

Agenda Item: 8-8

Meeting Dates: December 8 and 9, 2004

ANNUAL JOINT MEETING WITH BAY-DELTA PUBLIC ADVISORY COMMITTEE

LEAD SCIENTIST REPORT

Summary of Science Program 2004 Accomplishments:

1. Developed and Released the First Science Program Proposal Solicitation (PSP)

- **Due Date:** January 6, 2004, \$18-20 million.
- **Overall goal:** “Invest in projects that develop new knowledge about how water use and management activities interact with and affect key aquatic species and environmental processes across spatial and temporal scales.”
- **Three major topics:**
 - **A. Water Operations and Biological Resources:** Studies that will improve knowledge of key aquatic species and how water management activities affect populations of those species across broad spatial and temporal scales ranging from upstream rivers down through the Estuary.
 - **B. Ecological Processes and their Relationships to Water Management and Key Species:** Studies that will further develop understanding of ecosystem processes in the Delta, Suisun Marsh, and upstream rivers and their relationships to factors critical for water and aquatic species management.
 - **C. Performance Assessment to Improve Tools and Implications of Future Changes:** Analytical frameworks that will support assessments and refined predictions about how likely future changes such as population or climate-related hydrological shifts may affect water operations, ecosystem processes and CALFED projects.
- **Status:**
 - About 60 proposals in preparation on the website, expect about 120 proposals.
 - Developing set of reviewers - will have several hundred to draw on for reviews.
 - Setting up the technical review panel and selection panels early in 2005.

2. Third Biennial CALFED Science Conference

- Three-day conference.
- ~239 oral presentations.
- ~185 poster presentations.
- About 1,100 people attended.
- Abstracts on website.
- Will have a written conference summary available in early 2005.
- Will have a review of the conference by the coordinators early 2005 to set the stage for planning the next conference.

3. Workshops and Reviews Conducted in 2004

- Making Science Work for Suisun Marsh (in conjunction with Environmental Restoration Program (ERP) and Bay-Delta Consortium) - summary posted on website.
- Gravel Introduction Workshop (in conjunction with ERP) - draft summary completed will be posted on website early in 2005.
- The Environmental Water Account (EWA): The First Four Years - all documents on EWA website.
- Contaminant Stressors in the Bay-Delta Workshop - working on summary and whitepaper to come out in 2005.
- Technical Review of EWA for the last four years –The panel's written report is expected by January 2005 and we hope to schedule a more detailed discussion with the Authority in early 2005.
- Initiated a programmatic review of the Interagency Ecological Program (IEP) that will culminate in a public workshop in late spring 2005.

4. Continued Publishing the San Francisco Estuary and Watershed Science Journal

- Open access, peer-reviewed, electronic journal.
 - The Journal focuses on contemporary scientific findings in the science of estuaries and watersheds, with a particular emphasis on the San Francisco Estuary and the watersheds that drain into it.
 - The Journal's published content is indexed by several abstracting services: Directory of Open Access Journals, Cambridge Scientific Abstracts, and Ulrich's Periodicals.
 - Vol. 1, Issue 1 (edited volume) – 10/03/03 to 10/31/04
 - Vol. 2, Issue 1 (monograph) – 03/05/04 to 10/31/04
 - Vol. 2, Issue 2 (standard articles) – 05/24/04 to 10/31/04
- About 5000 downloads of articles so far.

Selected Funded Projects in Progress in 2004

Science Program postponed funding new proposals in 2004 in preparation for the open competition through the Proposal Solicitation Package (PSP) process.

There are a number of studies funded in previous years still ongoing, including:

- Data analysis of patterns in Delta water quality over time focusing on organic carbon (U.S. Geological Survey [USGS])
- Integrated Regional Wetland Pilot Monitoring effort designed to develop monitoring strategies for measuring ecological changes affected by wetland restoration projects in the San Francisco Bay Estuary (San Francisco State University and others)
- IEP Delta fish community data analysis (USGS)
- Franks Tract modeling (Stanford University)
- Winter run salmon genetic analysis (University of California, Davis [UCD])
- Splittail population simulation model to examine how habitat restoration could affect the species (Department of Water Resources and UCD).

The only new project funding during 2004 is a proposed one-year coverage of IEP shortfall to support ongoing hydrodynamic studies and external research projects.

2005 Efforts

- Grant 2004 PSP funds through peer-review and selection process; continue annual solicitation of \$15-18 million.
- Workshops – develop topics of interest/need to CALFED agencies.
- EWA Panel – modify charge/panel for next 3 years of EWA and develop organization of review for long-term EWA.

- Develop Science Program strategic plan with advice from Independent Science Board (ISB).
- Finalize ISB guidelines and Conflict of Interest/Open Meeting rules.
- Organization of science boards for efficient communication – ISB, ERPSB and WMSB.
- IEP Programmatic Review