

Chapter 1—Introduction

What is in this chapter?

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

The first chapter of this document briefly describes the CALFED Bay-Delta Program and its goals, principles, and commitments. The processes used to establish this PSP's priorities are also explained. Information about the PSP's funding sources is also provided. The second chapter lists specific priorities for this PSP. The third chapter describes who is eligible to apply for funds, what your proposal needs to contain, and how to submit it. The final chapter outlines the proposal review and selection process and criteria.

The information in this PSP has been reorganized, but most of its processes are similar to the ERP's 2002 PSP. New features that differ from the 2002 PSP are:

- **Focused solicitations.** This package solicits proposals to monitor and evaluate previously-funded restoration actions. A later package will solicit proposals for other kinds of ecosystem restoration projects.
- **Fish screen coordination.** Proposals to complete the design, permitting, construction, and testing of fish screens identified in the ERP's *Draft Stage 1 Implementation Plan* will be considered in cooperation with the Central Valley Project Improvement Act's (CVPIA) Anadromous Fish Screen Program instead of through the review of proposals submitted in response to a solicitation. For more information, contact the U.S. Fish and Wildlife Service's Bill O'Leary at (916) 414-6725.
- **Eligible applicants.** Public agencies or certain non-profit organizations are eligible to apply. Chapter 3 describes eligible applicants in more detail.
- **Web-based submittal.** The PSP website through which proposals are submitted has been improved to provide clearer forms and easier uploading.
- **Proposal development tools.** Information about previously-funded restoration actions, conceptual models, monitoring, performance measures, and other topics is posted on a "Tools" toolbar at the proposal submittal website.

The Objectives of the CALFED Bay-Delta Program

Ecosystem Quality. Improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay-Delta to support sustainable populations of diverse and valuable plant and animal species.

Water Supply. Reduce the mismatch between Bay-Delta water supplies and current and projected beneficial uses dependent on the Bay-Delta system.

Water Quality. Provide good water quality for all beneficial uses.

Levee System Integrity. Reduce the risk to land use and associated economic activities, water supply, infrastructure, and the ecosystem from catastrophic failure of Delta levees.

Background

The CALFED Bay-Delta Program 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. In 2003, a new law created the California Bay-Delta Authority (“the Authority”) that is charged with ensuring that programs and policies are carried out as described in the CALFED Bay-Delta Record of Decision and the Final Programmatic Environmental Impact Statement/Impact Report (ROD and PEIS/EIR, respectively). The Authority coordinates the activities of numerous implementing agencies to promote balanced implementation of activities that meets the goals and objectives of the CALFED Program. The Authority is also authorized to disburse funds in the form of grants. (See Wat. Code, §§ 79420(a)(6); 79421(j).)

There are 11 program elements in the CALFED Bay-Delta Program; this PSP is for the Ecosystem Restoration Program (ERP). The agencies responsible for implementing the ERP are the California Department of Fish and Game (DFG), the U.S. Fish and Wildlife Service (USFWS) and National Oceanographic and Atmospheric Administration -Fisheries (formerly the National Marine Fisheries Service). These agencies are mid-way through the first seven years (Stage 1) of carrying out the 30-year plan laid out in the ROD and PEIS/EIR.

ERP goals. The ERP seeks to improve and increase aquatic and terrestrial habitats and to improve ecological functions in the Bay-Delta to support sustainable populations of diverse and valuable plant and animal species. The ERP has six strategic goals:

- Recover endangered and other at-risk species and native biotic communities.
- Rehabilitate ecological processes.
- Maintain or enhance harvested species populations.
- Protect and restore habitats.
- Prevent establishment of and reduce impacts from non-native invasive species.
- Improve or maintain water and sediment quality.

Guiding documents. Applicants unfamiliar with the ERP goals and objectives are encouraged to review the documents that guide how the ERP is carried out. In addition to the ROD, there are the *ERP Strategic Plan* (including its Appendix E, the

What should I read?

Many documents guide how the ERP, and consequently this PSP, are carried out. Project proponents familiar with the ERP and the CALFED Bay-Delta Program probably would do well to review the *ERP Multi-Year Program Plan* (Years 5-8) to get a sense of ERP implementation.

If you are new to the ERP PSP process, you may need to take the time to review the *Draft Stage 1 Implementation Plan*, the *ERP Strategic Plan*, and appropriate portions of the *Ecosystem Restoration Program Plan (Volumes I and II)*, the *Multi-Species Conservation Strategy* and the *Water Quality Program Plan's* environmental water quality component; the USFWS's *Final Restoration Plan for the Anadromous Fish Restoration Program* is also helpful.

All documents are available online at <http://calwater.ca.gov>

Strategic Plan for Managing Nonnative Invasive Species), the *Ecosystem Restoration Program Plan Vol. I (Ecological Attributes of the San Francisco Bay-Delta Watershed)* and *Vol. II (Ecological Management Zone Visions)*, the *Water Quality Program Plan* and the *Multi-Species Conservation Strategy*. Documents that guide Central Valley Project Improvement Act programs include the *Central Valley Project Improvement Act (HR429 Title IV)* and the *Final Restoration Plan for the Anadromous Fish Restoration Program*. The ERP's *Draft Stage 1 Implementation Plan* describes how the ERP will implement these longer term plans during the CALFED Bay-Delta Program's first seven years (2000-2007). The *ERP Multi-Year Program Plan (Years 5-8)* outlines specific implementation steps for the next three years.

Priority-setting Process for 2004

The agencies implementing the ERP have assessed progress on the *Draft Stage 1 Implementation Plan's* priorities and on the milestones of the *Multi-Species Conservation Strategy*. The assessment's results are available on-line at <http://www.delta.dfg.ca.gov/envcomp/milestones.asp>.

While the assessment's results are being considered, the Authority, on behalf of the ERP implementing agencies, is issuing this solicitation to continue the monitoring and evaluation of previously-funded restoration actions. Discussions at the Bay-Delta Public Advisory Committee's Ecosystem Restoration Subcommittee and at the ERP Science Board have underscored the importance of continuing to monitor the results of restoration actions. Because ERP grants are limited to three years, many restoration projects will soon exhaust their budgets for monitoring. If new funding is not provided soon, opportunities to sustain monitoring of how completed restoration projects are affecting the ecosystem will be lost. Results from this monitoring can also support adaptive management of previously funded ERP actions and improve planning for future projects.

Funding Sources for this PSP

We expect that about \$20 million may be awarded for projects selected through the PSP.

Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002, is the primary source of funding for this PSP. Most of these funds are administered by the Department of Fish and Game. The Authority may administer some. Funds from other sources, including the Central Valley Project Improvement Act, National Oceanographic and Atmospheric Administration Restoration Funds, or Natural Resource Damage Assessment Settlement Funds, may also be available to carry out some of these projects.

Chapter 2 – Priority for this Proposal Solicitation Package: Understanding the Effects of Previously-Funded Restoration Actions

What is in this chapter?

This part of the document describes the kinds of projects for which proposals are being solicited, including some especially desirable project features.

What kinds of projects are priorities?

The priority of this solicitation is monitoring and evaluation of restoration actions, or groups of restoration actions, previously funded through ERP solicitation processes or by directed actions. These prior restoration actions may have been funded through the CALFED Bay-Delta Program or by the CVPIA's Anadromous Fish Restoration Program, Anadromous Fish Screen Program, or Habitat Restoration Program. A complete list of these projects, including their sponsors, locations, and key features, can be downloaded from the PSP website: <https://solicitation.calwater.ca.gov>. Proposals that seek funds for activities other than monitoring and evaluation of ERP and CVPIA restoration actions will not be considered through this PSP.

We seek monitoring and evaluation projects that can help the ERP and its restoration partners to continue learning:

- How well are restoration actions attaining their objectives? How are ecosystems responding to multiple restoration actions in local areas? Are harmful ecosystem stressors, such as disrupted hydrology, poor water quality, or invasions by nonnative species, reduced? Are ecosystem processes and functions recovering? What measures of project performance indicate the ecosystem's response?

Monitoring and Adaptive Management

Adaptive management is a foundation of the CALFED Bay-Delta Program. In the ERP, adaptive management means managing natural systems to ensure improvement or recovery, while increasing our understanding of how those systems work. Future management actions can then be revised or refined in light of information generated from previous actions and activities.

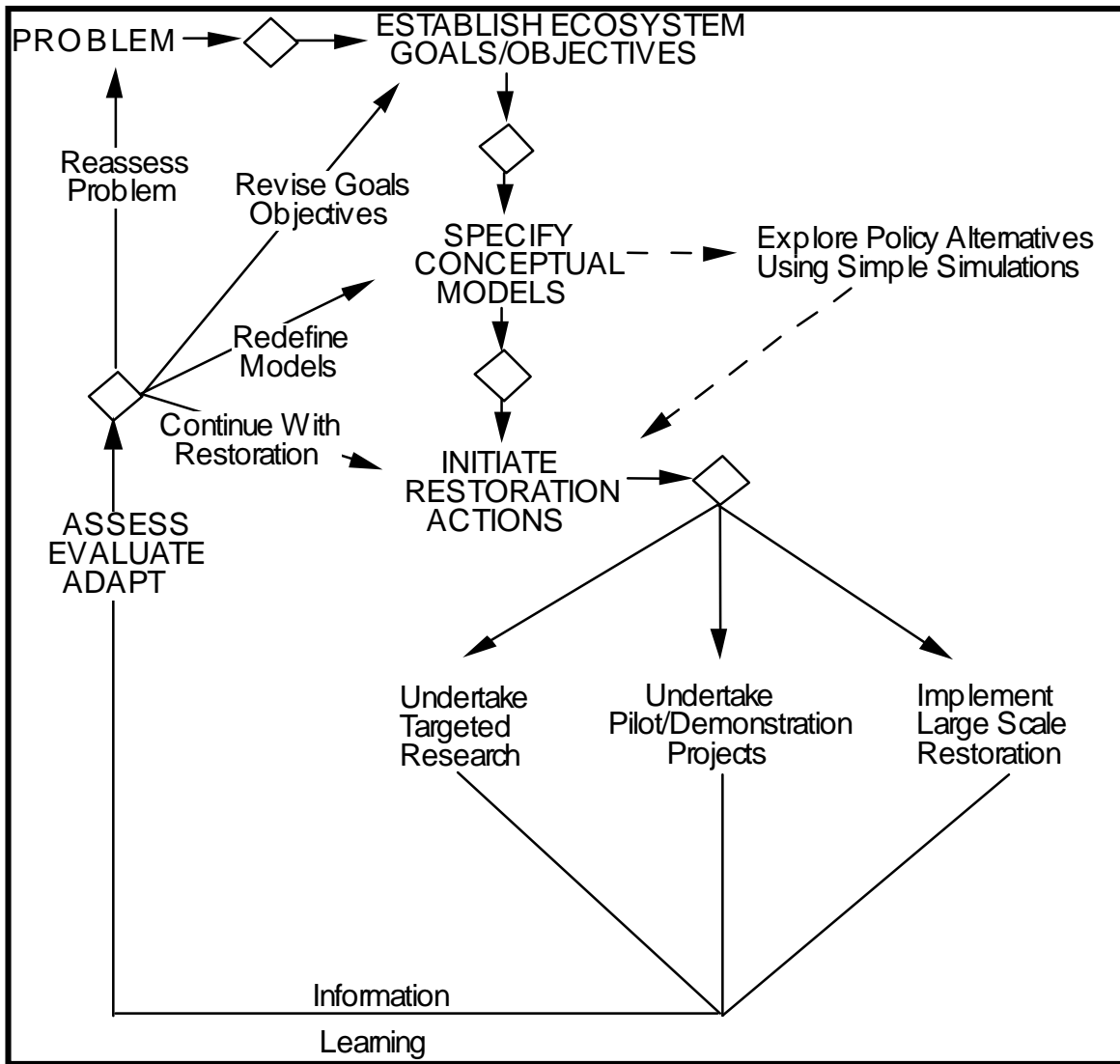
Adaptive management begins by defining the problem to be addressed and selecting goals and objectives for your action. Your understanding of how the affected ecosystem operates is documented in a "conceptual model" that describes what is known about the system and lays out your assumptions about it, uncertainties about which too little is known to be confident, and hypotheses about the ecosystem that your project will test.

If too much is unknown, you may need to begin with research to learn more so that you can more confidently assess whether your project will achieve its objectives. If uncertainties about how the system works are fewer, a pilot project that tests hypotheses about how a restoration action may turn out could be appropriate. Full scale restoration is best when prior research and pilot scale projects make you reasonably confident of achieving a restoration project's objectives.

Because each project is conducted as an experiment, monitoring to assess results and evaluate assumptions and hypotheses is essential. It provides information that is the basis of the adaptive management process. When monitoring results are reported, future projects can build on experience gained from recent actions.

Figure 1 depicts the adaptive management process. More information can be found in Section 2.0 of the *Draft Stage 1 Implementation Plan* and the *Strategic Plan for Ecosystem Restoration's* Chapter 3.

Figure 1. Adaptive Management Process



- How much progress has been made towards the objectives of the Ecosystem Restoration Program and the Multi-Species Conservation Strategy?
- What adjustments to prior restoration actions are needed to better achieve their objectives? Were the ecosystem restoration problems that these actions were intended to address accurately defined?
- What new information or understandings are resulting from restoration actions that may lead to adjustments in our understanding of Bay-Delta ecosystems?

Monitoring of several types may be appropriate:

- **Trends.** Tracking status and trends of environmental variables in ecosystems where restoration is occurring to determine whether conditions are achieving desired objectives.
- **Implementation.** Evaluations of how well a restoration action achieves the objectives listed in the project's proposal.
- **Effectiveness.** Assessments that relate restoration actions' implementation to changes in ecosystem processes or species abundance and diversity.
- **Model Validation.** Investigation of the causal relationships between ecosystem structure and functions and restoration actions.

Monitoring and evaluating outcomes in ecosystems where the ERP has undertaken its most significant restoration actions is especially important. These are: Clear Creek, Butte Creek, the Sacramento River, the Cosumnes River (including adjacent areas in the eastern Delta), the Tuolumne River, the Merced River, the North Delta, and San Pablo Bay, especially the Napa and Petaluma rivers. These areas include the greatest numbers of ERP-funded restoration actions and represent key investments of the program.

Another especially high priority is monitoring and evaluation that assess and compare outcomes of similar restoration actions, such as a group of actions to restore tidal marshes, meandering main stem rivers, or Central Valley tributaries.

Monitoring and evaluation that provide information about how key species, such as salmon or steelhead, have been affected by restoration projects are also important. The Multi-Species Conservation Strategy lists these key species, for which the CALFED Bay-Delta Program has established a goal to recover the species within the CALFED ERP ecological management zones. These are often referred to as "big R" species. Information needs include status and trends in the species' populations, or changes in habitats that support them or processes and stressors that affect them.

Monitoring and evaluation that assess an ecosystem's cumulative response to several restoration actions, continuation of monitoring initiated with previously-awarded ERP or CVPIA grants, or new studies intended to fill gaps in prior monitoring are also appropriate.

Projects should help inform ecosystem management by synthesizing data, drawing conclusions, and reporting results to appropriate audiences, including decision makers, resource managers, stakeholders, researchers, and others.

Other features we seek are:

- **Multi-Institutional Initiatives.** Projects that combine (1) current monitoring of restoration action outcomes or ecosystem status and trends, (2) universities or other research institutions talented in synthesizing and evaluating information, and (3) agencies or organizations responsible for managing important ecosystems.

- **Durable Partnerships.** Projects likely to endure beyond the term of an ERP grant, because they establish readily replicated monitoring and evaluation processes, make full use of ongoing data-gathering programs, and build partnerships capable of attracting funding from multiple sources over time.
- **Joint Fact-Finding.** Projects that involve stakeholders and others in evaluating and reporting results in ways that lead to shared understanding about ecosystems and restoration action outcomes.
- **Interdisciplinary Understanding.** Projects that draw fully upon experts in physical and environmental sciences and other disciplines needed to understand restoration action outcomes and the associated ecosystem processes.
- **Program Coordination.** Projects that, where feasible, produce results readily integrated with those of other long-term monitoring efforts, such as the Interagency Ecological Program, the CVPIA's Comprehensive Assessment and Monitoring Program, the Surface Water Ambient Monitoring Program, the San Francisco Bay integrated regional wetland monitoring program, or endangered species recovery programs.
- **Useful at various scales.** Investigations whose results are useful to resource management at various scales: regions, watersheds, or local project area.

No one project can have all these attributes. Projects should incorporate them consistent with their proponents' needs and capabilities. Projects that combine these features appropriately and efficiently are a priority.