

Agenda Item: Item 5
Meeting Date: January 31, 2008

Lead Scientist Report

Scientific Coordination

1. The Science Program received a number of applications from qualified candidates for the IEP Lead Scientist Position. The IEP Selection Panel interviewed four candidates on January 25, 2008. The Science Program and IEP Agencies will work to bring the selected candidate on board as soon as possible.
2. The Science Program DRMS Independent Review Panel provided a reply (IRP Reply) to the DRMS Response to the DRMS IRP Review. The IRP Reply (dated December 8, 2007) reiterated key areas where additional analyses and modification of the Phase I Report are needed and expressed pleasure that the DRMS staff were taking the review seriously and planning to revise their report. DRMS staff recently informed Science Program staff that DWR is unable to commit to a schedule for the revision and release of the Phase I Report due to contracting and fiscal issues. In response, the DRMS IRP cancelled their May meeting to discuss the anticipated Phase I Report revision. Mike Healey will be working with DWR to resolve this issue. Jeff Mount and Michael Healey, as science advisors to the Delta Vision Task Force, will brief the Task Force on these issues.
3. In October 2007, The CALFED Water Quality Program released its *Draft Final Water Quality Program Stage 1 Final Assessment* (Final Assessment) for the program's first seven years of operation. The Science Program will assist the Water Quality Program and CALFED Drinking Water Quality Subcommittee in evaluating the overall adequacy of the Final Assessment. In February 2008, Science Program staff will convene an independent review panel and coordinate a peer review.
4. The CALFED Science Program coordinated review of the science underlying the 2004 National Marine Fisheries Service (NMFS) Biological Opinion. Based on this review and others, the US Bureau of Reclamation has reinitiated consultation under the Endangered Species Act on their Operations Criteria and Plan (OCAP) for long term operation of the Central Valley Project and State Water Project. Reclamation is developing a new multi-species Biological Assessment (BA) for OCAP, expected by the end of April 2008, to be followed by Biological Opinions (BOs) issued by NOAA Fisheries National Marine Fisheries Service (NMFS) on anadromous fish

species by December 2008, and U.S. Fish and Wildlife Service (FWS) on inland species, including delta smelt, by September 15, 2008. NMFS and Reclamation have requested that the Science Program review the anadromous species aspects of this BA and the resulting NMFS BO. The OCAP BA review, targeted for early May, will focus on key issues identified by a small group of agency staff and outside scientists working with Science Program staff. In addition, the Science Program has agreed to work with USBR and NMFS on a water temperature modeling workshop in mid to late March in support of the BA and BO development.

5. After the Performance Measures Rally in October 2007, the CALFED Performance Measures Team (Science Program, Program Performance and Tracking (PPT), and Agency Staff) have been assessing the existing personnel available to work on the performance measures effort and adjusting the Performance Measures Work Plan to fit this reality.

More specifically, for each of the four subgroups, there is less than one FTE committed to this effort. Given this level of resources, the Team is focusing on reporting on a small number of initial outcome performance measures by June 2008. The progress report will include status of each performance measure, a conceptual model, trends and analysis where available, and a plan for reporting on additional performance measures. PPT will report on a pilot effort for gathering Level 1 and Level 2 performance measure information for 40 projects as part of this June report. The Science Program and PPT will work on a plan to integrate and expand this effort over time. Water Supply Reliability, Levees, and Water Quality are moving ahead with this plan. Ecosystem Restoration is further behind.

In addition, PPT and Science Program staff will follow up the ISB performance measure memo with meetings focusing on securing additional and appropriate personnel for this effort.

6. In December 2007, The Governor's Delta Vision Blue Ribbon Task Force (Task Force) released *Our Vision for California's Delta*, which offers a vision for sustainable management of the Sacramento-San Joaquin Delta for 30 to 50 years into the future. Mike Healey and Jeff Mount participated in several meetings with Delta Vision Task Force members and staff to identify how science can be integrated into the strategic planning phase of Delta Vision in 2008. They were successful in their efforts to emphasize the critical role science must have in the vision process. The Vision credits the past work supported by CALFED Science ("Applied science, particularly science supported through the CALFED Bay-Delta Program, provided the foundation of understanding that identified the need for a new vision;"), and specifically highlights the ongoing need for science: "...it is imperative that we strengthen the science infrastructure in support of the new vision for the Delta." The Vision also notes: "Robust science and public understanding will be critical to support effective policymaking and operational management required for adaptation."

Scientific Communication

1. The CALFED Science Program's *State of Bay-Delta Science 2008: Summary for Policymakers and the Public* report was completed in time for the November Delta Vision Task Force meeting and is now available online. The summary highlights important new perspectives on water and environmental management in the Bay-Delta system. It defines seven new scientific perspectives and their policy implications, three contributions of science to the policy making process, and a pathway forward to ensure continued high quality and policy relevant Bay-Delta science. The summary is written for resource managers, policymakers, and the public, and is written in context to help decision makers assess important policy choices.

Most chapters of the full report have been reviewed by ISB members and some have been reviewed externally. The remaining chapters are in final stages of preparation or under review and will be complete within several weeks. Copy-editing, and layout and production will occur on final chapters as the remaining chapters come in.

2. The CALFED Science Program and the U.S. Fish and Wildlife Service co-hosted a workshop on delta smelt and longfin smelt spawning migrations and reproductive biology on November 15, 2007, in response to comments by the 2006 Science Review Panel for the Environmental Water Account who considered the lack of scientific information on delta smelt spawning biology a glaring data gap. The main conclusions of the workshop are that Delta and longfin smelts probably spawn in shallow water, probably most often on sand or gravel substrates. They are also secretive spawners, making overnight forays into spawning microhabitats and leaving them before dawn. Scientists could not answer how delta smelt and longfin smelt make decisions about where to spawn or how to find their way to suitable spawning microhabitats. The workshop concluded with a formidable list of research questions that, when answered, will help determine how to mitigate human impacts on spawners. The workshop report will be posted on the CALFED Science Program website in early 2008. See a more detailed story on the workshop in the next Science News.
3. Mike Healey and Science Program Staff participated in two legislative briefings and meetings over the last several months to highlight Science Program activities and to convey the importance of science in the Delta planning efforts.
4. A new issue of Science Action is nearing completion. The issue is on organic matter in Delta drinking water and focuses mainly on work by the USGS. It should be finalized next month.
5. The synthesis report from the two conveyance workshops held last year will be posted soon. The workshops were focused on the science issues surrounding an isolated facility and also through delta alternatives for conveying water to the export facilities.

Scientific Support

1. In the absence of available funds for a full PSP in 2007, the CALFED Science Program made a small amount of supplemental funds available on a competitive basis to provide an opportunity for existing Science Program Grantees to enhance their funded research. The objectives of all proposal supplements must relate to the objectives of the originally funded proposal to be eligible. Proposals that clearly illustrate a need for immediate funding and exhibit a high value added for the funds requested will be viewed more favorably than others. The maximum funding limit per proposal was \$300,000 and an additional 2 years.

Seventeen proposal supplements were submitted totaling \$4.2 million. Proposals are currently undergoing an administrative review to ensure they meet the minimum qualifications. A review panel comprised of independent scientists will be convened in late February – March to discuss and compare the technical merit and value of each proposal and make funding recommendations to the CALFED Lead Scientist.

2. On January 10, 2008, the Science Program hosted a two-day independent review of the Regional Salmon Outmigration Study Plan (Study Plan) prepared by a U.S. Geological Survey-led team of researchers (Study Team). The Study Plan addresses the complex hydrodynamic systems that may pose risks to out-migrating Sacramento River Chinook salmon in the northern Delta Region.

The Review Panel of independent scientists evaluated and commented on the Study Plan and is making recommendations to ensure the proposed investigation, when executed, will provide the best-available science. The Review Panel report is being submitted to DWR next week. The Study Team will provide a written response to the technical review report in the form of a revised proposal to be prepared by March 2008. DWR and the Study Team conveyed positive comments on the workshop and felt it was very worthwhile.

Program Building

1. On December 12, 2007, the Science Program staff participated in a retreat at the Cosumnes River Preserve. The objectives of the retreat were to reassess and discuss future priorities, existing workload and strategic planning for the Science Program. The retreat was a success and a number of follow up actions are underway. Some of the outcomes include focus on improving the Science Program website, assignment of a small group for visioning and strategic planning, and the need for discussion papers on the future role of the Science Program within new CALFED governance options.

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