

I. Introduction

A. Overview of the CALFED Bay-Delta Program

The CALFED 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. 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 1a and 1b). The mission is achieved through the following four Program objectives:

- **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 system water supplies and current and projected beneficial uses that depend on the Bay-Delta system ecosystems.
- **Improve Water Quality.** Provide good water quality for all beneficial uses.
- **Improve Levee System Integrity.** Reduce the risk to land use and associated economic activities, water supply, infrastructure, and ecosystem from catastrophic failure of Delta levees.

In 2003, a new law created the California Bay-Delta Authority (Authority) that is charged with ensuring that policies are carried out as described in the CALFED Bay-Delta Program Programmatic Record of Decision and the Final Programmatic Environmental Impact Statement/Impact Report (ROD and PEIS/EIR, respectively). The Authority is specifically charged with providing accountability, ensuring balanced implementation of CALFED objectives, tracking and assessing CALFED progress, using sound science, ensuring public involvement and outreach, and coordinating and integrating related government programs.

The Authority, until July 1, 2006 was the implementing agency for the CALFED Science Program. The Budget Act of 2006 and accompanying trailer bill (AB1803) transfer that function to the Resources Agency.

B. Overview of the CALFED Science Program

The long-term goal of the Science Program is to establish a body of knowledge relevant to CALFED actions and their implications. That body of knowledge, both in perception and reality, must be unbiased, relevant, authoritative, integrated across program elements, and communicated to the scientific community, CALFED agency managers, stakeholders, and the public. The mission of the Science Program is to integrate world-class science and peer review into every aspect of the CALFED program to develop the best scientific information possible to guide decisions and evaluate actions that are critical to CALFED's success.

C. Background of this Proposal Solicitation Package (PSP)

Goals of this PSP

The PSP is one of several tools the Science Program uses in accordance with its mission and goals to establish unbiased and authoritative knowledge directly relevant to CALFED actions. The goal of this PSP is not to create knowledge for its own sake nor is it to fund routine monitoring or mandated projects. The goal is to invest in knowledge that will fundamentally advance the understanding of the complex environments/systems within the CALFED jurisdiction to aid policy-makers and managers. This knowledge must be timely and highly relevant to CALFED decision-making. This focused PSP will help to achieve this goal by:

1. identifying scientific unknowns of the highest priority to the CALFED community prior to the opening of the PSP;
2. soliciting for and supporting new scientific studies that closely investigate these scientific unknowns;
3. thoroughly analyzing what is learned through unbiased scientific review;
4. clearly articulating what is learned through publications, conferences, workshops, and web-sites.

Development of this PSP

Unlike the 2004 Science Program PSP which covered a very broad array of CALFED Program needs and research questions, this PSP is more focused in order to accelerate the review process and maximize the use of scarce funds by more precisely targeting CALFED priority issues.

The 4 topics in the Priority Research Topic List of this PSP were developed by a Selection Panel comprised of agency representatives, stakeholders, and independent scientists whose combined expertise covered the breadth of CALFED issues and interests (panelist names and affiliations are available through the PSP website at http://science.calwater.ca.gov/psp/psp_package_2006.shtml). To assist them in defining and selecting these topics the panel utilized information from recent public events and processes and from priority management issues solicited from implementing agencies and stakeholder groups. Some of these efforts included:

- Pelagic Organism Decline (POD) Report, Review, and Responses
- Interagency Ecological Program (IEP) Delta Smelt Review
- Environmental Water Account (EWA) Reviews
- Operational Criteria and Plan (OCAP), Biological Opinion, and Review
- Mercury Workshop
- Delta Science Panel experts
- Delta Risk Management Strategy (DRMS) experts
- Water Quality experts
- Agriculture experts
- Other

Priority issues were considered in the context of currently funded ongoing research, such as the Interagency Ecological Program (IEP) Pelagic Organism Decline work, the Ecosystem Restoration Program's (ERP) assisting farmers in integrating agricultural activities with

ecosystem restoration PSP, and other agency efforts focused on addressing management needs such as the Delta Risk Management Strategy (DRMS). An additional consideration was the minimum two to three year time frame for most research projects to yield useful products. Integration and synthesis of available information, models, and interdisciplinary approaches were stressed.

In addition to recommending the research topics the Selection Panel also recommended that each priority topic area be designated a minimum of \$1 million of the total \$6 million of available funding for this PSP (assuming there are enough adequate proposals per topic).

This PSP process and the Priority Research Topic List were open to the public for comment on June 6, 2006 and approved by the Authority board on June 15, 2006 (see Figure 2 for a summary of the PSP process and schedule). To view the public comments and the Science Program response please visit the Science Program PSP website at http://science.calwater.ca.gov/psp/psp_package_2006.shtml

Guiding Documents

Project proponents unfamiliar with CALFED goals, objectives, and issues are encouraged to review the documents that guide CALFED activities. These documents and a host of other useful information can be found through the CALFED website (<http://www.calwater.ca.gov>) and the Science Program website (<http://science.calwater.ca.gov>). Following are some specific documents that will be particularly helpful to proponents wishing to familiarize themselves with broad and specific CALFED issues:

CALFED-Wide Perspective:

- CALFED Record of Decision (ROD): <http://calwater.ca.gov/CALFEDDocuments/CALFEDDocuments.shtml>
- CALFED 10 year action plan: http://www.calwater.ca.gov/Revitalizing_CALFED/RevitalizingCALFED.shtml
- Science Program 2004 PSP: http://science.calwater.ca.gov/psp/psp_toc_2004.shtml
- ERP Draft Stage 1 implementation plan: http://www.delta.dfg.ca.gov/erp/reports_docs.asp

CALFED Specific issues:

- Pelagic Organism Decline (POD) Report and IEP 2006-2007 Workplan: <http://science.calwater.ca.gov/>
- Environmental Water Account workshop and reviews: <http://science.calwater.ca.gov/>
- Operational Criteria and Plan (OCAP), Biological Opinion, and Review: <http://science.calwater.ca.gov/>
- Delta Risk Management Strategy (DRMS): <http://www.drms.water.ca.gov/>

CALFED previously funded efforts:

- Science Program
2004 Science Program PSP funded proposals: http://science.calwater.ca.gov/psp/psp_package_2004.shtml

- ERP
ERP directed actions and research grants:
http://www.delta.dfg.ca.gov/erp/grants_2006_grants.asp

D. Funding for this PSP

Approximately \$6 million is targeted for this focused solicitation, reflecting the Proposition 50 funds that have been appropriated to the Authority for these purposes. Of this \$6 million, each of the four priority topic areas of this focused PSP have been designated a minimum of \$1 million assuming there are enough qualified proposals per topic area.

The Science Program anticipates an additional \$6 million will be available in 2007 for another focused solicitation. It is hoped the Science Program PSP will be an annual event, however, due to the uncertainty of funding sources there is no guarantee.