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State Water Resources Control Board
Water Quality Planning
and
Nonpoint Source Programs

Request for Proposals

Federal Clean Water Act (CWA) Section 205(j) Water Quality Planning Grants
CWA Section 319(h) Nonpoint Source Implementation Grants

Grant Announcement

CWA Section 104 (b) (3) Wetlands Protection Grant

March 2000

STATE WATER RESOURCES CONTROL BOARD
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

COV0085

Water Quality Planning and Nonpoint Source Implementation Grants
Division of Water Quality
State Water Resources Control Board

Executive Summary

The purpose of this document is to announce the availability of water quality grants that the Division of Water Quality, State Water Resources Control Board (SWRCB), intends to offer in calendar year 2001. The announcements in this document include the Clean Water Act (CWA) sections 205(j), 319(h), and Wetlands grants programs (Exhibits I, II and III). Please read the enclosed materials carefully and contact your Regional Water Quality Control Board (RWQCB) to determine your eligibility for funding by these programs, particularly the water quality planning and nonpoint source implementation programs.

REQUEST FOR PROPOSALS
FFY 2001 GRANTS
Watershed Management Initiative (WMI)

EXHIBIT I - Federal CWA section 205(j) Water Quality Planning Grant
And
EXHIBIT II - Federal CWA section 319(h) Nonpoint Source (NPS) Implementation Grant

Deadline for Proposals: All proposals must be received by the respective RWQCB, the SWRCB, and the U.S. Environmental Protection Agency – Region 9 (USEPA) by the close of business or **U.S. Postmarked no later than June 16, 2000. Late proposals will not be considered.** (The RWQCBs receive the original proposals pertinent to their Regions only and the SWRCB receives the original statewide proposals. Both the SWRCB and USEPA must receive copies of all proposals.)

Although this entire Request for Proposal (RFP) serves to solicit requests for both types of project funding, **a separate proposal is required for each planning or implementation grant.** If your project involves both types of work, two separate submittals are required.

SWRCB Program Contacts:

205(j) Water Quality Planning
Paul Lillebo
Telephone No.: (916) 657-1031
FAX: (916) 654-8375
SWRCB-Division of Water Quality

319(h) Nonpoint Source Implementation
Lauma Jurkevics
Telephone No.: (916) 657-0518
FAX: (916) 657-2127
SWRCB-Division of Water Quality

USEPA and RWQCB staff contacts are listed in Attachment 3.

EXHIBIT III: WETLANDS GRANT ANNOUNCEMENT

USEPA – Region 9 Program Contact:
Nancy Woo, USEPA
Telephone No.: (415) 744-1164
E-mail: woo.nancy@epamail.epa.gov

- This document and other reference documents are available on the SWRCB NPS Home Page at http://www.swrcb.ca.gov/nps/npshome.html.
- Up to $7 million is currently available for projects in the coastal area under the Fishery Restoration Grant Program. Proposals are due May 5, 2000. For more information, please contact Mike Bird at the Department of Fish and Game at (916) 327-8842.

EXHIBITS I, II, AND III
TABLE OF CONTENTS

REQUEST FOR PROPOSALS
WATERSHED MANAGEMENT INITIATIVE

EXHIBIT I – CWA SECTION 205(j) WATER QUALITY PLANNING GRANTS

About the 205(j) Grant Program

Summary

The State Water Resources Control Board (SWRCB), Regional Water Quality Control Boards (RWQCBs), and U.S. Environmental Protection Agency, Region 9 (USEPA) are requesting proposals for water quality planning projects to reduce, eliminate, or prevent water pollution and to enhance water quality. Funds made available through this Request for Proposal (RFP) are offered under the authority of the federal Clean Water Act (CWA) section 205(j) Water Quality Planning and Assessment Program (205(j)). The Federal Fiscal Year (FFY) 2001 grant funds awarded pursuant to this RFP are expected to be available to the SWRCB no sooner than July 1, 2001.

Proposals must be (1) received no later than close-of-business on or before June 16, 2000 or (2) U.S. postmarked on June 16, 2000. Applicants must submit the original proposals to the respective RWQCBS pertinent to their regions only. The original statewide proposals[1] are submitted to the SWRCB. In addition, applicants must submit a copy of all proposals to both the SWRCB and USEPA.

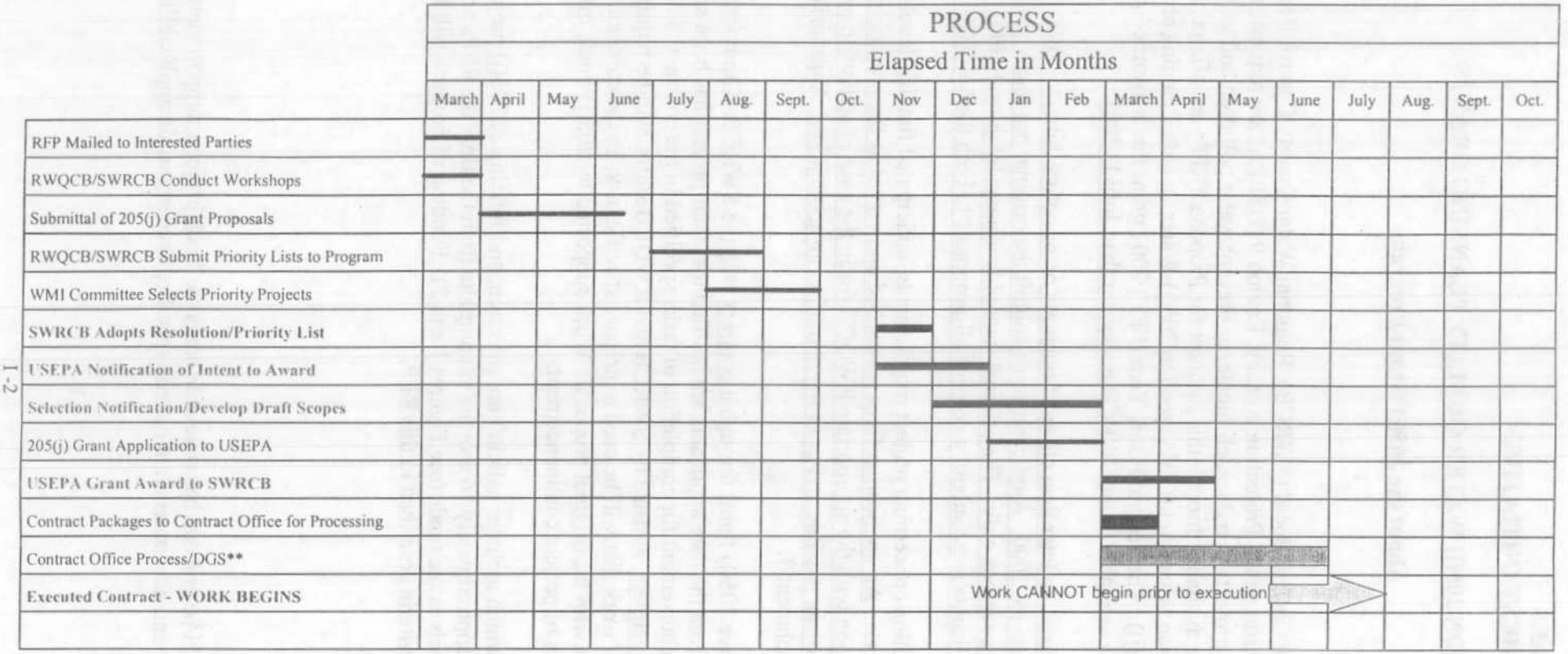
This RFP contains information concerning project requirements, anticipated funding levels, the review process, and selection criteria. An application form is attached and serves as the proposal template (Attachment 2). Consultation with the appropriate RWQCB (or in the case of statewide projects, the SWRCB) is required as soon as possible and prior to submitting an application. Appropriate contacts are listed in Exhibit I, Attachment 3.

Selected projects will receive 205(j) funds through a contract with the SWRCB. Contracts must be executed within one year from the date applicants are notified that their project has been selected. Funds are provided as reimbursement for completion of tasks specified in the contract. Following selection of a project, the recipient, assisted by SWRCB and RWQCB staffs, will be required to develop a detailed scope of work that will be used to prepare specific tasks in the contract. The scope of work must be consistent with the original proposal. Work supported by 205(j) funds must be completed within two years of project commencement.

The grant award process, which includes solicitation, selection, and funding of 205(j) projects, is a multistage process taking approximately 16 months to complete from the time the RFPs are released through when the State receives the funds (see Figures 1 and 2). Funding of projects will be based on the selection process and criteria described in this RFP.

[1] A statewide project should be one that has statewide benefits. Such projects support statewide Nonpoint Source planning and assessment, are not site specific, have statewide applicability, and have multiple applications.

CWA SECTION 205(j) GRANT PROCESS
RFP-TO-EXECUTION TIMELINE - *16 MONTHS**



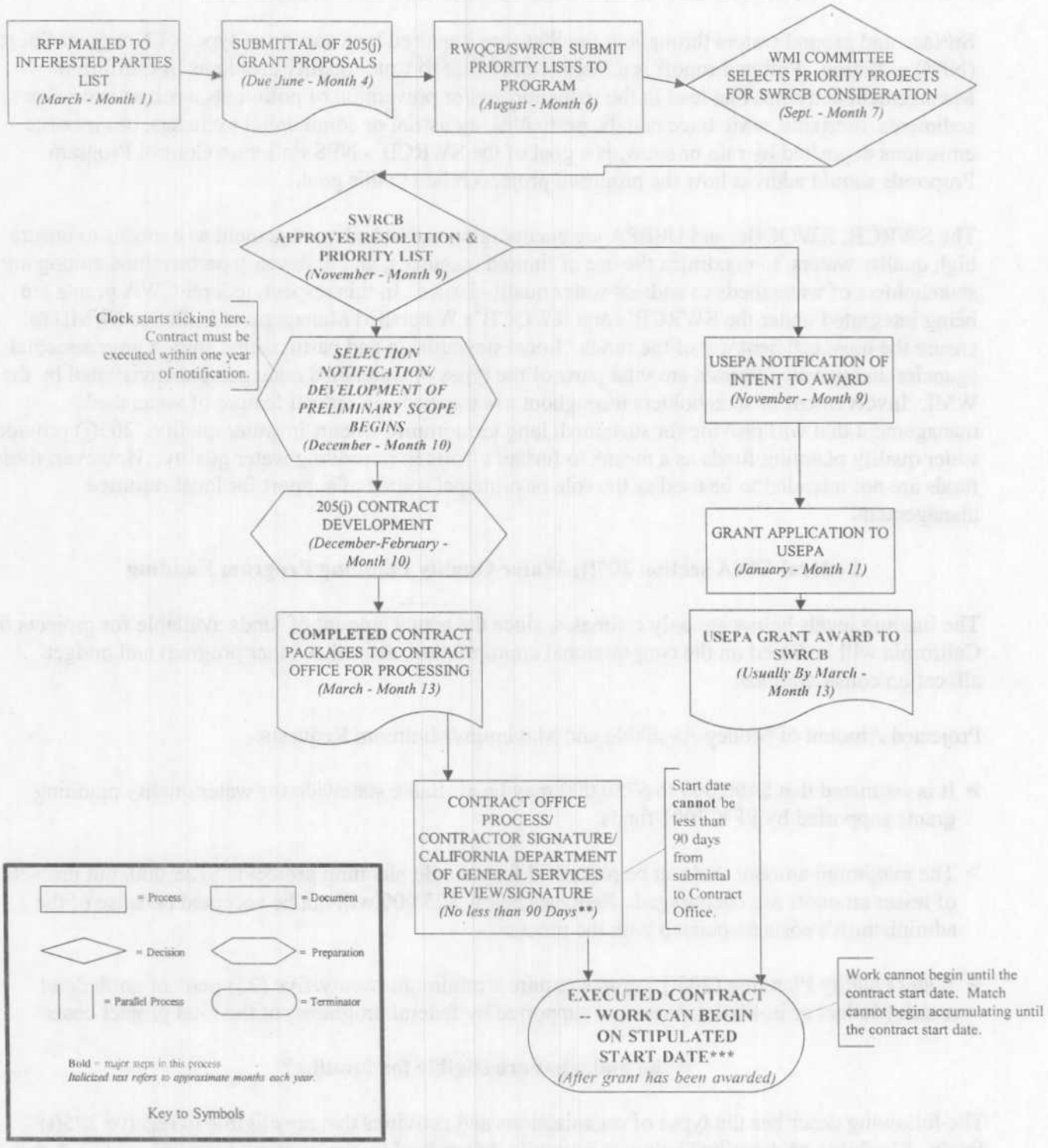
KEY CODE

= Standard steps
= Major steps in process
= This is contingent upon date of receipt of final contract package by SWRCB.
= This is contingent upon date of receipt by SWRCB's Contract Office.

FIGURE 1

*This is a best case scenario.
**California Department of General Services

CWA SECTION 205(j) GRANT PROCESS
RFP-TO-EXECUTION TIMELINE - *16 MONTHS**



* This is a best-case scenario. The actual time is contingent upon the quick submittal of the contract package by the Contractor.
** This turn around time is contingent upon the number of contracts in the Contract Office during this timeframe.
*** Dollars are not available for expenditure until July 1 of the respective grant year, so contract start dates must reflect a date after July 1. Contractors should not budget the funds beginning July 1 if they cannot get the final contract package to the Program in time to meet the 90-day timeframe. If the package is received inside the timeframe, the date will either be changed or the package will be returned to the Contract Manager for correction. Be aware that, if the project does not begin by the start date, the schedule of completion dates included in the package will be affected.

FIGURE 2

Background

Surface and ground waters throughout the State are impaired by a variety of types of Nonpoint Source (NPS) pollution. Polluted runoff is a major contributor to water quality problems in California. Management activities that lead to the reduction and/or prevention of pollutants, such as excessive sediments, nutrients, toxic trace metals, pesticides, industrial or commercial toxicants, or air borne emissions deposited by rain or snow, is a goal of the SWRCB's NPS Pollution Control Program. Proposals should address how the proposed projects relate to this goal.

The SWRCB, RWQCBs, and USEPA are encouraging watershed management as a means to ensure high quality waters, to maximize the use of limited resources, and to develop partnerships among all stakeholders of watersheds to address water quality issues. In this respect, federal CWA grants are being integrated under the SWRCB's and RWQCB's Watershed Management Initiative (WMI) to ensure the most efficient use of the funds. Local stewardship and partnerships among governmental agencies and private interests are vital parts of the types of watershed management envisioned by the WMI. Involvement of stakeholders throughout a watershed is a critical feature of watershed management that will provide for sustained, long term improvements in water quality. 205(j) provides water quality planning funds as a means to further efforts in improving water quality. However, these funds are not intended to be used as the sole or principal source of support for local resource management.

Federal CWA section 205(j) Water Quality Planning Program Funding

The funding levels below are only estimates, since the actual amount of funds available for projects in California will be based on the congressional appropriation, as well as other program and budget allocation considerations.

Projected Amount of Money Available and Maximum/Minimum Requests:

- It is estimated that $400,000 to $750,000 may be available statewide for water quality planning grants supported by FFY 2001 funds.
- The maximum amount that can be requested for a single planning project is $125,000, but projects of lesser amounts are encouraged. Requests below $25,000 will not be accepted because of the administrative costs associated with the process.
- Water Quality Planning (205(j)) grants require a minimum twenty-five (25) percent nonfederal match (dollars or in-kind services not supported by federal programs) of the total project costs.

Who and what are eligible for funding?

The following describes the types of organizations and activities that are eligible to receive 205(j) funds. Eligibility as described below is primarily determined by the section of the federal CWA that authorizes the funding. See the Frequently Asked Questions section, page 6 of this document for more information concerning eligible projects.

- Water Quality Planning/CWA section 205(j)

Who Can Apply? Only local public agencies and special districts (e.g., resource conservation districts, water districts, councils of governments, city and county agencies) are eligible to receive 205(j) planning funds. State agencies, including State educational institutions, are not eligible for these funds.

What Activities Qualify? These funds are available for water quality planning and assessment activities. Eligible activities include the development of total maximum daily loads (TMDLs), watershed plans, or other planning functions designed to resolve actual or potential water quality issues. Planning projects may include a water quality monitoring component, but such monitoring should contribute directly to the planning objective of the project. Proponents must show that a coordinated approach with relevant agencies and stakeholders will be employed.

What Activities Are Excluded? The following are not eligible for 205(j) funding: (1) implementation or construction work and (2) general water quality assessments not linked to a comprehensive planning process.

What are we looking for in a project?

For 205(j) projects deemed eligible per the qualifications described above, the following criteria will be used in the project ranking and selection process:

Water Quality Planning/205(j) Ranking Criteria

The proposed project should:

- Address a target project or watershed identified by the RWQCBs or SWRCB as indicated in Attachment 4.
- Set realistic goals and objectives that address or adequately characterize the stated environmental problem.
- Provide an effective use of grant dollars.
- Promote or contribute to ongoing water quality planning throughout the project area and possibly in other applicable areas throughout the region and State.
- Include effective measures and indicators of progress and success.
- Provide data or develop plans that may result in the development of an implementation project.
- Include a technically-sound approach and a well-conceived strategy to achieve the goals and objectives.
- Demonstrate a watershed effort.

Selection/Award Process

What are the steps in the selection/award process?

The steps in the selection process are as follows:

1. RFP document is released to the public.

2. Project proponents must consult with the respective RWQCB/SWRCB staff as soon as possible and prior to submitting a project proposal (application).

3. Project proponents must submit one project proposal to the appropriate RWQCB (regional) or SWRCB (statewide) and one copy to the SWRCB and the USEPA by June 16, 2000. See Attachment 3 for mailing addresses.

   Projects selected by each organization must be consistent with provisions of this RFP and are subject to final approval by the SWRCB.

4. The competitive project proposal selection process will involve four tiers of review:

   Tier I - Each RWQCB will review and rank in priority order all 205(j) proposals for projects within their respective regions. The SWRCB Division of Water Quality (DWQ) will review and rank statewide or multi-regional proposals.

   Tier II - The WMI Committee, consisting of management from all RWQCBs, SWRCB, and USEPA, will review project proposals previously prioritized by each RWQCB and DWQ staff to develop statewide priority lists for 205(j) projects. Projects will be ranked by evaluating the level of responsiveness to each criterion (high, medium, or low) and by the number of criteria met. The higher the number of criteria met, the higher the project will be ranked. For the 205(j) priority list, the WMI Committee will primarily consider the top priority project for each RWQCB.

   Tier III - An Executive Committee consisting of RWQCB, SWRCB, and USEPA Executive Management will review the WMI Committee recommendations and modifications and submit them to the SWRCB for consideration.

   Tier IV - SWRCB considers recommendations of the Executive Committee and adopts the final consolidated project priority list of projects to be funded under 205(j).

5. A grant application package is prepared and submitted to USEPA so that the State may receive 205(j) funds.

6. USEPA accepts the grant application and makes grant awards to the SWRCB for the 205(j) projects.

7. Proponents of the approved projects receive a notice of award, develop a detailed scope of work, and negotiate contracts with SWRCB. (The contract negotiation and execution process must be completed within one year from the notice of grant award.) The entire process from proposal submittal to contract execution takes a minimum of 16 months to complete. Please refer to Figures 1 and 2 for more information.

Frequently Asked Questions

- *Why are there questions about restoration action strategies and management plans?*

Your proposed project should be integrated with other watershed activities and be part of a larger, comprehensive effort to increase the likelihood of improving water quality.

- *What if my proposed project falls in a watershed where there is no restoration action strategy? Can I still get funded?*

Yes. However, the available funding for projects in non-restoration action strategy watersheds is less than that available for watersheds where restoration action strategies exist.

- *What if my project is not listed as a targeted project by the RWQCB or SWRCB in Attachment 4? Can I still get funded?*

Yes. There is a strong preference to select projects that are listed in Attachment 4 (see selection criteria on page I-5). However, proposed projects that are not listed but are otherwise eligible will not be excluded from further consideration. We recognize that other projects not listed may be very effective in addressing a significant water quality concern, and these projects will be considered for funding.

- *Why is the project proponent required to consult with the appropriate RWQCB or SWRCB prior to submitting a proposal?*

This consultation is important to ensure that the proposed project addresses acknowledged water quality priorities and is coordinated with the activities of the RWQCB/SWRCB and other key partners. Consultation will involve substantive discussion regarding specific aspects of the proposed project. __

- *What if I miss the proposal deadline?*

Your proposal will not be considered.

- *Who gets copies of the proposal package?*

The appropriate RWQCB where your proposed project is located receives the original application package while USEPA and the SWRCB receive one copy. If your project occurs in multiple regions, a copy should go to each RWQCB included in the coverage. Proposals for projects to be considered under the "statewide" (for definition, see footnote on page I-1) category only go to the SWRCB and USEPA.

- *Can I apply for both 205(j) and 319(h) funding with one proposal?*

No. Separate proposals are needed.

- *How do I know which funding I qualify for?*

Read the eligibility criteria for each program as described in this application package. Also (and this is very important), talk with your local RWQCB contact well ahead of the deadline about the eligibility of your proposal. Many otherwise good proposals are rejected each year because they do not meet the eligibility criteria. 319(h) funds are for implementation activities while 205(j) funds are for planning type work (including monitoring).

➢ *Why is there a 10-page maximum?*

A statewide review committee will be ranking all proposals after each RWQCB has ranked theirs. There may be as many as 90 - 319(h) and 20 - 205(j) proposals received statewide that need reviewing. Therefore, a page limit is imposed to streamline and facilitate the review process.

➢ *Are there any types of projects that tend to be viewed more favorably during review?*

Projects that are most favored are those listed by the SWRCB and RWQCB as targeted projects listed in Attachment 4. In general, however, a 205(j) proposal has an advantage if it leads to development of a watershed management plan, develops a TMDL for pollutants listed on the 303(d) list, or creates the opportunity for an implementation project. Monitoring without a clear goal is not viewed favorably for 205(j) funding, which is extremely limited in funding.

➢ *I meet all the eligibility criteria and I think I have a good proposal. What else can I do?*

Review your proposal one last time (or have someone else do it) and evaluate how you would answer the following questions. Does your proposal clearly state what the money will be used for and what benefit will there be to water quality and the watershed in general? Is the proposal clear on what products will result? Have you been in contact and discussed your proposal with the respective RWQCB or the SWRCB? Have you sought endorsement letters from local entities? Have you calculated your match correctly? Have you requested funds within the RFP limitations?

➢ *What are examples of planning-type projects that would qualify for 205(j) funds?*

Section 205(j)(2) of the CWA states these funds shall be used to carry-out water quality planning including, but not limited to:

➢ Identifying the most cost-effective and locally acceptable facility and nonpoint measures (as in a watershed management or similar plan) to meet and maintain water quality standards (319(h) funds would be used to <u>implement</u> these measures);
➢ Developing an implementation plan to obtain State and local financial and regulatory commitments to implement measures developed under the above bullet (here again, 319(h) funds would be used to do the work described in the plan);
➢ Determining the nature, extent, and causes of water quality problems in various areas of the State and interstate region and reporting on these problems annually; and
➢ Determining those publicly-owned treatment works that should be constructed with assistance with these funds, in which areas and in what sequence, taking into account the relative degree of effluent reduction attained, the relative contributions to water quality of other point or nonpoint sources, and the consideration of alternatives to such construction.

• industrial [illegible]
[illegible]

ATTACHMENTS

Attachment 1 -- Applying for funding
Attachment 2 -- Application form
Attachment 3 -- RWQCB, SWRCB, and USEPA contacts
Attachment 4 -- Inventory of targeted 205(j) projects
Attachment 5 -- Sample Scope and Budget
Attachment 6 – Natural Resource Project Inventory Form 2000

ATTACHMENT 1 - APPLYING FOR FUNDING

Application Summary

Project applicants *must* submit the following (found in Attachment 2):

A. Cover Page
B. Budget Summary Sheet
C. Project Questionnaire

Submittal Deadline and Details on Packaging Submittal

Proposals must be submitted in the format shown in the attached forms and U.S. postmarked (or delivered) no later than June 16, 2000. The length of response to each question can be adjusted provided all relevant questions are answered and the adjusted Project Questionnaire does not exceed ten (10) pages. Additional information such as watershed strategies may be provided and will not be considered part of the ten-page limit. However, the additional information will be noted as available for review but will not be routinely circulated with the proposal. This RFP (with the forms) is available electronically on the Internet at the SWRCB's Internet Homepage at http://www.swrcb.ca.gov/nps/npshome.html.

➽ Project proponents must submit the original copy of their project proposal to the appropriate RWQCB (for Region-specific projects) or to the SWRCB (for statewide projects). One copy of each proposal must also be sent to both the SWRCB and USEPA.

Application Form - General Instructions

Much of the attached application is self-explanatory; however, a few points deserve some clarification and are discussed below.

PART A. The **COVER PAGE** should be completed with all of the information as requested and should not exceed one page.

PROJECT SUMMARY

The Project Summary should be a succinct statement that clearly describes project highlights including framework, objectives, tasks, products, and outcomes.

PART B. Complete the **BUDGET** summary using the following information to define the budget categories. Attach a detailed budget if one exists.

1. PERSONNEL SERVICES
   Personnel Services include salaries, benefits, and indirect charges for wage-earning personnel employed by the organization.

2. OPERATING EXPENSES
   Operating Expenses include travel and other operating costs directly related to the project.

3. PROFESSIONAL AND CONSULTANT SERVICES
   a. Professional and Consultant Services include the total costs for any consultants needed by the applicant.

   b. State contracts (except interagency agreements or contracts with other governmental entities) must fulfill the Disabled Veterans Owned Businesses participation goals required under Public Contract Code section 10115. Recipients of 205(j) funds will be required to submit Standard Form 840 (provided later in the process) prior to entering into a contract with the SWRCB.

4. OVERHEAD
   Overhead consists of a reasonable percentage of all costs it takes to run your agency while completing your project. This can include agency management, supplies, telephone, office rental, and postage.

5. MATCH SHARE
   No federal funds or services can be counted as part of the local agency match. Any combination of non-federally funded personnel services, operating expenses, or consulting services can be included in the matching portion of project costs. Each line item does not have to be individually matched. The match must be dedicated to this grant and cannot be used to qualify for any other grant.

➽ MISTAKES ARE FREQUENTLY MADE IN CALCULATING THE MATCH. PLEASE READ THE INSTRUCTIONS CAREFULLY

CWA section 205(j) grants require a non-federal match of 25 percent of the total project cost. The 25 percent match requirement is most easily calculated as in the following example:

$90,000	Total Project Budget
x 0.25	Required Match (25%)
$22,500	Required Match (in dollars)

Match Share in dollars = 25% of TOTAL PROJECT BUDGET in dollars
(Match Share $s = 0.25 x Total Project Budget)

Total Project Budget – Required Match = 205(j) dollars to be requested

$90,000	Total Project Budget
- 22,500	Required Match (25%)
$67,500	205(j) $s to be requested

205(j) dollars that can be requested = $67,500

Note: In calculating the Match Share, you must use the Total Budget for the project and not the funding amount being requested.

PART C. The **PROJECT QUESTIONNAIRE** serves as your proposal (application) and must be completed. The questionnaire is designed to be a summary of the project. The space provided indicates the detail desired in response to each question. You may vary the length of response to individual questions provided you do not exceed a total of ten (10) pages in responding to all questions. Additional information is requested in some questions and should be attached (not included in ten-page limit). If you answer "No" or "Not applicable" to any question, please provide a very brief explanation or justification for the negative response. Other information can be attached as desired, but may not be thoroughly reviewed during the selection process.

Detailed Explanations of Questions

QUESTIONS 1 – 4 ARE SELF EXPLANATORY

5. PROPOSAL DESCRIPTION

a. Problem Statement
Describe the water quality problem(s) and scope of problem that are being addressed through the proposed project. This section may include descriptions of impaired waters and the need to prevent impairment of high quality waters and threatened waters. Describe the conditions of the resources in question and identify whether these descriptions arise from field assessment, models, and/or professional judgement. Please note where data are available but unreported to date.

b. Specific Water Quality Goals Involved
Describe the water quality objectives that are the focus of the project, the beneficial uses (e.g., municipal and domestic supply, hydropower generation, wildlife habitat) associated with these improvements, and the expected improvements to water quality.

c. Project Description
This section should provide a succinct overview of the project, including methodology, products and outcomes. As relevant, describe key partnerships, relationship to related efforts, and any formal recognition of the problem, such as ongoing projects designed to address parts of the problem or written reports describing conditions.

d. Work To Be Performed/Proposed Actions
The *Work to be Performed* is considered the "substantive portion" of the proposal because it should clearly define the steps the project applicant will take to complete each task of the project. This section should include a logical, sequential description of the work.

Itemized Tasks And Milestones - List the itemized actions and target completion dates to be undertaken. Itemized tasks must also include the required quarterly reports and the final report.

e. Starting And Ending Dates For The Activities Proposed For Funding Under This Grant
Planning grants (205(j) can be used within a two (2) year period, beginning no sooner than July 1, 2001.

Project Start date: End date:

Phased Projects

If the activities proposed for funding under this grant are part of a phased project or part of a larger project effort, explain the objectives, framework, and scheduling for the larger project. Note whether there is a commitment to complete the entire project and how that commitment is structured (e.g., Memorandum of Understanding or a Joint Powers Agreement).

f. Identify Work Products Of This Project
Show findings, conclusions, recommendations, and results that need to be obtained from this project.

6. SWRCB OR RWQCB STAFF CONTACTED REGARDING THIS PROPOSAL
Consultation with the appropriate RWQCB or SWRCB staff is required prior to submitting a proposal. This consultation is important to ensure that the proposed project addresses acknowledged water quality priorities and is coordinated with the activities of the RWQCB/SWRCB and other key partners. Consultation will involve substantive discussion regarding specific aspects of the proposed project.

7. COOPERATING AGENCIES
All cooperators should be thoroughly familiar with the project before being listed as a cooperator. Cooperators should have substantial involvement in project implementation.

QUESTION 8 AND 9 ARE SELF-EXPLANATORY

10. IS THE PROPOSED PROJECT IDENTIFIED AS AN RWQCB/SWRCB TARGET PROJECT IN ATTACHMENT 4?
Attachment 4 presents an inventory of targeted projects identified by the RWQCB and SWRCB staffs. While addressing these projects is a key criterion in the selection process, other projects will be considered if they are eligible and address the other selection criteria.

QUESTIONS 11-12 In order to provide the reviewers some background on the watershed in which you propose to do your project, please list previous CWA grants or other grants that have been awarded for that watershed. Your RWQCB contact can assist with this question.

13. SUMMARIZE ACTIONS THAT HAVE BEEN ACCOMPLISHED TO DATE TO ADDRESS THE PROBLEM(S) (e.g., PAST MONITORING, PLANNING, IMPLEMENTATION PHASES).
Describe related activities that have been completed to provide the reviewers with additional background information to understand and review the proposed project. These activities may include monitoring, watershed planning, water quality assessment, and technology testing.

14. DESCRIBE HOW THE PROJECT WILL RESULT IN ONGOING OR WIDESPREAD IMPLEMENTATION THROUGHOUT THE PROJECT AREA, REGION, OR STATE.
Ongoing implementation refers to activities that will provide for implementation after these 205(j) grant funds are expended. Widespread implementation refers to expanding the activities that have been successfully applied through this project to other areas, within or beyond the current project area. Activities to be described may include mechanisms to secure future funding for ongoing implementation and education, outreach, and training to promote technology transfer throughout the project area, region, or State.

15. WHAT CAPABILITY OR COMMITMENTS DOES THE APPLICANT HAVE TO ENSURE THAT THE PROJECT WILL BE COMPLETED?
Describe the applicant's environmental position, fiscal commitments, and responsibilities to this project to arrive at a successful conclusion. Describe the applicant's working relationship or commitments with other watershed stakeholders.

16. DESCRIBE ANTICIPATED FUTURE WORK. DESCRIBE WHAT COMMITMENTS TO IMPLEMENTING THE PLAN CURRENTLY EXIST.
Describe follow-up activities upon project completion. Describe planned future activities with watershed stakeholders within the project watershed, such as additional phased projects, continued monitoring and maintenance, development of geographic information systems (GIS), and land resource planning.

17. INDICATE WHETHER THIS PROJECT IS DEVELOPING A TMDL.
Indicate whether the project is for TMDL development and provide further description of these activities. TMDL activities should be clearly stated in the project description as well. Identify the steps that will be taken to achieve TMDL development. When is full conformity with the allocations anticipated? If only some of the allocations in a TMDL are addressed by the proposed work, identify which allocations are applicable. Identify the applicable TMDL by name and, if applicable, cite the RWQCB resolution number that established the TMDL.

Please note that through this RFP, TMDL development activities are only eligible for 205(j) water quality planning funds. Development activities include studies (e.g., source analysis and modeling), or preparation of plans for the implementation of TMDLs. Implementation activities include implementation of Best Management Practices and/or Management Measures and tracking and monitoring of implementation.

ATTACHMENT 2 - APPLICATION FORM

Part A - Cover Page
Part B - Budget Summary Sheet
Part C - Project Questionnaire

ATTACHMENT 2
APPLICATION PART A
ENTER APPLICATION NAME HERE
ENTER PROJECT TITLE HERE

PART A - COVER PAGE

STATE WATER RESOURCES CONTROL BOARD
FFY 2001 CWA Section 205(j) Grant Program

CHECK ONLY ONE LINE:

Region Specific Project ____ Indicate Region: RWQCB # ____
Multi-regional Project ____ Indicate Regions: RWQCB #s ____
Statewide Project ____

APPLICANT: _____

ADDRESS: _____
_____
_____

PROJECT DIRECTOR: _____

E-MAIL ADDRESS: _____ FAX NUMBER: _____

PHONE NO.: _____ FEDERAL TAX ID. NO.: _____

PROJECT TITLE: _____

PROBLEM(S) BEING ADDRESSED:

WATERBODY/WATERSHED: _____

FISCAL SUMMARY:

205(j) Funds Requested $ _____ (205(j)/min. $25,000/max. $125,000)
25% Non-Federal Match Contribution $ _____
Total Project Budget $ _____

PROJECT SUMMARY:

PART B - BUDGET SUMMARY SHEET

STATE WATER RESOURCES CONTROL BOARD
FFY 2001 CWA section 205(j) Grant Program

APPLICANT: _____
PROJECT TITLE: _____

	Total Budget	25% Match Share	205(j) SWRCB Share
1. Personnel Services	$	$	$
2. Operating Expenses			
3. Professional and Consulting Services			
4. Overhead (%)			
TOTAL BUDGET			

5. Match Share in dollars = 25% of TOTAL PROJECT BUDGET in dollars
   Match Share $ = 0.25 x Total Project Budget

Note: In calculating the Match Share, you must use the Total Budget for the project and not the funding amount being requested.

Describe the source, nature (e.g., cash and in-kind services) of the 25% Nonfederal Matching Funds indicated above.

Note: The SWRCB reserves the right to adjust project awards. Applicants may be asked to reduce their project budgets. Applicants should be prepared to provide detailed justification of costs by task for their project.

PART C - PROJECT QUESTIONNAIRE

1. PROJECT TITLE: _____

2. LEAD AGENCY: _____

   ADDRESS: _____
   _____
   _____

   PROJECT DIRECTOR: _____

   E-MAIL ADDRESS: _____ FAX NO.: _____

   PHONE NO.: _____

3. WATERSHED IN WHICH THE PROJECT WILL BE UNDERTAKEN

4. IDENTIFY THE MAJOR SOURCES OF NPS POLLUTION THAT WILL BE ADDRESSED BY THE PROPOSED PROJECT (CHECK ALL APPROPRIATE SOURCES).

   ____Agriculture ____Forestry ____Urban (Construction, Roads, Septic Systems)
   ____Marinas And Boating Activities ____Hydromodification
   ____Resource Extraction Other:_____

5. PROPOSAL DESCRIPTION

   a. PROBLEM STATEMENT

   b. SPECIFIC WATER QUALITY GOALS INVOLVED

   c. PROJECT DESCRIPTION

d. WORK TO BE PERFORMED/PROPOSED ACTIONS -- ITEMIZED TASKS AND MILESTONES

TASK COMPLETION DATE

e. STARTING AND ENDING DATES FOR THE ACTIVITIES PROPOSED FOR FUNDING UNDER THIS GRANT

i. Project Start date: End date:

ii. Is this a phased project or part of a larger project effort? Y___ N___
If yes, list the start and end dates for the larger project effort.

Start date: End date:

f. IDENTIFY WORK PRODUCTS OF THIS PROJECT

6. SWRCB or RWQCB STAFF CONTACTED REGARDING THIS PROPOSAL:

RWQCB Contact: _____ SWRCB Contact: _____
Phone No.: _____ Phone No.: _____
Dates contacted: _____ Dates contacted: _____

7. COOPERATING AGENCIES:
(Note any formal agreements to cooperate.)

Agency Name: _____
Role/Contribution to Project: _____
Contact Person: _____ Phone No.: _____
E-mail address: _____

Agency Name: _____
Role/Contribution to Project: _____
Contact Person: _____ Phone No.: _____
E-mail address: _____

Agency Name: _____
Role/Contribution to Project: _____
Contact Person: _____ Phone No.: _____
E-mail address: _____

Agency Name: _____
Role/Contribution to Project: _____
Contact Person: _____ Phone No.: _____
E-mail address: _____

If additional space is needed please attach a list.

8. ATTACH A MAP (8 ½ X 11 is preferred) DEPICTING THE PROJECT AREA.

9. DOES THE PROPOSED PROJECT ADDRESS ANY OF THE WATERBODIES LISTED AS CATEGORY 1 (IMPAIRED) PRIORITY WATERSHEDS IN ATTACHMENT 5?
Yes___ No___ If yes, please list the involved waterbodies by reference number and watershed name.

10. IS THIS PROPOSAL FOR A PROJECT IDENTIFIED AS AN RWQCB/SWRCB TARGET PROJECT IN ATTACHMENT 4?
Yes ___ No ___ If yes, note the project number.

11. LIST ANY PREVIOUS 205(j) WATER QUALITY PLANNING GRANTS AWARDED FOR WORK IN THIS WATERSHED.

12. LIST GRANTS FROM OTHER AGENCIES AND OTHER FUNDING SOURCES THAT HAVE BEEN USED OR ARE CURRENTLY BEING USED TO SUPPORT WORK IN THIS WATERSHED.

13. SUMMARIZE ACTIONS THAT HAVE BEEN ACCOMPLISHED TO DATE TO ADDRESS THE PROBLEM(S) (e.g., PAST MONITORING, PLANNING, IMPLEMENTATION PHASES).

14. DESCRIBE HOW THE PROJECT WILL RESULT IN ONGOING OR WIDESPREAD IMPLEMENTATION THROUGHOUT THE PROJECT AREA, REGION, OR STATE.

15. IF THERE IS AN NPDES PERMIT REQUIRED FOR THIS PROJECT AREA, DESCRIBE THE RELATIONSHIP OF THE PROJECT TO THE PERMIT. IN PARTICULAR, TO BE ELIGIBLE FOR THESE GRANTS, YOU MUST BE ABLE TO DESCRIBE HOW THE GRANT FUNDED ACTIVITY IS NOT REQUIRED BY AN EXISTING NPDES PERMIT.

16. WHAT CAPABILITY OR COMMITMENTS DOES THE APPLICANT HAVE TO ENSURE THAT THE PROJECT WILL BE COMPLETED?

17. DESCRIBE ANTICIPATED FUTURE WORK. DESCRIBE WHAT COMMITMENTS TO IMPLEMENTING THE PLAN CURRENTLY EXIST.

18. INDICATE IF THIS PROJECT IS DEVELOPING A TMDL.
Yes ___ No ___ If yes, briefly explain.

PLEASE LIST ANY SUGGESTIONS YOU MAY HAVE TO IMPROVE NEXT YEAR'S RFP.

Submit this Questionnaire together with any attachments and supporting information to the appropriate project contact staff person (see Attachment 3 - RWQCB, SWRCB, and USEPA Contact list).

Copies of completed proposals must be submitted to the respective RWQCB staff contact and to the respective SWRCB and USEPA 205(j) contact no later than June 16, 2000.

ATTACHMENT 3 - RWQCB, SWRCB, AND USEPA CONTACTS

RWQCB Contacts

Janet Blake or Bob Klamt
NORTH COAST REGION (1)
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403
(707) 576- 2805—Blake
(707) 576-2693—Klamt
FAX: (707) 523-0135

Dale Hopkins (205[j])
SAN FRANCISCO BAY REGION (2)
2101 Webster Street, Suite 500
Oakland, CA 94612
(510) 622-2362
FAX: (510) 622-2460

Gerhardt Hubner
CENTRAL COAST REGION (3)
81 Higuera Street, Suite 200
San Luis Obispo, CA 93401-5427
(805) 549-4647
FAX: (805) 543-0397

Shirley Birosik – (205(j))
LOS ANGELES REGION (4)
320 West 4th Street, Suite 200
Los Angeles, CA 90013
(213) 576-6679
FAX: (213) 576-6686

Jerry Bruns or Val Connor or Carol Atkins
CENTRAL VALLEY REGION (5S)
3443 Routier Road, Suite A
Sacramento, CA 95827-3098
(916) 255-3111 –Connor
(916) 255-3092 - Atkins
(916) 255-3093 – Bruns
FAX: (916) 255-3015

Dennis Heiman
CENTRAL VALLEY REGION
REDDING OFFICE (5R)
415 Knollcrest Drive
Redding, CA 96002
(530) 224-4851
FAX: (530) 224-4857

Betty Yee
CENTRAL VALLEY REGION
FRESNO OFFICE (5F)
3614 East Ashlan Ave
Fresno, CA 93726
(209) 445-5550
FAX: (209) 445-5910

Cindy Wise
LAHONTAN REGION (6SLT)
2501 South Lake Tahoe Blvd.
South Lake Tahoe, CA 96150
(530) 542-5408
FAX: (530) 544-2271

Doug Feay
LAHONTAN REGION
VICTORVILLE OFFICE (6V)
15428 Civic Drive, Suite 100
Victorville, CA 92392
(760) 241-7353
FAX: (760) 241-7308

Summer Bundy
COLORADO RIVER BASIN
REGION (7)
73-720 Fred Waring Dr., Suite 100
Palm Desert, CA 92260
(760) 776-8937
FAX: (760) 341-6820

Hope Smythe
SANTA ANA REGION (8)
3737 Main Street, Suite 500
Riverside, CA 92501-3339
(909) 782-4493
FAX: (909) 781-6288

Greig Peters or Bruce Posthumus
SAN DIEGO REGION (9)
9771 Clairemont Mesa Blvd., Suite A
San Diego, CA 92124
(619) 467-2976—Peters
(619) 467-2964—Posthumus
FAX: (619) 571-6972

SWRCB Contact

Paul Lillebo,
(205(j) Planning Grants)
SWRCB, Division of Water Quality
901 P Street
Sacramento, CA 94244-2130
(916) 657-1031
FAX: (916) 654-8375

For additional information about Watershed Management and these grant programs, contact:

USEPA Contact

Cheryl McGovern, (WTR-4)
(CWA 205(j)/Water Quality Planning)
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105
(415) 744-2013 – e-mail: mcgovern.cheryl@epamail.epa.gov

ATTACHMENT 4 - INVENTORY OF TARGETED 205(j) PROJECTS

Attachment 4 identifies targeted projects that address key nonpoint source and point source problems as well as ground water assessments as identified by a RWQCB for a geographic area/watershed or by the SWRCB as a statewide project. Addressing these projects is a key criterion in the selection process (See Water Quality Planning/205(j) Ranking Criteria on Page I-5). However, other projects that may not be specifically listed will also be considered if they are eligible and address the other selection criteria.

These targeted projects are presented here along with project descriptions, a project number, and the project's geographic location/watershed. The following briefly describes the significance of this information:

- **Project Number**: This number is provided to assist in the identification of the project and absolutely does not indicate any priority ranking. If your proposal addresses a targeted project, indicate the project number as listed in Attachment 4 in response to question 13 of the Application, Part C.

- **Geographic Location/Watershed**: Many of the proposed actions are for specific geographic locations or watersheds. Some of these geographic locations/watersheds have been identified as a Category 1 Priority watershed by the California Unified Watershed Assessment. These geographic locations/watersheds are identified with an asterisk (*). This will help answer questions 3 and 10 of the Application, Part C.

In addition, the information in Attachment 4 is preliminary and subject to revision by RWQCB or SWRCB staff. Applicants are strongly advised to contact the appropriate RWQCB or SWRCB staff listed in Exhibit I, Attachment 3 of this RFP to: (1) confirm the information, (2) discuss missing or additional information; or (3) clarify eligibility of projects that differ in scope or location from those described below.

ATTACHMENT 4
INVENTORY OF TARGETED 205(j) WATER QUALITY PLANNINT PROJECTS

North Coast Region – R1

Project Number	Project Description	Waterbody
R1 - 1	Temperature modeling to predict impacts of different riparian land use for Garcia River	N. Coast Rivers WMA (Garcia River)
R1 - 2	Stream channel assessments	Humboldt WMA (Freshwater Cr Elk River)
R1 - 3	Landslide Risk Assessment Methodology	Regional for 303(d) sediment impaired
R1 - 4	Identify Sources of HVOCs in Santa Rosa Creek	Russian/Bodega WMA (Santa Rosa Creek)
R1 - 5	GIS map layers of sources, monitoring wells, and groundwater pollution in McMinn Contamination Area	Russian/Bodega WMA (Roseland Creek)
R1 - 6	Watershed Management Plan for Americano Creek	Russian/ Bodega WMA (Americano Cr Watershed)
R1 - 7	Citizen Ammonia and Oxygen Monitoring	Russian/Bodega WMA
R1 - 8	Monitoring, TMDL development and implementation planning	N. Coast Rivers WMA (Mattole River)
R1 - 9	Watershed assessments and development of watershed plans in watersheds where TMDLs are pending in the next five years	Regionwide
R1 - 10	Assessments and inventories of roads as sediment sources to streams in watersheds where sediment TMDLs are established or are pending in the next five years	Regionwide

Central Coast Region – R3

Project Number	Project Description	Waterbody
R3 – 1	Plans for Water Quality Control or protection consistent with CCMP	Morro Bay*
R3 – 2	Water Quality Monitoring Plans and Assessments consistent with 303(d) listings	San Luis Obispo Creek*, Los Osos Creek*, Morro Bay*, Valencia Creek*, Aptos Creek*, Santa Barbara Coastal Creeks*
R3 - 3	Assessment of Paso Robles ground water basin with emphasis on current and potential effects of land use changes on water quality	Paso Robles Ground Water Basin/ Salinas River Watershed*

Central Valley Region – R5

Project Number	Project Description	Waterbody
R5 - 1	Assess water quality conditions and potential for enhancement of salmon/ steelhead propagation in anadramous fish streams	Cow Creek * and other Sacramento River tributaries*
R5 – 2	Provide assistance to develop sediment control plans for entire watershed	Panoche/Silver Creek*
R5 – 3	Provide assistance to develop nutrient reduction plan for the Fresno River Watershed	Fresno River*
R5 – 4	Staff funding for agricultural discharge waiver development	Regionwide*
R5 – 5	Fund drainage basin coordinators to develop drainage entities and water quality management plans	San Joaquin River Basin*
R5 – 6	Monitoring to track BMP and TMDL implementation and effectiveness	Regionwide*
R5 – 7	Salt and Boron load/concentration reduction BMP implementation/projects	San Joaquin River Basin*
R5 – 8	Provide assistance to develop coordinated watershed plan for Pit River	Pit River*
R5 – 9	Develop plans for water quality assessments of effluent dependent and/or agriculture dominated waterbodies	Regionwide*
R5 – 10	Assess erosion and sedimentation from the upper watershed of the Panoche/Silver Creek	Panoche/Silver Creek*, Tulare Lake Basin*
R5 – 11	Assessment of salt loads in the Kings Management Area of the Tulare Lake Basin	Tulare Lake Basin*

Colorado River Basin Region – R7

Project Number	Project Description	Waterbody
R7 - 1	**Development of local watershed plans** – plans should most or all elements of a Watershed Restoration Action Strategy, should include tracking/ reporting component	Salton Sea Transboundary Watershed
R7 - 2	**Salton Sea Nutrient Budget** - development of all or a portion of a Salton Sea Nutrient Budget, and a comprehensive plan for the reduction of nutrient loads to the Salton Sea	Salton Sea Transboundary Watershed
R7 - 3	**Grower Water Quality Outreach Program** – could development and distribution of water quality monitoring kits, water quality videos, grower water quality planning outreach	Salton Sea Transboundary Watershed
R7 - 4	**Geographic Information System (GIS)** – integrate locations of known and/or potential sources of pollution into a regional GIS.	Salton Sea Transboundary Watershed
R7 - 5	**Water quality (not including microscopic plant/animal life) and fish and bird kills in the Salton Sea Watershed** – study and recommended actions.	Salton Sea Transboundary Watershed
R7 - 6	**Source Analyses** - Any study of pollution sources, fate and potential reductions related to a 303(d) listed constituent/ waterbody combination.	Region wide (Salton Sea Transboundary Watershed)
R7 - 7	**Wetlands** - Studies and proposed plans for the potential for the development/ enhancement of wetland habitat, and potential water quality benefits of that habitat.	Salton Sea Transboundary Watershed
R7 - 8	**Mexicali Population Study** – assessment of the potential population growth in Mexicali, and projections for planning based on the infrastructure needs for Mexicali.	Salton Sea Transboundary Watershed

Project Number	Project Description	Waterbody
R7 - 9	**Pesticide Use GIS** - Development of a geo-referenced database for tracking the use of pesticides in agricultural areas of the Region.	Salton Sea Transboundary Watershed*
R7 - 10	**Pesticide Assessment** - studies of the fate and transport of applied pesticides in agricultural areas of the Region.	Regionwide (Salton Sea Transboundary Watershed)
R7 - 11	**BMP Assessment** – assessment of current level of implementation of BMPs for listed pollutants	Salton Sea Transboundary Watershed

San Diego Region – R9

Project Number	Project Description	Waterbody
R9 - 1	Monitor and assess water quality and beneficial use conditions	All watersheds in San Diego region
R9 - 2	Develop watershed management plans or other Watershed Restoration Action Strategies (WRAS)	All watersheds in San Diego region
R9 - 3	Develop a geographic information system (GIS) to track and identify water quality and beneficial use conditions and problems; habitat conditions, loss, and degradation; use STORET for electronic data storage	Regionwide
R9 - 4	Develop pollution prevention (as opposed to pollution control) plans and strategies	All watersheds in San Diego region
R9 - 5	Develop regional bioassessment strategy	Regionwide
R9 - 6	Conduct bioassessments	All watersheds in San Diego region
R9 - 7	Develop a watershed management plan or other Watershed Restoration Action Strategy (WRAS) for the San Juan Creek watershed	San Juan Creek WMA
R9 - 8	Develop habitat protection program for steelhead and endangered species for San Mateo Canyon Hydrologic Area (HA 901.40).	San Juan Creek WMA
R9 - 9	Conduct a source analysis for dissolved copper in Shelter Island Yacht Basin in San Diego Bay.	San Diego Bay WMA
R9 - 10	Conduct a toxicity identification evaluation (TIE) for the Seventh Street Channel / Paleta Creek Watershed TMDL site in San Diego Bay.	San Diego Bay WMA
R9 - 11	Identify pollutant sources and allocate pollutant loads for the Seventh Street Channel / Paleta Creek Watershed TMDL site in San Diego Bay.	San Diego Bay WMA

Project Number	Project Description	Waterbody
R9 - 12	Conduct a toxicity identification evaluation (TIE) for the Naval Station TMDL site in San Diego Bay.	San Diego Bay WMA
R9 - 13	Identify pollutant sources and allocate pollutant loads for the Naval Station TMDL site in San Diego Bay.	San Diego Bay WMA
R9 - 14	Conduct a toxicity identification evaluation (TIE) for the Grape Street TMDL site in San Diego Bay.	San Diego Bay WMA
R9 - 15	Identify pollutant sources and allocate pollutant loads for the Grape Street TMDL site in San Diego Bay.	San Diego Bay WMA

ATTACHMENT 5 – SAMPLE SCOPE AND BUDGET

CWA SECTION 205(j) GRANT PROGRAM[1]
January 20, 2000

A. Scope and Objectives

Chollas Creek is a heavily urbanized watershed tributary to San Diego Bay. The Chollas Creek watershed has been added to the 303(d) list as a result of toxicity measured during wet weather monitoring. This monitoring, which included chronic toxicity to *Ceriodaphnia dubia* and *Pimephales promelas*, was conducted for wet weather discharges as part of the NPDES permit requirements issued to the City and County of San Diego and associated co-permittees. The monitoring consisted of samples taken near the end of the Chollas Creek channel, approximately 5 km upstream of San Diego Bay. Additional NPDES permit sampling and analysis were conducted on sediments at the mouth of Chollas Creek where it enters San Diego Bay. These results have shown increased levels of several constituents and whole sediment toxicity using the amphipod, *Eohaustorius estuaris*. As a result, Chollas Creek is subject to a Total Maximum Daily Load (TMDL) for toxicity. This TMDL is scheduled to be completed by April, 2000.

The objectives of this project are to assess the spatial extent and magnitude of impairment to beneficial uses in San Diego Bay as a result of wet weather discharges from Chollas Creek, an urbanized watershed, and to assist the San Diego Regional Water Quality Control Board (RWQCB) in the development of the TMDL for aquatic life toxicity in the Chollas Creek watershed.

B. Work

The contractor shall be responsible for the performance of the work as set forth here-in-below and for the preparation of products and final report as specified in this Exhibit. The Project Director shall promptly notify the Contract Manager of events or proposed changes that could affect the scope, budget, or schedule of work performed under this agreement.

Task 1. Project Management and Administration

Subtask 1.1 Project Management

Provide all technical and administrative services needed for project completion, including but not limited to: staff resources for monitoring, supervising, and reviewing all work performed; and coordination of budgeting, scheduling, and subcontract administration.

Subtask 1.2 Quarterly Progress Reports

Prepare and submit written quarterly progress reports to the State Water Resources Control Board's (SWRCB) Contract Manager (Contract Manager). The progress reports shall detail work accomplished, discussion of any problems encountered and potential solutions to those problems, detail costs incurred during the subject quarter, and document delivery of any intermediate work products. A brief outline of upcoming work scheduled for the subsequent quarter should also be provided. Progress reports must be submitted by the tenth day of the month following each calendar quarter (April, July, October, January) throughout the duration of the project.

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[1] General Terms and Conditions can be found on the Department of General Services' Website at www.dgs.ca.gov\contracts

Subtask 1.3 Data Management

Prepare and submit all water quality-related data generated by the project to the SWRCB for input into the STORET system. Data formats and reporting guidance for STORET shall be provided by the Contract Manager. Data shall be submitted to the SWRCB Office of Information Technology on computer diskette or on forms provided by the SWRCB. The Contractor shall be responsible for verification of data quality.

Subtask 1.4 Subcontract.

Award subcontract(s) as necessary to qualified consultant(s) or other agencies. The subcontractor shall be selected by a process that complies with all applicable State and federal regulations
(CFR 40 Part 31 – Procurement). Prepare a legally enforceable agreement between the Contractor and the selected subcontractor(s). The agreement shall describe the scope of work and the products expected from the subcontractor(s). The Contractor shall submit subcontract documentation to the Contract Manager for review.

Task 2. Public Participation

Subtask 2.1 Formation of a Technical Advisory Committee

Form a Technical Advisory Committee (TAC) to oversee the progress and technical aspects of the project. The TAC shall include staff from the Southern California Coastal Water Research Project, the US Navy, the San Diego Unified Port District, the City of San Diego, the City of La Mesa, the City of Lemon Grove, the California Department of Transportation, the University of San Diego and/or San Diego State University, the San Diego Regional Water Quality Control Board, the Contract Manager (or Project Officer), and other representatives from public agencies as are agreed upon by the Contractor and the Contract Manager.

Guide the overall management of the project through periodic formal reviews with the TAC. The TAC will be asked to review interim project reports and the draft project final report. To the extent possible, TAC comments on the draft project final report shall be addressed and incorporated into the project final report. Additional activities of the TAC are described in the appropriate tasks below.

Subtask 2.2 Public Meetings and Responsive Summaries

Conduct publicly noticed meetings at various times throughout the duration of the project to describe the goals, objectives, and progress of the study and to receive comments and suggestions from public agencies, affected entities, and interested persons. Hold the first meeting during the first three months of the study and schedule at least one public meeting subsequent to release of the project draft final report. Schedule additional meetings as necessary.

Document public participation in the project by preparing responsiveness summaries as required under 40 CFR Part 25 (Public Participation). Prepare a responsiveness summary for each public meeting conducted for the project. The responsiveness summary shall identify the public participation activity conducted, describe the matters on which the public was consulted, summarize the public's views, significant comments, criticisms and suggestions, and set forth the agency's specific responses in terms of modifications of the proposed action or an explanation for rejection of proposals made by the public. Submit responsiveness summaries to the Contract Manager with the quarterly progress report for the quarter in which the meeting is conducted and make the summaries available to the public upon request.

Task 3. Develop Quality Assurance Project Plan (QA Plan)

Prepare a QA Plan that adequately addresses the requirements of Section 31.45 of 40 CFR Part 31 (53 Federal Register 8074. March 11, 1988) in accordance with "EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations" (EPA QA/R-5), May 1995. The QA Plan shall be reviewed and approved by the State or Regional Board's QA Officer prior to any sample collection or analysis activities.

Task 4. Develop Study Design for Sampling and Analysis Plan

Develop, in association with any collaborating agency, a study design that outlines the elements of the work to be performed and demonstrates that the proposed work will answer the research/monitoring questions derived by the TAC. Include the study design in a Sampling and Analysis Plan (SAP) that will guide the remaining portions of the study. At a minimum, the SAP will detail the number of storms required per season, the number of samples per storm, and target analyses and species to be used for testing.

Task 5. Conduct Field Sampling and Laboratory Analysis

Subtask 5.1 In-channel Sampling for Toxicity Prior to Entering the Bay

Sample stormwater runoff from the Chollas Creek Channel for toxicity prior to entering San Diego Bay (Bay). Ensure that these samples represent the source of potential runoff toxicity to the Bay and test the samples for toxicity with the same organisms that are being used in toxicity tests of other receiving water environments. To the extent possible, conduct this portion of the study in collaboration with the San Diego County and NPDES co-permittees that regularly sample at this location.

Subtask 5.2 Plume Tracking to Assess Spatial Extent of Storm Water Discharges

Conduct surveys for runoff characteristics (e.g., salinity, turbidity) inside San Diego Bay to assess how large the stormwater plume emanating from Chollas Creek extends into the receiving water environment. Accomplish these surveys through grid sampling, continuous *in situ* measurements, or a combination of both techniques, depending upon the SAP study design. Conduct the sampling from the area of greatest freshwater impact, across the gradient of plume extent, and beyond the edge of the plume.

Subtask 5.3 Receiving Water Sampling to Assess Spatial Extent of Toxicity

During the plume-mapping component, collect individual samples and test them for acute/chronic toxicity. Collect samples across the gradient of plume influence. Compare these measurements to the toxicity measurements taken from in-channel samples to assess dilution in the receiving waters.

Subtask 5.4 Receiving Water Sampling to Assess Duration of Toxicity

At the area of greatest plume influence, collect multiple samples and subject them to acute/chronic toxicity testing. Collect these samples over a pre-determined length of time to assess the duration of toxicity. At a minimum, collect samples at least three days after storm events when flows subside and dissipate.

Subtask 5.5 Toxicity Identification Evaluations (TIEs) to Identify Constituents of Concern

Conduct Phase I TIEs on in-channel samples collected from Chollas Creek and selected samples collected from San Diego Bay in the heart of the runoff plume. Identify, if possible, the constituent, or group of constituents, that appears to be responsible for the observed toxicity and that might be targeted for a TMDL.

Task 6. Draft and Final Reports

Subtask 6.1 Prepare and Circulate Project Draft Final Report

Prepare a draft project report that presents the results of the task work completed by this project. Include in the report all elements of Tasks 3, 4, 5 and 6, including subtasks under each of those sections. Submit the draft report to the Contract Manager, the TAC, and all other affected public and private agencies, and interested parties for comment. Prepare an evaluation and response of all comments made on the draft report.

Subtask 6.2 Revise, Complete, and Distribute Final Report

Incorporate all relevant comments into the final report. Distribute the final report to members of the TAC and all public and private agencies and individuals with an interest in the project. Include as part of the final report an Implementation Checklist for annual post-project assessment by the SWRCB. The checklist shall consist of a one- or two-page form that summarizes the objectives of the overall project. Submit the checklist form to the Contract Manager with the project Final Report.

As part of the final report, complete a Data Entry Form provided by the Contract Manager and submit this to the Information Center for the Environment (ICE) at University of California, Davis for posting on the Internet on their Natural Resource Project Inventory Website. The Contract Manager will work with the Project Director in completing this form and confirming that the information becomes available on the Internet.

C. Schedule of Completion Dates

1.0 Administration and Management	ongoing
2.0 Quarterly Reports	quarterly
3.0 QA Plan	Nov 1999
4.0 Study Design	Nov 1999
5.1 In-channel Sampling	May 2000
5.2 Plume Tracking	May 2000
5.3 Receiving Water Sampling	May 2000
5.4 Toxicity Duration	May 2000
5.5 TIEs	May 2000
6.1 Draft Report	Jan 2001
6.2 Final Report	Mar 2001

D. Reports

1. Not later than January 1, 2000 and quarterly thereafter, during the life of this agreement, the Project Director shall provide to the Contract Manager a written progress report describing activities undertaken, milestones accomplished, any problems encountered in the performance of the work under this agreement, and delivery of intermediate products, if any.

2. The Project Director shall submit to the Contract Manager for approval the reports containing the results of the work performed in accordance with the schedule in this Exhibit.

3. Not later than January 21, 2001, the Project Director shall submit to the Contract Manager one copy of a draft report describing the work performed pursuant to Paragraph B of this Exhibit for review and comment.

4. Within four (4) weeks of receipt of the draft report, the Contract Manager shall submit his final comments to the Project Director.

5. On or before the termination date of this agreement, the Project Director shall submit to the Contract Manager for approval five (5) copies of the final report containing the results of the work performed and addressing the comments submitted to the Project Director by the Contract Manager.

6. The report shall not be considered final until approved and accepted by the Contract Manager.

PROJECT BUDGET

TASK	STATE BOARD	MATCH	TOTAL
1.0 Project Management	$ 7,500	$ 2,500	$10,000
2.0 Public Participation	7,500	2,500	10,000
3.0 QA Plan	3,750	1,250	5,000
4.0 Study Design	3,750	1,250	5,000
5.1 In-Channel Sampling	3,750	1,250	5,000
5.2 Plume Tracking	30,000	10,000	40,000
5.3 Receiving Water Sampling	7,200	2,400	9,600
5.4 Toxicity Duration	12,600	4,200	16,800
5.5 TIEs	12,000	4,000	16,000
6.1 Draft Report	17,000	6,000	23,000
6.2 Final Report	4,950	1,650	6,600
TOTAL	$110,000	$37,000	$147,000

Natural Resource Projects Inventory (NRPI) Form 2000[1]

A Collaborative Effort between the California Biodiversity Council and the University of California at Davis Information Center for the Environment (ICE) (http://ice.ucdavis.edu)

This data will made available to the public as a searchable database on the Internet in both the Natural Resource Projects Inventory and the California Rivers Assessment. Geographical information will be made available as a Geographic Information System (GIS) layer on ICEMAPS through the ICE homepage (http://ice.ucdavis.edu).

Use the "tab" and arrow keys to move through the form. Skip Areas that Do Not Apply to Your Project

Date filled out:

A) Project Information Please use complete phrases/ sentences. Fields will expand as necessary as you type	
1. Project Title:	
2. Project Purpose / Goals ("why" the project):	
3. Project Abstract (brief description of project):	
5. Is this project part of an agency program? Put an "X" by all that apply: ☐ *NCCP* ☐ *HCP* ☐ *CRMP* ☐ *EPA 319h grant* ☐ *EPA 205j grant* ☐ *TMDL Program* ☐ *Larger watershed plan (name of plan):* ☐ *Other (describe):*	
B) Project Contact:	
Name:	**Job Title:**
Organization:	**Webpage Address:**
Address:	
Phone:	**Fax number:**
Email:	
Secondary Project Contact:	
Name:	**Job Title:**
Organization:	**Webpage Address:**
Street Address:	
Phone:	**Email:**
C) Data Contact: *Data Contact same as Project Contact?* ☐ *Y or* ☐ *N*	
Name:	**Job Title:**

[1] For assistance contact Ms. Kevin Ward (kcward@ucdavis.edu) or call (530) 752-2378.

Organization:	Webpage Address:
Phone:	Email:

Is there data available? ☐ *Y or* ☐ *N*

List Publicly Available Reports:

D. Project Time Frame: Refers to the implementation period of project. You can put "ongoing" as ending date

From:	To:

E) Participant and Funding Information: Name all agencies/groups involved with project; put an X by their role. If a Funder, note amount of Cash or Inkind contribution. Attach another sheet of paper if necessary.

Participant (include Volunteers)	ead	Land-owner	Coop-erator	Funder	Cash Contrib	Inkind Contrib
	☐	☐	☐	☐	$	$
	☐	☐	☐	☐	$	$
	☐	☐	☐	☐	$	$
	☐	☐	☐	☐	$	$
	☐	☐	☐	☐	$	$
	☐	☐	☐	☐	$	$
	☐	☐	☐	☐	$	$
	☐	☐	☐	☐	$	$
	☐	☐	☐	☐	$	$

F) Location

1. **Size of Project** (include units):	2. **Counties** included in project:

If **over 5000 acres**, in addition to a point, attach a map of project. If **under 5000 acres**, we only need a center point.

3. Center Point: Lat/Long coordinates:

Lat Degrees: Minutes: Seconds:

Long Degrees: Minutes: Seconds:

(we will also accept decimal degrees - put all the numbers in the first latitude or longitude box)

OR

Township, Range and Section *(include Meridian)*:

G) Project Focus

What types of resource issues does this project address? *(Please put an "X" by all resource areas that apply.)*

☐ Agriculture	☐ Air Quality	☐ Biomass/ Fuels Control	☐ Dams	☐ Educ/Outreach
☐ Erosion / Sediment	☐ Fire Control	☐ Fisheries	☐ Flood Contrl	☐ Forestry
☐ Grazing	☐ Mining	☐ Recreation	☐ Riparian Enhance	☐ Septic Systems
☐ Stream Bank Prot	☐ Urbanization	☐ Urban Runoff	☐ Vegetation	
☐ Weed Control	☐ Wetlands	☐ Wildlife	☐ Wildlife Habitat	
☐ Water Quality*:	☐ Water Quantity	☐ Ground Water or	☐ Surface Water	
☐ Other:				

*For Water Quality Specify issue⇒		
	☐ Nutrients	☐ Pollutants
	☐ pH	☐ Organics
	☐ Salinity	☐ Heavy Mtls
		☐ Pesticides

H) Habitat / Species What habitats are in the project area?

****Put an "E" by existing habitats and a "T" by those that are targeted as an end result**

__1. BEACH AND COASTAL DUNES	__14. GREAT BASIN SCRUBS	__28. CLOSED-CONE CONIFEROUS FOREST
__2. INTERIOR DUNES	__15. CHAPARRALS	__29. LOWER MONTANE CONIFEROUS FOREST
		__30. UPPER MONTANE CONIFEROUS FOREST
__3. COASTAL AND INTERIOR SALT MARSH	__16. OAK WOODLANDS	__31. SUBALPINE CONIFEROUS FOREST
__4. BRACKISH AND FRESH WATER MARSH	__17. FOOTHILL PINE WOODLANDS	
__5. BOGS AND FENS	__18. PINYON AND JUNIPER WOODLANDS	__32. ALPINE COMMUNITIES
__6. STANDING WATER (LAKES, PONDS)	__19. SONORAN THORN WOODLANDS	
	__20. JOSHUA TREE WOODLANDS	__33. SOUTHERN CALIFORNIA ISLANDS
__7. COASTAL PRAIRIES		
__8. VALLEY AND FOOTHILL GRASSLANDS	__21. RIPARIAN FORESTS AND WOODLANDS	__34. AGRICULTURAL
__9. VERNAL POOLS	__22. RIPARIAN SCRUBS AND DESERT WASHES	__35. GRAZED PASTURE
__10. MEADOWS and SEEPS	__23. STREAM OR RIVER CHANNEL	__36. MINED LAND
__11. PLAYAS	(IN STREAM RESTORATION)	__37. URBAN/SUBURBAN
	__24. WETLAND (Type Unspecified)	__38. RUDERAL (WEED LOT)
__12. COASTAL SCRUBS	__25. BROADLEAF UPLAND FOREST	__39. NONE OF THE ABOVE (DESCRIBE) ⇓
__13. SONORAN DESERT SCRUBS	__26. NORTH COAST CONIFEROUS FOREST	
__14. MOJAVEAN DESERT SCRUBS	__27. MIXED EVERGREEN FOREST	

Does this project target the protection / conservation of specific species? Does this project try to Introduce or Eradicate a species as part of restoration or conservation efforts? Please Note Below.

Latin Name or	Common Name	Targeted for Protection	Introduced to Project Area	Seek to Eradicate from Area
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐

		☐	☐	☐

I) Project Methods / Progress (Table will expand as you type)

Treatment Area Include Units (feet, miles)	General Habitat Type (ex: Weedlot, forest, river, wetland)	Treatment or Restoration Activity (ex: Woody debris, revegetation, fish screen)

Was fertilizer used? Y☐ or N☐ If yes, what type:

and at what rate:

Was the site irrigated? Y☐ or N☐ Was irrigation ☐regularly scheduled or ☐supplemental/as needed

State frequency and method (drip, overhead sprinkler, hand, etc.):

What problems have you encountered with this project?

Was (or will) the project (be) monitored? ☐Yes ☐No

If yes, what is the monitoring schedule, i.e., how often per year and for how many years?

Has the project goal(s) listed in Section "A" been attained? ☐Yes ☐No ☐ Partially ☐Too Soon to Tell

Are there performance standards (success criteria) for the project? ☐Yes ☐No

If yes, please describe:

Have the performance standards been attained? ☐Yes

☐No

☐ Partially ☐Too Soon to Tell

J) Project Status, Funding & Needs

Current phases of project: *(Put an "X" by all applicable words)*

☐Scoping ☐Planning ☐Implementation ☐Monitoring ☐Writing Report ☐Completed ☐Other:

4. Indicate specific tasks in need of funding:

What are the project's current needs? *(Put an "X" by applicable terms)*	
☐Analysis	☐Research
☐Legislation	☐Habitat Management
☐Community Support	☐Restoration
☐Modeling	☐Inventory
☐Equipment	☐Training
☐Monitoring	☐Legal Assistance
☐Funding	☐Volunteers
☐Public Outreach	☐Other:
☐Governmental Approval	

K) Project Data: Check those that apply.

EXAMPLES of Content Type (Write Answers in Boxes BELOW Examples)			
☐Air Quality	☐Hydrology ⊙	☐	☐
☐Water Quality	☐Water Nutrients	☐Water Salinity	☐Water Pollution
☐Water - Heavy Metals	☐Water - Organics	☐Water - Pesticides	☐Water - pH
☐Biological /Ecological	☐Birds	☐Fish	☐Amphibians
☐Insects	☐Reptiles	☐Phytoplankton	☐Plants
☐Soils	☐Geology	☐Land Use	☐Recreational Use
☐Remote Imagery	☐GIS Data	☐Vegetation Maps	☐Vegetation Data
☐Other Data (Describe)			

Additional Comments:

Questions?, please contact: Kevin Ward at ICE, UC Davis Dept. of Environmental Science and Policy, Davis, CA 95616
Phone: (530) 752-2378 and Email: kcward@ucdavis.edu

THANK YOU FOR YOUR TIME!! Mail completed form to address above. You will be notified when your data is on-line.

REQUEST FOR PROPOSALS
WATERSHED MANAGEMENT INITIATIVE

EXHIBIT II – CWA 319(h) NONPOINT SOURCE IMPLEMENTATION GRANTS

About the 319(h) Grant Program

Summary

The State Water Resources Control Board (SWRCB), Regional Water Quality Control Boards (RWQCBs), and U.S. Environmental Protection Agency – Region 9 (USEPA) are requesting proposals for Nonpoint Source (NPS) implementation projects to reduce, eliminate, or prevent water pollution and to enhance water quality. Funds made available through this Request For Proposals (RFP) are offered under the authority of Clean Water Act (CWA) section 319(h) NPS Implementation Programs (319(h)). The Federal Fiscal Year (FFY) 2001 grant funds awarded pursuant to this RFP are expected to be available to the SWRCB for funding contracts no sooner than July 1, 2001.

Proposals must be (1) received no later than close-of-business on or before June 16, 2000 or (2) U.S. postmarked on or before June 16, 2000. Applicants must submit original proposals to the respective RWQCBs pertinent to their regions only. Original statewide proposals[1] are submitted to the SWRCB. In addition, applicants must submit a copy of all proposals to both the SWRCB and USEPA.

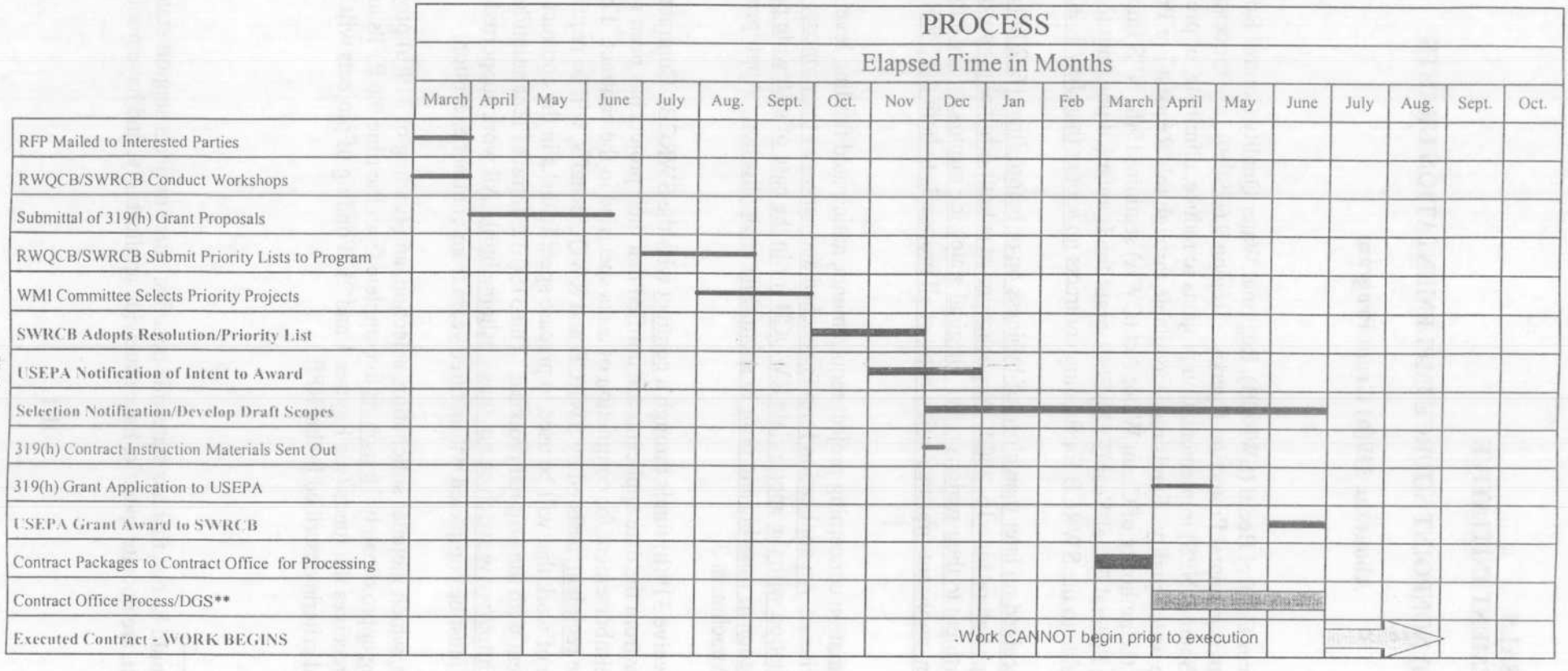
This RFP contains information concerning project requirements, anticipated funding levels, the review process, and selection criteria. An application form is attached and serves as the proposal template (Attachment 2). Consultation with the appropriate RWQCB (or in the case of statewide projects, the SWRCB) is required as soon as possible and prior to submitting an application. Appropriate contacts are listed in Exhibit II, Attachment 3.

Selected projects will receive 319(h) funds through a contract with the SWRCB. Contracts must be executed within one year from the date applicants are notified that their project has been selected. Funds are provided as reimbursement for completion of tasks specified in the contract. Following selection of a project, the recipient, assisted by SWRCB and RWQCB staffs, will be required to develop a detailed scope of work that will be used to prepare specific tasks in the contract. The scope of work must be consistent with the original proposal. The 319(h) Contract Preparation/Management Guide can be viewed at http://www.swrcb.ca.gov/nps/npshome.html. All work supported by FFY 2001 319(h) funds must be completed within three years from contract execution.

The grant award process, which includes solicitation, selection, and funding of 319(h) projects, is a multistage process taking approximately 16 months to complete from the time the RFPs are released through when the State receives the funds (see Figures 1 and 2). Funding of projects will be based on the selection process and criteria described in this RFP.

[1] A statewide project should be one that has statewide benefits. Such projects support statewide NPS program implementation, are not site specific, have statewide applicability, and have multiple applications.

CWA SECTION 319(h) GRANT PROCESS
RFP-TO-EXECUTION TIMELINE - *16 MONTHS**



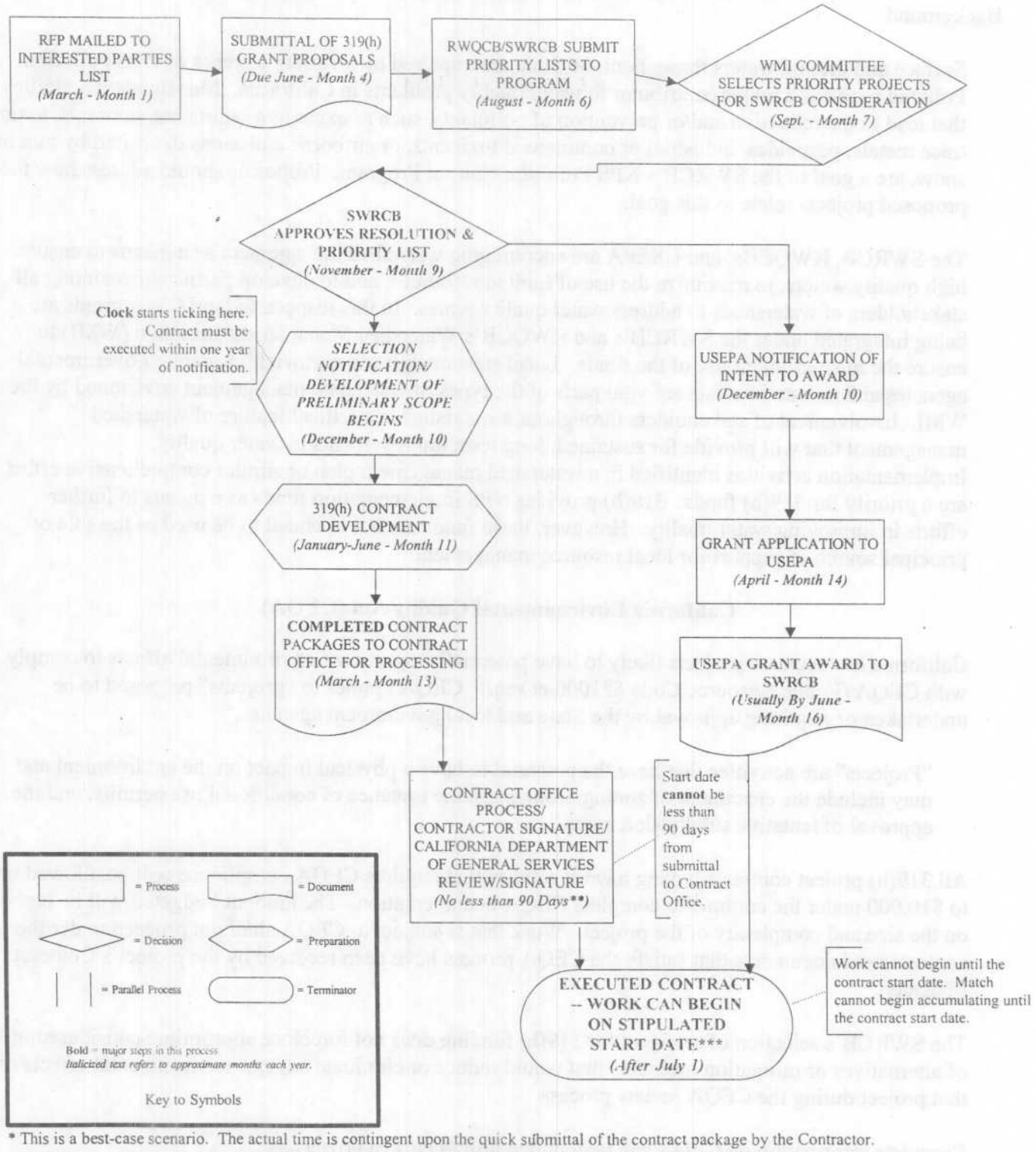
KEY CODE

= Standard steps
= Major steps in process
= This is contingent upon date of receipt of final contract package by SWRCB.
= This is contingent upon date of receipt by SWRCB's Contract Office.

FIGURE 1

*This is a best case scenario.
**California Department of General Services

CWA SECTION 319(h) GRANT PROCESS
RFP-TO-EXECUTION TIMELINE - *16 MONTHS**



* This is a best-case scenario. The actual time is contingent upon the quick submittal of the contract package by the Contractor.
** This turn around time is contingent upon the number of contracts in the Contract Office during this timeframe.
** Dollars are not available for expenditure until July 1 of the respective grant year, so contract start dates must reflect a date after July 1. Contractors should not budget the funds beginning July 1 if they cannot get the final contract package to the Program in time to meet the 90-day timeframe. If the package is received inside the timeframe, the date will either be changed or the package will be returned to the Contract Manager for correction. Be aware that, if the project does not begin by the start date, the schedule of completion dates included in the package will be affected.

FIGURE 2

Background

Surface and ground waters throughout the State are impaired by a variety of types of NPS pollution. Polluted runoff is a major contributor to water quality problems in California. Management activities that lead to the reduction and/or prevention of pollutants, such as excessive sediments, nutrients, toxic trace metals, pesticides, industrial or commercial toxicants, or air borne emissions deposited by rain or snow, are a goal of the SWRCB's NPS Pollution Control Program. Proposals should address how the proposed projects relate to this goal.

The SWRCB, RWQCBs, and USEPA are encouraging watershed management as a means to ensure high quality waters, to maximize the use of limited resources, and to develop partnerships among all stakeholders of watersheds to address water quality issues. In this respect, federal CWA grants are being integrated under the SWRCB's and RWQCB's Watershed Management Initiative (WMI) to ensure the most efficient use of the funds. Local stewardship and partnerships among governmental agencies and private interests are vital parts of the types of watershed management envisioned by the WMI. Involvement of stakeholders throughout a watershed is a critical feature of watershed management that will provide for sustained, long term improvements in water quality. Implementation activities identified in a watershed management plan or similar comprehensive effort are a priority for 319(h) funds. 319(h) provides NPS implementation funds as a means to further efforts in improving water quality. However, these funds are not intended to be used as the sole or principal source of support for local resource management.

California Environmental Quality Act (CEQA)

California law requires projects likely to have potentially significant environmental effects to comply with CEQA (Public Resource Code §21000 et seq.). CEQA applies to "projects" proposed to be undertaken or requiring approval by the State and local government agencies.

> "Projects" are activities that have the potential to have a physical impact on the environment and may include the enactment of zoning ordinances, the issuance of conditional use permits, and the approval of tentative subdivision maps."

All 319(h) project contracts having a work activity that requires CEQA compliance will be allowed up to $10,000 under the contract to complete CEQA documentation. The amount budgeted will be based on the size and complexity of the project. Work that is subject to CEQA shall not proceed under the contract until documents that satisfy the CEQA process have been received by the project's Contract Manager.

The SWRCB's selection of a project for 319(h) funding does not foreclose appropriate consideration of alternatives or mitigation measures that would reduce or eliminate adverse environmental effects of that project during the CEQA review process.

Complete information on CEQA can be found at http://ceres.ca.gov/ceqa/.

The SWRCB and RWQCBs are refining their tracking of 319(h) projects in an effort to improve the effectiveness of California's NPS program and to satisfy federal requirements of the CWA and the Coastal Zone Act Reauthorization Amendments (CZARA) of 1990. Specifically, the State is working: (1) to promote information exchange and coordination among watershed groups; (2) to track the implementation of management measures; and (3) to determine the effectiveness of 319(h) projects in protecting beneficial uses (includes municipal and domestic supply, hydropower generation, wildlife habitat, etc.) and improving water quality. All proponents of selected projects must complete a one-page contract summary (format provided by SWRCB) within three months of contract execution. The SWRCB will make these summaries available to the public, including posting them on the SWRCB's NPS Website. At the completion of each funded project, prior to final payment, all project proponents must complete a project survey form (Attachment 8). At the same time, SWRCB and RWQCB staff may survey project location and aerial extent using global positioning equipment. The information gathered will be entered into an Internet-accessible geographic information system.

Federal CWA section 319(h) NPS Implementation Program Funding

The funding levels below are only estimates since the actual amount of funds available for projects in California will be based on the congressional appropriation, as well as other program and budget allocation considerations.

Projected amount of money available and maximum/minimum requests:

- It is estimated that up to $5 million may be available statewide for NPS implementation projects. Approximately $4 million of these funds must support projects that are: (1) located in Category 1 (Impaired) Priority watersheds; (2) identified in watershed restoration action strategies; and (3) that implement activities that achieve measurable water quality improvements. For more information, see Clean Water Action Plan (CWAP) requirements on page II-7.

- An amount of $1.3 million of the available $5 million in funding will be divided among the nine (9) RWQCBs and the SWRCB ($130,000 each) so that each agency may dedicate these resources to a single project or to multiple projects in order to meet the agency's priority watershed needs. The remaining $3.7 million will be available statewide for NPS implementation projects.

- The maximum amount that may be requested for implementation projects is $350,000. Requests below $25,000 will not be accepted because of the administrative costs associated with the 319(h) contract process. Requests above $350,000 or below $25,000 will result in automatic disqualification.

- Implementation funds (319(h)) require a minimum forty (40) percent nonfederal match (dollars or in-kind services not supported by federal programs) of the project costs.

Who and what are eligible for funding?

The following describes the types of activities and organizations that are eligible to receive 319(h) funds. Eligibility as described below is primarily determined by the section of the federal CWA that authorizes the funding. See the Frequently Asked Questions section, page II-10, of this document for more information concerning eligible projects.

- NPS Implementation/CWA Section 319(h)

  Who Can Apply? Nonprofit organizations, local government agencies including special districts (e.g., resource conservation districts or water districts), Indian Tribes, and educational institutions are eligible to receive 319(h) implementation funds. State or federal agencies may qualify if they are collaborating with local entities and are involved in watershed management or are proposing a project of "statewide" (see "Summary" for explanation of statewide projects) significance.

  What Activities Qualify? These funds are available for the implementation of activities that reduce or prevent NPS pollution to ground and surface waters. NPS pollution includes potential discharges associated with agriculture, silviculture, livestock grazing, urban runoff, septic systems, marina and boating facilities, confined animal facilities, mines, as well as hydrologic modification and physical habitat alteration. Specific activities qualifying for 319(h) funds may include the implementation of best management practices (BMPs), total maximum daily load (TMDL) implementation, technology transfer, demonstration projects, pollution prevention, technical assistance, citizen monitoring, and public education/outreach. Projects may include water quality monitoring to determine the effectiveness of management practices or activities that are being implemented.

  What Activities Are Excluded? The following are not eligible for 319(h) funding: planning, ambient water quality monitoring and assessment, activities undertaken pursuant to an National Pollutant Discharge Elimination System (NPDES) permit, underground tank cleanup, research, and the purchase of real estate or easements.

What are we looking for in a project?

For 319(h) projects deemed eligible per the qualifications described above, the following criteria will be used in the project ranking and selection process:

NPS Implementation/319(h) Ranking Criteria

- The proposed project addresses a target project identified by the RWQCB or SWRCB as indicated in Attachment 4.

- The proposed project includes a technically/scientifically sound and effective means of preventing degradation of water quality and/or restoring water quality and results in measurable water quality improvement.

- The proposed project results in the implementation of NPS Management Measure(s) described in the recently upgraded *Plan for California's Nonpoint Source Pollution Control Program.*

- The proposed project implements water quality improvement activities that are identified in an established plan (e.g. watershed plan, habitat conservation plan, TMDL, watershed restoration

action strategy [see below], general plan, resource management plan, or other plans) and will contribute to more effective watershed management.

- The proposed project includes effective measures and indicators of progress and success, including the tracking and implementation of NPS Management Measures and monitoring water quality improvements.

- The proposed project demonstrates collaboration and coordination among multiple stakeholders/agencies/interest groups.

- The proposed project promotes or contributes to ongoing NPS implementation throughout the project area and possibly in other applicable areas throughout the region and State.

Clean Water Action Plan (CWAP) Requirements

The CWAP, announced by the President on February 19, 1998, has the goals of protecting public health and restoring our nation's waterways by providing states, communities, farmers, and landowners with the tools and resources to meet those goals. The CWAP resulted in a near doubling of 319(h) funds available to states to better control NPS pollution. Funds allocated as part of the CWAP (CWAP funds) have some additional requirements associated with them. These requirements are intended to help focus our funding on activities that achieve measurable water quality results.

To be eligible to compete for the approximately $4 million in CWAP funds that are available through this RFP, proposed projects must:

1. Address NPS water pollution within a Category 1 Priority watershed as identified by the California UWA (Attachment 5) - The CWAP requests that states, with assistance from federal agencies and input from stakeholders and the public, convene a collaborative process to develop a UWA to guide allocation of new federal resources for watershed protection. The California UWA has been developed and lists 66 Category 1 Priority watersheds which are listed in Attachment 5 of the RFP. CWAP funds are to be focused on these priority watersheds. Project proponents should identify the applicable Category 1 Priority watershed in response to the RFP Questionnaire, Question 10. A Category 1 Priority Watershed is a watershed in need of restoration that has been designated as a priority watershed in its respective region.

2. Implement activities identified in a "Watershed Restoration Action Strategy" (WRAS) - CWAP funded projects must also focus on the implementation of WRASs. The intent of this requirement is to ensure that the activities supported by these funds are part of a comprehensive effort that has the existing community and technical support necessary to achieve significant environmental results. In responding to this RFP, a wide range of plans will qualify as WRASs. For example, a local watershed plan, a coordinated resource management plan (CRMP), a TMDL, a comprehensive conservation and management plan (CCMP), as well as other similar plans, will be considered as WRASs. Plans and strategies that will be considered as WRASs should include the following elements:

- Identification of measurable environmental and programmatic goals;
- Identification of sources of water pollution and the relative contribution of those sources (source analysis);
- Implementation of pollution control and natural resource restoration measures to achieve clean water and other natural resource goals, especially measures that will achieve multiple environmental and public health benefits (e.g., permit revisions, implementation of best management practices, and

buffer strips);
- Schedules for implementation of needed restoration measures and identification of appropriate lead agencies to oversee implementation, maintenance, monitoring, and evaluation;
- Implementation of TMDLs for pollutants exceeding State water quality standards;
- Implementation of source water assessment and protection programs;
- Monitoring and evaluation needed to assess progress towards achieving environmental and programmatic goals;
- Funding plans to support the implementation and maintenance of needed restoration measures;
- A process for cross-agency (federal, State, interstate, tribal, and local) coordination to help implement WRASs; and
- A process for public involvement.

In response to the RFP Questionnaire, Question 9, project proponents should identify the applicable WRAS and describe how the proposed restoration activities to be supported with 319(h) funds are part of, or consistent with, that WRAS. If such a strategy is not yet completed but is underway and will be completed prior to execution of the project, the proponent should identify and describe that strategy. If you have questions regarding WRAS, contact your RWQCB and/or SWRCB representative.

3. Focus on implementation activities that achieve measurable water quality improvements. Generally, the same 319(h) eligibility requirements concerning NPS implementation (described on page II-6 of the RFP) apply to these CWAP funds. However, the CWAP funded activities must further emphasize restoration, which includes implementation activities that will achieve measurable water quality improvements. By emphasizing restoration, a wide range of implementation activities can be considered that further focus on actions supported by these 319(h) funds to achieve water quality improvements that address your priority concerns of each region. Project proponents should identify the implementation activities, with a description of the anticipated measurable water quality and associated monitoring, in response to RFP Questionnaire, Question 11.

For More Information, please see one of the listed websites:

- On the Clean Water Action Plan and Watershed Restoration Action Strategies, you can refer to http://www.cleanwater.gov.
- On the California Unified Watershed Assessment, you can refer to http://www.ca.nrcs.usda.gov. or contact the RWQCB, SWRCB, or USEPA.

Selection/Award Process

What are the steps in the selection/award process?

The steps in the selection process are as follows:

1. RFP document is released to the public.

2. Project proponents must consult with the respective RWQCB/SWRCB staff as soon as possible and prior to submitting a project application.

3. Project proponents must submit one project proposal to the appropriate RWQCB (regional) or to SWRCB (statewide), and one copy to the SWRCB and the USEPA by June 16, 2000. See Attachment 3 for mailing addresses.

Projects selected by each organization must be consistent with provisions of this RFP and are subject to final approval by the SWRCB.

4. The competitive project proposal selection process will involve four tiers of review:

   Tier I. USEPA and SWRCB staff will do an initial review of projects to ensure that they are eligible for 319(h) funds. Each RWQCB will review and rank in priority order all eligible 319(h) proposals for projects within their respective region. The SWRCB, Division of Water Quality (DWQ), will review and rank all eligible statewide or multi-regional proposals.

   For the FFY 2001 319(h) selection cycle, approximately $1.3 million will be divided among the nine (9) RWQCBs and the SWRCB so that each agency may dedicate these resources to a single project or to multiple projects (with an aggregate value of less than $130,000) in order to meet the agency's watershed needs. The balance of funds, approximately $4 million, will be pooled to fund projects on a competitive basis (up to $350,000 per project).

   Tier II. The WMI Committee, consisting of management from all RWQCBs, SWRCB, and USEPA, will review project proposals previously prioritized by each RWQCB and DWQ to develop statewide priority lists for 319(h) projects. The WMI Committee will also accept each organization's top priority 319(h) projects providing they are eligible projects that are consistent with the RFP and total no more than $130,000 per agency. The Committee will then rank the remainder of the projects to distribute the remaining 319(h) funding (approximately $4 million). Projects will be ranked by evaluating the level of responsiveness to each criterion (high, medium, or low) and by the number of criteria met. The higher the number of criteria met, the higher the project will be ranked.

   Tier III. An Executive Committee consisting of RWQCB, SWRCB, and USEPA Executive Management will review the WMI Committee recommendations and modifications and submit them to the SWRCB for consideration.

   Tier IV. SWRCB considers recommendations of the Executive Committee and adopts final consolidated priority list of projects to be funded under 319(h).

5. A grant application package is prepared and submitted to USEPA so that the State can receive 319(h) funds.

6. USEPA accepts the grant application and makes grant awards to the SWRCB for the 319(h) projects.

7. Proponents of the approved projects receive a notice of award, develop detailed workplans, and negotiate contracts with the SWRCB. (The contract negotiation and execution process must be completed within one year of the notice of project selection. Failure to meet this condition may result in forfeiture of grant award.) The entire process from proposal submittal to contract execution takes a minimum of 16 months to complete. Please refer to Figures 1 and 2 for more information.

Frequently Asked Questions

- *Why are there questions about restoration action strategies and management plans?*

Your proposed project should be integrated with other watershed activities and be part of a larger, comprehensive effort to increase the likelihood of improving water quality.

- *What if my proposed project falls in a watershed where there is no restoration action strategy? Can I still get funded?*

Yes. However, the available funding for projects in non-restoration action strategy watersheds is less than that available for watersheds where restoration action strategies exist.

- *What if my project is not listed as a targeted project by the RWQCB or SWRCB in Attachment 4? Can I still get funded?*

Yes. There is a strong preference (see selection criteria on page II-6) to select projects that are listed in Attachment 4. However, proposed projects that are not listed but are otherwise eligible will not be excluded from further consideration. We recognize that other projects not listed may be very effective in addressing a significant water quality concern, and these projects will be considered for funding.

- *Why is the project proponent required to consult with the appropriate RWQCB or SWRCB prior to submitting an application?*

This consultation is important to ensure that the proposed project addresses acknowledged water quality priorities and is coordinated with the activities of the RWQCB/SWRCB and other key partners. Consultation will involve substantive discussion regarding specific aspects of the proposed project.

- *What if I miss the application deadline?*

Your application will not be considered.

- *Who gets copies of the application package?*

The appropriate RWQCB where your proposed project is located receives the original application package, while USEPA and the SWRCB receive one copy. If your project occurs in multiple regions, a copy should go to each RWQCB included in the coverage. Proposals for projects to be considered under the "statewide" (see footnote on page II-1) category only go to SWRCB and USEPA.

- *Can I apply for both 205(j) and 319(h) funding with one application?*

No. Separate applications are needed.

➢ *How do I know which funding I qualify for?*

Read the eligibility criteria for each program described in this application package. Also (and this is very important), talk with your local RWQCB contact well ahead of the deadline about the eligibility of your proposal. Many otherwise good proposals are rejected each year because they do not meet the eligibility criteria. 319(h) funds are for implementation activities while 205(j) funds are for planning type work (including monitoring).

➢ *I want to do some implementation work not really related to my NPDES permit. Can I be eligible for NPS money?*

You MAY be eligible. Here again, contact your local RWQCB early on to discuss the potential for eligibility problems.

➢ *Why is there a 10-page maximum?*

A statewide review committee will be ranking all proposals after each RWQCB has ranked theirs. There may be as many as 90 - 319(h) and 20 - 205(j) proposals received statewide that need reviewing. Therefore, a page limit is imposed to streamline and facilitate the review process.

➢ *Are there any types of projects that tend to be viewed more favorably during review?*

Projects that are most favored are those listed by the SWRCB and RWQCB as targeted projects in Attachment 4. In general, however, 319(h) NPS implementation projects that implement management measures that lead to measurable improvements in water quality, restore watersheds, and have good local support are favored. In addition, favored projects should provide for ongoing implementation and/or encourage implementation beyond the specific project area.

➢ *I meet all the eligibility criteria and I think I have a good proposal. What else can I do?*

Review your proposal one last time (or have someone else do it) and evaluate how you would answer the following questions. Does your proposal clearly state what the money will be used for and what benefit will there be to water quality and the watershed in general? Is the proposal clear on what products will result? Have you calculated your match correctly? Have you requested funds within the RFP limitations?

ATTACHMENTS

Attachment 1 - Applying for funding
Attachment 2 - Application form
Attachment 3 - RWQCB, SWRCB, and USEPA contacts
Attachment 4 - Inventory of targeted projects
Attachment 5 - California Unified Watershed Assessment (UWA)
Attachment 6 - California Management Measures for Polluted Runoff
Attachment 7 - Sample Scope and Budget
Attachment 8 - Natural Resource Projects Inventory (NRPI) Form 2000

ATTACHMENT 1 - APPLYING FOR FUNDING

Application Summary

Project applicants *must* submit the following (found in Attachment 2):

A. Cover Page
B. Budget Summary Sheet
C. Project Questionnaire

Submittal Deadline and Details on Packaging Submittal

Proposals must be submitted in the format shown on the attached forms and U.S. postmarked (or delivered) no later than June 16, 2000. The length of response to each question can be adjusted provided all relevant questions are answered and the adjusted Project Questionnaire does not exceed ten (10) pages. Additional information such as watershed strategies may be provided and will not be considered part of the ten-page limit. However, the additional information will be noted as available for review but will not be routinely circulated with the application. This RFP (with the forms) is available electronically on the Internet at the SWRCB's Internet Homepage at http://www.swrcb.ca.gov/nps/npshome.html .

➳ Project proponents must submit one original of their project application to the appropriate RWQCB (for Region-specific projects) or to the SWRCB (for statewide projects). One copy of each proposal must be sent to both the SWRCB and USEPA.

Application Form - General Instructions

Much of the attached application is self-explanatory; however, a few points deserve some clarification and are discussed below.

PART A. The **COVER PAGE** should be completed with all of the information as requested and should not exceed one page.

PROJECT SUMMARY

The Project Summary should be a succinct statement that clearly describes project highlights including framework, objectives, tasks, products, and outcomes.

PART B. Complete the **BUDGET** summary using the following information to define the budget categories. Attach a detailed budget if one exists.

1. PERSONNEL SERVICES
   Personnel Services include salaries, benefits, and indirect charges for wage-earning personnel employed by the organization.

2. OPERATING EXPENSES
   Operating Expenses include travel, rental, and other operating costs directly related to the project.

3. PROPERTY ACQUISITIONS

Property Acquisitions should be itemized as:

a. Equipment
b. Furniture
c. Portable Assets
d. Electronic Data Processing Equipment
e. Processing Equipment
f. Miscellaneous

Real estate or easements cannot be acquired with grant dollars, but the costs of real estate or easements may be used for the match requirements, if not purchased with federal dollars.

Property (e.g., equipment, supplies) purchased in whole or in part with grant funds should be itemized. Property purchased with these funds may be required to be returned to the SWRCB or USEPA upon completion of the project (or termination of the contract).

4. PROFESSIONAL AND CONSULTANT SERVICES

a. Professional and Consultant Services include the total costs for any consultants needed by the applicant.

b. State contracts (except interagency agreements or contracts with other governmental entities) must fulfill the Disabled Veterans Owned Businesses participation goals required under Public Contract Code section 10115. Recipients of 319(h) funds will be required to submit Standard Form 840 (to be provided later in the process) prior to entering into a contract with the SWRCB.

5. CONSTRUCTION EXPENSES

Construction Expenses include the estimated costs of material and labor for capital improvements.

6. OVERHEAD

Overhead consists of a reasonable percentage of all costs to run your agency while completing your project. These costs can include agency management, supplies, telephone, office rental, and postage.

7. MATCH SHARE

No federal funds or services can be counted as part of the match. Any combination of personnel services, operating expenses, property acquisition, consulting services, or construction expenses can be included in the matching portion of project costs. Each line item does not have to be individually matched. The match must be dedicated to this grant and cannot be used to qualify for any other grant.

➽ MISTAKES ARE FREQUENTLY MADE IN CALCULATING THE MATCH – PLEASE READ THE INSTRUCTIONS CAREFULLY

CWA section 319(h) grants require a non-federal match of 40 percent of the total project cost. The 40 percent match requirement is most easily calculated as in the following example:

$125,000	Total Project Budget
x 0.40	Required Match (40%)
$ 50,000	Required Match (in dollars)

Match Share in dollars = 40% of TOTAL PROJECT BUDGET in dollars
(Match Share $s = 0.40 x Total Project Budget)

Total Project Budget – Required Match = 319(h) dollars to be requested

$125,000	Total Project Budget
- 50,000	Required Match (40%)
$ 75,000	319(h) $s to be requested

319(h) $s that can be requested = $75,000

Note: In calculating the Match Share, you must use the Total Budget for the project and not the funding amount being requested.

PART C. The **PROJECT QUESTIONNAIRE** serves as your proposal and must be completed. The questionnaire is designed to be a summary of the project. The space provided indicates the detail desired in response to each question. You may vary the length of response to individual questions provided you do not exceed a total of ten (10) pages in responding to all questions. Additional information is requested in some questions and should be attached (not included in the ten-page limit). If you answer "No" or "Not applicable" to any question, please provide a very brief explanation or justification for the negative response. Other information can be attached as desired, but may not be thoroughly reviewed during the selection process.

Detailed Explanations of Questions

QUESTIONS 1 – 4 ARE SELF EXPLANATORY

5. PROPOSAL DESCRIPTION

a. PROBLEM STATEMENT

Describe the water quality problem(s) and scope of problem(s) that are being addressed through the proposed project. This section may include descriptions of impaired waters or the need to prevent impairment of high quality waters and threatened waters. Describe the conditions of the resources in question and identify whether these descriptions arise from field assessments, models, and/or professional judgement. Please note where data are available but unreported to date.

b. SPECIFIC WATER QUALITY GOALS INVOLVED

Describe water quality objectives that are the focus of the project, the beneficial uses associated with these improvements, and the expected improvements in water quality. Any NPS management measures (see Attachment 6) to be implemented should be listed (e.g., applicant proposes to implement restoration activities to eliminate impairments by Activity A or proposes to restore degraded habitat while improving sediment control capabilities).

c. PROJECT DESCRIPTION

This section should provide a succinct overview of the project, including methodology, products and outcomes. As relevant, describe key partnerships, relationship to related efforts, and any formal recognition of the problem, such as ongoing projects designed to address parts of the problem or written reports describing conditions.

d. WORK TO BE PERFORMED/PROPOSED ACTIONS

The *Work to be Performed* is considered the "substantive portion" of the proposal because it should clearly define the steps the project applicant will take to complete each task of the project. This section should include a logical, sequential description of the work.

i. Itemized Tasks and Milestones

An itemized list of the actions and the target completion dates to be undertaken should be listed here. Itemized tasks must also include the required quarterly reports and the final report.

ii. Methods and Materials to be Used in Performing the Work

Describe any computer models, Best Management Practices, or other pertinent methods and materials that will be implemented as part of the project.

iii. Regulations and Standards to Assure a Minimum Standard of Quality, Regulatory Compliance, and Product Acceptability. This includes CEQA as Noted on page II-4 of the RFP.

List any permits, environmental reviews (CEQA), or design standards that must be obtained/met for the project.

e. STARTING AND ENDING DATES FOR THE ACTIVITIES PROPOSED FOR FUNDING UNDER THIS GRANT

Implementation grants (319(h)) can be used within a three (3)-year period, beginning no sooner than July 1, 2001.

Project Start date: End date:

Phased Projects

If the activities proposed for funding under this grant are part of a phased project or part of a larger project effort, explain the objectives, framework, and scheduling for the larger project. Note whether there is a commitment to complete the entire project and how that commitment is structured (e.g., Memorandum of Understanding or a Joint Powers Agreement).

f. QUALITY ASSURANCE PLAN
If the project is selected and water quality sampling or other environmental measurements are to be undertaken, the applicant will be required to prepare and maintain a Quality Assurance Plan (QAP) in accordance with the USEPA QAPs for Environmental Data Operations, QA/R5 Interim Final 5/94 (language can be substituted to reference an approved existing QAP). The QAP shall be approved by the RWQCB Quality Assurance Officer or the SWRCB Quality Assurance Officer, Bill Ray (916/657-1123) and the Contract Manager prior to the implementation of any sampling or monitoring activities.

g. IDENTIFY WORK PRODUCTS OF THIS PROJECT
Show findings, conclusions, recommendations, and results that need to be obtained from this project.

6. SWRCB OR RWQCB STAFF CONTACTED REGARDING THIS PROPOSAL
Consultation with the appropriate RWQCB or SWRCB staff is required prior to submitting an application. This consultation is important to ensure that the proposed project addresses acknowledged water quality priorities and is coordinated with the activities of the RWQCB/SWRCB and other key partners. Consultation will involve substantive discussion regarding specific aspects of the proposed project.

7. COOPERATING AGENCIES
All cooperators should be thoroughly familiar with the project before being listed as a cooperator. Cooperators should have substantial involvement in project implementation.

QUESTION 8 IS SELF-EXPLANATORY

9. IS THE PROPOSED PROJECT PART OF AN EXISTING WATERSHED RESTORATION ACTION STRATEGY OR EQUIVALENT DOCUMENT?
Watershed Restoration Action Strategies are explained in the section on CWAP requirements on page II-7.

If yes, list the title and attach a copy of the cover page. Describe how the proposed restoration activities to be supported with 319(h) funds are part of, or consistent with, that strategy. If no, list reports that characterize conditions for the project area and attach copies of cover pages from the reports, if available, or indicate if a plan is currently being developed and will be completed prior to the start of the project. Contact your RWQCB and/or SWRCB representative if you have any questions.

QUESTION 10 IS SELF-EXPLANATORY

11. WILL THE PROPOSED PROJECT ACHIEVE MEASURABLE WATER QUALITY IMPROVEMENTS?
Describe the anticipated methodologies that will be used to measure water quality improvements. Identify factors that will be considered and what parameters will be used to determine the effects the project will have on water quality. Identify who (including community members) will conduct the measurements and the assessment. Describe how this will be used to evaluate the

effectiveness of the project in solving specific pollution or water quality/beneficial use problems. Consider how these activities may be coordinated with the tracking and implementation of management measures (see Question 19).

12. IS THIS AN NPS IMPLEMENTATION PROJECT THAT IS ELIGIBLE FOR CWAP FUNDS?
The CWAP resulted in a significant increase of 319(h) funding in California. The majority of the funds available through this RFP are considered CWAP funds. CWAP funds have additional requirements intended to further focus efforts to achieve significant water quality improvements. To be eligible for consideration to receive CWAP funds, you must have affirmatively answered Questions 9, 10 and 11. These additional requirements are further described on pages II-7.

13. IS THE PROPOSED PROJECT IDENTIFIED AS AN RWQCB/SWRCB TARGET PROJECT IN ATTACHMENT 4?
Attachment 4 presents an inventory of targeted 319(h) projects identified by the RWQCB and SWRCB staff. While addressing these projects is a key criterion in the selection process, other projects will be considered if they are eligible and address the other selection criteria.

QUESTIONS 14-15 In order to provide the reviewers some background on the watershed in which you propose to do your project, please list previous CWA grants or other grants that have been awarded for that watershed. Your RWQCB contact can assist with this question.

16. SUMMARIZE ACTIONS THAT HAVE BEEN ACCOMPLISHED TO DATE TO ADDRESS THE PROBLEM(S) (e.g., PAST MONITORING, PLANNING, IMPLEMENTATION PHASES).
Describe related activities that have been completed to provide the reviewers with additional background information to understand and review the proposed project. These activities may include monitoring, watershed planning, water quality assessment, and technology testing.

17. DESCRIBE HOW THE PROJECT WILL RESULT IN ONGOING OR WIDESPREAD IMPLEMENTATION THROUGHOUT THE PROJECT AREA, REGION, OR STATE.
Ongoing implementation refers to activities that will provide for implementation after these 319(h) grant funds are expended. Widespread implementation refers to expanding the activities that have been successfully applied through this project to other areas, within or beyond the current project area. Activities to be described may include mechanisms to secure future funding for ongoing implementation and education, outreach and training to promote technology transfer throughout the project area, region or State.

18. IF THERE IS AN NPDES PERMIT REQUIRED FOR THIS PROJECT AREA, DESCRIBE THE RELATIONSHIP OF THE PROJECT TO THE PERMIT. IN PARTICULAR, TO BE ELIGIBLE FOR THESE GRANTS, YOU MUST BE ABLE TO DESCRIBE HOW THE GRANT FUNDED ACTIVITY IS NOT REQUIRED BY AN EXISTING NPDES PERMIT.
These grant funds cannot be used for activities required by an NPDES permit. These permits often contain requirements for some activities that are similar to activities eligible for funding under 319(h). Since 319(h) funds cannot be used to fund activities required by a permit, it is important to clarify the relationship between proposed projects and permit conditions. Check with RWQCB or SWRCB staff for clarification on eligible activities.

19. FOR 319(h) PROJECTS, IDENTIFY THE NPS MANAGEMENT MEASURE(S) THAT THE PROPOSED PROJECT WILL IMPLEMENT AND DESCIBE HOW YOU WILL BE ABLE TO TRACK OR ACCOUNT FOR THE IMPLEMENTATION OF THESE MEASURES.
The upgraded *Plan for California's NPS Pollution Control Program* has adopted 61 management measures for six NPS categories (agriculture, forestry, urban areas, marinas and recreational boating, hydromodification, and wetlands/riparian areas/vegetated treatment systems) to be implemented by 2013. Management measures serve as general goals for the control and prevention of polluted runoff. Site-specific management practices are then used to achieve the goals of each management measure. All proposed implementation projects should identify the management measures that the project will implement and describe how the project would track or account for the implementation of these measures. Consider how these activities may be coordinated with the measurement of water quality improvements (see Question 11). For a full listing of the management measures, please refer to Attachment 6. Also, check with RWQCB or SWRCB staff for further assistance.

20. WHAT CAPABILITY OR COMMITMENTS DOES THE APPLICANT HAVE TO ENSURE THAT THE PROJECT WILL BE COMPLETED?
Describe the applicant's environmental position, fiscal commitments, and responsibilities to this project to arrive at a successful conclusion. Describe the applicant's working relationship or commitments with other watershed stakeholders.

21. DESCRIBE ANTICIPATED FUTURE WORK.
Describe follow-up activities upon project completion. Describe planned future activities with watershed stakeholders within the project watershed, such as additional phased projects, continued monitoring and maintenance, development of geographic information systems (GIS), and land resource planning.

22. INDICATE IF THIS PROJECT IS DEVELOPING OR IMPLEMENTING TMDL.
Indicate whether the project is for TMDL development or implementation and provide further description of these activities. TMDL activities should be clearly stated in the project description as well. Identify the steps that will be taken to achieve TMDL implementation. When is full conformity with the allocations anticipated? If only some of the allocations in a TMDL are addressed by the proposed work, identify which allocations are applicable. Identify the applicable TMDL by name and, if applicable, cite the RWQCB resolution number that established the TMDL.

Please note that through this RFP, TMDL development activities are only eligible for 205(j) planning funds and 319(h) funds may only be used for implementation. Development activities include studies (e.g., source analysis, modeling) and preparation of plans for the implementation of TMDLs. Implementation activities include implementation of Best Management Practices and/or Management Measures and the tracking and monitoring of implementation.

ATTACHMENT 2 - APPLICATION FORM

Part A - Cover Page
Part B - Budget Summary Sheet
Part C - Project Questionnaire

PART A - COVER PAGE

STATE WATER RESOURCES CONTROL BOARD
FFY 2001 CWA section 319(h) Grant Program

CHECK ONLY ONE LINE:

Region Specific Project ___ Indicate Region: RWQCB # ___
Multi-regional Project ___ Indicate Regions: RWQCB #s ___
Statewide Project ___

APPLICANT: _____

ADDRESS: _____
_____
_____

PROJECT DIRECTOR: _____

E-MAIL ADDRESS: _____ FAX NO.: _____

PHONE NO.: _____ FEDERAL TAX ID. NO.: _____

PROJECT TITLE: _____

PROBLEM(S) BEING ADDRESSED:

WATERBODY/WATERSHED: _____

FISCAL SUMMARY:

319(h) Funds Requested	$ _____	(319(h)/min. $25,000/max. $350,000)
40% Non-Federal Match Contribution	$ _____	
Total Project Budget	$ _____	

PROJECT SUMMARY:

PART B - BUDGET SUMMARY SHEET

STATE WATER RESOURCES CONTROL BOARD
FFY 2001 CWA section 319(h) Grant Program

APPLICANT: _____
PROJECT TITLE: _____

	Total Budget	40% Match Share	319(h) SWRCB Share
1. Personnel Services	$	$	$
2. Operating Expenses			
3. Property Acquisitions			
a. Equipment			
b. Furniture			
c. Portable assets			
d. Electronic data			
e. Processing equipment			
f. Miscellaneous			
4. Professional and Consulting Services			
5. Construction Expenses			
6. CEQA			
7. Overhead (%)			
TOTAL BUDGET			

8. Match Share in dollars = 40% of TOTAL PROJECT BUDGET in dollars
Match Share $ = 0.40 x Total Project Budget
319(h) dollars to be requested = Total Project Budget – Required Match

Describe the source, nature (e.g., cash, volunteer labor, or in-kind services) of the 40% nonfederal matching funds indicated above.

Note: The SWRCB reserves the right to adjust project awards. Applicants may be asked to reduce their project budgets. Applicants should be prepared to provide detailed justification of costs by task for their project.

PART C - PROJECT QUESTIONNAIRE

1. PROJECT TITLE: _____

2. LEAD AGENCY: _____

   ADDRESS: _____
   _____
   _____

   PROJECT DIRECTOR: _____

   E-MAIL ADDRESS: _____ FAX NO.: _____

   PHONE NO.: _____

3. WATERSHED IN WHICH THE PROJECT WILL BE UNDERTAKEN

4. IDENTIFY THE MAJOR SOURCES OF NPS POLLUTION THAT WILL BE ADDRESSED BY THE PROPOSED PROJECT (CHECK ALL APPROPRIATE SOURCES).

   ____Agriculture ____Forestry ____Urban (Construction, Roads, Septic Systems)
   ____Marinas and Boating Activities ____Hydromodification
   ____Resource Extraction Other:_____

5. PROPOSAL DESCRIPTION

   a. PROBLEM STATEMENT

   b. SPECIFIC WATER QUALITY GOALS INVOLVED

   c. PROJECT DESCRIPTION

d. WORK TO BE PERFORMED/PROPOSED ACTIONS

i. ITEMIZED TASKS AND MILESTONES

TASK	COMPLETION DATE

ii. METHODS AND MATERIALS TO BE USED IN PERFORMING THE WORK

iii. REGULATIONS AND STANDARDS TO ASSURE A MINIMUM STANDARD OF QUALITY, REGULATORY COMPLIANCE, AND PRODUCT ACCEPTABILITY. THIS INCLUDES CEQA, AS NOTED ON PAGE II-4 OF THIS RFP.

e. STARTING AND ENDING DATES FOR THE ACTIVITIES PROPOSED FOR FUNDING UNDER THIS GRANT

Project Start date: End date:

Is this a phased project or part of a larger project effort? Y___ N___
If yes, list the start and end dates for the larger project effort.
Start date: End date:

f. QUALITY ASSURANCE PLAN (if water quality monitoring is paid for by 319(h) dollars)

If the project is selected and environmental measurements are to be undertaken, the applicant will be required to prepare and maintain a Quality Assurance Plan (QAP), or name an approved one, in accordance with the USEPA QAPs for Environmental Data Operations, QA/R5 Interim Final 5/94. The QAP shall be approved by the Contract Manager prior to the implementation of any sampling or monitoring activities.

g. IDENTIFY WORK PRODUCTS OF THIS PROJECT

6. SWRCB or RWQCB STAFF CONTACTED REGARDING THIS PROPOSAL:

RWQCB Contact:	_____	SWRCB Contact:	_____
Phone No.:	_____	Phone No.:	_____
Dates contacted:	_____	Dates contacted:	_____

7. COOPERATING AGENCIES:
(Note any formal agreements to cooperate.)

Agency Name: _____
Role/Contribution to Project: _____
Contact Person: _____ Phone No.: _____
E-mail address: _____

Agency Name: _____
Role/Contribution to Project: _____
Contact Person: _____ Phone No.: _____
E-mail address: _____

Agency Name: _____
Role/Contribution to Project: _____
Contact Person: _____ Phone No.: _____
E-mail address: _____

Agency Name: _____
Role/Contribution to Project: _____
Contact Person: _____ Phone No.: _____
E-mail address: _____

If additional space is needed please attach a list.

8. ATTACH A MAP (8 ½ X 11 is preferred) DEPICTING THE PROJECT AREA.

9. IS THE PROPOSED PROJECT PART OF AN EXISTING WATERSHED RESTORATION ACTION STRATEGY OR EQUIVALENT DOCUMENT?
Yes___ No___ If yes, please identify the document, attach a copy of the title page, and briefly describe how the proposed project is consistent with the document.

10. DOES THE PROPOSED PROJECT ADDRESS ANY OF THE WATERBODIES LISTED AS CATEGORY 1 (IMPAIRED) PRIORITY WATERSHEDS IN ATTACHMENT 5?
Yes___ No___ If yes, please list the involved waterbodies by reference number and watershed name.

11. WILL THE PROPOSED PROJECT ACHIEVE MEASURABLE WATER QUALITY IMPROVEMENTS?
Yes___ No___ If yes, please describe the anticipated improvements and the methodologies that will be used to measure them.

12. IS THIS AN NPS IMPLEMENTATION PROJECT THAT IS ELIGIBLE FOR CWAP FUNDS?
Yes____ No____ Please note that to be eligible for CWAP funds, you must have affirmatively answered Questions 9, 10 and 11.

13. IS THIS PROPOSAL FOR A PROJECT IDENTIFIED AS AN RWQCB/SWRCB TARGET PROJECT IN ATTACHMENT 4?
Yes ___ No ___ If yes, note the project number.

14. LIST ANY PREVIOUS 319(h) IMPLEMENTATION GRANTS AWARDED FOR WORK IN THIS WATERSHED.

15. LIST GRANTS FROM OTHER AGENCIES AND OTHER FUNDING SOURCES THAT HAVE BEEN USED OR ARE CURRENTLY BEING USED TO SUPPORT WORK IN THIS WATERSHED.

16. SUMMARIZE ACTIONS THAT HAVE BEEN ACCOMPLISHED TO DATE TO ADDRESS THE PROBLEM(S) (e.g., PAST MONITORING, PLANNING, IMPLEMENTATION PHASES).

17. DESCRIBE HOW THE PROJECT WILL RESULT IN ONGOING OR WIDESPREAD IMPLEMENTATION THROUGHOUT THE PROJECT AREA, REGION, OR STATE.

18. IF THERE IS AN NPDES PERMIT REQUIRED FOR THIS PROJECT AREA, DESCRIBE THE RELATIONSHIP OF THE PROJECT TO THE PERMIT. IN PARTICULAR, TO BE ELIGIBLE FOR THESE GRANTS, YOU MUST BE ABLE TO DESCRIBE HOW THE GRANT FUNDED ACTIVITY IS NOT REQUIRED BY AN EXISTING NPDES PERMIT.

19. FOR 319(h) PROJECTS, IDENTIFY THE NPS MANAGEMENT MEASURE(S) THAT THE PROPOSED PROJECT WILL IMPLEMENT AND DESCIBE HOW YOU WILL BE ABLE TO TRACK OR ACCOUNT FOR THE IMPLEMENTATION OF THESE MEASURES.

20. WHAT CAPABILITY OR COMMITMENTS DOES THE APPLICANT HAVE TO ENSURE THAT THE PROJECT WILL BE COMPLETED?

21. DESCRIBE ANTICIPATED FUTURE WORK.

22. INDICATE IF THIS PROJECT IS IMPLEMENTING (319(h)) A TMDL.
Yes ___ No ___ If yes, briefly explain.

PLEASE LIST ANY SUGGESTIONS YOU HAVE TO IMPROVE NEXT YEAR'S RFP.

Submit this Questionnaire together with any attachments and supporting information to the appropriate project contact staff person (see Attachment 3 - RWQCB, SWRCB, and USEPA Contact list).

Copies of completed applications must be submitted to the respective RWQCB staff contact and to the respective SWRCB and USEPA 319(h) contact no later than June 16, 2000.

ATTACHMENT 3 - RWQCB, SWRCB, AND USEPA CONTACTS

RWQCB Contacts

Janet Blake or Bob Klamt
NORTH COAST REGION (1)
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403
(707) 576- 2805—Blake
(707) 576-2693—Klamt
FAX: (707) 523-0135

Dale Hopkins 319(h))
SAN FRANCISCO BAY REGION (2)
2101 Webster Street, Suite 500
Oakland, CA 94612
(510) 622-2362
FAX: (510) 622-2460

Gerhardt Hubner
CENTRAL COAST REGION (3)
81 Higuera Street, Suite 200
San Luis Obispo, CA 93401-5427
(805) 549-4647
FAX: (805) 543-0397

Raymond Jay – (319(h))
LOS ANGELES REGION (4)
320 West 4th Street, Suite 200
Los Angeles, CA 90013
(213) 576-6689
FAX: (213) 576-6686

Jerry Bruns or Val Connor or Carol Atkins
CENTRAL VALLEY REGION (5S)
3443 Routier Road, Suite A
Sacramento, CA 95827-3098
(916) 255-3111 - Connor
(916) 255-3092 - Atkins
(916) 255-3093 - Bruns
FAX: (916) 255-3015

Dennis Heiman
CENTRAL VALLEY REGION
REDDING OFFICE (5R)
415 Knollcrest Drive
Redding, CA 96002
(530) 224-4851
FAX: (530) 224-4857

Betty Yee
CENTRAL VALLEY REGION
FRESNO OFFICE (5F)
3614 East Ashlan Ave
Fresno, CA 93726
(209) 445-5550
FAX: (209) 445-5910

Cindy Wise
LAHONTAN REGION (6SLT)
2501 South Lake Tahoe Blvd.
South Lake Tahoe, CA 96150
(530) 542-5408
FAX: (530) 544-2271

Doug Feay
LAHONTAN REGION
VICTORVILLE OFFICE (6V)
15428 Civic Drive, Suite 100
Victorville, CA 92392
(760) 241-7353
FAX: (760) 241-7308

Summer Bundy
COLORADO RIVER BASIN
REGION (7)
73-720 Fred Waring Dr., Suite 100
Palm Desert, CA 92260
(760) 776-8937
FAX: (760) 341-6820

Hope Smythe
SANTA ANA REGION (8)
3737 Main Street, Suite 500
Riverside, CA 92501-3339
(909) 782-4493
FAX: (909) 781-6288

Greig Peters or Bruce Posthumus
SAN DIEGO REGION (9)
9771 Clairemont Mesa Blvd., Suite A
San Diego, CA 92124
(619) 467-2976 - Peters
(619) 467-2964 - Posthumus
FAX: (619) 571-6972

SWRCB Contacts
Lauma Jurkevics
(319(h) Implementation Grants)
SWRCB, Division of Water Quality
901 P Street
Sacramento, CA 94244-2130
(916) 657-0518
FAX: (916) 657-2127

For additional information about Watershed Management and this grant program, contact:

USEPA Contacts

Sam Ziegler, (WTR-3)
CWA 319(h)/NPS Implementation
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105
(415) 744-1990 – Ziegler (ziegler.sam@epamail.epa.gov)

ATTACHMENT 4 - INVENTORY OF TARGETED 319(h) PROJECTS

Attachment 4 identifies targeted projects that address key nonpoint source problems as identified by a RWQCB for a geographic area/watershed or by the SWRCB as a statewide project. Addressing these projects is a key criterion in the selection process (See NPS Implementation/319 Ranking Criteria on page II-6). However, other projects that may not be specifically listed will also be considered if they are eligible and address the other selection criteria.

These targeted projects are presented here along with project descriptions, a project number, the project's geographic location/watershed, management measures addressed by the project, and the WRAS or equivalent document which the project falls under. The following briefly describes the significance of this information:

- Project Number: This number is provided to assist in the identification of the project and absolutely does not indicate any priority ranking. If your proposal addresses a targeted project, indicate the project number as listed in Attachment 4 in response to Question 13 of the Application, Part C.

- Geographic Location/Watershed: Many of the proposed actions are for specific geographic locations or watersheds. Some of these geographic locations/watersheds have been identified as a Category 1 Priority watershed by the California UWA. These geographic locations/watersheds are identified with an asterisk (*). This will help answer Questions 3 and 10 of the Application, Part C. For more information, please refer to Clean Water Action Plan requirements on page II-7.

- NPS Management Measures: All proposed implementation projects should identify the NPS management measures that will be implemented and describe how the project would track or account for the implementation of these measures. For a full listing of the NPS management measures, please refer to Attachment 6.

- Watershed Restoration Action Strategies (WRAS): A priority of the California NPS Program and this RFP is to fund projects that implement activities that are identified in an established plan, also referred to as a WRAS. In responding to this RFP, a wide range of plans, not limited to those listed in Attachment 4, will be considered to qualify as a WRAS. For more information, please refer to Clean Water Action Plan (CWAP) requirements on page II-7.

Please note that projects that are in Category 1 Priority Watersheds, implement activities described in a WRAS, and achieve measurable water quality improvements are more likely to receive funding through this RFP. For more information, please refer to CWAP requirements on page II-7.

In addition, the information in Attachment 4 is preliminary and subject to revision by RWQCB or SWRCB staff. Applicants are strongly advised to contact the appropriate RWQCB or SWRCB staff listed in Exhibit II, Attachment 3 of this RFP to: (1) confirm the information, (2) discuss missing or additional information; or (3) clarify eligibility of projects that differ in scope or location from those described below.

ATTACHMENT 4
Inventory of Targeted Nonpoint Source (319) Implementation Projects

North Coast Region – R1

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category 1 Priority Watersheds)*	Management Measures *(See Attachment 6)*	Watershed Restoration Action Strategy
R1 - 1	Monitoring to determine the effectiveness of management practices and activities to achieve TMDL sediment reduction targets	N. Coast Rivers WMA (Navarro River*, Noyo River) Trinity WMA*	5.1A, 5.1B, 5.3A	Navarro River Restoration Plan, Noyo River TMDL& Implementation Recommendations
R1 - 2	Implementation of a program to reduce runoff discharges from residential, commercial, and industrial properties and improve stream habitat in a mixed cultural/Environmental Justice setting	Russian/Bodega WMA* (Roseland Creek)	1E	Southwest Santa Rosa Area Plan
R1 - 3	Riparian Revegetation, Channel Protection and Animal Exclusion Zones	Russian/Bodega WMA* (Stemple, Americano & Salmon River Watersheds) N.Coast Rivers WMA (Garcia* and Navarro* Rivers)	1B, 1E, 5.3A, 6B	Stemple Creek Waste Reduction Strategy (TMDL) Navarro River Restoration Plan Garcia River Waste Reduction Strategy
R1 - 4	Technology Transfer for Vineyard Installation, Educational Outreach	Russian/Bodega WMA* N. Coast Rivers WMA (Gualala* & Navarro* Rivers)	1A, 1G	Navarro River Restoration Plan
R1 - 5	Laguna Wetland Corridor Restoration and Wetland Bank	Russian/Bodega WMA* (Laguna de Santa Rosa)	6A, 6B	Waste Reduction Strategy for Laguna de Santa Rosa; Laguna CRMP

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category 1 Priority Watersheds)*	Management Measures *(See Attachment 6)*	Watershed Restoration Action Strategy
R1 - 6	Technology Transfer for Construction Projects, Educational Outreach	Regionwide	3.6A	N/A
R1 - 7	"Shrimp Club" type Education/Outreach	Regionwide	6D	N/A
R1 - 8	Wetland "polishing marsh" for stormwater runoff from Sebastopol	Russian/Bodega WMA* (Laguna de Santa Rosa)	6B, 6C	Waste Reduction Strategy for Laguna de Santa Rosa; Laguna CRMP
R1 - 9	Stream restoration in watersheds where TMDLs are established or pending in the next five years	Regionwide	5.1A, 5.1B, 5.3A, 6B	Waste Reduction Strategies are in place for established TMDLs
R1 - 10	Road restoration, road retirement in watersheds where TMDLs are being established for sediment	Regionwide	3.5A, 3.5E, 3.5F	Waste Reduction Strategies are in place for established TMDLs
R1 - 11	Implementation of a volunteer monitoring network to establish baseline conditions and to track effectiveness of management measures and restoration projects	Regionwide	various	Scott Valley CRMP Shasta Valley CRMP Salmon River Subbasin Restoration Strategy Other already listed in this table: Navarro, Noyo, Stemple, Mattole, Garcia, Laguna de Santa Rosa, Greenwood
R1 - 12	Stream restoration, road restoration/retirement or other erosion/sedimentation reduction activities	N. Coast Rivers WMA (Mattole* River)	5.1A, 5.1B, 5.3A, 6B	Mattole Salmon Group Five Year Plan, Mattole Restoration Council Elements of Recovery

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category 1 Priority Watersheds)*	Management Measures *(See Attachment 6)*	Watershed Restoration Action Strategy
R1 - 13	Improve high priority roads within the watershed	N Coast Rivers WMA (Greenwood Creek)	3.5A, 3.5E, 3.5F	Greenwood Creek Stream Survey: Data Analysis and Recommendations Greenwood Creek Watershed Project: 1996 Road Survey Summary Report
R 1 -14	Inventory of roads (logging, rural, and residential) and needed road improvements	Eel River WMA*	3.5A, 3.5E, 3.5F	
R1 - 15	Inventory of roads (logging, rural, and residential) and needed road improvements	N. Coast Rivers WMA (Garcia*, Noyo, Gualala*, Albion*, Big*, Ten Mile*, Navarro* Rivers)	3.5A, 3.5E, 3.5F	Navarro River Restoration Plan Garcia River Waste Reduction Strategy Noyo River TMDL & Implementation Recommendations

San Francisco Bay Region – R2

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category 1 Priority Watersheds)*	Management Measure(s) *(see Attachment 6)*	Watershed Restoration Action Strategy
R2 - 1	Implement BMPs to address runoff from dairy and grazing lands; BMPs to address pathogens from boating activities and on-site sewage systems.	Tomales Bay, Marin County*	1(A), 1(C), 1(E), 3.4(B), 4(H)	Marin Coastal Watershed Enhancement Project
R2 - 2	Implement sediment and nutrient source reduction BMPs, habitat restoration, education & outreach, and technical support. Demonstrate effectiveness of vineyard erosion BMPs.	Napa River Watershed, Napa County*	1(A), 1(C), 1(G)	Napa River Owners Manual
R2 - 3	Implement erosion control on abandoned and existing roads located in public parklands.	Pescadero/Butano Creeks, San Mateo County*	1(A), 1(E), 2.0, 5.0	Pescadero/Butano Creeks Coordinated Resources Management Plan
R2 - 4	Implement removal of fish migration barriers native plant projects	San Francisquito Creek, San Mateo County*	1(A), 1(E), 3.0, 5.0	San Francisquito Creek Coordinated Resources Management Plan
R2 - 5	Implement fish barrier removal projects	Pilarcitos Creek, San Mateo County*	1(A), 1(E), 3.0, 5.0	Pilarcitos Creek Restoration Plan
R2 - 6	Implement BMPs to reduce mercury impairment	Guadalupe River, Santa Clara County*	5.0	Santa Clara Basin Watershed Management Initiative
R2 - 7	Implement appropriate BMPs, volunteer monitoring, habitat restoration, education & outreach, and technical support	Petaluma River Sonoma County*	1.0, 3.0, 5.0	Petaluma River Watershed Enhancement Plan

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category 1 Priority Watersheds)*	Management Measures *(See Attachment 6)*	Watershed Restoration Action Strategy
R2 - 8	Implement appropriate BMPs, volunteer monitoring, habitat restoration, education & outreach, technical support	Sonoma Creek, Sonoma County*	1.0, 3.0, 5.0	Sonoma Creek Watershed Enhancement Plan
R2 - 9	Implement appropriate BMPs, volunteer monitoring, habitat restoration, education & outreach, technical support	San Leandro Creek, Alameda County*	3.0, 5.0	San Leandro Creek Watershed Management Plan
R2 - 10	Implement appropriate BMPs, volunteer monitoring, habitat restoration, education & outreach, technical support	Walnut Creek, Contra Costa County*	3.0, 5.0	Walnut Creek Restoration Master Plan
R2 - 11	Implement tidal marsh restoration and fishery enhancement	Alameda Creek, Alameda County*	6.0	Baylands Ecosystem Goals Implementation Strategy

Central Coast Region – R3

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category I Priority Watersheds)*	Management Measure(s) *(see Attachment 6)*	Watershed Restoration Action Strategy
R3 – 1	Implementation of Farm Water Quality Planning short course	Salinas Watershed, Pajaro River Watershed (PRW), Morro Bay Watershed*	1A, 1C, 1D, 1F, 1G	Salinas Watershed Mgmt Action Plan, MBNMS Plan for Ag and Rural Lands; Water Quality Management Plan (WQMP) for the PRW
R3 – 2	Assessment of vineyard management practices through use of positive point system	Salinas Watershed, San Luis Obispo and Monterey Counties*	1A, 1C, 1D, 1F, 1G	Salinas Watershed Mgmt Action Plan, MBNMS Plan for Ag and Rural Lands
R3 – 3	Protection and restoration of riparian areas/ steelhead habitat	Salinas Watershed: Upper Salinas, Estrella subwatersheds*; San Lorenzo River Watershed (SLRW)*; Pajaro River (PRW) and subwatersheds*; Santa Ynez*	1E, 6A, 6B,1C, 2.0, 3.0, 5.0, 6.0	Upper Salinas River Watershed Mgmt Plan; SLRW Mgmt Plan ; WQMP for PRW; Santa Ynez River Fish Mgmt Plan
R3 – 4	Implementation of mgmt measures consistent with CCMP actions	Morro Bay Watershed*	1A, 1C, 1D, 1E, 1F, 1G, 3.1, 3.2 ,3.3, 3.4, 3.6, 4.2 4.3, 5.1, 5.3, 5.4, 6.0	Morro Bay CCMP
R3 – 5	Implementation of Management Measures to control discharge of sediment, bacteria, and/or nutrients	San Lorenzo River Watershed*	1A, 1C, 1D, 1F, 1G, 2.0, 3.0, 5.0, 6.0	SLRW Mgmt Plan, MBNMS Plan for Ag and rural lands, SLRW Wastewater Mgmt Plan, Nitrate Mgmt Plan

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category 1 Priority Watersheds)*	Management Measures *(See Attachment 6)*	Watershed Restoration Action Strategy
R3 – 5	Management Measures that addresss impacts to Pajaro River and its tributaries due to in-stream mining	Pajaro River Watershed*	1A, 5.1, 5.3, 5.4, 6.0	Water Quality Mgmt Plan for Pajaro River Watershed
R3 – 6	Stream, estuary, and riparian restoration	So. Coast Watersheds, Arroyo Burro, Arroyo Quemado, Carpinteria, Mission, Rincon, Gaviota, Refugio, Devereux, Atascadero, Maria Ygnacio, Cieneguitas, Las Positas, and Honda*	6.B, 6.D, 5.1B, 5.3A, 6.D	Project Clean Water Plans and supporting documents

Los Angeles Region - R4

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category 1 Priority Watersheds)*	Management Measures *(See Attachment 6)*	Watershed Restoration Action Strategy
R4 - 1	Pilot projects: trash reduction, management of horse corral runoff, golf course irrigation water runoff, urban runoff, or implementation of septic correction measures (NOT related to a NPDES permit). Leads to demonstration of effective ways to reduce loadings from these constituents, mainly, trash, nutrients, and coliform, all of which are causing impairments.	Los Angeles River Watershed*	3.4.B. 3.6.A. 1.B.	Los Angeles-San Gabriel Rivers Watershed Council. *The Los Angeles-San Gabriel Watershed, an Integrated Vision of the Future*, 1997
R4 - 2	Restore aquatic and riparian habitats; enhance recreational uses. Leads to protection and enhancement of beneficial uses	Los Angeles River Watershed*	6.B.	Los Angeles-San Gabriel Rivers Watershed Council. *The Los Angeles-San Gabriel Watershed, an Integrated Vision of the Future*, 1997
R4 - 3	Restore wetlands (Malibu, Topanga, and Trancas Lagoons). Leads to protection and restoration of beneficial uses	Santa Monica Bay WMA*	6.B.	Santa Monica Bay Restoration Project. *Santa Monica Bay Restoration Plan*, 1995.

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category 1 Priority Watersheds)*	Management Measures *(See Attachment 6)*	Watershed Restoration Action Strategy
R4 - 4	Implement comprehensive erosion control projects, with expected demonstrable improvements, in previously identified top three problem subwatersheds in terms of sediment production. Leads to significant reduction in sediment and pesticide loads to Mugu Lagoon.	Calleguas Creek Watershed*	1.A. 1.G. 5.3.A.	Natural Resources Conservation Service. *Calleguas Creek Watershed Erosion and Sediment Control Plan for Mugu Lagoon*, 1995.
R4 - 5	Habitat enhancement/ riparian restoration. Leads to restoration and protection of beneficial uses	Calleguas Creek Watershed*	6.B.	Natural Resources Conservation Service. *Calleguas Creek Watershed Erosion and Sediment Control Plan for Mugu Lagoon*, 1995.
R4 - 6	Reduce nutrients, pesticides, and sediments in irrigation water that flows to surface water or infiltrates to ground water. Leads to implementation of measures needed to comply with TMDLs and de-list impairments.	Calleguas Creek Watershed*	1.C., 1.D., 1.F., 1.G.	Natural Resources Conservation Service. *Calleguas Creek Watershed Erosion and Sediment Control Plan for Mugu Lagoon*, 1995.

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category 1 Priority Watersheds)*	Management Measures *(See Attachment 6)*	Watershed Restoration Action Strategy
R4 - 7	Restore aquatic and riparian habitats; enhance recreational uses. Leads to protection and enhancement of beneficial uses.	San Gabriel River Watershed*	6.B.	California Regional Water Quality Control Board, Los Angeles Region. *East Fork San Gabriel River Litter TMDL*, 1999. Los Angeles-San Gabriel Rivers Watershed Council. *The Los Angeles-San Gabriel Watershed, an Integrated Vision of the Future*, 1997.
R4 - 8	Trash reduction projects in upper San Gabriel River; elsewhere in watershed, management of horse corral runoff, golf course irrigation water runoff, urban runoff, or implementation of septic correction measures (NOT related to a NPDES permit). Leads to trash reduction in upper San Gabriel River (implementation of trash TMDL).	San Gabriel River Watershed*	3.4.B., 3.6.A, 1.B	California Regional Water Quality Control Board, Los Angeles Region. *East Fork San Gabriel River Litter TMDL*, 1999. Los Angeles-San Gabriel Rivers Watershed Council. *The Los Angeles-San Gabriel Watershed, an Integrated Vision of the Future*, 1997.

R4 - 9	Restore aquatic and riparian habitats; enhance recreational uses.	Los Cerritos Channel/Alamitos Bay WMA*	6.B.	None
R4 - 10	GIS repository for watersheds of Region; use in TMDLs a high priority. Leads to a GIS repository.	Regionwide		California Regional Water Quality Control Board, Los Angeles Region. *Watershed Management Initiative Chapter*, 2000.

Central Valley Region – R5

Project Number	Project Description	Geographic Area/Watershed *(*denotes Category 1 Priority Watersheds)*	Management Measures *(see Attachment 6)*	Watershed Restoration Action Strategy
R5 - 1	Provide assistance to implement sediment control plans	Panoche/Silver Creek*	Agriculture	Panoche/Silver Creek Sedimentation Plan
R5 - 2	Provide assistance to implement sediment control plans	Arroyo Pasajero*	Agriculture	Arroyo Pasajero Watershed Plan
R5 - 3	Provide assistance to Implement nutrient reduction plan	Fresno River*	Agriculture, Urban	Fresno River Nutrient Reduction Plan
R5 - 4	Reduce bank erosion	Bass Lake*	Agriculture, Hydromodification	Phase I Agreement of the Crane Valley Committee
R5 - 5	Implement Selenium reduction projects	San Joaquin River Basin*	Agricultural	
R5 - 6	Controlling offsite movement of water borne pesticides (e.g. dormant sprays)	Region wide*	Agriculture Urban	
R5 - 7	Controlling offsite movement of sediment and associated pesticides	Regionwide*	Agriculture Urban	
R5 - 8	San Joaquin River dissolved oxygen impairment	San Joaquin Basin*	1.3A, 2B1, 2B2, 2C, 2F, 4G, 5A, 5B,	Regional Bay Protection Cleanup Plan; Steering Committee Strategic Plan; CALFED EIR/EIS Water Quality Appendix

Project Number	Project Description	Geographic Area/Watershed *(*denotes Category 1 Priority Watersheds)*	Management Measures *(see Attachment 6)*	Watershed Restoration Action Strategy
R5 - 9	Clear Lake Mercury Control Program: Implement and evaluate management measures for mercury load reduction and efficiency of the proposed management measure(s)	Clear Lake*	1.5A; 2A; 4.1E; 5.1A, 5.1B, 5.2B, 5.3; 6B; Mining adit, retort waste and slag pile control; possible control of geothermal springs	
R5 - 10	Cache Creek Mercury Control Program: Implement and evaluate management measures for mercury load reduction and efficiency of the proposed management measure(s)	Cache Creek Watershed*	2.0E; 5.3; Mining adit, retort waste and slag pile control; possible control of geothermal springs	Regional Bay Protection Cleanup Plan; CALFED EIR/EIS water quality appendix
R5 - 11	Revegetation using native flora to reduce sedimentation	Cache Creek Watershed *	1.1B, 1.2A; 2A, 2E; 3C, 3G; Mining: gravel extraction remediation, waste pile control	Clear Lake Management Plan
R5 - 12	Fund Education Coordinator for education and outreach	Cache Creek Watershed*	Urban; 2A, 2C, 2D, 2E; 5.3; 6A, 6B; Mining	
R5 - 13	Non-native plant species (tamarisk and Arundo) control	Cache Creek Watershed*	6A, 6B	
R5 - 14	Erosion control	Cache Creek Watershed*	2A; 3C, 3G; 5.3; 6B; Mining	

Project Number	Project Description	Geographic Area/Watershed *(*denotes Category 1 Priority Watersheds)*	Management Measures *(see Attachment 6)*	Watershed Restoration Action Strategy
R5 - 15	Bay-Delta Mercury Control Program- Implement and evaluate management measures for mercury load reduction and efficiency of the proposed management measure(s)	Sacramento-San Joaquin Bay-Delta Estuary*	2.0E; 5.3; Mining adit, retort waste and slag pile control; possible pretreatment at multiple municipal sewage treatment plants.	Regional Bay Protection Cleanup Plan; CALFED EIR/EIS water quality appendix;
R5 - 16	Support for watershed coordinator position	Goose Lake Basin*	Outreach and education	
R5 - 17	Implementation plan to establish a river-wide conservation easement	Fall River*	Wetlands	
R5 - 18	Support for watershed coordinator position	Pit River*	Outreach and education	
R5 - 19	Establish information and education coordinator and center for the Pit River (i.e., River Center)	Pit River*, American River*	Outreach and education	
R5 - 20	Establish GIS Coordinator	American River*	Outreach and education, monitoring assessment	
R5 - 21	Stream improvement projects	Cow Creek*	Agriculture, Hydro modification	
R5 - 22	Stream improvement projects	Cottonwood Creek*	Agriculture, Hydromodification	
R5 - 23	Stream improvement projects (as identified in the Watershed Management Strategy)	Battle Creek*	Agriculture, Hydromodification	

Project Number	Project Description	Geographic Area/Watershed *(*denotes Category 1 Priority Watersheds)*	Management Measures *(see Attachment 6)*	Watershed Restoration Action Strategy
R5 - 24	Stream improvement projects	American River* and tributaries*	Forestry, Hydro modification	
R5 - 25	Support for a watershed coordinator positions	Big Chico Creek*, Upper American and Lower American Rivers*	Outreach and education	
R5 - 26	Stream improvement projects	Butte Creek*	Agriculture, Hydromodification	
R5 - 27	Stream improvement projects	North Fork Feather River*	Agriculture, Hydromodification	
R5 - 28	Stream improvement projects	Sierra Valley*	Agriculture, Hydromodification	
R5 - 29	Selenium, agriculture, dairies (salt and nitrates) temperature, urban runoff, sediment	Lower San Joaquin Watershed*: Vernalis*, Mendota Pool*, Stanislaus*, Tuolumne* and Merced* Rivers, Urban Areas: Sacramento Stockton, and other cities.	Agriculture, Urban, Hydromodification	
R5 - 30	Implementation of ag BMPs to reduce op pesticide conc + follow-up water quality monitoring	Sacramento River*, San Joaquin River*, Delta* and tribs*	Agriculture	
R5 - 31	Mine remediation demonstration projects to reduce biologically available mercury discharge + effectiveness monitoring	Cache Creek*, Sacramento River*, Delta* and Tributaries*	Resource Extraction	

Project Number	Project Description	Geographic Area/Watershed *(*denotes Category 1 Priority Watersheds)*	Management Measures *(see Attachment 6)*	Watershed Restoration Action Strategy
R5 - 32	Implementation of BMPs to reduce selenium concentrations in waterways	San Joaquin River* and tributaries*	Agriculture	
R5 - 33	Demonstration projects and BMPs to reduce BOD from NPS (i.e. dairies & irrigated ag)	Delta Waterways* and tributaries*	Agriculture	
R5 - 34	Demonstration projects and BMPs to reduce salinity and boron concentrations from NPS	San Joaquin River*, Delta* and tributaries*	Agriculture, Urban	
R5 - 35	Conduct mercury source identification with bioavailability analysis	Sacramento River* and tributaries*	Resource Extraction	
R5 - 36	Implement ag and grazing BMPs to improve water quality and aquatic habitat	Pit River *(Modoc and Lassen Counties)	Agriculture	
R5 - 37	Establish a mini-grant program to provide program support for new local watershed programs and funds for training, education and equipment needs of existing local watershed programs	Northern portion of the Sacramento River watershed*	Outreach and Education, Technical Assistance	

Project Number	Project Description	Geographic Area/Watershed *(*denotes Category 1 Priority Watersheds)*	Management Measures *(see Attachment 6)*	Watershed Restoration Action Strategy
R5 - 38	Implement BMPs to reduce erosion and sediment discharge from Westside Sac River tribs.	Westside tributaries of Sacramento River*	Agriculture, Forestry	
R5 - 39	Implement recommendations from sedimentation study funded under 205j	Panoche/Silver Creek*, Tulare Lake Basin*	Agriculture	
R5 - 40	Implement projects to assess erosion and sedimentation from the upper watershed of the Panoche/Silver Creek	Panoche/Silver Creek*, Tulare Lake Basin*	Agriculture	
R5 - 41	Implement projects to assessment of salt loads in the Kings Management Area of the Tulare Lake Basin	Tulare Lake Basin*	Agriculture	
R5 - 42	Implement projects to address or assess nutrient load to Clear Lake	Clear Lake*	Agriculture	
R5 - 43	Implement projects for fuel load reduction and wildlife habitat improvement	Regionwide*	Forestry	
R5 - 44	Implement and evaluate sediment and mercury management measures for load reduction and efficiency	Yuba*, Bear* **and American* Rivers**	Resource Extraction	
R5 - 45	Education and Outreach Coordinator for mercury and forestry issues	Yuba, Bear and American Rivers*	Resource Extraction, outreach and education	

Lahontan Region – R6

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category I Priority Watersheds)*	Management Measures *(See Attachment 6)*	Watershed Restoration Action Strategy
R6 - 1	BMP Implementation and/or other implementation activities to address nonpoint sources of pollution including agricultural drainage, acid mine drainage, physical habitat alteration, channel stabilization, sediment control, hydrologic modification, dredging, silviculture practices, septic systems, marina and boating activities, urban runoff, livestock grazing, irrigation water management, and confined animal facilities.	Northern WMA*, Lake Tahoe WMA*, Carson-Walker WMA*, Mono-Owens WMA*, Mojave WMA, Antelope Valley/Other Southern WMA	Agriculture 1A-F Forestry 2A-K Urban 3.1-3.5 Marinas and Boating 4.1, 4.2 Hydromodification 5.1-5.3 Wetlands 6A-6C	
R6 - 2	Technology transfer of nonpoint source pollution control techniques	Northern WMA*, Lake Tahoe WMA*, Carson-Walker WMA*, Mono-Owens WMA*, Mojave WMA, Antelope Valley/Other Southern WMA	Agriculture 1G Forestry 2L Urban 3.6 Marinas and Boating 4.3 Hydromod 5.4 Wetlands 6.0D	
R6 - 3	Wetland/riparian restoration	Northern WMA*, Lake Tahoe WMA*, Carson-Walker WMA*, Mono-Owens WMA*, Mojave WMA*, Antelope Valley/Other Southern WMA	Hydromod. 5.1B Wetlands 6.0B	

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category I Priority Watersheds)*	Management Measures *(See Attachment 6)*	Watershed Restoration Action Strategy
R6 - 4	Habitat Restoration	Northern WMA*, Lake Tahoe WMA*, Carson-Walker WMA*, Mono-Owens WMA*, Mojave WMA, Antelope Valley/Other Southern WMA	Hydromod. 5.1B Wetlands 6.0B	
R6 - 5	Watershed Restoration	Northern WMA*, Lake Tahoe WMA*, Carson-Walker WMA*, Mono-Owens WMA*, Mojave WMA, Antelope Valley/Other Southern WMA	Hydromod. 5.1B Wetlands 6.0B	
R6 - 6	Habitat Improvement	Northern WMA*, Lake Tahoe WMA*, Carson-Walker WMA*, Mono-Owens WMA*, Mojave WMA, Antelope Valley/Other Southern WMA	Hydromod. 5.1B Wetlands 6.0B Urban 3.1A	
R6 - 7	Nonpoint source pollution prevention outreach, education and training	Northern WMA*, Lake Tahoe WMA*, Carson-Walker WMA*, Mono-Owens WMA*, Mojave WMA, Antelope Valley/Other Southern WMA	Agriculture 1G Forestry 2L Urban 3.6 Marinas and Boating 4.3 Hydromod 5.4 Wetlands 6.0D	
R6 - 8	Watershed Education	Northern WMA*, Lake Tahoe WMA*, Carson-Walker WMA*, Mono-Owens WMA*, Mojave WMA, Antelope Valley/Other Southern WMA	Agriculture 1G Forestry 2L Urban 3.6 Marinas and Boating 4.3 Hydromod 5.4 Wetlands 6.0D	

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category I Priority Watersheds)*	Management Measures *(See Attachment 6)*	Watershed Restoration Action Strategy
R6 - 9	Citizen Monitoring	Northern WMA*, Lake Tahoe WMA*, Carson-Walker WMA*, Mono-Owens WMA*, Mojave WMA, Antelope Valley/Other Southern WMA	Agriculture 1G Forestry 2L Urban 3.6 Marinas and Boating 4.3 Hydromod 5.4 Wetlands 6.0D	
R6 - 10	Sediment/nutrient reduction/erosion control	Northern WMA*, Lake Tahoe WMA*, Carson-Walker WMA*, Mono-Owens WMA*, Mojave WMA, Antelope Valley/Other Southern WMA	Agriculture 1A Forestry 2H Urban 3.1,3.2,3.3,3.5F, Boating and Marinas 4.1D, 4.2G Hydromod. 5.1A, 5.2A,C, 5.3A	
R6 - 11	Development of predictive or calibration models for TMDLs	Northern WMA*, Lake Tahoe WMA*, Carson-Walker WMA*, Mono-Owens WMA*		
R6 - 12	Implementation of a RWQCB approved TMDL	Northern WMA*, Lake Tahoe WMA*, Carson-Walker WMA*		
R6 - 13	Water quality monitoring to determine the effectiveness of BMPs or protective measures that are being implemented	Northern WMA*, Lake Tahoe WMA*, Carson-Walker WMA*, Mono-Owens WMA*, Mojave WMA, Antelope Valley/Other Southern WMA	Agriculture 1.0 Forestry 2.0 Urban 3.0 Boating and Marinas 4.0 Hydromod. 5.0 Wetlands 6.0	

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category 1 Priority Watersheds)*	Management Measures *(See Attachment 6)*	Watershed Restoration Action Strategy
R6 - 14	Ground water protection from source of nonpoint source pollution	Northern WMA*, Lake Tahoe WMA*, Carson-Walker WMA*, Mono-Owens WMA*, Mojave WMA, Antelope Valley/Other Southern WMA	Agriculture 1.0 Forestry 2.0 Urban 3.0 Boating and Marinas 4.0 Hydromod. 5.0 Wetlands 6.0	
R6 - 15	nonpoint source pollution prevention	Northern WMA*, Lake Tahoe WMA*, Carson-Walker WMA*, Mono-Owens WMA*, Mojave WMA, Antelope Valley/Other Southern WMA	Agriculture 1G Forestry 2L Urban 3.6 Marinas and Boating 4.3 Hydromod 5.4 Wetlands 6.0D	

Colorado River Basin Region – R7

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category I Priority Watersheds)*	Management Measures *(See Attachment 6)*	Watershed Restoration Action Strategy
R7 - 1	Sediment TMDL Demonstration Projects – could include projects that reduce inputs of sediment to receiving water or that treat surface waters for pollutant	Salton Sea Transboundary Watershed*	1A, 1F, 1G	Draft Sediment TMDL
R7 - 2	Farm Water Quality Planning and Implementation Courses/Software/ Videos – should include components that focus on current and future TMDL water quality issues; should include a reporting component, and a self-evaluation component (e.g., each event/component should include survey of participants)	Salton Sea Transboundary Watershed*	1A, 1B, 1C, 1D, 1F, 1G	Imperial County Farm Bureau Watershed Plan(s) – in progress
R7 - 3	Volunteer Monitoring Course/Kits to Assess BMP Efficacy - should include development of kits, education component, tracking and reporting component, and self-evaluation component	Salton Sea Transboundary Watershed*	1A, 1B, 1C, 1D, 1F, 1G	Imperial County Farm Bureau Watershed Plan(s) – in progress

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category I Priority Watersheds)*	Management Measures *(See Attachment 6)*	Watershed Restoration Action Strategy
R7 - 4	Irrigator Training – should include components that focus on sediment TMDL water quality issues	Salton Sea Transboundary Watershed*	1A, 1G	Imperial County Farm Bureau Watershed Plan(s) – in progress
R7 - 5	Implementation Education & Stakeholder Involvement – should include on-the-ground encouragement/ coordination of discharger/landowner NPS implementation with tracking and reporting (to the RWQCB) components	Salton Sea Transboundary Watershed*	1A, 1B, 1C, 1D, 1F, 1G	Imperial County Farm Bureau Watershed Plan(s) – in progress
R7 - 6	Wetlands Demonstration Projects – should focus on treatment of polluted agricultural drain water and/or New River water	Salton Sea Transboundary Watershed*	1A, 1C, 1G, 6C, 6D	Imperial County Farm Bureau Watershed Plan(s) – in progress
R7 - 7	Selenium Demonstration Projects – should include projects that reduce inputs of selenium to receiving water or that treat surface waters for pollutant	Salton Sea Transboundary Watershed*	1F, 1G	

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category 1 Priority Watersheds)*	Management Measures *(See Attachment 6)*	Watershed Restoration Action Strategy
R7 - 8	Nutrient Demonstration Projects – could include projects that reduce inputs of nutrients to receiving water or that treat surface waters for pollutant	Salton Sea Transboundary Watershed*	1C, 1F, 1G	
R7 - 9	Pesticide Demonstration Projects – could include projects that reduce inputs of pesticides to receiving water or that treat surface waters for pollutant	Salton Sea Transboundary Watershed*	1A, 1D, 1F, 1G	
R7 – 10	New River Dissolved Oxygen Improvement Projects – man-made structures to improve DO levels in the River	Salton Sea Transboundary Watershed*/ Imperial Hydrologic Unit /New River	3.1A, 3.3A	
R7 - 11	Septic Tank Education/Outreach	Salton Sea Transboundary Watershed*/Whitewater Hydrologic Unit	3.4B	
R7 - 12	Urban Nutrient Management	Salton Sea Transboundary Watershed*/Whitewater Hydrologic Unit	3.1A, 3.1C, 3,3A, 3.6A	

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category 1 Priority Watersheds)*	Management Measures *(See Attachment 6)*	Watershed Restoration Action Strategy
R7 - 13	TMDL Implementation Tracking System	Salton Sea Transboundary Watershed*/Imperial Hydrologic Unit		
R7 - 14	Geographical Information System for NPS Pollution Control	Salton Sea Transboundary Watershed*		
R7 - 15	Drain Sediment Management Control Project(s) – should include implementation of identified sediment management practices within agricultural drains	Salton Sea Transboundary Watershed*		

Santa Ana Region - R8

Project Number	Project Description	Geographic Area/Watershed (*denotes Category 1 Priority Watershed)	Management Measures *(see Attachment 6)*	Watershed Restoration Action Strategy
R8 – 1	Increase education/outreach to general public to reduce urban runoff	Regionwide	3.1A,B,C; 3.6A	
R8 - 2	Volunteer monitoring	Regionwide	3.6A	
R8 - 3	Reduce storm water runoff	Regionwide	3.1A,B,C; 3.6A	
R8 - 4	Arundo/Invasive species eradication	Regionwide		
R8 - 5	Wetlands creation, enhancement, and restoration	Regionwide	6A,B,C; 3.1A,B,C; 3.6A	
R8 - 6	Source analysis for sediment input to Big Bear Lake	Big Bear Lake*	3.1A,B,C; 3.6A	
R8 - 7	Source analysis for metals input to Big Bear Lake	Big Bear Lake*	3.1A,B,C; 3.6A	
R8 - 8	Streambank stabilization/protection Creek restoration	Big Bear Lake*	3.1A,B,C; 3.6A	
R8 - 9	Implement forest road BMPs, especially in ski areas	Big Bear Lake*	3.1A,B,C; 3.6A	
R8 - 10	Implement erosion control measures, especially in ski areas	Big Bear Lake*	3.1A,B,C; 3.6A	
R8 - 11	Reduce nutrients in urban runoff using filter strips, PAM or other methods	Big Bear Lake*	3.1A,B,C; 3.6A	
R8 - 12	Reduce snowmelt runoff	Big Bear Lake*	3.1A,B,C; 3.6A	
R8 - 13	Water storage basins, connections	Chino Basin*	3.1A,B,C	
R8 - 14	CAFO education/outreach project to dairymen to reduce NPS runoff	Chino Basin*	1B,G	

Project Number	Project Description	Geographic Area/Watershed (*denotes Category 1 Priority Watershed)	Management Measures *(see Attachment 6)*	Watershed Restoration Action Strategy
R8 - 15	Manure management programs for dairies	Chino Basin*	1B,G	
R8 - 16	Reduction of runoff from dairies	Chino Basin*	1A,B,G	
R8 - 17	Desalter project	Chino Basin*	1C,G	
R8 - 18	Implement nutrient monitoring program to evaluate compliance with nutrient TMDL	Newport Bay/San Diego Creek*	1C,G	TMDLs
R8 - 19	Reduce nutrients in agricultural and urban runoff using filter strips, PAM or other methods	Newport Bay/San Diego Creek*	1C	TMDLs
R8 - 20	Implement pathogen monitoring program to evaluate compliance with pathogen TMDL	Newport Bay/San Diego Creek*	1F,G	TMDLs
R8 - 21	Implement improvements to Vessel Waste Program	Newport Bay/San Diego Creek*	4.1G, 4.2F	TMDLS
R8 - 22	Reduce pesticides in agricultural and urban runoff	Newport Bay/San Diego Creek*	1D	TMDLs
R8 - 23	Mystic Lake restoration	Lake Elsinore/San Jacinto River*	6A,B,C	
R8 - 24	Lake Elsinore inlet restoration (including retention basins)	Lake Elsinore/San Jacinto River*	6A,B,C	
R8 - 25	In-lake aerator treatment	Lake Elsinore/San Jacinto River*	6A,B,C	
R8 - 26	Education/outreach to farmers using biosolids	Lower/Middle Santa Ana River*	1F,G	
R8 - 27	Reduce pathogens in runoff from agricultural fields amended with biosolids or manure	Lower/Middle Santa Ana River*	1F	
R8 - 28	Reduce incidence of beach closures	Lower/Middle Santa Ana River*	3.1A,B,C;3.6 A	
R8 - 29	Develop/Implement BMPs in Coastal Area to protect water quality	Lower/Middle Santa Ana River*	CCA	
R8 - 30	OSDS Evaluation	Lower/Middle Santa Ana River*	3.4B	

San Diego Region – R9

Project Number	Project Description	Geographic Area/Watershed (*denotes Category 1 Priority Watershed)	Management Measures *(see Attachment 6)*	Watershed Restoration Action Strategy
R9 - 1	Implement measures to reduce pollutants (including trash) in urban runoff	All watersheds in San Diego region	3.1, 3.2, 3.3, 3.4 3.5, 3.6	SDRWQCB watershed management chapter
R9 - 2	Implement watershed education, awareness, and training activities	All watersheds in San Diego region	1G, 3.6A, 4.3A, 5.4A, 5.4B, 6D	SDRWQCB watershed management chapter
R9 - 3	Implement measures to restore WARM, COLD, SAL, EST, MAR, WILD, and RARE beneficial uses	All watersheds in San Diego region	5.1B, 5.2C, 5.3A, 6B, 6D	SDRWQCB watershed management chapter
R9 - 4	Implement measures to control invasive non-native reparian plant species	All watersheds in San Diego region	1G, 6A, 6B, 6D	SDRWQCB watershed management chapter
R9 - 5	Implement measures to prevent introduction of invasive non-native marine plant and animal species	All watersheds in San Diego region	4.2C, 4.3A, 6A, 6B, 6D	SDRWQCB watershed management chapter
R9 - 6	Implement volunteer citizen monitoring	All watersheds in San Diego region	1G, 3.6A, 4.3A, 5.4, 6D	SDRWQCB watershed management chapter
R9 - 7	Implement measures to reduce discharges of pesticides / herbicides (particularly diazinon and chlorpyrifos) to watercourses	All watersheds in San Diego region	1D, 1F, 1G, 3.1, 3.2B, 3.3A, 3.5D, 3.6A	SDRWQCB watershed management chapter
R9 - 8	Implement measures to reduce toxicity from metals in storm water	All watersheds in San Diego region	3.1, 3.3, 3.5	SDRWQCB watershed management chapter

Project Number	Project Description	Geographic Area/Watershed (*denotes Category 1 Priority Watershed)	Management Measures *(see Attachment 6)*	Watershed Restoration Action Strategy
R9 - 9	Implement measures to minimize impacts to aquatic and riparian habitats from flood control measures	All watersheds in San Diego region	5.1A, 5.1B, 5.3A, 5.4A, 5.4B, 6A, 6B, 6D	SDRWQCB watershed management chapter
R9 - 10	Implement best management practices for horse manure management.	All watersheds in San Diego region	1B, 1G, 3.3A	SDRWQCB watershed management chapter
R9 - 11	Implement greenhouse irrigation return water recycling.	All watersheds in San Diego region	1F, 1G	SDRWQCB watershed management chapter
R - 12	Implement measures to pevent and control erosion and sedimentation.	All watersheds in San Diego region	1A, 1G, 3.2A, 3.5C, 3.6A	SDRWQCB watershed management chapter
R9 - 13	Implement measures to reduce nutrient loadings	All watersheds in San Diego region	1F, 1C, 1G, 3.4B	SDRWQCB watershed management chapter
R9 - 14	Implement measures to restore wetlands	All watersheds in San Diego region	5.1B, 6B, 6D	SDRWQCB watershed management chapter
R9 - 15	Implement measures to reduce pollutant discharges from marinas	All watersheds in San Diego region	4.2A, 4.2C, 4.2D, 4.2E, 4.2F, 4.3A	SDRWQCB watershed management chapter
R9 - 16	Implement measures to reduce contamination indicated by elevated coliform counts	All watersheds in San Diego region	1B, 3.1, 3.3, 3.4, 4.2F	SDRWQCB watershed management chapter
R9 - 17	Implement pollution prevention (as opposed to pollution control) measures	All watersheds in San Diego region	1G, 3.6A, 4.3A, 5.4A	SDRWQCB watershed management chapter

Project Number	Project Description	Geographic Area/Watershed (*denotes Category 1 Priority Watershed)	Management Measures *(see Attachment 6)*	Watershed Restoration Action Strategy
R9 - 18	Implement measures to reduce pesticide / herbicide loading to water courses in San Juan Hydrologic Unit (901)	San Juan Creek WMA	SDRWQCB watershed management chapter	SDRWQCB watershed management chapter
R9 - 19	Implement measure to reduce contamination indicated by elevated coliform counts in / from Aliso Creek Watershed	San Juan Creek WMA / Pacific Ocean WMA	3.1, 3.3	SDRWQCB watershed management chapter
R9 - 20	Implement measures to restore habitat for fish and fisheries in the San Mateo Canyon Hydrologic Area (HA 901.40).	San Juan Creek WMA	5.1B, 6B, 6D	SDRWQCB watershed management chapter
R9 - 21	Implement measures to improve and enhance water quality and habitat for steelhead in the San Mateo Canyon Hydrologic Area (HA 901.40).	San Juan Creek WMA	5.1B, 6B, 6D	SDRWQCB watershed management chapter

Project Number	Project Description	Geographic Area/Watershed (*denotes Category 1 Priority Watershed)	Management Measures *(see Attachment 6)*	Watershed Restoration Action Strategy
R9 - 22	Implement measures to pevent and control erosion and sedimentation in the San Mateo Canyon Hydrologic Area (HA 901.40).	San Juan Creek WMA	1A, 1G, 3.2A, 3.5C, 3.6A	SDRWQCB watershed management chapter
R9 - 23	Implement measures to control invasive non-native fish	San Juan Creek WMA	6A, 6B, 6D	SDRWQCB watershed management chapter
R9 - 24	Implement measures to store native riparian vegetation and control invasive non-native plants	San Juan Creek WMA	5.1B, 6B, 6D	SDRWQCB watershed management chapter
R9 - 25	Implement measures to reduce nutrient loading to Rainbow Creek	Santa Margarita River WMA	1C, 1F, 1G, 3.4	SDRWQCB watershed management chapter
R9 - 26	Implement measures to reduce pesticides / herbicides in irrigation return water in Rainbow Creek watershed	Santa Margarita River WMA	1D, 1F, 1G	SDRWQCB watershed management chapter
R9 - 27	Implement measures to reduce nutrient loading from agriculture in the Santa Margarita Hydrologic Unit (HU 902)	Santa Margarita River WMA	1C, 1F, 1G	SDRWQCB watershed management chapter

R9 - 28	Implement demonstration project converting a grove from sprinkler to drip irrigation to reduce nutrient discharges to Rainbow Creek.	Santa Margarita River WMA	1C, 1F, 1G	SDRWQCB watershed management chapter
R9 - 29	Implement best management practices to reduce nutrient discharges from groves to tributaries of Rainbow Creek.	Santa Margarita River WMA	1C, 1F, 1G	SDRWQCB watershed management chapter
R9 - 30	Implement wetland habitat restoration to restore natural water purification functions in Buena Vista Creek through removal of concrete and other hardscaping and re-establishment of native wetland vegetation.	Carlsbad WMA	5.1B, 6B, 6D	SDRWQCB watershed management chapter
R9 - 31	Implement wetland habitat restoration to restore natural water purification functions in Lower Escondido Creek through removal of concrete and other hardscaping and re-establishment of native wetland vegetation.	Carlsbad WMA	5.1B, 6B, 6D	SDRWQCB watershed management chapter

Project Number	Project Description	Geographic Area/Watershed (*denotes Category 1 Priority Watershed)	Management Measures *(see Attachment 6)*	Watershed Restoration Action Strategy
R9 - 32	Implement wetland habitat restoration to restore natural water purification functions in Rose Creek through removal of concrete and other hardscaping and re-establishment of native wetland vegetation.	Mission Bay WMA	5.1B, 6B, 6D	SDRWQCB watershed management chapter
R9 - 33	Implement wetland habitat restoration to restore natural water purification functions in Forester Creek through removal of concrete and other hardscaping and re-establishment of native wetland vegetation.	San Diego River WMA	5.1B, 6B, 6D	SDRWQCB watershed management chapter
R9 - 34	Implement wetland habitat restoration to restore natural water purification functions in Lower Chollas Creek through removal of concrete and other hardscaping and re-establishment of native wetland vegetation.	San Diego Bay WMA	5.1B, 6B, 6D	SDRWQCB watershed management chapter

Project Number	Project Description	Geographic Area/Watershed (*denotes Category 1 Priority Watershed)	Management Measures *(see Attachment 6)*	Watershed Restoration Action Strategy
R9 - 35	Implement measures to restore riparian habitat in Sweetwater River watershed	San Diego Bay WMA	5.1B, 6B, 6D	SDRWQCB watershed management chapter
R9 - 36	Implement measures to reduce number and volume of petroleum spills to San Diego Bay	San Diego Bay WMA	3.5F, 3.6A, 4.2D, 4.3A	Comprehensive Management Plan for San Diego Bay and SDRWQCB watershed management chapter
R9 - 37	Implement measures to reduce pollution from petroleum byproducts	San Diego Bay WMA	3.1, 3.3, 3.5. 3.6, 4.2D, 4.3A	Comprehensive Management Plan for San Diego Bay and SDRWQCB watershed management chapter
R9 - 38	Implement measures to prevent animal waste from entering watercourses	Tijuana River WMA	1B, 1G, 3.3A	SDRWQCB watershed management chapter

State Water Resources Control Board

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category 1 Priority Watersheds)*	Management Measures *(see Attachment 6)*	Watershed Restoration Action Strategy
SWRCB - 1	Development of a technical guidance manual for implementation of California's management measures and associated management practices (Guidance Manual). The Guidance Manual will be State's equivalent of the USEPA's *Guidance Specifying Management Measures for Sources of Nonpoint Source Pollution Control.*	Statewide	All	Not applicable
SWRCB - 2	Development of a database for geographically tracking the implementation of management measures and management practices. Database development will consider the following: (1) integration with other databases and/or geographic information systems used by the SWRCB and RWQCBs in nonpoint source activities; (2) provision for training and subsequent consultation with SWRCB and RWQCB staff in use of the database; and (3) accessibility by the SWRCB and RWQCBs for updating information via the Internet and by the public for downloading information from the Internet.	Statewide	All	Not applicable
SWRCB - 3	Technical assistance for nonpoint source practitioners and others to promote implementation of practices to control and/or prevent nonpoint source pollution, particularly involving agriculture, urban runoff, and hydromodification.	Statewide	All management measures with emphasis on those associated with agriculture, urban runoff, and hydromodification	Not applicable

SWRCB - 4	Conduct activities to increase public awareness statewide of nonpoint source pollution and the related solutions available to protect and enhance water quality.	Statewide	All	Not applicable

ATTACHMENT 5 - CALIFORNIA UNIFIED WATERSHED ASSESSMENT (UWA)
February 2000 update

CATEGORY I (IMPAIRED) PRIORITY WATERSHEDS

Note: Watersheds listed in bold below have been upgraded to priorities since the 1998 UWA.

Catalog Number	Region*	Watershed Name
16050101	6	Lake Tahoe
16050102	6	Truckee
16050201	6	Upper Carson
16050301	6	East Walker
16050302	**6**	**West Walker**
18010102	1	Mad-Redwood
18010105	1	Lower Eel
18010106	1	South Fork Eel
18010107	**1**	**Mattole**
18010108	1	Big-Navarro-Garcia
18010109	1	Gualala-Salmon
18010110	1	Russian
18010111	1	Bodega Bay
18010207	1	Shasta
18010209	1	Lower Klamath
18010210	**1**	**Salmon**
18010211	1	Trinity
18010212	1	South Fork Trinity
18020001	**5**	**Goose Lake**
18020002	5	Upper Pit
18020003	**5**	**Lower Pit**
18020101	5	Sacramento-Lower Cow-Lower Clear
18020102	**5**	**Lower Cottonwood**
18020105	**5**	**Lower Butte**
18020107	5	Lower Yuba
18020109	5	Lower Sacramento
18020110	5	Lower Cache
18020111	5	Lower American
18020113	**5**	**Cottonwood Headwaters**
18020114	**5**	**Upper Elder-Upper Thomes**
18020115	**5**	**Upper Stony**
18020116	5	Upper Cache
18020118	**5**	**Upper Cow-Battle**
18020119	5	Mill-Big Chico
18020120	**5**	**Upper Butte**
18020121	**5**	**North Fork Feather**
18020122	**5**	**East Branch North Fork Feather**
18020123	**5**	**Middle Fork Feather**

18020125	5	Upper Yuba
18020126	5	Upper Bear
18020127	5	Upper Coon-Upper Auburn
18020128	5	North Fork American
18030006	5	Upper Tule
18030012a	**5**	**Tulare-Buena Vista Lakes**
18030012b	**5**	**Tulare-Buena Vista Lakes**
18040001	5	Middle San Joaquin- Lower Chowchilla
18040002	5	Middle San Joaquin- Lower Merced--Lower Stanislaus
18040003	5	San Joaquin Delta
18040005	5	Lower Cosumnes-Lower Mokelumne
18040006	5	Upper San Joaquin
18040013	5	Upper Cosumnes
18040014	5	Panoche-San Luis Reservoir
18050001	2	Suisun Bay
18050002	2	San Pablo Bay
18050003	2	Coyote
18050004	2	San Francisco Bay
18050005	2	Tomales-Drakes Bay
18050006	2	San Francisco Coastal South
18060001	3	San Lorenzo-Soquel
18060002	3	Pajaro
18060005	3	Salinas
18060006	3	Central Coastal
18060008	3	Santa Maria
18060010	3	Santa Ynez
18060011	3	Alisal-Elkhorn Slough
18060012	3	Carmel
18060013	3	Santa Barbara Coastal
18070102	4	Santa Clara
18070103	4	Calleguas
18070104	4	Santa Monica Bay
18070105	4	Los Angeles
18070106	4 & 8	San Gabriel
18070201	**8**	**Seal Beach**
18070202	**8**	**San Jacinto**
18070203	8	Santa Ana
18070204	8	Newport Bay
18070301	**9**	**Aliso-San Onofre**
18070302	9	Santa Margarita
18070303	9	San Luis Rey- Escondido
18070304	9	San Diego
18070305	**9**	**Cottonwood-Tijuana**
18080003	6	Honey-Eagle Lake
18090101	6	Mono Lake

18090102	6	Crowley Lake
18090103	6	Owens Lake
18100200	7	Salton Sea

CATEGORY I (IMPAIRED) NON-PRIORITY WATERSHEDS

Catalog Number	Region	Watershed Name
15030104	7	Imperial Reservoir
17100311	1	Illinois
17100312	1	Chetco
18010103	1	Upper Eel
18010104	1	Middle Fork Eel
18010204	1	Lost
18010205	1	Butte
18010206	1	Upper Klamath
18010208	1	Scott
18020004	5	McCloud
18020005	5	Sacramento Headwaters
18020103	5	Sacramento-Lower Thomes
18020104	5	Sacramento-Stone Corral
18020106	5	Lower Feather
18020108	5	Lower Bear
18020112	5	Sacramento-Upper Clear
18020117	5	Upper Putah
18020124	5	Honcut Headwaters
18020129	5	South Fork American
18030001	5	Upper Kern
18030002	5	South Fork Kern
18030003	5	Middle Kern-Upper Tehachapi-Grapevine
18030004	5	Upper Poso
18030005	5	Upper Deer-Upper White
18030007	5	Upper Kaweah
18030008	5	Mill
18030009	5	Upper Dry
18030010	5	Upper King
18030011	5	Upper Los Gatos-Avenal
18030012c	5	Tulare-Buena Vista Lakes
18040004	5	Lower Calaveras-Mormon Slough
18040007	5	Upper Chowchilla-Upper Fresno
18040008	5	Upper Merced
18040009	5	Upper Tuolumne
18040010	5	Upper Stanislaus
18040011	5	Upper Calaveras
18040012	5	Upper Mokelumne
18060003	3	Carrizo Plain

18060004	3	Estrella
18060007	3	Cuyama
18060009	3	San Antonio
18070101	4	Ventura
18080001	6	Surprise Valley
18090201	6	Eureka-Saline Valleys
18090202	6	Upper Amargosa
18090205	6	Indian Wells-Searles Valleys
18090206	6	Antelope-Fremont Valleys
18090207	6	Coyote-Cuddeback Lakes
18090208	6	Mojave (northern)
18100100	7	Southern Mojave

CATEGORY II WATERSHEDS

Catalog Number	Region	Watershed Name
15030101	7	Havasu-Mojave Lakes
15030107	7	Lower Colorado
16040203	6	Smoke Creek Desert
16040204	6	Massacre Lake
17120007	6	Warner Lakes
18080002	6	Madeline Plains

CATEGORY III WATERSHEDS

Catalog Number	Region	Watershed Name
15030102	7	Piute Wash
16060010	6	Fish Lake-Soda Spring Valley
16060015	6	Ivanpah-Pahrump Valleys
17100309	1	Applegate
18010101	1	Smith River
18090203	6	Death Valley-Lower Amargosa
18090204	6	Panamint Valley

* Regional Water Quality Control Boards (Regions) are numbered 1-9 as follows: 1. North Coast; 2. San Francisco Bay; 3. Central Coast; 4. Los Angeles; 5. Central Valley; 6. Lahontan; 7. Colorado River Basin; 8. Santa Ana; 9. San Diego

California Management Measures for Polluted Runoff

Note: Table 6-1 summarizes the management measures presented in the *Plan for California's Nonpoint Source Control Program* (Program Plan). A more detailed description of the individual management measures is provided in Volume II of the Program Plan titled *California's Management Measures for Polluted Runoff* (CAMMPR). CAMMPR is available on the SWRCB's website at http://www.swrcb.ca.gov/nps/html/cammpr.html .

TABLE 6-1. SUMMARY OF MANAGEMENT MEASURES FROM THE *PLAN FOR CALIFORNIA'S NONPOINT SOURCE POLLUTION CONTROL PROGRAM*

MANAGEMENT MEASURES
1. Agriculture
A. Erosion and Sediment Control
B. Confined Animal Facilities Wastewater and Runoff
C. Nutrient Management
D. Pesticide Management
E. Grazing Management
F. Irrigation Water Management
G. Education/Outreach
2. Forestry (Silviculture)
A. Preharvest
B. Streamside Management Areas
C. Road Construction/Reconstruction
D. Road Management
E. Timber Harvesting
F. Site Preparation and Forest Regeneration
G. Fire Management
H. Revegetation of Disturbed Areas
I. Forest Chemical Management
J. Wetlands Forest
K. Postharvest Evaluation
L. Education/Outreach
3. Urban Areas
3.1 Runoff from Developing Areas
A. Watershed Protection
B. Site Development
C. New Development
3.2 Runoff from Construction Sites
A. Construction Site Erosion/Sediment Control

B. Construction Site Chemical Control
3.3 Runoff from Existing Development
A. Existing Development
3.4 On-site Disposal Systems
A. New On-site Disposal
B. Operating On-site Disposal Systems
3.5 Transportation Development: Roads, Highways, and Bridges
A. Planning, Siting, and Developing Roads and Highways
B. Bridges
C. Construction Projects
D. Construction Site Chemical Control
E. Operation and Maintenance
F. Road, Highway, and Bridge Runoff Systems
3.6 Education/Outreach
A. Pollution Prevention/Education: General Sources
4. Marinas and Recreational Boating
4.1 Assessment, Siting, and Design
A. Water Quality Assessment
B. Marina Flushing
C. Habitat Assessment
D. Shoreline Stabilization
E. Storm Water Runoff
F. Fuel Station Design
G. Sewage Facilities
H. Waste Management Facilities
4.2 Operations and Maintenance
A. Solid Waste Control
B. Fish Waste Control
C. Liquid Material Control
D. Petroleum Control
E. Boat Cleaning and Maintenance
F. Maintenance of Sewage Facilities
G. Boat Operation
4.3 Education/Outreach
A. Public Education
5. Hydromodification
5.1 Channelization and Channel Modification
A. Physical and Chemical Characteristics of Surface Waters
B. Instream and Riparian Habitat Restoration
5.2 Dams
A. Erosion and Sediment Control
B. Chemical and Pollutant Control
C. Protection of Surface Water Quality and Instream and Riparian Habitat

5.3 Streambank and Shoreline Erosion
A. Eroding Streambanks and Shorelines
5.4 Education/Outreach
A. Educational Programs
6. Wetlands, Riparian Areas and Vegetated Treatment Systems
A. Protection of Wetlands and Riparian Areas
B. Restoration of Wetlands and Riparian Areas
C. Vegetated Treatment Systems
D. Education/Outreach

1. Agriculture

The SWRCB, CCC, and other State agencies have identified seven MMs to address agricultural NPSs of pollution that affect State waters. The agricultural MMs include practices and plans installed under various NPS programs in California, including systems of practices commonly used and recommended by the USDA as components of RMS, WQMPs, and Agricultural Waste Management Systems. These RMSs are planned by individual farmers and ranchers using an objective-driven planning process outlined in the NRCS National Planning Procedures Handbook. The RMSs are designed to achieve sustainable use of the different natural resource areas—soil, water, air, plants, animals, and human considerations.

California's MMs to address agricultural sources of NPS pollution in California:

- 1A. Erosion and Sediment Control
- 1B. Facility Wastewater and Runoff from Confined Animal Facilities
- 1C. Nutrient Management
- 1D. Pesticide Management
- 1E. Grazing Management
- 1F. Irrigation Water Management
- 1G. Education/Outreach

According to USEPA (1993), agriculture contributes more than half of the pollution entering the Nation's water bodies; recent studies have identified it as the greatest source of water pollution in the United States. The primary agricultural NPS pollutants are nutrients, sediment, animal wastes, pesticides, and salts. Agricultural activities may also affect habitat through physical disturbances caused by livestock or equipment or through the management of water.

Management Measures:

Erosion and Sediment Control. MM 1A addresses NPS problems associated with soil erosion and sedimentation. Where erosion and sedimentation from agricultural lands affect coastal waters and/or State's inland water bodies, landowners shall design and install or shall apply a combination of practices to reduce solids and associated pollutants in runoff during all but the larger storms. Alternatively, landowners may apply the erosion component of an RMS as defined in the NRCS FOTG. The NRCS FOTG contains standards and specifications for installing these practices.

Facility Wastewater and Runoff from Confined Animal Facilities. Pursuant to MM 1B, facility wastewater and contaminated runoff from confined animal facilities must be contained at all times. Storage facilities should be of adequate capacity to allow for proper wastewater use and should be constructed so they prevent seepage to ground water, and stored runoff and accumulated solids from the facility shall be managed through a waste use system that is consistent with MM 1C or shall be removed from the site.

Nutrient Management. MM 1C addresses the development and implementation of comprehensive nutrient management plans for areas where nutrient runoff is a problem affecting coastal waters and/or water bodies listed as impaired by nutrients. Such plans would include: (1) a plant tissue analysis to determine crop nutrient needs; (2) crop nutrient budget; (3) identification of the types, amounts, and timing of nutrients necessary to produce a crop based on realistic crop yield expectations; (4) identification of hazards to the site and adjacent environment; (5) soil sampling and tests to determine crop nutrient needs; and (6) proper calibration of nutrient equipment. When manure from confined animal facilities is to be used as a soil amendment and/or is disposed of on land, the plan shall discuss steps to assure that subsequent irrigation of that land does not leach excess nutrients to surface or ground water.

Pesticide Management. Implementation of MM 1D is intended to reduce contamination of surface water and ground water from pesticides. Implementation of this measure will primarily occur through cooperation with the CDPR as provided in a MAA with the SWRCB. Elements of this measure include: (1) development and adoption of reduced risk pest management strategies (including reductions in pesticide use); (2) evaluation of pest, crop, and field factors; (3) use of Integrated Pest Management (IPM); (4) consideration of environmental impacts in choice of pesticides; (5) calibration of equipment; and (6) use of anti-backflow devices. IPM is a key component of pest control. IPM strategies include evaluating pest problems in relation to cropping history and previous pest control measures and applying pesticides only when an economic benefit will be achieved. When used, pesticides should be selected based on their effectiveness to control target pests and environmental impacts such as their persistence, toxicity, and leaching potential.

Grazing Management. MM 1E is intended to protect sensitive areas (including streambanks, lakes, wetlands, estuaries, and riparian zones) by reducing direct loadings of animal wastes and sediment. This may include restricting or rotationally grazing livestock in sensitive areas by providing fencing, livestock stream crossings, and locating salt, shade, and alternative drinking sources away from sensitive areas. Upland erosion can be reduced by, among other methods: (1) maintaining the land consistent with the California Rangeland WQMP or BLM and Forest Service activity plans or (2) applying the range and pasture components of an RMS (NRCS FOTG). This may include prescribed grazing, seeding, gully erosion control, such as grade stabilization structures and ponds, and other critical area treatment.

Irrigation Water Management. MM 1F promotes effective irrigation while reducing pollutant delivery to surface and ground waters. Pursuant to this measure, irrigation water would be applied uniformly based on an accurate measurement of crop water needs and the volume of irrigation water applied, considering limitations raised by such issues as water rights, pollutant concentrations, water delivery restrictions, salt control, wetland, water supply, and frost/freeze temperature management. Additional precautions would apply when chemicals are applied through irrigation.

Education/Outreach. The goals of MM 1G are to implement pollution prevention and education programs to reduce NPS pollutants generated from the following activities where applicable:

1. Activities that cause erosion and loss of sediment on agricultural land and land that is converted from other land uses to agricultural land;
2. Activities that cause discharge from confined animal facilities to surface waters;
3. Activities that cause excess delivery of nutrients and/or leaching of nutrients;
4. Activities that cause contamination of surface water and ground water from pesticides;
5. Grazing activities that cause physical disturbance to sensitive areas and the discharge of sediment, animal waste, nutrients, and chemicals to surface waters;
6. Irrigation activities that cause NPS pollution of surface and ground waters.

2. Forestry

There are 12 MMs to address various phases of forestry operations relevant to controlling NPSs of pollution that affect State waters. The forestry MMs are for the most part a system of practices used and recommended by the BOF and CDF in rules or guidance.

Silviculture contributes pollution to 17 percent of the polluted rivers and 21 percent of the polluted lakes in California (SWRCB, 1996). Without adequate controls, forestry operations may degrade the characteristics of waters that receive drainage from forest lands. For example (1) sediment concentrations can increase due to accelerated erosion, (2) water temperatures can increase due to removal of over-story riparian shade, (3) dissolved oxygen can be depleted due to the accumulation of slash and other organic debris, and (4) concentrations of organic and inorganic chemicals can increase due to harvesting and fertilizers and pesticides.

California's MMs to address silvicultural sources of nonpoint pollution:

- 2A. Preharvest Planning
- 2B. Streamside Management Areas
- 2C. Road Construction/Reconstruction
- 2D. Road Management
- 2E. Timber Harvesting
- 2F. Site Preparation/Forest Regeneration
- 2G. Fire Management
- 2H. Revegetation of Disturbed Areas
- 2I. Forest Chemical Management
- 2J. Wetlands Forest
- 2K. Postharvest Evaluation
- 2L. Education/Outreach

Management Measures:

Preharvest Planning. Silvicultural activities shall be planned to reduce potential delivery of pollutants to surface waters. Components of MM 2A address aspects of forestry operations, including: the timing, location, and design of harvesting and road construction; site preparation; identification of sensitive or high-erosion risk areas; and the potential for cumulative water quality impacts.

Streamside Management Areas (SMAs). SMAs protect against soil disturbance and reduce sediment and nutrient delivery to waters from upland activities. MM 2B is intended to safeguard vegetated buffer areas along surface waters to protect the water quality of adjacent streams.

Road Construction/Reconstruction. MM 2C requires that road construction/reconstruction shall be conducted so as to reduce sediment generation and delivery. This can be accomplished by following, among other means, preharvest plan layouts and designs for road systems, incorporating adequate drainage structures, properly installing stream crossings, avoiding road construction in SMAs, removing debris from streams, and stabilizing areas of disturbed soil such as road fills.

Road Management. MM 2D describes how to manage roads to prevent sedimentation, minimize erosion, maintain stability, and reduce the risk that drainage structures and stream crossings will fail or become less effective. Components of this measure include inspections and maintenance actions to prevent erosion of road surfaces and to ensure the effectiveness of stream-crossing structures. The measure also addresses appropriate methods for closing roads that are no longer in use.

Timber Harvesting. MM 2E addresses skid trail location and drainage, management of debris and petroleum, and proper harvesting in SMAs. Timber harvesting practices that protect water quality and soil productivity also have economic benefits by reducing the length of roads and skid trails, reducing equipment and road maintenance costs, and providing better road protection.

Site Preparation and Forest Regeneration. Impacts of mechanical site preparation and regeneration operations—particularly in areas that have steep slopes or highly erodible soils or where the site is located in close proximity to a water body—can be reduced by confining runoff on site. MM 2F addresses keeping slash material out of drainageways, operating machinery on contours, timing of activities, and protecting ground cover in ephemeral drainage areas and SMAs. Careful regeneration of harvested forest lands is important in protecting water quality from disturbed soils.

Fire Management. MM 2G requires that prescribed fire practices for site preparation and methods to suppress wildfires should be conducted as feasible in a manner that limits loss of soil organic matter and litter and that reduces the potential for runoff and erosion. Prescribed fires on steep slopes or adjacent to streams and that remove forest litter down to mineral soil are most likely to impact water quality.

Revegetation of Disturbed Areas. MM 2H addresses the rapid revegetation of areas disturbed during timber harvesting and road construction—particularly areas within harvest units or road systems where mineral soil is exposed or agitated (e.g., road cuts, fill slopes, landing surfaces, cable corridors, or skid trails) with special priority for SMAs and steep slopes near drainageways.

Forest Chemical Management. Application of pesticides, fertilizers, and other chemicals used in forest management should not lead to surface water contamination. Pesticides must be properly mixed, transported, loaded, and applied; and their containers must be disposed of properly. Fertilizers must also be properly handled and applied since they also may be toxic depending on concentration and exposure. Components of MM 2I include applications by skilled workers according to label instructions, careful prescription of the type and amount of chemical to be applied, use of buffer areas for surface waters to prevent direct application or deposition, and spill contingency planning.

Wetland Forest Management. Forested wetlands provide many beneficial water quality functions and provide habitat for aquatic life. Under MM 2J, activities in wetland forests shall be conducted to protect the aquatic functions of forested wetlands.

Postharvest Evaluation. The goals of MM 2K are to incorporate postharvest monitoring, including: (a) implementation monitoring to determine if the operation was conducted according to specifications and (b) effectiveness monitoring after at least one winter period to determine if the specified operation prevented or minimized discharges.

Education/Outreach. The goals of MM 2L are to implement pollution prevention and education programs to reduce NPS pollutants generated from applicable silvicultural activities.

3. Urban Areas

The SWRCB, CCC, and other State agencies have identified 15 MMs to address urban NPSs of pollution that affect State waters. With approximately 80 percent of the nation's population living in coastal areas, controlling polluted runoff in urban areas is a challenge. Negative impacts of urbanization on coastal and estuarine waters are well documented in a number of sources, including California's CWA section 305(b) and section 319 reports and the Nationwide Urban Runoff Program.

Major pollutants found in runoff from urban areas include sediment, nutrients, oxygen-demanding substances, road salts, heavy metals, petroleum hydrocarbons, pathogenic bacteria, and viruses. Suspended sediments constitute the largest mass of pollutant loadings to receiving waters from urban areas. Construction is a major source of sediment erosion. Petroleum hydrocarbons result mostly from automobile sources. Nutrient and bacterial sources include garden fertilizers, leaves, grass clippings, pet wastes, and faulty septic tanks. As population densities increase, a corresponding increase occurs in pollutant loadings generated from human activities. Many of these pollutants enter surface waters via runoff without undergoing treatment.

Urban runoff management requires that several objectives be pursued simultaneously. These objectives include the following (American Public Works Association, 1981):

- Protection and restoration of surface waters by the minimization of pollutant loadings and negative impacts resulting from urbanization;
- Protection of environmental quality and social well-being;
- Protection of natural resources, e.g., wetlands and other important aquatic and terrestrial ecosystems;
- Minimization of soil erosion and sedimentation problems;
- Maintenance of the predevelopment hydrologic conditions;
- Protection of ground water resources;
- Control and management of runoff to reduce or prevent flooding; and
- Management of aquatic and riparian resources for active and passive.

California's MMs to address urban sources of nonpoint pollution:

- 3.1 Runoff from Developing Areas
  - A. Watershed Protection
  - B. Site Development
  - C. New Development
- 3.2 Runoff from Construction Sites
  - A. Construction Site Erosion and Sediment Control
  - B. Construction Site Chemical Control
- 3.3 Runoff from Existing Development
  - A. Existing Development
- 3.4 On-site Disposal Systems (OSDSs)
  - A. New OSDSs
  - B. Operating OSDSs
- 3.5 Transportation Development (Roads, Highways, and Bridges)
  - A. Planning, Siting, and Developing Roads and Highways
  - B. Bridges
  - C. Construction Projects
  - D. Chemical Control
  - E. Operation and Maintenance
  - F. Road, Highway, and Bridge Runoff Systems
- 3.6 Education/Outreach
  - A. Pollution Prevention/Education: General Sources

Management Measures:

The control of urban NPS pollution requires the use of two primary strategies: (1) the prevention of pollutant loadings and (2) the treatment of unavoidable loadings. California's urban MMs are organized to parallel the land use development process in order to address the prevention and treatment of NPS pollution loadings during all phases of urbanization. This strategy relies primarily on the watershed approach, which focuses on pollution prevention and source reduction practices. Emphasizing pollution prevention and source reduction practices over treatment practices is favored because conducting education practices and incorporating pollution prevention practices into project planning and design activities are generally more effective, require less maintenance, and are more cost-effective in the long term than treatment strategies. Treatment strategies should only be used to address unavoidable loadings or where they are truly cost-effective.

The major opportunities to control NPS loadings occur during the following three stages of development: (1) the siting and design phase, (2) the construction phase, and (3) the post-development phase. Before development occurs, land in a watershed is available for a number of pollution prevention and treatment options, such as setbacks, buffers, or open space requirements, as well as wet ponds or constructed urban runoff wetlands that can provide treatment of the inevitable runoff and associated pollutants. In addition, siting requirements and restrictions and other land use ordinances, which can be highly effective, are more easily implemented during this period. After development occurs, these options may no longer be practicable or cost-effective. MMs 3.1A through 3.1C address the strategies and practices that can be used during the initial phase of the urbanization process.

The control of construction-related sediment loadings is critical to maintaining water quality. The implementation of proper erosion and sediment control practices during the construction stage can significantly reduce sediment loadings to surface waters. MMs 3.2A and 3.2B address construction-related practices.

After development has occurred, lack of available land severely limits the implementation of cost-effective treatment options. MM 3.6A focuses on improving controls for existing surface water runoff through pollution prevention to mitigate NPSs of pollution generated from on-going domestic and commercial activities.

4: Marinas and Recreational Boating Management Measures[24]

Recreational boating and marinas are increasingly popular uses of coastal areas and inland surface water bodies (e.g., lakes and delta). And, they are an important means of public access, and California must balance the need for protecting the environment and the need to provide adequate public access (USEPA, 1993). Because marinas and boats are located at the water's edge, pollutants generated from these sources are less likely to be buffered or filtered by natural processes. When boating and adjunct activities (e.g., marinas and boat maintenance areas) are poorly planned or managed, they may pose a threat to water quality and the health of aquatic systems and may pose other environmental hazards. Sources of pollution associated with marinas and boating include:

- Poorly flushed waterways;
- Pollutants discharged from boats (recreational boats, commercial boats, and "live-aboards");
- Pollutants carried in storm water runoff;
- Physical alteration of wetlands and of shellfish/ other benthic communities during construction of marinas, ramps, and related facilities;
- Pollutants generated from boat maintenance activities on land and in the water.

California's marina and recreational boating MMs:

4.1 Assessment, Siting and Design
- A. Water Quality Assessment
- B. Marina Flushing
- C. Habitat Assessment
- D. Shoreline Stabilization
- E. Storm Water Runoff
- F. Fueling Station Design
- G. Sewage Facilities
- H. Waste Management Facilities

4.2 Operation and Maintenance
- A. Solid Waste Control
- B. Fish Waste Control
- C. Liquid Material Control
- D. Petroleum Control
- E. Boat Cleaning and Maintenance
- F. Maintenance of Sewage Facilities
- G. Boat Operation

4.3 Education/Outreach
- A. Public Education

There are 16 MMs to address marina and boating sources of nonpoint pollution. Effective implementation of these MMs can (1) avoid impacts associated with siting marinas and boat maintenance areas, (2) ensure the best available design and construction practices (for new and expanding facilities), (3) ensure appropriate operation and maintenance practices to prevent and/or reduce the delivery of NPS pollutants to State waters, and (4) encourage the development and use of effective pollution control and education efforts. The MMs cover the following operations and facilities:

- Any facility that contains ten or more slips, piers where ten or more boats may tie up, or any facility where a boat for hire is docked;
- Any residential or planned community marina with ten or more slips;
- Any mooring field where ten or more boats are moored;
- Public or commercial boat ramps;
- Boat maintenance or repair yards that are adjacent to the water and any federal, State, or local facility that involves recreational boat maintenance or repair on or adjacent to the water.

The Implementation Plan involves targeting implementation of six of the 16 marina and boating MMs, specifically those measures for water quality assessment, sewage facilities, boat cleaning and maintenance, hazardous waste

[24] Commercial and military ports are not targeted in this Program Plan because they are subject to the storm water NPDES permits regulating industrial and construction activities. Commercial ports are also required to submit a port master plan (PMP) for certification by the CCC. The PMP must include the conditions contained in Coastal Act section 30711. An NPS-related condition is "an estimate of the effect of development on habitat areas and the marine environment, a review of existing water quality, habitat areas, and quantitative and qualitative biological inventories, and proposals to minimize and mitigate any substantial adverse impact." Section 30711 further states that, "each city, county, or city and county which has a port within its jurisdiction shall incorporate the certified [PMP] in its [LCP]." In addition, activities in military ports are subject to federal consistency review by the CCC, affording the State an opportunity to ensure that appropriate NPS pollution prevention and control measures are in place. Ports located in the San Francisco Bay are under the jurisdiction of SFBCDC and subject to regulations of the MPA.

management, and public education. These MMs and related actions were identified by representatives of the marina and boating community at four meetings held between December 1998 and April 1999 and by the SWRCB, RWQCBs, and CCC. The 1994 Marina TAC Report provided additional recommendations. The 16 MMs are summarized below.

Assessment, Siting, And Design Management Measures:

41.A **Water Quality Assessment.** Consider impacts to water quality in siting and designing new and expanding marinas.

41.B **Marina Flushing.** Site and design marinas to provide for maximum flushing and circulation of surface waters, which can reduce the potential for water stagnation, maintain biological productivity, and reduce the potential for toxic accumulation in bottom sediment.

41.C **Habitat Assessment.** Site and design marinas to protect against adverse impacts on fish and shellfish, aquatic vegetation, and important locally, State, or federally designated habitat areas.

41.D **Shoreline Stabilization.** Stabilize shorelines where shoreline erosion is a pollution problem.

41.E **Storm Water Runoff.** Implement runoff control strategies to remove at least 80 percent of suspended solids from storm water runoff coming from boat maintenance areas (some boatyards may conform to this provision through NPDES permits).

41.F **Fueling Station Design.** Locate and design fueling stations to contain accidental fuel spills in a limited area; and provide fuel containment equipment and spill contingency plans to ensure quick spill response.

41.G **Sewage Facilities.** Install pump out, pump station, and restroom facilities at new and expanding marinas where needed to prevent sewage discharges directly to State waters.

41.H **Waste Management Facilities.** Install facilities at new and expanding marinas where needed for the proper recycling or disposal of solid wastes (e.g., oil filters, lead acid batteries, used absorbent pads, spent zinc anodes, and fish waste as applicable) and liquid materials (e.g., fuel, oil, solvents, antifreeze, and paints).

Operation And Maintenance Management Measures:

4.2A **Solid Waste Control.** Properly dispose of solid wastes produced by the operation, cleaning, maintenance, and repair of boats to limit entry of these wastes to surface waters.

4.2B **Fish Waste Control.** Promote sound fish waste management where fish waste is an NPS problem through a combination of fish cleaning restrictions, education, and proper disposal.

4.2C **Liquid Material Control.** Provide and maintain the appropriate storage, transfer, containment, and disposal facilities for liquid materials commonly used in boat maintenance; and encourage recycling of these materials.

4.2D **Petroleum Control.** Reduce the amount of fuel and oil that leaks from fuel tanks and tank air vents during the refueling and operation of boats.

4.2E **Boat Cleaning and Maintenance.** Minimize the use of potentially harmful hull cleaners and bottom paints and prohibit discharges of these substances to State waters.

4.2F **Maintenance of Sewage Facilities.** Maintain pumpout facilities in operational condition and encourage their use so as to prevent and control untreated sewage discharges to surface waters.

4.2G **Boat Operation.** Prevent turbidity and physical destruction of shallow-water habitat resulting from boat wakes and prop wash.

Education and Outreach Management Measures:

4.3A **Public Education.** Institute public education, outreach, and training programs to prevent and control improper disposal of pollutants into State waters.

5. Hydromodification Management Measures

The SWRCB, CCC, and other State agencies have identified seven MMs to address hydromodification sources of nonpoint pollution affecting State waters. Hydromodification includes modification of stream and river channels, dams and water impoundments, and streambank/shoreline erosion.

California's MMs to address sources of nonpoint pollution related to hydromodification activities:

- 5.1 Channelization/Channel Modification
  - A. Physical and Chemical Characteristics of Surface Waters
  - B. Instream and Riparian Habitat Restoration
- 5.2 Dams
  - A. Erosion and Sediment Control
  - B. Chemical and Pollutant Control
  - C. Protection of Surface Water Quality & Instream and Riparian Habitat
- 5.3 Streambank and Shoreline Erosion
  - A. Eroding Streambanks & Shorelines
- 5.4 Education/Outreach
  - A. Educational Programs

Channel modification activities are undertaken in rivers or streams to straighten, enlarge, deepen, or relocate the channel. These activities can affect water temperature, change the natural supply of fresh water to a water body, and alter rates and paths of sediment erosion, transport, and deposition. Hardening the banks of waterways with shoreline protection or armor also accelerates the movement of surface water and pollutants from the upper reaches of watersheds into coastal waters. Channelization can also reduce the suitability of instream and streamside habitat for fish and wildlife by depriving wetlands and estuarine shorelines of enriching sediments, affecting the ability of natural systems to filter pollutants, and interrupting the life stages of aquatic organisms (USEPA, 1993).

Dams can adversely impact hydrology and the quality of surface waters and riparian habitat in the waterways where the dams are located. A variety of impacts can result from the siting, construction, and operation of these facilities. For example, improper siting of dams can inundate both upstream and downstream areas of a waterway. Dams reduce downstream flows, thus depriving wetlands and riparian areas of water. During dam construction, removal of vegetation and disturbance of underlying sediments can increase turbidity and cause excessive sedimentation in the waterway.

The erosion of shorelines and streambanks is a natural process that can have either beneficial or adverse impacts on riparian habitat. Excessively high sediment loads resulting from erosion can smother submerged aquatic vegetation, cover shellfish beds and tidal flats, fill in riffle pools, and contribute to increased levels of turbidity and nutrients.

Management Measures:

Channelization/Channel Modification. California's MMs for channelization and channel modification promote the evaluation of channelization and channel modification projects. Channels should be evaluated as a part of the watershed planning and design processes, including watershed changes from new development in urban areas, agricultural drainage, or forest clearing. The purpose of the evaluation is to determine whether resulting NPS changes to surface water quality or instream and riparian habitat can be expected and whether these changes will have a detrimental (or negative) impact. Existing channelization and channel modification projects can be evaluated to determine the NPS impacts and benefits associated with the projects. Modifications to existing projects, including operation and maintenance or management, can also be evaluated to determine the possibility of improving some or all of the impacts without changing the existing benefits or creating additional problems. In both new and existing channelization and channel modification projects, evaluation of benefits and/or problems will be site specific.

Dams. The second category of MMs addresses NPS pollution associated with dams. Dams are defined as constructed impoundments that are either: (1) 25 feet or more in height *and* greater than 15 acre-feet in capacity or (2) six feet or more in height *and* greater than 50 acre-feet in capacity. MMs 5.2A and 5.2B address two problems associated with dam construction: (1) increases in sediment delivery downstream resulting from construction and operation activities and (2) spillage of chemicals and other pollutants to the waterway during construction and operation. MM 5.2C addresses the impacts of reservoir releases on the quality of surface waters and instream and riparian habitat downstream.

Streambank and Shoreline Erosion. The third category of hydromodification measures addresses the stabilization of eroding streambanks and shorelines in areas where streambank and shoreline erosion creates a polluted runoff problem. Bioengineering methods such as marsh creation and vegetative bank stabilization are preferred. Streambank and shoreline features that have the potential to reduce polluted runoff shall be protected from impacts, including erosion and sedimentation resulting from uses of uplands or adjacent surface waters. This MM does not imply that all shoreline and streambank erosion must be controlled; the measure applies to eroding shorelines and streambanks that constitute an NPS problem in surface waters.

Education/Outreach. MMs 5.4A focuses on the development and implementation of pollution prevention and education programs for agency staffs and the public, as well as the promotion of assistance tools that emphasize restoration and low-impact development. Education, technical assistance, incentives, and other means can be used to promote projects that: (1) reduce NPS pollutants, (2) retain or reestablish natural hydrologic functions (e.g., channel restoration projects and low-impact development projects), and/or (3) prevent and restore adverse effects of hydromodification activities.

6. Wetlands, Riparian Areas, and Vegetated Treatment Systems

The SWRCB, CCC, and other State agencies have identified four MMs to promote the protection and restoration of wetlands and riparian areas and the use of vegetated treatment systems as means to control NPSs of pollution. Wetlands and riparian areas reduce polluted runoff by filtering out runoff-related contaminants, such as sediment, nitrogen, and phosphorus, thus maintaining the water quality benefits of these areas is important. These areas also help to attenuate flows from higher-than-average storm events. This protects downstream areas from adverse impacts, such as channel scour, erosion, and temperature and chemical fluctuations. Changes in hydrology, substrate, geochemistry, or species composition can impair the ability of wetland or riparian areas to filter out excess sediment and nutrients and therefore can result in deteriorated water quality. The following activities can cause such impairment: drainage of wetlands for cropland, overgrazing, hydromodification, highway construction, deposition of dredged material, and excavation for ports and marinas.

California's MMs to protect and restore wetlands and riparian areas and use vegetated treatment systems as means to control pollution from nonpoint sources:

6A. Protection of Wetlands & Riparian Areas
6B. Restoration of Wetlands & Riparian Areas
6C. Vegetated Treatment Systems
6D. Education/Outreach

Management Measures:

6A **Protection of Wetlands/Riparian Areas.** Implementation of MM 6A is intended to protect the existing water quality improvement functions of wetlands and riparian areas as a component of NPS Programs.

6B **Restoration of Wetlands/Riparian Areas.** Restoration of wetlands and riparian areas (MM 6B) refers to the recovery of a range of functions that existed previously by reestablishing hydrology, vegetation, and structure characteristics. Damaged or destroyed wetland and riparian areas should be restored where restoration of such systems will significantly abate polluted runoff.

6C **Vegetated Treatment Systems.** MM 6C promotes the installation of vegetated treatment systems (e.g., artificial or constructed wetlands) in areas where these systems will serve a polluted runoff-abatement function. Vegetated filter strips and engineered wetlands remove sediment and other pollutants from runoff and wastewater and prevent pollutants from entering adjacent water bodies. Removal typically occurs through filtration, deposition, infiltration, absorption, adsorption, decomposition, and volatilization.

6D **Education/Outreach.** MM 6D promotes the establishment of programs to develop and disseminate scientific information on wetlands and riparian areas and to develop greater public and agency staff understanding of natural hydrologic systems—including their functions and values, how they are lost, and the choices associated with their protection and restoration.

ATTACHMENT 7 – SAMPLE SCOPE AND BUDGET

CWA SECTION 319(h) GRANT PROGRAM[1]
February 4, 2000

EXHIBIT A - WORK STATEMENT

I. PROJECT OFFICIALS:

The State Water Resources Control Board's (SWRCB) Contract Manager shall be Carol Atkins of the Central Valley Regional Water Quality Control Board (RWQCB). The Contract Manager shall be the day-to-day representative for administration of this agreement, and, except as otherwise specifically provided, shall have full authority to act on behalf of the SWRCB with respect to this agreement. The SWRCB's Executive Director, or designee, may also perform any and all acts that could be performed by the Contract Manager under this agreement. Except as otherwise expressly indicated, all communications relative to this agreement shall be given to the Contract Manager.

The Contractor's Project Director shall be Rich Gresham. The Project Director shall be the contractor's representative for the agreement and shall have full authority to act on behalf of the contractor. All communications given to the Project Director shall be as binding as if given to the contractor.

The parties may change their Contract Manager or Project Director upon providing 10-days written notice to the other party.

II. WORK TO BE PERFORMED:

A. Scope and Objectives

This project will:

1. Teach citizen volunteer groups to learn and use a variety of measurement tools, including bioassessment, habitat assessment, erosion potential, chemical monitoring, and/or sediment toxicity to collect data about watershed conditions and to measure and demonstrate long-term improvements in the watershed resulting from educational outreach efforts and project implementation;
2. Support citizen volunteer activities to enhance their long-term viability and effectiveness as change agents in the Sacramento River Watershed, through communication training, resource center maintenance, and networking and information exchange opportunities;
3. Improve the knowledge and commitment of volunteers, local land owners, resource managers, public works personnel, and elected officials to take actions to reduce the negative consequences of their activities on stream channel integrity and implement effective Best Management Practices (BMPs) for erosion/sediment reduction and channel maintenance in the watershed through workshops, demonstration restoration projects, and outreach by the citizen volunteers; and
4. Implement demonstration restoration projects in four tributary watersheds to reduce physical impacts of sediment and the chemical impacts of pollutants associated with sediments on in-stream habitat and aquatic organisms.

The current list of collaborators includes Placer County Resource Conservation District (Placer County RCD), CVRWQCB, Cache Creek Conservancy, Upper Putah Creek Stewardship, Big Chico Creek Watershed Alliance, Butte Creek Education Project, Dry Creek Conservancy, Delta

[1] General Terms and Conditions can be found on the Department of General Services' Website at www.dgs.ca.gov\contracts

Keeper, Wildlife History Foundation, Sustainable Land Stewardship Institute, Sacramento Urban Creeks Council, and Sacramento SPLASH.

B. Work to be Performed

The Contractor shall be responsible for the performance of the work as set forth herein below and for the preparation of products and a final report as specified in this exhibit. The Project Director shall promptly notify the Contract Manager of events or proposed changes that could affect the scope, budget, or schedule of work performed under this agreement.

Task 1. Project Management and Administration

1.1 Provide all technical and administrative services as needed for contract completion; monitor, supervise, and review all work performed; and coordinate budgeting, scheduling, agreement and subcontract administration to assure that the contract is completed within budget, on schedule, and in accordance with approved procedures, applicable laws, and regulations.

1.2 Ensure that contract requirements are met through completion of quarterly progress reports, which will be submitted to the Contract Manager by the tenth of the month following the end of the calendar quarter and through regular communication with the Contract Manager. Describe in the quarterly reports activities undertaken, accomplishments of each task during the quarter, milestones achieved, and any problems encountered in the performance of the work under this agreement. Describe the activities and accomplishments of each task during the quarter in sufficient detail to provide a basis for payment of invoices and translate into percent of the task completed for the purpose of calculating invoice amounts.

1.3 Award subcontracts to appropriate organizations to perform tasks outlined in this agreement. Document steps taken in soliciting and awarding the subcontract and submit to Contract Manager for review. Document all subcontractor activities in quarterly reports.

1.4 Secure all required permits for project work, including but not necessarily limited to U.S. Army Corps of Engineers 404 permit and California Department of Fish and Game Streambed Alteration Agreement.

1.5 At the completion of this project and prior to final payment, the Project Director shall fill out and provide a project survey form to the Contract Manager.

Task Products: Quarterly status reports; subcontract documentation; project survey.

Task 2. Resource Center and Support Services for Watershed Groups

Continue development and maintenance of the Watershed Resource Center (Resource Center) to be located at Mather Field (established through the 1997 319(h)) project and its subsequent partnership with Sacramento SPLASH). Provide access to materials, information, and technical assistance to the 319(h) cooperators, other citizen monitoring groups, teachers, students, and the public through a procedure to be established upon receipt of contract.

2.1 Coordinate with the Technical Advisory Group (TAG) of Sacramento SPLASH to develop guidance for further development of the Resource Center and its services to the community. The TAG will serve two functions for this project: (1) as a technical advisory committee with participants to review and comment on the development and implementation of the task products; and (2) as a forum for information exchange.

2.2 Develop and maintain electronic access to information through the SPLASH website and link this site to information resources provided by the Sacramento River Watershed Program (SRWP) main webpage at "sacriver.org". Share informational materials to the maximum extent possible with the Resource Center of the SRWP Resource Center planned for commencement in the fall of 1999). The internet linkages shall provide public access to current information about:

- Watershed funding sources and submittal schedules;
- Guidance documents for bioassessment, water quality monitoring, and stream restoration;
- Curriculum materials for watershed education;
- Local watershed volunteer groups and activities;
- Technical training sessions for citizen volunteers;
- Opportunities for public involvement in stream habitat monitoring and improvement projects;
- Links to public agencies and resources for watershed interests; and
- Other Internet sites containing relevant watershed information.

2.3 Maintain a publicly accessible physical library of hardcopy materials, with electronic search capabilities and on-site copying services at this Resource Center.

2.4 Maintain a supply of equipment for watershed monitoring at the Resource Center such as sampling equipment, laboratory equipment, and reference collections. Some of these materials will be purchased under this grant and made available for on-site use and short-term loan. The loans will be guided by procedures (to be established) for inventorying and monitoring their condition and whereabouts. Contractor will instruct borrowers in the proper use, maintenance, and storage of any loaned equipment.

2.5 Attend and facilitate quarterly TAG meetings and provide TAG members and the Contract Manager with a quarterly status report of Resource Center activities at least one week prior to each meeting. A written summary of the meeting minutes will be produced no longer than two weeks after each meeting. The minutes will be posted on the webpage and mailed to participating parties and a subscriber list. Between meetings, information related to the Resource Center materials, events, and services will be made available through the Resource Center webpage and a listserver as needed to facilitate communication on issues of interest to the watershed.

2.6 Assist citizen-based monitoring groups by organizing and publicizing opportunities to receive technical training and participating in local watershed activities and education. Publicity will be accomplished through posting notices of these opportunities in existing newsletters of local organizations, website postings, email, and direct mail. Organization will be accomplished through grassroots contacts within existing community networks of volunteers, organizations, and agencies, with continual outreach toward new groups. Assistance will be provided to citizen-based bioassessment groups to develop their aquatic insect reference collections and quality control procedures.

Task 3. Technical Workshop Organization

Through a subcontract with a specialist in focused outreach, organize a series of three workshops (Workshops I, II, and III) to train citizen watershed volunteers and their targeted audience (to include selected timber operators, resource managers, public works agency staff, planners, developers, and streamside land owners) to improve local stream and land use management decisions to benefit water quality, and stream dynamics and to reduce erosion/sedimentation in the watershed. Present the workshop series three times and follow-up the training to achieve goals of changing land use practices along stream corridors in a sustainable way.

3.1 Perform on target audience background research (e.g., knowledge level, interests, motivations) necessary to: (1) develop workshops that present technical information and concepts in ways that participants find useful; and (2) demonstrate effective ways to approach landowners, local communities, and agencies.

3.1.1 The potential audience for voluntary stream monitoring will be broken into, at least, three subgroups:

3.1.1.1 Existing organized groups that have an interest in watershed protection (including groups that make use of watershed resources), such as local conservation groups, fishermen and hunters, and other recreational users.

3.1.1.2 Landowner, business and industry resource user associations, such as farmers and ranchers, homeowners, forest products and gravel pit operators, developers, and clean-up operators.

3.1.1.3 Government regulatory and oversight agencies, such as county planning and public works, NRCS, USFS, BLM, CDF, Fish and Game, and regional and State water (and air) quality agencies.

3.2 Develop ways to attract participation and support for voluntary monitoring from these subgroups, given that each of these subgroups will have its own perspectives, perceptions, interests, and goals regarding water quality monitoring and the use of volunteers to do the work. Explore ways of making the concept and the actual training appealing to the subgroups by linking these aspects to the subgroup's interests and perspectives and by using presenters who can make clear connections, as well as provide technical training.

3.3 Coordinate workshops to bring together the appropriate mix of effective presenters and receptive participants, i.e., match the information type and level to the assembled audiences interests and abilities in three steps:

3.3.1 Compile a list of stakeholders belonging to each subgroup and contact them through informal discussions, interviews, and meetings to gain insight into their perspectives and knowledge levels. During this process, develop a database of potential participants and presenters.

3.3.2 Gather presenters who can deliver the material in ways that are in step with what we know about potential participants, neither making it overwhelmingly technical nor trivializing it.

3.3.3 Formally announce the training to stakeholder groups, and specifically invite potential participants identified in the database to attend.

3.4 Select appropriate workshop sites and arrange for invitations, recording equipment, handouts, and facilitation.

3.5 Subcontract with technical experts to develop and present the content of the Workshop Series I, II and III.

<u>Workshop I - Stream Channel Dynamics</u>

- Teach basic principles of channel dynamics and processes targeted at the lay public.
- Provide field experience with channel and drainage issues that demonstrate overt and inadvertent channel and drainage design issues.
- Examine potential upstream and downstream impacts resulting from stream activities.
- Review restoration techniques and equipment handling/installation techniques.
- Provide an information booklet about universal stream channel protection principles.
- Provide the Creek Care Guide (produced by Placer County RCD) for use by landowners

along streams.

Workshop II - Sedimentation/ Erosion and BMPs

- Identify and quantify the primary sources of man-induced erosion/sedimentation in selected areas of the watersheds, using the Revised Universal Soil Loss Equation method, and calculate the reductions that could be achieved through various erosion control options and BMPs.
- Identify options for BMPs for erosion reduction and channel maintenance and how they are to be used.
- Identify which BMPs are required to be used by operators within their local jurisdiction.
- Identify a specified chain of contact for reporting and following-up on inappropriate use of BMPs.

Workshop III - Communication in the Watershed

Develop and conduct this workshop to provide citizen monitoring groups with the tools and experience necessary to effectively communicate with their identified target audiences and to facilitate implementation of appropriate erosion/sedimentation and stream management BMPs. (Workshop III may be combined with Workshop I and/or II, if that integration would achieve the overall goal of the workshops more effectively.)

3.6 Prepare summary of meeting content and results and provide to Contract Manager for review.

3.7 Conduct follow-up evaluation of effectiveness through interviews with local leaders and a representative sample of participants.

Task Product: Three sets of three workshops and effectiveness evaluations.

Task 4. Bioassessment Training - Conduct training courses in Rapid Bioassessment

Conduct five training sessions in volunteer rapid bioassessment techniques. Two of the five sessions will consist of the full, 3-day training. The other three sessions will consist of a 1-day advanced training for groups who need additional assistance and/or wish to review methods to address particular monitoring needs of their group. Each training will be hosted by a local watershed group that has a demonstrated ability to implement and maintain a bioassessment program for their watershed.

4.1 Conduct two, 3-day training sessions in rapid bioassessment procedures (RBP) established by the CDFG. Devote one field day and two laboratory sessions to each group of trainees and provide materials necessary for sample collection, processing, and identification. Field sessions will demonstrate the RBP for collection of macroinvertebrates and the CDFG volunteer protocol for habitat assessment. Procedures will be consistent with the quality assurance/quality control (QA/QC) procedures already established by CDFG. Contractor will supply own transportation to the trainings, requisite liability insurance, and all necessary equipment and supplies to conduct the training.

4.2 Conduct three, 1-day training sessions in the classroom, laboratory, and/or field setting to provide advanced or refresher training to citizen monitoring groups that have previously received the full training but need additional technical assistance. Sessions will focus on issues of interest to the groups, based on their experience and changes in the protocols or interpretation.

Task Product: Two 3-day training sessions and three 1-day refresher courses. Field and laboratory materials to conduct bioassessment.

Task 5. Watershed Education Project on Butte Creek

Revegetate streambanks and organize citizen biomonitoring to complement erosion control projects through the Watershed Education Project on Butte Creek.

5.1 Train teachers and citizen volunteers in bioassessment protocols and establish permanent sites for monitoring through the Watershed Education Project on Butte Creek to complement erosion control projects. Establish archive for bioassessment data through the SRWP Resource Center.

5.2 Organize local participation in the Workshop Series provided under Task 4 by facilitating outreach through existing local watershed networks to which the subcontractor is connected. Facilitate advisory group development for local participation in erosion and sediment management for local creeks by working with individuals and organizations in the watershed who have demonstrated an interest in watershed issues through their participation in local watershed education and management activities.

5.2.1 Work with the organizer of the Workshop Series to identify and target local citizens and agencies to participate in the Series with the goal of identifying and implementing watershed-based solutions to stream sedimentation.

5.2.2 Identify Workshop Series follow-up activities that will facilitate the partnerships established through the Workshops and encourage practices that can reduce excess sedimentation in the watershed.

5.3 Cooperatively establish an educational nursery operation on the Butte Creek Ecological Preserve, Honey Run Unit, owned by California State University, Chico with support from CALFED, CSU Chico and Butte County Fish and Game Commission. Plant native vegetation on erodible streambanks on the CSU Chico Honey Run, and Canyon and Virgin Valley Units, owned by CDFG. Provide for a minimum of 1,000 feet of native vegetation cover with species list and planting to be reviewed by a qualified botanist experienced in riparian restoration. Monitor vegetation with student photo-monitoring. Provide photos and data to the Watershed Resource Center through the education web site.

Task Products: Bioassessment data generated by volunteers to identify impacts of erosion/sedimentation and to demonstrate benefits of use of BMPs. Cite appropriate native vegetation for erosion control. Make vegetation photo-monitoring data available through the SRWP Resource Center website.

Task 6. DeltaKeeper - Conduct sampling for sediment-associated toxicity in Delta tributaries

6.1 Develop a workplan describing the approach and methods to be used for collecting sediment from selected sites to measure the quality of sediment in Delta tributaries with an emphasis on determining what sediment chemical qualities are contributing to observed dissolved oxygen sags.

6.2 Conduct sampling and submit up to 30 sediment samples to laboratory for analysis of BOD, SOD, and other potentially relevant parameters.

6.3 Identify chemicals associated with sediments that may result in dissolved oxygen sags aquatic life and prepare report of findings. The report must include a description of sampling protocol and all analytical results.

6.4 Coordinate with Workshop organizer to identify appropriate individuals from the Delta area to participate in the Workshop Series provided under Task 3.

6.4.1 Work with the organizer of the Workshop Series to identify and target local citizens and agencies to participate in the series with the goal of identifying and implementing watershed-based solutions to stream sedimentation.

6.4.2 Identify Workshop Series follow-up activities that will facilitate the partnerships established through the Workshops and encourage practices that can reduce excess sedimentation in the watershed.

Task Product: Sediment collection workplan. Final report of sediment toxicity data to the Sacramento River Tributaries Work Group and the CVRWQCB.

Task 7. Dry Creek Conservancy Watershed Stewardship

Organize, train, and supervise citizen volunteers to identify and monitor impacts to Dry Creek and its tributaries from sediment and other nonpoint pollution sources in the watershed.

7.1 Actively encourage partnerships between public works agencies, landowners, and the Upper Dry Creek watershed through the Workshop Series to address problems related to physical stream channel impacts, erosion/sedimentation, and urban runoff in the watershed. Accomplish this by:

7.1.1 Working with the organizer of the Workshop Series to identify and target local citizens and agencies to participate in the Series with the goal of identifying and implementing watershed-based solutions to stream sedimentation.

7.1.2 Identifying Workshop follow-up activities that will facilitate the partnerships established through the Workshops and encourage practices that can reduce excess sedimentation in the watershed.

7.2 Establish a demonstration site on Dry Creek and Secret Ravine to highlight issues related to stream habitat impacts from erosion and sedimentation and recruit landowners, agencies, and citizens to participate in local stream restoration projects. Features of the demonstration site may include hydrogeomorphic and vegetative modifications, such as bank benches, importation of spawning gravels, in-stream flow modifications, and native vegetation for erosion control and bank stabilization.

7.2.1 Develop a work plan for the demonstration site with the input of technical experts and review by the community and local agencies.

7.2.2 Implement the demonstration site work plan.

7.3 Host one bioassessment training to be conducted by trainers under Task 3.

7.4 Provide two years of supervision and organization necessary for a citizen-based volunteer monitoring effort to: (1) conduct long-term habitat and bioassessment in the Dry Creek watershed; (2) calculate the erosion potential of typical land uses in the watershed; (3) identify and report on the use of inappropriate BMPs for erosion reduction; and (4) encourage the use of appropriate BMPs to reduce erosion and sedimentation of streams. The goal of the monitoring is to document the effects of sediment and other nonpoint source pollutants, as well as the benefits of implementing BMPs to reduce these impacts.

7.5 Develop an insect reference collection for bioassessment training and quality control purposes for the Dry Creek Watershed.

Task Product: Habitat and biological assessment data for Dry Creek; assessments of erosion potential for land uses in the watershed; oversight to report to appropriate local and State authorities cases of inadequate use of sediment reduction BMPs in local construction operations.

Task 8. Cache Creek Native Plant Restoration

Implement a native plant restoration project in Cache Creek to replace invasive exotic plants (Tamarix and Arundo donax) with native vegetation for erosion control. Please note: This project will not receive funds from this grant. While the project will benefit other local efforts funded under this grant, the only required contribution of the Cache Creek Conservancy to this grant is its participation in the Workshop Series.)

8.1 Set up a long-term monitoring facility to measure sediment loads, various chemical parameters, and analyze benthic macroinvertebrates samples from Cache Creek to increase public awareness of water quality issues in the Creek and generate community support to improve conditions.

8.2 Implement a demonstration restoration area based on plans developed by Cache Creek Conservancy and its agency partners to help landowners visualize the erosion control and habitat benefits of exotic plant removal and replacement with native plants.

8.3 Improve the working relationship of public works agencies, landowners, and the Cache Creek Conservancy through participation in the Workshop Series to address problems related to physical stream channel impacts, erosion/sedimentation, and agricultural runoff in the watershed. Accomplish this by working with the organizer of the Workshop Series to identify and target local citizens and agencies to participate in the Series with the goal of identifying and implementing watershed-based solutions to stream sedimentation.

8.4 Identify Workshop follow-up activities that will facilitate the partnerships established through the Workshops and encourage practices that can reduce excess sedimentation in the watershed and invasion of the riparian zone by non-native plants.

Task Product: Demonstration restoration area; citizens monitoring group; reduction of populations of Tamarix and Arundo donax.

Task 9. Sacramento Urban Creeks Council Stream Corridor Development Network

Hire technical experts and develop and manage a network of citizen monitors to oversee the development planning process and construction in selected tributaries of the newly urbanizing area of Sacramento.

Hire assistant to research, propose, and promote improvements to the development process that will reduce impacts to habitat and water quality from sediment, erosion, and urban runoff. Through the Workshop Series, work with Sacramento County policymakers and staff, landowners, and citizen volunteers in a selected tributary sub-watershed in Sacramento to adopt methods for reducing stream channel impacts, erosion/sedimentation, and urban runoff. To accomplish this:

9.1 Select a tributary sub-watershed in Sacramento County that is undergoing urbanization. Identify interested residents in the downstream reaches of the urbanizing creek and mobilize those residents through grassroots and targeted outreach to form a citizen watershed stewardship group.

9.2 Track development proposed for the urbanizing watershed and evaluate its potential impacts on water quality, sedimentation, and riparian habitat.

9.3 Provide review of the development plans and present recommendations for design alternatives and BMPs that would reduce impacts to water quality from sediment and chemicals in urban runoff.

9.4 Work with the organizer of the Workshop Series (Task 3) to identify and target local citizens, Sacramento County policymakers, and staff to participate in workshops and learn about methods to reduce impacts on creeks in urbanizing areas. Identify Workshop Series follow-up activities that will facilitate working partnerships among these parties to reduce impacts to streams in urbanizing watersheds.

9.5 Provide the training, supervision, and organizational framework to support a citizen-based watershed stewardship group that will:

9.5.1 Focus its attention on a newly urbanizing creek;
9.5.2 Develop an insect reference collection for Sacramento urban creeks to be used for bioassessment training and quality control purposes and make it available through the Sacramento SPLASH Resource Center;
9.5.3 Evaluate the erosion potential of selected areas during and after construction;
9.5.4 Identify and report on the use of inappropriate BMPs for erosion reduction and encourage the use of appropriate BMPs to reduce erosion and sedimentation of streams.

Task Product: Recommendations for development process improvements; habitat and biological assessment of a selected creek; assessments of erosion potential for land uses in a developing tributary watershed; reporting of incidents of failure to implement required BMPs for sediment reduction to appropriate officials.

Task 10. Upper Putah Creek Stewardship

Organize, train, and supervise citizen volunteers to identify and monitor impacts to Upper Putah Creek and its tributaries from sediment and other nonpoint pollution sources and translate findings into restoration projects for the Upper Putah Creek Stewardship to implement.

10.1 Recruit project coordinator; create contract, job description, and qualifications; advertise in local newspapers and letters to partners and members of the Stewardship. Locate an administrative site for coordinating and archiving data, preferably with a meeting room/classroom potential.

10.2 Identify existing monitoring activities in Upper Putah Creek conducted by Community Services Districts, municipal water district, geothermal industry, large landowners, and government agencies, such as Lake County Flood and Water Conservation District, to avoid duplication of efforts and to identify specific gaps.

10.3 Work with large landowners, local agencies and interested citizens to solicit and organize participants for technical training sessions including Bioassessment Training and the Workshop Series provided through this grant. Advertise through local newspapers and through existing partnerships with Middletown Unified School District, Yuba Community College, Parents and Community for Kids, and Stewardship members, "key sponsors", and Technical Advisory Committee.

10.4 Coordinate with Workshop Series organizer to locate a suitable workshop site and appropriate mix of participants through partnerships with such groups as Upper Putah Creek Stewardship (UPCS) Technical Advisory Committee and membership, Middletown Unified School District, and Yuba Community College.

10.5 Establish a local demonstration site for restoration techniques for erosion/sediment reduction on Upper Putah Creek.

10.5.1 Based on training received through technical workshops and additional assistance by technical experts, establish criteria and a plan for evaluating the major sources of sediment to the Upper Putah Creek Watershed.

10.5.2 Based on this information select an appropriate location to develop the demonstration site and create a work plan for the demonstration site. Solicit input from local landowners and agencies in developing and implementing the plan.

10.5.3 Conduct public outreach to landowners in the watershed to encourage visitation to the demonstration site during special outreach events and encourage the landowners to use similar techniques on their land.

10.6 Develop an aquatic insect reference collection for the Upper Putah Creek watershed to be used for bioassessment and quality control purposes by volunteer monitors.

10.7 Implement long-term monitoring and volunteer organization on Upper Putah Creek watershed.

10.7.1 Conduct ongoing bioassessment sampling twice annually to monitor impacts from sediment and other pollutant sources at representative sites along Upper Putah Creek to be selected based on mapping of representative reaches of the stream.

10.7.2 Maintain volunteer base and recruit and train additional volunteers.

10.7.3 Integrate citizen-based monitoring with an overall plan for watershed management for the Creek.

Task products: Map of stream reaches indicating suitable sampling sites; habitat and biological assessment data for Upper Putah Creek watershed; a list of volunteers trained through the workshops; a plan for evaluating sediment sources in the watershed; a work plan for establishing a demonstration site; an aquatic insect reference collection.

Task 11. Project Report

11.1 Prepare a draft project report that includes the products of the tasks listed above. The report shall include the following narrative sections:

11.1.1 An Executive Summary.

11.1.2 An introduction section including a statement of purpose and scope of the overall project, background information on the overall approach, and techniques utilized during the project.

11.1.3 A collection of the task products outlined above.

11.1.4 Any additional information that is deemed appropriate by the Project Director.

11.2 Submit copies of the draft report to Contract Manager for review and comment. Circulate the draft report among interested parties for comment. Schedule a public meeting subsequent to the release of the draft report.

11.3 Prepare a final project report that addresses, to the extent feasible, comments by the Contract Manger made on the draft project report. File report components in the Project Resource Center. Submit one reproducible master and five additional copies of the final project report to the Contract Manager for review and acceptance.

Task Products: Final Report for the FFY 1999 319(h) grant.

C. SCHEDULE OF COMPLETION DATES

Task	Schedule of Completion Dates	Completion Dates
1	Grant administration	
	1.1 Provide technical and administrative services	December 2001
	1.2 Quarterly reports	December 1999 and quarterly
	1.3 Subcontracting	June 2000
	1.4 Secure permits	June 2001
	1.5 Provide project survey form	December 2001
2	Resource Center and Support Services for Watershed Groups	
	2.1 Coordinate with SPLASH TAG	December 2001
	2.2 Develop and maintain electronic access	January 2000 - December 2001
	2.3 Maintain physical library at Resource Center	January 2000 - December 2001
	2.4 Maintain and loan monitoring equipment	January 2000 - December 2001
	2.5 Attend and facilitate quarterly TAG meetings	March 2000 and quarterly
	2.6 Assist citizen-based monitoring groups and schools	January 2000 - December 2001
3	Technical Workshop Organization	
	3.1 Perform background research on target audiences	June 2000
	3.2 Coordinate workshops' attendance	June 2000
	3.3 Announce meeting	December 2000
	3.4 Arrange logistics of workshops	December 2000
	3.5 Contract with technical experts to deliver Workshop Series	June 2000
	3.6 Prepare summary of workshops content and results	September 2001
	3.7 Conduct follow-up evaluations	November 2001
4	Conduct training courses in Rapid Bioassessment	
	4.1 Conduct 3-day bioassessment training	December 2001
	4.2 Conduct 3, 1-day bioassessment training	December 2001
5	Watershed Education Project on Butte Creek	
	5.1 Train teachers and citizen volunteers	January 2000 - January 2001
	5.2 Organize local participation; facilitate advisory group	January 2000
	5.3 Establish nursery operation; monitor vegetation; web site	December 2001

Task	Schedule of Completion Dates	Completion Dates
6	DeltaKeeper	
	6.1 Develop workplan	March 2000
	6.2 Conduct sampling	September 2001
	6.3 Identify chemicals	September 2001
	6.4 Participate in Workshop Series	December 2000
7	Dry Creek Conservancy Watershed Stewardship	
	7.1 Participate in Workshop Series	December 2000
	7.2 Establish demonstration site	December 2001
	7.3 Host bioassessment training	December 2000
	7.4 Supervise volunteer monitoring effort	December 2001
	7.5 Develop insect reference collection	December 2000
8	Cache Creek Native Plant Restoration	
	8.1 Establish monitoring facility	December 2000
	8.2 Establish demonstration site	December 2001
	8.3 Participate in Workshop Series	December 2000
	8.4 Facilitate long-term partnerships and practices	December 2001
9	Sacramento Urban Creeks Council	
	9.1 Select sub-watershed for study	March 2000
	9.2 Track development plans	December 2000
	9.3 Provide review and develop recommendations	September 2000
	9.4 Participate in Workshop Series	December 2000
	9.5 Host bioassessment training	December 2001
10	Upper Putah Creek Stewardship	
	10.1 Recruit project coordinator	December 1999
	10.2 Identify existing monitoring activities	March 2000
	10.3 Solicit and organize participants for Workshop Series	June 2000
	10.4 Participate in Workshop Series	December 2000
	10.5 Establish demonstration site	September 2001
	10.6 Develop insect reference collection	December 2000
	10.7 Conduct monitoring and volunteer organization	December 2001
11	Project Report	
	11.1 Prepare draft project report	November 2001
	11.2 Circulate report for comment and review	November 2001
	11.3 Prepare final project report	December 2001

D. REPORTS

1. Not later than December 1999 and quarterly thereafter during the life of this contract the Project Director shall provide to the Contract Manager a written progress report describing the activities undertaken, accomplishment of milestones, and any problems encountered in the performance of the work under this agreement and delivery of intermediate products, if any.

2. The Project Director shall submit to the Contract Manager for approval all task products related to the work performed in accordance with the Schedule of Completion Dates of this Exhibit.

3. Not later than September 30, 2001, the Project Director shall submit to the Contract Manager for review and comment two (2) copies of a draft final report describing the work performed pursuant to Section A of this Exhibit.

4. Within four weeks of receipt of the draft report, the Contract Manager shall submit final comments to the Project Director.

5. Not later than November 30, 2001 (thirty days prior to the end date of this contract), the Project Director shall submit to the Contract Manager for approval one (1) reproducible master and five copies of the final report containing the results of the work performed and addressing the comments submitted to the Project Director by the Contract Manager.

6. The report shall not be considered final until accepted and approved by the Contract Manager.

EXHIBIT B
BUDGET PAYMENT PR0VISIONS

TASK BUDGET

TASK	TASK DESCRIPTION	STATE SHARE	MATCH SHARE	TOTAL BUDGET
1.0	Project Management and Administration	35,000	0	35,000
2.0	Resource Center and Support Services for Watershed Groups	47,300	85,070	132,370
3.0	Technical Workshop Organization	32,000	28,000	60,000
4.0	Bioassessment Training	11,000	8,600	19,600
5.0	Watershed Education Project on Butte Creek	8,000	5,000	13,000
6.0	DeltaKeeper	10,000	4,000	14,000
7.0	Dry Creek Conservancy Watershed Stewardship	33,900	12,000	45,900
8.0	Cache Creek Native Plant Restoration	0	8,000	8,000
9.0	Sacramento Urban Creeks Council Stream Corridor Development Network	33,900	8,000	41,900
10.0	Upper Putah Creek Stewardship	33,900	8,000	41,900
11.0	Project Report	5,000	0	5,000
TOTAL		250,000	166,670	416,670

LINE ITEM BUDGET

ITEM DESCRIPTION	STATE SHARE	MATCH SHARE	TOTAL
Personnel Services District Manager 200 hours @ $60.00/hr = $12,000 Administrative Assistant 511 hours @ $45.00/hr = $23,000 (Rates for personnel include overhead.)	$35,000		$35,000
Operating Expenses (Includes photocopying, telephone, office supplies)	$9,000	$20,000	$29,000
Miscellaneous Supplies (bioassessment training)	$7500		$7500
Contracted Service Professional and Consultant Services Laboratory (sediment and water samples)	 $186,000 $12,500	 $146,670	 $332,670 12,500
TOTAL	$250,000.00	$166,670.00	$416,670

Natural Resource Projects Inventory (NRPI) Form 2000[1]

A Collaborative Effort between the California Biodiversity Council and the University of California at Davis Information Center for the Environment (ICE) (http://ice.ucdavis.edu)

This data will made available to the public as a searchable database on the Internet in both the Natural Resource Projects Inventory and the California Rivers Assessment. Geographical information will be made available as a Geographic Information System (GIS) layer on ICEMAPS through the ICE homepage (http://ice.ucdavis.edu).

Use the "tab" and arrow keys to move through the form. Skip Areas that Do Not Apply to Your Project

Date filled out:

A) Project Information Please use complete phrases/ sentences. Fields will expand as necessary as you type

1. Project Title:

2. Project Purpose / Goals ("why" the project):

3. Project Abstract (brief description of project):

5. Is this project part of an agency program? Put an "X" by all that apply:

☐ *NCCP* ☐ *HCP* ☐ *CRMP* ☐ *EPA 319h grant* ☐ *EPA 205j grant* ☐ *TMDL Program*

☐ *Larger watershed plan (name of plan):* ☐ *Other (describe):*

B) Project Contact:

Name:	**Job Title:**
Organization:	**Webpage Address:**
Address:	
Phone:	**Fax number:**
Email:	

Secondary Project Contact:

Name:	**Job Title:**
Organization:	**Webpage Address:**
Street Address:	
Phone:	**Email:**

C) Data Contact: *Data Contact same as Project Contact?* ☐ *Y or* ☐ *N*

Name:	**Job Title:**
Organization:	**Webpage Address:**

[1] For assistance contact Ms. Kevin Ward (kcward@ucdavis.edu) or call (530) 752-2378.

Phone:	Email:

Is there data available? ☐ *Y or* ☐ *N*

List Publicly Available Reports:

D. Project Time Frame: Refers to the implementation period of project. You can put "ongoing" as ending date

From:	To:

E) Participant and Funding Information: Name all agencies/groups involved with project; put an X by their role. If a Funder, note amount of Cash or Inkind contribution. Attach another sheet of paper if necessary.

Participant (include Volunteers)	ead	Land-owner	Coop-erator	Funder	Cash Contrib	Inkind Contrib
	☐	☐	☐	☐	$	$
	☐	☐	☐	☐	$	$
	☐	☐	☐	☐	$	$
	☐	☐	☐	☐	$	$
	☐	☐	☐	☐	$	$
	☐	☐	☐	☐	$	$
	☐	☐	☐	☐	$	$
	☐	☐	☐	☐	$	$
	☐	☐	☐	☐	$	$

F) Location

1. Size of Project (include units):	2. Counties included in project:

If **over 5000 acres**, in addition to a point, attach a map of project. If **under 5000 acres**, we only need a center point.

3. Center Point: Lat/Long coordinates:

Lat Degrees: Minutes: Seconds:

Long Degrees: Minutes: Seconds:

(we will also accept decimal degrees - put all the numbers in the first latitude or longitude box)

OR

Township, Range and Section *(include Meridian)*:

G) Project Focus

What types of resource issues does this project address? *(Please put an "X" by all resource areas that apply.)*

☐ Agriculture	☐ Air Quality	☐ Biomass/ Fuels Control	☐ Dams	☐ Educ/Outreach
☐ Erosion / Sediment	☐ Fire Control	☐ Fisheries	☐ Flood Contrl	☐ Forestry
☐ Grazing	☐ Mining	☐ Recreation	☐ Riparian Enhance	☐ Septic Systems
☐ Stream Bank Prot	☐ Urbanization	☐ Urban Runoff	☐ Vegetation	
☐ Weed Control	☐ Wetlands	☐ Wildlife	☐ Wildlife Habitat	
☐ Water Quality*:	☐ Water Quantity	☐ Ground Water or	☐ Surface Water	
☐ Other:				

*For Water Quality Specify issue⇒		
	☐ Nutrients	☐ Pollutants
	☐ pH	☐ Organics
	☐ Salinity	☐ Heavy Mtls
		☐ Pesticides

H) Habitat / Species What habitats are in the project area?

****Put an "E" by existing habitats and a "T" by those that are targeted as an end result**

_1. BEACH AND COASTAL DUNES	_14. GREAT BASIN SCRUBS	_28. CLOSED-CONE CONIFEROUS FOREST
_2. INTERIOR DUNES	_15. CHAPARRALS	_29. LOWER MONTANE CONIFEROUS FOREST
		_30. UPPER MONTANE CONIFEROUS FOREST
_3. COASTAL AND INTERIOR SALT MARSH	_16. OAK WOODLANDS	_31. SUBALPINE CONIFEROUS FOREST
_4. BRACKISH AND FRESH WATER MARSH	_17. FOOTHILL PINE WOODLANDS	
_5. BOGS AND FENS	_18. PINYON AND JUNIPER WOODLANDS	_32. ALPINE COMMUNITIES
_6. STANDING WATER (LAKES, PONDS)	_19. SONORAN THORN WOODLANDS	
	_20. JOSHUA TREE WOODLANDS	_33. SOUTHERN CALIFORNIA ISLANDS
_7. COASTAL PRAIRIES		
_8. VALLEY AND FOOTHILL GRASSLANDS	_21. RIPARIAN FORESTS AND WOODLANDS	_34. AGRICULTURAL
_9. VERNAL POOLS	_22. RIPARIAN SCRUBS AND DESERT WASHES	_35. GRAZED PASTURE
_10. MEADOWS and SEEPS	_23. STREAM OR RIVER CHANNEL	_36. MINED LAND
_11. PLAYAS	(IN STREAM RESTORATION)	_37. URBAN/SUBURBAN
	_24. WETLAND (Type Unspecified)	_38. RUDERAL (WEED LOT)
_12. COASTAL SCRUBS	_25. BROADLEAF UPLAND FOREST	_39. NONE OF THE ABOVE (DESCRIBE) ⇓
_13. SONORAN DESERT SCRUBS	_26. NORTH COAST CONIFEROUS FOREST	
_14. MOJAVEAN DESERT SCRUBS	_27. MIXED EVERGREEN FOREST	

Does this project target the protection / conservation of specific species? Does this project try to Introduce or Eradicate a species as part of restoration or conservation efforts? Please Note Below.

Latin Name or	Common Name	Targeted for Protection	Introduced to Project Area	Seek to Eradicate from Area
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐

I) Project Methods / Progress (Table will expand as you type)

Treatment Area Include Units (feet, miles)	General Habitat Type (ex: Weedlot, forest, river, wetland)	Treatment or Restoration Activity (ex: Woody debris, revegetation, fish screen)

Was fertilizer used? Y☐ or N☐ If yes, what type:

and at what rate:

Was the site irrigated? Y☐ or N☐ Was irrigation ☐regularly scheduled or ☐supplemental/as needed

State frequency and method (drip, overhead sprinkler, hand, etc.):

What problems have you encountered with this project?

Was (or will) the project (be) monitored? ☐Yes ☐No

If yes, what is the monitoring schedule, i.e., how often per year and for how many years?

Has the project goal(s) listed in Section "A" been attained? ☐Yes ☐No ☐ Partially ☐Too Soon to Tell

Are there performance standards (success criteria) for the project? ☐Yes ☐No

If yes, please describe:

Have the performance standards been attained? ☐Yes

☐No

☐ Partially ☐Too Soon to Tell

J) Project Status, Funding & Needs

Current phases of project: *(Put an "X" by all applicable words)*

☐Scoping ☐Planning ☐Implementation ☐Monitoring ☐Writing Report ☐Completed ☐Other:

4. Indicate specific tasks in need of funding:

What are the project's current needs? *(Put an "X" by applicable terms)*	
☐Analysis	☐Research
☐Legislation	☐Habitat Management
☐Community Support	☐Restoration
☐Modeling	☐Inventory
☐Equipment	☐Training
☐Monitoring	☐Legal Assistance
☐Funding	☐Volunteers
☐Public Outreach	☐Other:
☐Governmental Approval	

K) Project Data: Check those that apply.

EXAMPLES of Content Type (Write Answers in Boxes BELOW Examples)			
☐Air Quality	☐Hydrology	☐	☐
☐Water Quality	☐Water Nutrients	☐Water Salinity	☐Water Pollution
☐Water - Heavy Metals	☐Water - Organics	☐Water - Pesticides	☐Water - pH
☐Biological /Ecological	☐Birds	☐Fish	☐Amphibians
☐Insects	☐Reptiles	☐Phytoplankton	☐Plants
☐Soils	☐Geology	☐Land Use	☐Recreational Use
☐Remote Imagery	☐GIS Data	☐Vegetation Maps	☐Vegetation Data
☐Other Data (Describe)			

Additional Comments:

Questions?, please contact: Kevin Ward at ICE, UC Davis Dept. of Environmental Science and Policy, Davis, CA 95616

Phone: (530) 752-2378 and Email: kcward@ucdavis.edu

THANK YOU FOR YOUR TIME!! Mail completed form to address above. You will be notified when your data is on-line.

EXHIBIT III - WETLANDS GRANT ANNOUNCEMENT

Wetlands Grant Announcement

Introduction: U.S. Environmental Protection Agency (USEPA), the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) are announcing the availability of wetlands protection grants for Federal Fiscal Year (FFY) 2001. Wetlands grants assist State, tribal, and local government agencies in their wetlands protection efforts. See "What Activities Qualify?" below for more detailed information about eligible uses of the funds. Funds available through this announcement are offered under Clean Water Act (CWA) section 104(b)(3) and are anticipated for release between June and September 2001. Selected projects will be funded with grants USEPA issues directly to the state, tribe, or local recipient.

Background: California has lost over 90 percent of its historic wetlands, largely in response to economic and development pressures. Wetlands provide many beneficial uses, such as enhancing water quality, managing stormwater flows, providing habitat, enhancing water supply, controlling sedimentation and erosion, reducing flood losses, and providing recreational opportunities.

Anticipated Funding Levels: The wetlands grant program is a competitive process across all states, tribes, and local agencies within the jurisdictional area of USEPA - Region 9. Approximately $1.5 million are available to fund projects throughout USEPA - Region 9. State and local projects in California can expect to compete for about half of these funds. A minimum of 25 percent nonfederal match is required.

Eligibility: As the wetlands grants are to fund effective wetlands protection efforts, it is important that projects funded under these grants be coordinated with appropriate entities in federal, State, tribal, and local governments. For State and local agency applicants within California, projects should conform to the priorities in both the California Watershed Management Initiative and the California Wetlands Conservation Policy. For information about the California Watershed Management Initiative, contact the RWQCB that has jurisdiction over the project area. The California Wetlands Conservation Policy may be accessed on the Internet at www.ceres.ca.gov/wetlands/policies/governor.html or obtained from the California Resources Agency Wetlands Coordinator at (916) 653-5656.

Who Can Apply?: State, tribal, and local (regional, county, and municipal) governments are eligible for the wetlands grants. Interstate and intertribal organizations are eligible for funding. Universities that are legally a part of state government are eligible for funding. Resource Conservation Districts, for the purposes of this grant program, are considered to be local government entities.

What Activities Qualify?: To determine if your project is eligible for wetlands grant dollars, please read the most recent national wetlands grant guidance and its important appendices. The current year's guidance is available on the Internet at www.epa.gov/owow/wetlands/2000grant.

If you do not have Internet access, please contact Liliana Christophe of USEPA at (415) 744-1972 for a copy of the most recent national wetlands guidance. You may also e-mail Liliana Christophe at christophe.liliana@epa.gov to request a copy. Some examples of appropriate project types include: (1) wetland-watershed protection; (2) river corridor and wetland restoration; (3) development of wetland conservation plans; (4) regulatory effectiveness improvement, including assumption of CWA section 404 permitting responsibility; and (5) wetlands ecological integrity assessment and monitoring.

Restrictions: Unless a state or tribe meets minimum core elements for their existing wetlands program, wetlands grant funds cannot be used to fund ongoing wetlands program operations, and are only available for program development. Quality Assurance Project Plans must be approved by USEPA - Region 9 prior to a grantee beginning the collection of environmental data or the construction of models. Quality Assurance Project Plans may be completed either prior to the final grant award or during the project period.

Selection/Award Process: In the period June to September 2000, USEPA will announce a more detailed solicitation for grant applications for FFY 2001 wetlands grant funding. The first step in the application process will likely be the submittal of a two-page preproposal in August 2000 or later. After USEPA evaluates all of the preproposals, applicants with the most competitive preproposals will be asked to submit full, detailed applications in November 2000 or later. USEPA will announce funding decisions by March 2001 with grants to be awarded between June and September 2001.

Potential applicants should contact USEPA for a more specific submittal schedule. USEPA also welcomes calls from those who would like to discuss the suitability of their projects for wetlands grant funding.

To be added to USEPA's mailing list for the June to September 2001 solicitation, please contact Liliana Christophe of USEPA via phone at 415/744-1972, e-mail christophe.liliana@epa.gov, *or fax at (415) 744-1078.*

Wetlands Program Contact:

Nancy Woo, USEPA, (415) 744-1164 or woo.nancy@epa.gov.

RFP Process Checklist

- ☐ Contact your local RWQCB or SWRCB Representative to discuss your project prior to developing the proposal (see Attachment 3 for contact names and addresses). This step is required.

- ☐ Completely fill out the application form provided in Attachment 2. Make sure you answer the questions clearly and concisely. This could be a determining factor in your project being funded.

- ☐ Funding Range (Minimum-Maximum): 205(j) – ($25,000 to $125,000)
  319(h) – ($25, 000 to $350,000)

  Projects will <u>not</u> be funded outside this range.

- ☐ 205(j) funding requires a minimum 25 percent nonfederal match of total project cost. 319(h) funding requires a minimum 40 percent nonfederal match of the project cost.

- ☐ Be careful when calculating your match. See pages I-11 or II-15 for specific instructions.

- ☐ 205(j) and 319(h) proposals must be submitted in <u>separate</u> proposals.

- ☐ Original regional proposals must be sent directly to the pertinent RWQCB, and original statewide proposals must be sent directly to the SWRCB (see Attachment 3). One copy of <u>all</u> proposals must be sent to both the SWRCB and USEPA – Region 9.

Note: Any proposals received that do not meet RFP requirements will be automatically disqualified.

Money will not be available for actual expenditure until July 1, 2001.

Proposals must be delivered or U.S. Postmarked no later than <u>June 16, 2000</u>.

If you have any questions, please contact your RWQCB or SWRCB representative.

THE WETLAND BANK
A Sampler of Funding Sources for Wetland and Watershed Protection

FEDERAL PROGRAMS

Land and Water Conservation Fund (LWCF): The LWCF is revenue from outer continental shelf leases and royalties. Although the authorized level of funding annually is $900 million, Congress appropriates much less for the acquisition of land for conservation by the U.S. Forest Service, Bureau of Land Management, National Park Service, and the U.S. Fish and Wildlife Service. Contact your Congressional Representative or regional office of any of the federal agencies for more specific information.

National Coastal Wetlands Conservation Grants: Funds generated from excise taxes on sport fishing equipment and boat gasoline taxes are set aside in the Sport Fish and Restoration Account of the Aquatic Resources Fund for grants to state agencies for the acquisition, restoration, and enhancement of coastal wetlands systems. Grants are available to all coastal states and require a 50/50 match. Contact Chris McKay with U.S. Fish and Wildlife Service at (503) 231-6128 for an application. Deadline is in June.

North American Wetlands Conservation Act (NAWCA): NAWCA provides federal funds specifically to "conserve North American wetland ecosystems and waterfowl and the other migratory birds and fish and wildlife that depend on such habitats." (PL 101-233) Eligible projects include acquisition and restoration of wetlands among other activities. Proposals require a 50/50 nonfederal match and are accepted twice a year in March and August. A small grants program is also available with a May 1 deadline. For an application, call (703) 358-1784.

Wetlands Reserve Program: Funds are available through the U.S. Department of Agriculture as part of the 1996 Farm Bill for the acquisition of conservation easements on agricultural lands. For more information, contact Ron Schultze at (530) 792-5656 or Allan Forkey at (530) 792-5653 or the local National Resource Conservation Service office.

Central Valley Project Improvement Act (CVPIA)/Bureau of Reclamation: A variety of funding programs are available for the acquisition, restoration and study of wetlands and water resources in the Central Valley. Contact Chuck Solomon at the Bureau of Reclamation at (916) 978-5052. The Bureau of Reclamation also has a wetlands program with grant funding. Contact Bob Shaffer at (916) 414-6459.

CALFED Bay-Delta Program: The CALFED Bay-Delta Program is both state and federal agencies that have been charged with finding a solution to the long-standing water wars in the Delta. Ecosystem restoration is a major component of the program and over $100 million has been allocated to date. For 2001 grant funds, RFP will be released on March 1, 2000. Proposals are due in May and decisions will be given October. Future RFPs will be released in January. Grants range in size from $10,000 - $2 million. Call Rebecca Fauver at (916) 654-1334 for more information.

Army Corps of Engineers/Sections 1135 & 206: Section 1135 funds are available for the restoration and acquisition of wetlands previously affected by an Army Corps project. For more information, contact the Army Corps of Engineers at (415) 977-8702. Section 206 funds provide for the restoration of aquatic ecosystem structure and function. Projects usually include the manipulation of the hydrology in and along bodies of water, including wetlands and riparian areas. No relationship to an existing Corps project is required. Contact Guy Brown at (916) 557-5270.

Environmental Protection Agency (EPA): Various grants in the range of 25k-350k are available through the EPA for watershed planning, restoration and stewardship studies for state, tribal and local governments. For more information, contact Nancy Woo (Wetlands Coordinator) at (415) 744-1164, call the general EPA number at (916) 744-1702, or visit their website at www.epa.gov/epahome/grants.htm. Also refer to the Nonpoint Source information under state programs.

Partners for Fish & Wildlife Program: The U.S. Fish and Wildlife Service offers cost-share programs to restore and enhance wildlife habitats on private and enhance wetlands on private land. Call (916) 414-6446 for more information or visit http://partners.fws.gov/index.htm.

U.S. Dept. of Agriculture Natural Resource Conservation Service (NRCS): Wildlife Habitat Incentives Program (WHIP) is a voluntary program for private landowners who want to develop or improve fish and wildlife habitat on their property. The Natural Resource Conservation Service (NRCS) administers the program, providing technical assistance and up to 75% of the cost of the project. NRCS also offers watershed planning services that may lead to the commitment of financial resources for project implementation. Contact your local NRCS for more information or www.nrcs.usda.gov/NRCSProg.html.

Watershed Assistance Grants (WAG): The River Network allocated funding to build capacity of existing or new watershed partnerships to protect and restore their watersheds. For more information, visit their website at www.rivernetwork.org.

STATE PROGRAMS

Coastal Conservancy: The Conservancy has grant funding for the acquisition, restoration and enhancement of significant coastal and Bay resource and habitat lands. Grants are also available for the preparation of plans for the enhancement and restoration of wetlands, dunes, rivers, streams, and watersheds. State and local agencies and non-profits may apply. Contact the Coastal Conservancy at (510) 286-1015.

Wildlife Conservation Board: Inland Wetlands Conservation Program and Riparian Habitat Conservation Program: WCB acquires and restores wildlife habitat throughout California. WCB also manages the Inland Wetlands program for the acquisition and restoration of wetlands in the Central Valley and Riparian Habitat conservation program focuses on protecting and restoring riparian systems throughout the state. For more information on available funding, contact Marilyn Cundiff (Inland Wetlands) or Scott Clemons (Riparian) at (916) 445-8448.

Environmental Enhancement and Mitigation Program (EEM): The EEM program statute allows for $10 million a year when approved by the legislature for the supplemental mitigation for highway work in three categories, one of which is resource lands. Grants are available for projects that mitigate, directly or indirectly, the environmental impacts of new or modified transportation facilities. Grants are available for land acquisition, restoration enhancement and pollution reduction. Eligible applicants include any local, state, or federal agency, or non-profits. Deadline is in November. Contact the EEMP Coordinator, California Resources Agency, at (916) 653-5656.

Habitat Conservation Fund: The California Department of Parks and Recreation administers this grant program for local public agencies for the acquisition and restoration of wildlife habitats and significant natural areas. Deadline is in October. Contact Odell King at (916) 653-7423 or check out website at www.cal-parks.ca.gov.

Nonpoint Source (NPS) & Water Quality Planning Program: The State Water Resources Control Board (SWRCB) offers funding (grants and loans) for projects that improve or protect water quality that is impaired or threatened by non-point source pollution through the NPS section of the SWRCB. State and local agencies and non-profits may apply. For more information, contact Paul Roggensack (loans to address water quality associated with discharges and estuary enhancement) at (916) 657-0673, Paul Lillebo [205(j) planning grants] at (916) 657-1031, or Lauma Jurkevics [319(h) implementation grants] at (916) 657-0518 or visit their website at www.swrcb.ca.gov/nps/npshome.html.

Transportation Enhancement Activities Program: The Federal Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) required that states spend a minimum of 10% of their Surface Transportation Program funds on "transportation enhancements" such as the acquisition of scenic lands and mitigation of water pollution due to highway runoff. The program is now called Transportation Equity Act for the 21st Century (TEA-21). Contact the Caltrans' Transportation Enhancement Activities office at (916) 654-5275 or visit www.dot.ca.gov/hq/TransEnhAct.

Department of Fish and Game (DFG) Fines: DFG collects fine monies for fish and game code violations. County fish and game committees typically administer these funds. Contact your local Fish and Game office for information.

Caltrans Mitigation: Caltrans frequently looks for wetlands projects that can be used to mitigate approved highway projects. Contact your local Caltrans office.

Urban Streams Restoration Program: This program is offered by the Department of Water Resources Division of Planning and Local Assistance. The objective is to assist communities in reducing damages from stream bank and watershed instability and floods while restoring the environmental and aesthetic values of streams, and to encourage stewardship and maintenance of streams by the community. For more information, check out www.dpla.water.ca.gov/environment/habitat/stream/usrp.html.

LOCAL

General Obligation Bonds: Cities, counties, and recreation and Park districts have authority to issue bonds for park and open space purposes. If approved, bonds and the interest they incur are re-paid through an increase in property taxes. Current law requires passage by a 2/3 majority vote – bonds issued to fund specific, popular projects are more likely to be approved.

Assessments: An assessment may also be referred to as a 'special" or "benefit" assessment and involves the levying of a charge on property owners to provide financing for public improvements. A *Landscaping and Lighting Act Assessment District* is specifically designed to fund landscaping, street lighting, and open space acquisition projects. Proposition A in Los Angeles County, which was approved by county voters in November 1992, created a countywide Landscaping and Lighting Assessment District.

Local Park Districts: Many local or regional park districts are actively involved in acquiring and restoring wetland and riparian habitat. For more information, contact your local park district office.

Flood Control Districts: The acquisition and restoration of wetlands is increasing recognized as providing both environmental and flood control benefits. Contact your local district to determine if funds are available.

Regional Water Quality Control Board: The Regional board makes an effort to direct Administrative Civil Liability fines to local projects. For more information, call Wil Bruns at (510) 622-2327 or Carol Thornton at (510) 622-2419.

PRIVATE ORGANIZATIONS

National Fish and Wildlife Foundation (NFWF): NFWF has numerous grant programs for the acquisition and restoration of wetlands and watersheds. 2:1 matching funds are required. For more information, call Eric Hammerling at (415) 778-0999 or visit www.nfwf.org.

Ducks Unlimited (DU): DU provides technical assistance, matching funds and help in securing grants for the completion of wetland habitat restoration projects on both public and private land. Call the Western Regional Office of DU at (916) 852-2000.

Packard Foundation: The foundation's Conserving CA Landscapes Initiatives funds habitat protection and watershed projects in the Central Valley, Sierra, and Central Coast. For more information and grant guidelines, call (650) 948-7658 or www.packard.org.

ADDITIONAL RESOURCES

Options for Wetland Conservation: A Guide for California Landowners - Published by the California State Coastal Conservancy, 1994. For a copy, call the Conservancy at (510) 286-1015.

Funding for Habitat Restoration Projects – A Compendium of Current Federal Programs with Fiscal Year 1996-1998 Funding Levels. Published by Restore American's Estuaries. Download from the Internet at www.estuaries.org/funding.html or call (202) 289-2380.

The Wetland Bank fact sheet provides a sampler of the funding programs available for wetland conservation projects. This fact sheet was developed in cooperation with The Conservation Fund (916) 498-1479, the San Francisco By Joint Venture (510) 286-6767, and the Trust for Public Land (415) 495-5660.