOCATION
San Juan Hydrounit	Arroyo Trabuco	above San Juan Creek below Holy Jim Creek
	Oso Creek	above Arroyo Trabuco
	Bell Canyon Creek	just above confluence with San Juan Creek
	Crow Canyon	just above confluence with Bell Canyon Creek
	Canada Goberandora	just above confluence with San Juan Creek
	Canada Chiquita	just above confluence with San Juan Creek
	San Mateo Creek (1)	at headwaters
	Laguna Canyon Creek (alternate)	located in Laguna Canyon (approximately 1 mile above tidal influence)
	Moro Canyon Creek (alternate)	just above mouth of creek
	Sulpher Creek (alternate)	just above influence with Aliso Creek
	Salt Creek (alternate)	just above tidal influence
	San Mateo Creek (2)	at mouth of creek
	San Onofre Canyon Creek	just above tidal influence
	Christinitos Creek (alternate)	upstream of confluence with San Mateo Creek

WATERSHED	WATER BODY	MONITORING LOCATION
Otay Hydrounit	Jamul Creek	just above lower Otay Reservoir
	Dulzura Creek	just above confluence with Pringle Creek
	Hollenbeck Canyon Creek	just above confluence with Dulzura Creek
	Otay River (alternate)	between confluences of Poggi and Wolf Creek
	Pringle Canyon Creek (alternate)	just above confluence with Dulzura Creek
	Jamul Creek (alternate)	just above confluence with Dulzura Creek
	Salt Creek (alternate)	above confluence with Otay River
	Poggi Canyon Creek (alternate)	above confluence with Otay River
	Proctor Valley Creek (alternate)	just above Upper Otay Reservoir
Sweetwater Hydrounit	Telegraph Canyon Creek (alternate)	in Hilltop Park
Santa Margarita Hydrounit	Santa Margarita River	mouth of river
	Sandia Creek	at headwaters
	Deluz Creek	in Camp Pendleton
	Rainbow Creek	just above confluence with Santa Margarita River
	Roblar Creek	below falls, approximately 0.3 miles from De Luz Road
	Temecula Creek	upstream of confluence with Murrietta Creek

WATERSHED	WATER BODY	MONITORING LOCATION
Santa Margarita Hydrounit	Warm Springs Creek	above confluence with Murrietta Creek
San Dieguito Hydrounit	San Dieguito River	at River mouth
	Lusardi Creek	near Artesian Road
	Santa Ysabel Creek	at Highway 79 crossing
	Black Canyon Creek	at headwaters