CALFED ECOSYSTEM RESTORATION PROGRAM

2010/2011

PROPOSAL SOLICITATION PACKAGE

December 25, 2010

Implementing Agencies:
California Department of Fish & Game
United States Fish & Wildlife Service
NOAA's National Marine Fisheries Service

CALFED BAY-DELTA PROGRAM

SYNOPSIS

Proposal Solicitation Package (PSP) Synopsis

Through the California Department of Fish and Game, the CALFED Ecosystem Restoration Program (ERP) is seeking projects that will achieve objectives for ecosystem restoration primarily in the Delta and Suisun Marsh consistent with following:

- CALFED Record of Decision
- ERP Stage 2 Conservation Strategy
- Delta Stewardship Council Interim Plan
- Bay Delta Conservation Plan (BDCP)

The geographic area of interest is the CALFED Bay-Delta System (Figure 1), which includes California's Sacramento and San Joaquin River watersheds and the San Francisco Bay Estuary with a focus on the Delta and Suisun Marsh (Figure 2).

Specifically, the ERP is soliciting proposals focused on the following priorities:

1. Restoration Projects that Restore or Enhance Aquatic Habitat in the Sacramento-San Joaquin Delta and Suisun Marsh and Bay.

2. Research that tests hypotheses identified in the Delta Regional Ecosystem Restoration Implementation Plan (DRERIP) evaluation of the BDCP conservation measures and National Research Council Operations Criteria and Plan (OCAP) Biological Opinion (BO) review and address uncertainties.

3. Projects that (a) construct facilities to control waste discharges that contribute to low dissolved oxygen and other water quality problems in the lower San Joaquin River and south Delta or (b) construct facilities to control drainage from abandoned mines that adversely affect water quality in the Bay-Delta.

Award Information

- Anticipated Type of Award: Grant
- Estimated Number of Awards: Dependent on funds allocated
- Anticipated Total Funding: Dependent on Legislature Appropriation but is anticipated to be up to $20 million.
- Length of Funding: Up to 3 years

Eligibility Information

Any public agency or nonprofit organization capable of entering into a grant agreement with the State may apply. This includes, but is not limited to, public agencies, universities, Native American Indian Tribes, and nonprofit organizations.

Deadline

Proposals are due March 1, 2011. Any changes in this will be posted on the ERP PSP website.

Contacts

ERP PSP Website: http://www.dfg.ca.gov/erp/grants_2010_grants_psp.asp
Proposal Submittal Process Helpline: 916-445-0086.

Table of Contents

Figures

Appendices

I. Introduction

A. Overview of the CALFED Bay-Delta Program

The CALFED Bay-Delta Program (CALFED) is a cooperative effort of more than 20 State and federal agencies with management and regulatory responsibilities for the San Francisco Bay, Sacramento-San Joaquin Delta, and their tributaries and watershed. The mission of the Program is to develop and implement a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta system (Figures 1 and 2). The mission is achieved through the following four Program goals:

- Improve Ecosystem Quality. Improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay-Delta system to support sustainable populations of diverse and valuable plant and animal species.
- Improve Water Supply Reliability. Reduce the mismatch between Bay-Delta water supplies and current and projected beneficial uses dependent on the Bay-Delta system.
- Improve Water Quality. Provide good-quality water for all beneficial uses, including drinking water, agricultural uses (both in-Delta and exported), industrial uses, recreational in-Delta uses, and Delta aquatic habitats.
- Improve Levee System Integrity. Reduce the risk to land uses and associated agricultural and other economic activities, water supply, infrastructure, and the Bay-Delta ecosystem from catastrophic breaching of Delta levees.

CALFED Record of Decision (ROD) divided CALFED Program implementation into two stages, Stage 1 (2000-2007) and Stage 2 (2008-2030). Focus on the Sacramento-San Joaquin River Delta Ecological Management Zone (Delta EMZ) in the Conservation Strategy for Stage 2 responds to analysis of Stage 1 implementation, that CALFED's through-Delta conveyance alternative has not achieved sufficient progress in sustaining viable populations of endangered and threatened aquatic species or in ecosystem restoration, levee stability, and water supply reliability. Findings of ERP implementation during Stage 1 are presented in this document only to the extent that they demonstrate how scientists' understanding of the system has changed since the ROD was certified in 2000. The reader is encouraged to refer to ERP documents for the descriptions and rationales of the ecological processes, habitats, and stressors in the Delta EMZ, and to the ERP End of Stage 1 Report and ERP Stage 2 Conservation Strategy for more information on the specific projects funded and lessons learned during ERP Stage 1 implementation (http:/calwater.ca.gov/calfed/library/).

B. Overview of the CALFED Ecosystem Restoration Program

CALFED ERP serves two purposes: 1) to achieve objectives for ecosystem restoration; and 2) to enable actions from all CALFED Program elements to be completed in compliance with the Federal Endangered Species Act (FESA), the California Endangered Species Act (CESA), Natural Communities Conservation Planning (NCCP) regulations, and other State and federal environmental laws and regulations. ERP completed Stage 1 in 2007, covering the first seven years of a 30-year plan to restore ecological health in the San Francisco Bay and Sacramento-San Joaquin Delta ecosystem. Based on lessons learned during Stage 1, ERP developed a Conservation Strategy for Stage 2 Implementation for the Sacramento-San Joaquin Delta and Suisun Marsh and Bay Planning Area and is proceeding accordingly (http://www.dfg.ca.gov/water/).

CALFED Multi-Species Conservation Strategy (MSCS) identified 244 special status species and 20 natural communities in the Delta (http://www.dfg.ca.gov/erp/reports_docs.asp). Conservation goals for each species and community were developed. ERP Strategic Plan provides framework for restoration of the Bay-Delta and its watershed. ERP goal statements below provide the basis for desired future conditions of the Bay Delta system:

- Achieve recovery of at-risk native species dependent on the Delta and Suisun Bay as the first step toward establishing large, self-sustaining populations of these species; support similar recovery of at-risk native species in the Bay-Delta estuary and the watershed above the estuary; and minimize the need for future endangered species listings by reversing downward population trends of native species that are not listed.
- Rehabilitate natural processes in the Bay-Delta estuary and its watershed to fully support, with minimal ongoing human intervention, natural aquatic and associated terrestrial biotic communities and habitats, in ways that favor native members of those communities.
- Maintain and/or enhance populations of selected species for sustainable commercial and recreational harvest, consistent with the other ERP strategic goals.
- Protect and/or restore functional habitat types in the Bay-Delta estuary and its watershed for ecological and public values such as supporting species and biotic communities, ecological processes, recreation, scientific research, and aesthetics.
- Prevent the establishment of additional nonnative invasive species and reduce the negative ecological and economic impacts of established non-native species in the Bay-Delta estuary and its watershed.
- Improve and/or maintain water and sediment quality conditions that fully support healthy and diverse aquatic ecosystems in the Bay-Delta estuary and watershed; and eliminate, to the extent possible, toxic impacts to aquatic organisms, wildlife, and people.

C. Background of this Proposal Solicitation Package (PSP)

Purpose of PSP

This PSP serves two main purposes: 1) to help you determine whether you want to apply for a grant through the CALFED Bay-Delta Program's ERP, and 2) to guide you through the proposal process, including submittal, review, approval, and contracting.

Background

A series of events have led to a crisis in Delta resource management. Populations of several Delta fish species have declined precipitously. As a result, water operations have been affected and certain large water supply projects, such as an isolated conveyance facility, originally envisioned in the ROD, are being re-evaluated. Additionally, Delta water-related lawsuits have challenged the regulatory underpinnings of the joint State and federal water operation system. The Upper Jones Tract levee failure and Hurricane Katrina, have increased concern over an aging levee system. Scientific studies suggest that global warming and other natural forces will alter the landscape, ecology, and hydrology of the Delta. In light of these recent events, the Governor established the Delta Vision Blue Ribbon Task Force to develop recommendations for providing a long-term sustainable Delta that includes provisions for reliable water conveyance while restoring ecosystem quality for species recovery.

In late 2009, the legislature approved a series of bills commonly known as the Delta Reform Act which creates a new Delta governance structure including the Delta Stewardship Council (Council), to develop a comprehensive Delta Plan, focused on achieving the "coequal goals" of providing a more reliable water supply and protecting, restoring and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resources and agricultural values of the Delta as an evolving place. The Act also created the Sacramento-San Joaquin Delta Conservancy (Conservancy) as a primary Delta ecosystem restoration entity. The ERP will continue to function under the authority of the 2000 ROD, with guidance from the Council and the Delta Plan and in coordination with the Conservancy. Other provisions of the Act require instream flow criteria and biological objectives for aquatic and terrestrial species dependent on flow are established for the Delta in 2010, and instream flow recommendations are made for the Delta's watershed by 2018.

Additionally, the Bay Delta Conservation Plan (BDCP) is being developed under the NCCP Act. If BDCP is approved as an NCCP, it will be implemented under its own governance structure, conservation strategy, implementing agreement, monitoring program and success criteria. Also, if approved as a NCCP, BDCP would be included in the Conservancy's Comprehensive Delta Plan.

As a result of the Delta Reform Act, BDCP, the continuing critical decline in fisheries populations, the release of draft federal recovery plan for Central Valley Salmonids, the issuance of new Biological Opinions for spring and winter run salmon, Central Valley

steelhead, green sturgeon and Delta smelt related to operation of the state and federal water projects, as well as recommendations from the pelagic organism decline (POD) working group, ERP will be focusing on Delta and closely related issues in this PSP.

Better understanding of the Delta system and impact of management actions: The Delta ecosystem will continue to be intensively managed into the future. Management actions coupled with targeted research have considerably improved our understanding of the Delta as a dynamic system. The interacting effects of Delta inflows and outflows, water diversions, toxic chemicals, invasive species and Delta hydrology on sensitive aquatic species are now better understood; however, it is still necessary to continue with restoration activities, within an adaptive management strategy to find a sustainable balance between human and environmental needs for water. Research to address the uncertainties identified in the Delta Regional Ecosystem Restoration Implementation Plan habitat, process and species conceptual models is necessary to increase the effectiveness of future actions and guide adaptive management.

Better understanding of linkages – restoration, species, and water quality: At the beginning of Stage 1, increasing the amount of shallow water habitat in the Delta was a preferred restoration action. However, through pilot projects and research conducted in Stage 1, a better understanding has resulted in the linkages between restoration activities affects on species and water quality. For example, research and pilot projects are providing insights on how methylmercury enters the Bay-Delta system, impacts the environment, and risks human health. It is now recognized that actions taken to improve or increase shallow water habitat in the Delta may cause significant adverse impacts related to the methylization of mercury and an increase in organic carbon. So, while seasonally- or tidally-flooded habitats are believed to provide high quality feeding and growing areas for a number of native species, these intermittently flooded habitats also present problems with mercury mobilization, this demonstrates that there are no simple fixes for the Delta. For mercury, implementing best management practices to manage seasonally flooded wetlands, while sequestering mercury, is an area of where additional work is needed.

Importance of Invasive Species: During Stage 1, it became apparent that invasive species were a much more serious problem to restoration than had been appreciated. A much more aggressive program of prevention, early detection, eradication, and intensive management will be needed in the future. More recent information indicates that variation in habitat characteristics over time and space, similar to what existed historically, may favor native species over exotic species that have invaded the estuary.

Global Warming: Over the last 100 years, sea level at California's Golden Gate Bridge has been rising and now sits about seven inches higher than it did in 1920. Recent scientific evidence predicts the trend to warmer global

temperatures will accelerate melting of glaciers, which will release more water into the oceans. Global warming and the accompanying decrease of the world's snowpack mean that sea level rise will have permanent and far-reaching impacts in the Delta. Scientists who are studying these effects predict up to a 6° Celisus temperature increase by 2100, a loss of one-third of the world's snowpack by 2050, and up to three feet rise in sea level by 2100. Warmer temperatures and a higher sea level also have important implications for species and ecosystems. Saltwater will intrude further into the Delta, reducing low salinity habitats preferred by some species to narrow zones within leveed channels. Higher water temperatures will make the Delta intolerable to some native species and also more attractive to some non-native invaders. These are serious issues for the Delta, most of which has subsided to between 5-25 feet below sea level. Given the time necessary to secure and restore habitats, methods to provide corridors, linkages and maintain habitats within this dynamic system is of immediate importance.

Climate Change: Flooding from heavy winter rains and spring run-off poses an ongoing threat in the Delta. High flows can cause levee over-topping and accelerate levee erosion which can lead to instability, seepage and levee breaks. Storm runoff is likely to become more intense with more winter precipitation falling in the mountains as rain rather than snow. Average winter flows and flood events are likely to become larger in the future, which could increase the threat of levee failure and flooding of Delta islands. An important priority for the Delta Region is to synthesize hydrodynamic and hydraulic modeling information to guide preparation of ecologically-based plans for restoring aquatic resources.

Adaptive Management: Continued planning and subsequent implementation of several large-scale restoration and resource management projects within an adaptive management context will help to fulfill remaining habitat and process-related MSCS goals. Specific species may require particular restoration actions to provide essential life history requirements. All continuing and newly implemented projects should be monitored to assess performance and to inform other efforts.

Development of this PSP

To accelerate the review process and maximize the use of available funds, ERP has developed a focused set of priorities drawn from the Conservation Strategy for Stage 2 Implementation. Priorities (see Section II, subsection B) were considered in the context of currently and previously funded projects. An additional consideration was the minimum two- to three-year period for most research projects to yield useful products or results. ERP stresses the integration and synthesis of available information, models, and interdisciplinary approaches when developing annual Program Plans.

Guiding Documents

Project applicants unfamiliar with CALFED goals, objectives, and issues are encouraged to review the documents that guide CALFED activities. These documents and other useful information are posted on the CALFED website (http://www.calwater.ca.gov), the ERP website (http://www.dfg.ca.gov/erp/reports_docs.asp), and the DRERIP Evaluations of BDCP Draft Conservation Measures (http://baydeltaconservationplan.com/BDCPPages/BDCPInfoBackgroundDOcsDRERIP.aspx also see http://www.science.calwater.ca.gov/pdf/workshops/workshop_eco_052209_BDCP-DRERIP_Summary_with_Appendices1.pdf).

The following are some specific documents that will be particularly helpful to applicants wishing to familiarize themselves with broad and specific CALFED issues:

CALFED-wide perspective:

- CALFED Record of Decision (ROD): http://www.calwater.ca.gov/calfed/library/Archive_ROD.html
- CALFED *Draft* End of Stage 1 Report: http://www.calwater.ca.gov/calfed/library/
- ERP Conservation Strategy for Stage 2 Implementation: http://www.dfg.ca.gov/erp/reports_docs.asp
- CALFED Science Program's *State of Bay Delta Science, 2008*: http://www.science.calwater.ca.gov/publications/sbds.html
- CALFED Water Quality Program – Stage 1 Final Assessment and peer review: http://www.calwater.ca.gov/calfed/library/index.html

Bay-Delta issues:

- ERP Stage 2 Conservation Strategy: http://www.dfg.ca.gov/erp/reports_docs.asp
- ERP Program Plan (2009) http://www.calwater.ca.gov/calfed/library/Archive_Program_Plans_ER.html
- Science Program support of DVSP: http://www.science.calwater.ca.gov/delta_vision/dv_index.html
- Science Program Publications: http://www.science.calwater.ca.gov/publications/pub_index.html
- Bay Delta Conservation Plan (BDCP): http://baydeltaconservationplan.com/default.aspx
- Pelagic Organism Decline (POD) Reports and Interagency Ecological Program (IEP) Work plans: http://www.science.calwater.ca.gov/pod/pod_index.html
- Science Program Review of Delta Risk Management Strategy Phase 1 Report: http://www.science.calwater.ca.gov/drms/drms_irp.html
- Envisioning Futures for the Sacramento-San Joaquin Delta: http://www.ppic.org/content/pubs/report/R_207JLR.pdf

- Comparing Futures for the Sacramento-San Joaquin Delta: http://www.ppic.org/content/pubs/report/R_708EHR.pdf
- Delta Regional Ecosystem Restoration Implementation Plan (DRERIP): http://www.science.calwater.ca.gov/drerip/drerip_index.html or http://www.dfg.ca.gov/erp/drerip.asp
- National Marine Fisheries Service Operations Criteria and Plan (OCAP) Biological Opinion workshops and reviews: http://www.science.calwater.ca.gov/events/reviews/review_ocap.html
- Environmental Water Account workshop and reviews: http://www.science.calwater.ca.gov/events/reviews/review_ewa.html

Previously ERP funded efforts:

CALFED Ecosystem Restoration Program directed actions and research grants: http://www.dfg.ca.gov/erp/grants_2007_grants.asp

D. Funding for this PSP

The granting of funds will depend on fund availability. The Department has approximately $20 million available, subject to State Budget approval. Some portion of funding is expected from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006, also known as Proposition 84; and the Safe Drinking Water, Clean Water, Watershed Protection, and Flood Protection Act of 2000, also known as Proposition 13; and other State sources.

To be funded by Proposition 13, a project must be an “eligible project” that “constructs facilities” to address specific water quality problems, defined in of the California Water Code (Section 79190). Historically, Proposition 13 funds have been managed by the ERP to support projects that address low dissolved oxygen conditions in the Stockton Deep Water Ship Channel (DWSC) and mercury issues, both of which affect water quality in the Delta.

II. Priorities of this Proposal Solicitation Package (PSP)

A. Introduction to Priorities

The focused priorities were drawn from the Conservation Strategy for Stage 2 Implementation. The geographic area of interest is the Bay-Delta System (Figure 1 and 2). While viewing the priorities list, applicants should keep in mind several project characteristics that ERP considers of great need and that add high value.

- **Interdisciplinary Projects**
  Interdisciplinary projects are crucial to extract the knowledge needed for managers to answer extremely complex questions about the Bay-Delta system, whose issues are inherently interconnected across multiple disciplines of study. Additionally, from a programmatic standpoint, interdisciplinary projects typically meet multiple CALFED needs.

- **Analysis, Integration and Synthesis of Existing Information**
  The Bay-Delta system has a long history of monitoring and research that has resulted in a wealth of accessible information. However, much of this information remains only partially analyzed. A very cost-effective way to provide resource managers and policy-makers needed information is to analyze, integrate, and synthesize existing information across data-sets in new ways, and apply that knowledge to support a proposed action.

- **Collaborative Proposals**
  ERP encourages applicants from different institutions to work together on proposals. Collaborative approaches have been identified as a means of strengthening communication among different institutions; this communication can last well beyond the course of a single study and lead to further collaborative projects. Collaborative proposals typically involve applicants and institutions with different strengths and expertise, resulting in stronger interdisciplinary projects.

- **Matching Funds**
  ERP has limited funds, proposals that can demonstrate they will use other funding sources (matching funds, cost sharing, in kind services, etc.) to leverage ERP funds will have a greater likelihood of being selected over other proposals that do not have matching funds.

B. Priorities

1. Restoration Projects that Restore or Enhance Aquatic Habitat in the Sacramento-San Joaquin Delta and Suisun Marsh and Bay

To meet immediate and long-term goals for restoration of floodplain and intertidal/subtidal environment, there is a need for projects that provide the following:

- Floodplain restoration to optimize salmon rearing and splittail spawning and rearing functions.
- Intertidal restoration to estuarine productivity, provide spawning and rearing habitat for native fishes using the Delta, and which accommodate long-term habitat changes resulting from climate change.
- Restore geomorphic processes and riparian vegetation and assess aquatic invertebrate production and the resulting effects on fish survival and growth.
- Assessing flora and fauna response to restoration; determining changes in productivity, and monitoring hydrology and geomorphic changes in restored areas.

2. Research that Tests Hypotheses Identified in the DRERIP Evaluation of the BDCP Conservation Measures and National Research Council OCAP Biological Opinion Review and Address Uncertainties

To research and test hypotheses identified in the DRERIP evaluation of the BDCP conservation measures and National Research Council OCAP Biological Opinion review, there is a need for projects that address the following:

- Continue to study tidal marsh restoration efforts in the Delta and Suisun Marsh to determine how much this can supplement pelagic fish production.
- Determine the ecological characteristics of shallow water habitat in the Delta that are beneficial for native species and less likely to support non-native species.
- Conduct research to determine scale and balance of flow, sediment, and organic material inputs needed to restore riverine ecosystem function.
- Evaluate physical and geomorphic processes and monitor connectivity and key ecological variables to assess effects of seasonal and annual hydrologic variability.
- Develop temporal regimes for water movement that minimizes adverse effects on fisheries.
- Address potential factors affecting productivity (e.g. contaminants).
- Control introduced species and examines their effect on food web dynamics.
- Test the “Variable Delta” hypothesis to see if manipulating salinity and flows can help control invasive aquatic species and to see how native species use or avoid these conditions.

3. Projects using Constructed Facilities to Control Mercury or other Mine Drainage in the Bay-Delta or Dissolved Oxygen and Other Water Quality Problems in the Lower San Joaquin River and South Delta

- To meet water quality goals and standards in the Delta for mercury and dissolved oxygen and to reduce mobilization of mercury into the foodweb or into the Delta there is a need for projects that implement and evaluate best management practices for reducing loads of these constituents to the Delta.

III. Proposal Application Submission Procedures

A. Overview

Successful proposals are those whose applicants thoroughly and accurately complete the application forms and follow the prescribed format for the proposal document. Before applying, please make sure you are eligible to receive funds by carefully reviewing the information below. If you need assistance, please contact the helpline at 916-445-0406. Regional Coordinators are also available to answer ERP related questions. ERP Regional Coordinator's physical address and phone number for each Department of Fish and Game (DFG) Region are listed below:

DFG Region Address	Phone Number
Bay Delta Region, 7329 Silverado Trail, Napa, CA 94558	707-944-5500
Northern Region Headquarters, 601 Locust Street, Redding, CA 96001	530-225-2300
North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670	916-358-2900
Central Region, 1234 E. Shaw Avenue, Fresno, CA 93710	559-243-4005 x151

B. Eligibility

Eligible entities for the ERP 2010 award cycle are limited to public agencies, universities, Native American Indian Tribes, and nonprofit organizations. Grant proposals from private individuals or for-profit enterprises will not be accepted. Private individuals and for-profit enterprises interested in submitting restoration proposals are encouraged to work with a public agencies, universities, Native American Indian Tribes, and nonprofit organizations. The applicant organization must agree to the ERP Grant Conditions (Appendix F).

Proposals will not be accepted for projects that are required as mitigation under the California Environmental Quality Act (CEQA), the California Endangered Species Act (CESA), the National Environmental Policy Act (NEPA), or Section 404 of the Clean Water Act (CWA).

C. General Guidelines

Proposals submitted must be in full compliance with all stated requirements in this PSP. Forms used in this PSP as well as any changes to the proposal application submission process will be posted as soon as possible on the ERP PSP website at: http://www.dfg.ca.gov/erp/grants_2010_grants_psp.asp.

D. Proposal Due Date

Proposal due: March 1, 2011. Any change in this will be posted on the website noted above. You must provide **one paper copy** of each proposal and one copy on CD in Microsoft Word (one proposal per CD), Rich Text Format (RTF), and/or Portable Document Format (PDF). The electronic copy on CD must be all in one file. For example, you must paste your budget, maps, access agreements, etc. into the main application document. For multiple proposals being submitted, the applicant must provide one proposal per CD. The proposal text should be no more than 20 pages, excluding literature cited, on plain white paper. Each page of the proposal must be numbered in sequential order. Each map, photograph, figure, or table needs to be individually numbered and clearly titled. Double-sided pages are encouraged. Do not bind proposals in plastic, cover stock, folders, or any other binding. Simply staple each plain-paper proposal copy once in the upper left corner. Large files sometimes cannot be viewed readily by reviewers or others who lack high-speed Internet connections. Please keep file size manageable. Do not include transmittal letters or letters of support or recommendation with your proposal package. Proposals for the Ecosystem Restoration Program shall be sent or delivered to:

Ecosystem Restoration Program
CA Department of Fish and Game
Water Branch
830 “S” Street
Sacramento, CA 95811

Refer to Appendix A for all ERP application requirements. A complete proposal package will include:

- A completed application form (Appendix A) which includes all of the following:
  - Section 1: Summary Information
  - Section 2: Location Information
  - Section 3: Landowners, Access, and Permits
  - Section 4: Project Objectives
  - Section 5: Conflict of Interest
  - Section 6: Project Tasks and Results Outlines
  - Section 7: Project Budget

E. Project Description

Project proposals must include a detailed description that:

- Identifies the issue(s), problem(s), question(s) or critical unknown(s) that the proposed effort is designed to address;
- Identifies the project goals, objectives, and how they relate to the issue(s), problem(s), question(s) or critical unknown(s) the project proposes to address;
- States where the proposed project is located, what work is being proposed, how the work will be done, and when the work will be done;
- States hypothesis the project will be testing to achieve project goals and objectives;
- Describes relevant studies or other information that documents the problem(s) and unknowns, substantiates the goals and objectives, and includes the ways this problem has been addressed locally and elsewhere.

Project proposals must include a clear list of the deliverables and a clear list of quantifiable expected results (See Appendix A, Section 6, and Appendix C, D and E). Lists of proposed activities without descriptive narrative do not constitute sufficient detail.

F. Project Budget

Project proposals must include a detailed line item budget broken down in as many as three categories: Personnel Services, Operating Expense, and Administrative Overhead (as described in Appendix A). Line item expenditures in each category should include cost detail (i.e. unit costs, etc.) whenever possible. Large, undefined lump sums in the budget will be considered inadequate and will limit the ability of reviewers to evaluate the proposed project. During the scoring and evaluation review, ERP will perform a cost analysis using the detailed project description. The budget must identify the amount being requested from ERP, the applicants matching funds or services and the total cost for each line item.

ERP recognizes that project proposals for similar work may vary in cost due to the size of the project, accessibility, statewide variation in costs for heavy equipment and labor, or a variety of other factors. Applicants must justify project costs in the project description. Project cost analysis will be based on costs for similar projects that have been implemented.

For projects which include more than one distinct project activity, (e.g. instream habitat structures and barrier modification; riparian planting and livestock exclusion fencing) a cost breakdown by project objective must be submitted for each project activity as well as a detailed budget for the entire project. The budgets should include matching funds as shown in the examples and instructions (Appendix A).

Any equipment approved under this PSP shall remain the property of the State of California. Final disposition of equipment purchased under an agreement shall be at the State's discretion. For agreement purposes, equipment is defined as all moveable articles of non-expendable property that has:

- A normal useful life including extended life due to repairs of 4 years or more.
- An identity which does not change with use (i.e., it is not consumed by use or converted by fabrication into some other form of property). A unit cost of $5,000.00 or more; and used to conduct business in accordance with the agreement.

G. Funding Approval Submissions

After applicants are notified of funding awards, an agreement will be prepared and executed. Special requirements for various agreements are explained below. The applicable forms described in this section are for informational purposes only. **Do not submit these forms in your proposal.** When applicants are notified that their project has been approved for funding, they shall be required to complete, sign, and return the forms provided if not already on file.

Resolution of project approval – If the applicant is a public entity that has a governing body, then a resolution, order, motion, or ordinance of the local governing body, which by law has authority to enter into the proposed project, will be a requirement of entering into an agreement. It is suggested that the governing body be made aware of the proposal and be prepared to submit the resolution when returning the signed agreement. Nonprofit organizations do not fall into this category.

Federal Taxpayer ID Number

Final Landowner Agreements will be required for easements, habitat restoration (lowland floodplains and bypasses, riparian habitat, river channel restoration, shallow water and marsh habitat, upland habitat and wildlife friendly agriculture), fish passage, and fish screens projects. Agreements must include reasonable access by DFG or its agents for project implementation, inspection, maintenance, monitoring, and post-project evaluation for a period of 10 years following completion of the project. Additional landowner agreement requirements apply. Sample landowner agreements can be found in Appendix B.

Nondiscrimination Compliance Statement form (STD. 19) will be required for grants of $5,000.00 or more per Title 2, California Code of Regulations, Section 8113. Federal and State agencies and public entities are excluded from this requirement. This form can be found at: http://www.documents.dgs.ca.gov/osp/pdf/std019.pdf.

Drug-Free Workplace Certification (STD. 21) will be required for all grants regardless of grant dollar amount. Federal and State agencies and public entities are excluded from this requirement. This form can be found at: http:/www.documents.dgs.ca.gov/osp/pdf/std021.pdf

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion (Federal Form CE-512) will be required for grants awarded using federal dollars in amounts exceeding $100,000.

H. Collaborative Proposals

Grant agreements will be made with only one eligible lead applicant, so the proposal needs to clearly state which applicant will sign the agreement. The lead applicant will be responsible for payments, reporting, and accounting. Other collaborators in the project will typically be subcontractors to the lead applicant but should be clearly identified, if known, in the application forms and proposal document. You must document that the lead institution will be able to execute all subcontracts in a timely manner. Your proposal must explain how the collaboration will work, including how decision-making authority and liability is to be allocated. Your proposal must also identify the tasks or sub-tasks that will be performed by the different entities. The names of known subcontractors must be identified. When subcontractors are identified, explain briefly how they were selected, and why. You should include the estimated costs of subcontract work and any costs for managing subcontractors in your proposal. If subcontractors and/or subconsultants are not identified in the proposal, applicants are required by the State of California rules and regulations to competitively bid all consultant and subconsultant services performed under each agreement. Subcontractor costs exceeding a quarter of the total project budget should be fully explained and clearly justified.

I. Environmental Compliance

All activities funded under this solicitation must be in compliance with all applicable State and federal laws and regulations, including the National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA), and other environmental permitting requirements. Funding is contingent upon compliance. Project compliance is the responsibility of the project proponent, and proposals may include in their budgets the funding necessary for compliance tasks. It typically requires 6 to 12 months to obtain permits for activities such as sampling for organisms that might include endangered species, so it is critical to begin the process for acquiring the needed permits well before the intended project start date. Permits must be issued to the applicant organization for work specific to the applicant's proposal. Permits transferred

from other programs or projects are not acceptable under this PSP. Grant managers will be conducting audits of regulatory compliance during the period of performance and may freeze payments on invoices and/or require grant funds to be repaid if proponents have not met legal requirements.

Additional information on regulations and permits are available online at http://www.calwater.ca.gov/calfed/library/Archive_ROD.html. (Disclaimer: These publications should not be relied on for legal guidance; consultation with legal counsel may be required to address specific regulatory situations. The ultimate authorities on environmental compliance issues are the regulatory agencies and not the information provided in these guides.)

It is the responsibility of the applicant to comply with all applicable laws and regulations for their projects, including the applicant's institutional requirements for selection of subcontractors. ERP does not have the staff to assist each applicant with their particular needs. Please use the regional offices of appropriate regulatory agencies where your project is located for assistance.

J. Water Law

Funded proposals that address stream flows and water use shall comply with the California Water Code, as well as any applicable Fish and Game Codes. Any proposal that would require a change to water rights, including but not limited to bypass flows, point of diversion, location of use, purpose of use, off-stream storage, etc., shall demonstrate an understanding of the State Water Resources Control Board (SWRCB) processes, timelines, and costs necessary for project approvals by the SWRCB and the ability to meet those timelines within the term of a grant. In addition, any proposal modifying water rights for an adjudicated stream shall identify the required legal process for change as well as associated legal costs.

Prior to a water right purchase or lease, an appraisal of the value of the water right, conducted in compliance with Department of General Services Real Property Services Section specifications must be completed.

An applicant must demonstrate to DFG that they have a legal right to divert water by submitting a copy of a water right permit or license on file with the SWRCB, or some other document that evidences the right. Applicants who divert water based on a riparian or pre-1914 water right must document their right to divert by submitting the information outlined below with their proposal.

- A Statement of Water Diversion and Use that has been filed with the SWRCB. For applicants who have not filed a Statement of Water Diversion and Use, a copy of that form maybe obtained at: www.waterboards.ca.gov/waterrights/. ***The Department will not accept a Statement of Water Diversion and Use unless it has been filed with the SWRCB.***

- The average volume of water (in acre feet) diverted each month during the period of use at each point of diversion; the average volume of water applied at the place of use each month during the period of use from each point of diversion; a table that shows the number of acres irrigated for each parcel within the place of use; the average amount of water (in acre feet) applied per acre each month calculated by dividing the flow (in acre feet) at the place of use into the number of acres irrigated; all data, calculations, and any other information used to estimate the “duty of water”; the average irrigation requirements for the crops and/or pasture land at the place of use. Information regarding average irrigation requirements may be available from the Natural Resource Conservation Service, U.C. Extension, or in the Department of Water Resource’s Bulletin 113; the method(s) used to apply the water to the crops and/or pasture land at the place of use; the type(s) of soil at the place of use; and a map that depicts the place of use, the boundaries of each parcel, each stream or river from which the water is diverted, and the location of each point of diversion on the stream or river.

K. Confidentiality and Conflict of Interest

Applicants should be aware that the titles and executive summaries of all proposals will be available for viewing on the ERP PSP website shortly after the solicitation has closed. Comments from all levels of the review process will also be posted on the website and distributed as part of the public comment process. The complete text of all funded proposals will be posted on the ERP PSP website. By submitting a proposal, the applicant agrees to waive any right to confidentiality of the proposal[1].

Both applicants and individuals who participate in reviews of submitted proposals are bound to State and federal conflict of interest laws. Any individual who has participated in planning or setting priorities for this PSP or who will participate in any part of the grant development and negotiation process on behalf of the public is ineligible to receive funds or personally benefit from funds awarded through this PSP. Individuals who have participated in development of this PSP should not submit proposals. Scientific reviewers and individuals participating in review panels are also subject to the same conflict of interest laws. Proposals may be reviewed and discussed by members of the public under public disclosure requirements. Applicants should also be aware that certain State and federal agencies may submit proposals that will compete for funding. Employees of State and federal agencies may participate in the review process as scientific/technical reviewers but are subject to the same State and federal conflict of interest laws.

To help ERP manage potential conflicts, applicants should complete the ERP Grant Application Section 5 Conflict of Interest (Appendix A) to fully disclose individuals who participated in writing or who will benefit from the project if funded. Individuals who have participated in development of this PSP should not submit proposals.[2]

---

[1] Although the Ecosystem Restoration Program will not post proposal documents for unfunded proposals on their website, all submitted proposals, whether funded or not, are considered public documents and are subject to disclosure under California law.

[2] Failure to comply with these laws, including business and financial disclosure provisions, will result in the proposal being rejected and/or any subsequent grant being declared void. Before submitting a proposal, applicants are urged to seek legal counsel regarding potential conflict of interest concerns that they may have and requirements for disclosure. Applicable California statutes include (i.e., are not limited to) Government Code Section 1090 and Public Contract Code Sections 10365.5, 10410, and 10411.

IV. Proposal Review and Selection

A. Review Process Summary and Schedule

All completed proposals received will undergo administrative review, external scientific review, ERP Implementing Agency Managers Review for project selection, and Delta Stewardship Council review. Funding recommendations and reviews will be made available for public comment through the ERP PSP website. Following public comment, the Director of DFG will make final funding recommendations for final funding approval. Finally, DFG will prepare grant agreements for approved projects. Grant agreements typically require 60-90 days to prepare.

B. Administrative Review

ERP staff will conduct an initial review of proposals to ensure the following:

- all proposal components have been completed, including all application forms and associated documents including the proposal document and detailed budget (see section III.D. of this PSP above);
- proposals are from eligible applicants;
- proposals are responsive to the solicitation's priorities;
- applicants have an acceptable past performance, including effective management of grants previously received from ERP;
- applicability to ERP goals, the MSCS, Conservation Strategy for Stage 2, and priorities listed in Section 2;
- linkages with other restoration activities in that region, such as ongoing implementation projects, watershed or regional planning efforts;
- feasibility based on local circumstances (e.g., are there local constraints on the project's ability to move forward in a timely and successful manner?);
- local involvement, such as participation by landowners, local agencies, and other community organizations; and
- local value, including extent to which the project will improve fish and wildlife habitat and support replicable agricultural activities that contribute to local or regional environmental and economic sustainability.

C. External Scientific Review

Independent external reviewers will be selected to review each proposal based on their expertise in the subject areas of the proposal. The reviewers will evaluate submissions using a set of criteria that combines classic scientific review questions and elements designed by the ERP to address common issues. The subject experts will also make overall recommendations as to whether proposals are superior, above average, sufficient, or inadequate, and explain their recommendations. The external scientific reviewers will thoroughly explain their reviews and base them on the following criteria:

Project Purpose

- Are the goals, objectives, hypotheses, and questions clearly stated and internally consistent?
- Does the proposal link with other restoration activities in that region, such as ongoing implementation projects, watershed or regional planning efforts?
- Is the idea timely and important? Is the study justified relative to existing knowledge?
- Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology, or approaches?

Background

- Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work?
- Is other information needed to understand the basis for the proposed work included and well documented?

Approach

- Is the approach well designed and appropriate for meeting the objectives of the project?
- Is it clear who will be performing management tasks and administration of the project, and are resources set aside to do so?
- Are products of value likely from the project? Is there a plan for widespread and effective dissemination of information gained from the project? Are contributions to larger data management systems relevant and considered?

Feasibility

- Is the approach fully documented and technically feasible?
- What is the likelihood of success?
- Is the scale of the project consistent with the objectives and within the grasp of the authors?

Relevance to ERP

- Does the proposal clearly and directly address one or more of the priorities?
- How well does the proposal address the priorities stated in the PSP?
- Does the proposal possess characteristics state in the PSP such as integration, syntheses, use of existing information, collaborations, or multiple disciplines?
- Will the information ultimately be useful to ERP resource managers and policy-makers?

Overall Evaluation Summary Rating

- A brief explanation of a summary rating.

D. ERP Implementing Agency Managers Review and Project Selection

The Ecosystem Restoration Program Implementing Agency Managers (ERPIAMs) will review recommendations of technical experts whose expertise spans the range of issues covered by the submitted proposals. The ERPIAMs will consider all reviewer comments in their overall evaluation of the proposals. The result of these discussions will be a panel rating of superior, above average, sufficient, or inadequate, along with clear evaluation statements. The panel's funding recommendations will be based on the quality of the proposal, its ability to meet ERP objectives, and the amount of available funds. The ERPIAMs may also recommend additional conditions for funding which may result in modifications of tasks and products. Funding recommendations and reviews may be made available for public comment. No proposals rated inadequate by the panel will be recommended to the Director of DFG for funding.

E. Delta Stewardship Council Review

Projects located in the legal Delta, and tributaries affecting Delta planning actions are subject to review by the Delta Stewardship Council. The review is to determine if the project will contribute to the Council's coequal goals for providing a more reliable water supply while protecting, restoring, and enhancing the Delta ecosystem (Public Resources Code Section 29702).

F. Department of Fish and Game Review and Action

Following public comment, the Director of DFG will make final funding recommendations for final funding approval. The Director may also recommend and/or award a package of grants determined to be most responsive to the charge to promote implementation of the Program in a balanced manner, consistent with the goals and objectives of the CALFED ROD.

G. Signed Grant Agreements

The process of finalizing grant agreements will begin as soon as projects are approved by the Director of the DFG. Depending on the complexity of each project, it will likely take three to six months to develop and finalize the grant agreements for successful proposals. Applicants should not commence work on their projects until funding is approved/secured and agreements are fully executed. Work performed prior to the full execution of a funding agreement is done at the risk of the applicant and without expectation of reimbursement and is considered voluntary. General conditions for grants are provided in Appendix F (Note that some modifications may be made prior to awarding).

H. Timeline

- Proposals due: March 1 , 2011
- Administrative Review process - 1 month
- External and ERPIAMs review – 2 month
- Contract Processing - 3 month
- Award grants: Summer-Fall 2011

Figure 1. The Bay-Delta System

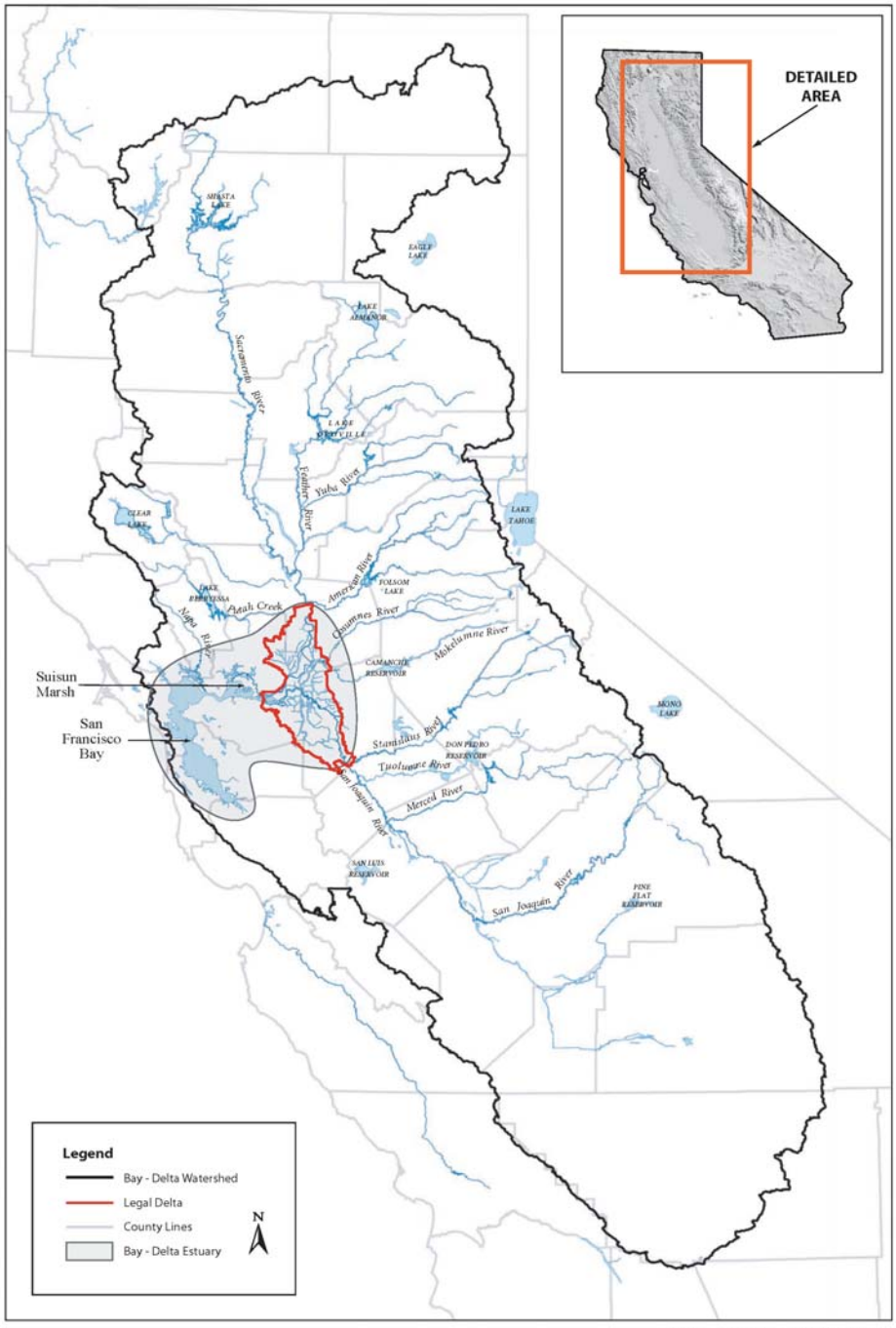

Figure 1 - The Bay-Delta System

Figure 2. The Delta