

**Agenda Item: Item 4**  
**Meeting Date: May 19, 2008**

## Lead Scientist's Report

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### Scientific Coordination

1. The Science Program and IEP Agencies have interviewed IEP Lead Scientist candidates. CALFED staff is working through administrative details for hiring the selected candidate.
2. The U.S. Bureau of Reclamation (USBR) has initiated formal 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. USBR released a new multi-species Biological Assessment (BA) for OCAP on May 16, 2008; to be followed by Biological Opinions (BOs) issued by U.S. Fish and Wildlife Service (FWS) on inland species, including delta smelt by September 2008 and NOAA Fisheries National Marine Fisheries Service (NMFS) on anadromous fish species by December 2008. NMFS has requested that the Science Program review the anadromous species aspects of this BA and the resulting NMFS BO. The OCAP BA review, targeted for late July/early August, will focus on key issues identified by a small group of agency staff and outside scientists working with Science Program staff. The Science Program lead is Matt Nobriga.

The Science Program worked with USBR and NMFS to convene a workshop on Temperature Management and Modeling Workshop in Support of the OCAP Biological Assessment and Biological Opinion on April 1, 2008. The Science Program lead is Steve Culberson. More information can be viewed at: [http://www.science.calwater.ca.gov/events/workshops/workshop\\_tmm.html](http://www.science.calwater.ca.gov/events/workshops/workshop_tmm.html)

3. The Science Program is providing support and advice to the The Governor's Delta Vision Blue Ribbon Task Force (Task Force). The Science Program convened the first of two workshops on various aspects of Delta conveyance modeling on April 3. The first workshop on modeling approaches provided a forum for discussing how several current modeling efforts are addressing Task Force needs for information on dual conveyance. At the request of the Task Force, the second workshop to be held May 20 will highlight efforts to develop computer models linking physical models to ecosystem response. The Science Program lead is Steve Culberson.

Mike Healey prepared and presented a summary of the April 3 Delta conveyance modeling workshop for the April 24-25 Task Force Meeting ([http://deltavision.ca.gov/BlueRibbonTaskForce/April2008/Handouts/Item\\_5a\\_Attachment1.pdf](http://deltavision.ca.gov/BlueRibbonTaskForce/April2008/Handouts/Item_5a_Attachment1.pdf)). Healey will prepare and present summaries of both the second conveyance modeling workshop and the organic carbon workshop to the Task Force at the May 28-29 meeting.

On May 16, the Science Program sponsored a workshop in support of the Task Force on Organic Carbon: The Good, the Bad and the Muddy. The workshop explored potential misconceptions about organic carbon, its importance to the ecosystem, and problems of organic carbon in drinking water along with potential strategies to resolve conflicts between ecosystem and drinking water needs. The Science Program lead is Darcy Jones.

The synthesis report from two previous Delta conveyance infrastructure workshops held in August and September 2007 is now available and can be viewed at:

[http://www.science.calwater.ca.gov/events/workshops/workshop\\_dci.html](http://www.science.calwater.ca.gov/events/workshops/workshop_dci.html)

4. Science Program staff, Mike Healey and Jeff Mount recently met with Department of Water Resources staff to confirm that the Delta Risk Management Strategy (DRMS) Independent Review Panel (IRP) will review the revised Phase 1 Report. We anticipate the IRP will receive the revised Phase 1 report by the last week of June and complete their review by September, 2008. The Science Program lead is Ladd Lougee.
5. On April 17-18, Erica Fleishman from UC Santa Barbara, National Center for Ecological Analysis and Synthesis (NCEAS), Bill Dennison (University of Maryland), and Wim Kimmerer (San Francisco State) convened a work group to explore the use of a "report card approach" to evaluate the Bay-Delta system. This approach has been successful for highlighting the importance of scientific issues in areas such as the Chesapeake Bay. Further discussion between CALFED Science Program Staff and others is ongoing. See Staff Report #6 (Performance Measures) for more detail. The Science Program leads are Elizabeth Soderstrom and Matt Nobriga.
6. The Science Program is assisting the CALFED Water Quality Program and CALFED Drinking Water Quality Subcommittee in evaluating the overall adequacy of the *Draft Final Water Quality Program Stage 1 Final Assessment* (Final Assessment) for the program's first seven years of operation. Science Program staff convened an independent review panel and is coordinating the review of the Final Assessment. Final review comments will be provided to the Science Program by June 13, 2008. The lead reviewer will travel to Sacramento in July 2008 and present a summary of the comments to CALFED staff and the CALFED Water Quality Subcommittee. The Science Program lead is Barbara Marcotte.

## **Scientific Communication**

1. The Lead Scientist and Science Program staff are making final edits to the *State of Bay-Delta Science 2008 Report*. All chapters are complete and at the final graphics and layout stage except one, which is in final revision. A few non-scientific CALFED staff are reviewing the chapters for comprehension by our target audience. A few final layout decisions and indexing remain. Production and printing are expected to take at least a month. The revised timeline for release of the report is summer 2008. The Science Program lead is Darcy Jones.
2. A new issue of Science Action, Tracking Organic Matter in Delta Drinking Water, was completed and released in April. The issue focuses mainly on work by the U.S. Geological Survey and can be viewed at:  
[http://www.science.calwater.ca.gov/pdf/publications/sia/SIA\\_DOC\\_041608.pdf](http://www.science.calwater.ca.gov/pdf/publications/sia/SIA_DOC_041608.pdf)
3. The 5<sup>th</sup> Biennial CALFED Science Conference will be held at the Sacramento Convention Center on October 22-24, 2008. The title of this year's forum is: Global Perspectives and Regional Results: Science and Management in the Bay-Delta System. The organizers of the Science Conference are seeking presentations in all four of the CALFED Program's objectives: ecosystem restoration, levee system integrity, water quality, and water supply reliability.  
  
The conference program will feature both oral and poster presentations. We encourage individuals to submit abstracts on any appropriate topic, regardless of funding source of the projects being described. All abstracts are due June 6, 2008. For additional details please visit the conference web site: <http://www.science.calwater.ca.gov/conferences/>. The Science Program lead is Rebecca Fris.
4. The CALFED Science Program recently appointed Samuel Luoma as the Editor in Chief for the San Francisco Estuary and Watershed Science online journal starting with Volume 6, Issue 3. The current issue (Volume 6, Issue 1) contains four articles on topics including delta smelt, phytoplankton trends in the upper estuary, particle transport in the Delta and regional hydrologic response to climate variability. All articles can be downloaded at <http://repositories.cdlib.org/jmie/sfews>. The Science Program lead is Michelle Shouse.
5. A new issue of Science News was issued in April and included topics such as out-migration of salmon, ISB letter to IEP, DRMS, and an update on the Science Program supplemental PSP. All articles can be viewed at [http://www.science.calwater.ca.gov/pdf/sci\\_news/sci\\_news\\_april\\_2008.pdf](http://www.science.calwater.ca.gov/pdf/sci_news/sci_news_april_2008.pdf)

## **Scientific Support**

1. In the absence of funds for a full research grant proposal solicitation package (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 CALFED Science Program received 17 proposals, totaling \$4.3 million. In April, a Technical Selection Panel, made up of independent scientists and chaired by Mike Healey, reviewed the proposals and recommended that nine of the proposals be funded totaling \$2.2 million. Resources Secretary Mike Chrisman approved the funding May 14, 2008. Science Program technical staff will prepare modifications to the existing contracts so that they can begin their supplemental work. The Science Program lead is Michelle Shouse. The funding recommendations and the proposal reviews can be viewed at: [http://www.science.calwater.ca.gov/psp/psp\\_package\\_2007.html](http://www.science.calwater.ca.gov/psp/psp_package_2007.html)
2. The Science Program is accepting applications from qualified individuals to compete for fellowship opportunities in 2008. Up to 12 fellowships are available for qualified graduate students and postdoctoral researchers. Fellowships must focus on one or more of the following topics for the California Bay-Delta system:
  - Trends and Patterns of Habitats, Populations and System Response to a Changing Environment
  - Aquatic Invasive (Exotic) Species
  - Water Supply, Water Quality
  - Developing Indicators and Performance MeasuresCalifornia Sea Grant administers and manages the fellowship program. Fellowships will begin September 2008: the application deadline is 5 p.m., Friday, June 6, 2008. The Science Program lead is Matt Nobriga. Additional information and application instructions, are posted on the California Sea Grant website at: <http://www.csgc.ucsd.edu/EDUCATION/CALFED/CALFEDIndx.html>.

## **Program Building**

1. A small group of interested Science Program staff been working to review and revise Lead Scientist Mike Healey's draft Science Program Strategic Plan. The group met several times and recently completed draft Vision, Mission and Objective statements that were reviewed by all Science Program staff. At a May 30 retreat Science Program staff will continue to flesh out the strategic plan and discuss their ideas about the future role of the Science Program within possible Delta governance options.

2. Science Program staff made substantial improvements to the Science Program website and webpages. Users can now access a wide range of products and new information as well as specific information on workshops, review panels, research grants, seminars and conferences. The Science Program lead is Dusty Boeger.
3. Research Writer Robert Ullrey recently took a position with the California Department of General Services. The Science Program is currently working to fill two vacancies: Research Writer and Staff Environmental Scientist/Environmental Scientist.

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