



# Science News

News from the CALFED Science Program



## Welcome

Welcome to the return of the CALFED Science Program's *Science News*. The CALFED Science Program was established to integrate peer reviewed science into the CALFED Bay-Delta Program. This monthly newsletter is designed to help inform you of the latest information coming from the CALFED Science Program, such as upcoming events, workshops, research of interest and recent reports. We will also let you know about key CALFED news affecting the Science Program.

If you would like to unsubscribe or subscribe to the *Science News*, please follow this link:  
<http://www.calwater.ca.gov/ListServe/EmailSubscriptions.htm>

## What's Going on in CALFED Science

### Dr. Healey Takes Lead Post with Science Program

Dr. Michael C. Healey took office as Lead Scientist for the CALFED Bay-Delta Program, January 2007. Appointed by Secretary for Resources, Michael Chrisman, Dr. Healey is internationally-recognized as an expert on salmonids and natural resource management. Dr. Healey brings 37 years of ground-breaking science experience to the CALFED Science Program including lead for a number of research programs on the ecology and productivity of Pacific Coast salmon. Dr. Healey directed the University of British Columbia's Westwater Research Center, an interdisciplinary research program focusing on science and policy regarding water issues. He is author of more than 225 scientific articles and reports, editor of two books on water and sustainable development, and recipient of two Fulbright Scholarships.

Dr. Healey will serve a one-year term and be responsible for identifying, refining and implementing the science agenda for the CALFED program. As the Lead Scientist, Dr. Healey will act as the primary contact between the research community, the CALFED Bay-Delta Program and resource decision makers. Moreover, Dr. Healey will develop, direct and implement the programmatic goals of the CALFED Science Program, as well as develop priorities with program managers and implementing agencies pursuing those goals. Dr. Healey will work closely with the Independent Science Board to advise CALFED managers, stakeholders and the public on the application of science and the effectiveness of science practices for the Bay-Delta program.

Science News  
February 2007

## CALFED Science Program

### Establishing a Body of Knowledge

*The CALFED Science Program's mission is to integrate peer reviewed science into every aspect of the CALFED Bay-Delta Program. The Science Program is establishing the best scientific information possible to guide decisions and evaluate actions critical to the CALFED Program's success.*

*The long-term goal of the Science Program is to establish an unbiased, relevant and authoritative body of knowledge integrated across program objectives and communicated to the scientific community, agency managers, stakeholders and the public.*

### Links:

CALFED Science Program Homepage

CALFED Bay-Delta Program Homepage

Subscribe to the Science News

A publication of the  
 CALFED  
 Bay-Delta Program  
 Science Program

650 Capitol Mall  
 5th Floor  
 Sacramento, CA 95814  
 916.445.5511  
[science.calwater.ca.gov](http://science.calwater.ca.gov)

Editor  
 Robert Ullrey  
[rullrey@calwater.ca.gov](mailto:rullrey@calwater.ca.gov)

## CALFED Science Fellows Named

The CALFED Science Program has announced its Science Fellows Class of 2006. This year two doctoral and eight post-doctoral fellows were selected. Science Fellows are brought together with agency scientists and senior research mentors to work collaboratively on data analysis and research projects relevant to ecosystem management and water supply reliability. This year's CALFED Science Fellows are:

### Doctoral Fellows:

**Anthony Clemento**, UC Santa Cruz, studying *Validation of a New Method for Population Assessment of Pacific Salmonids Using Genetic Markers*.

**Russell Perry**, Department of Aquatic and Fishery Science, University of Washington, Seattle, studying the *Estimating Route-Specific Survival and Distribution of Juvenile Salmonids Migrating Through the Sacramento-San Joaquin River Delta*.

### Post-Doctoral Fellows:

**Allison Luengen**, UC Santa Cruz, studying *Mercury Interactions with Algae: Effects on Mercury Bioavailability in the San Francisco Bay Delta*.

**Alexander Parker**, Romberg Tiburon Center, San Francisco State University, studying *Heterotrophic Bacteria and the Food Web of the Low Salinity Zone and Salt Marsh Habitats of the San Francisco Estuary*.

**Brian Sardella**, UC Davis, studying *Temperature and Salinity Effects on the Physiology of White Sturgeon*.

**Robert Schroeter**, Department of Wildlife, Fish and Conservation Biology, UC Davis, studying *Temporal and Spatial Patterns in Abundance and Production in Pelagic Organisms in the Low Salinity Zone (Suisan Marsh, Bay and Delta) of the San Francisco Estuary with Insight into Tropic Position and Impacts of Alien Invasive Species*.

**Nathaniel Seavy**, U.S. Geological Survey, Hawaii, studying *Measuring and Predicting the Success of Riparian Restoration for Wildlife Populations*.

**Lindsay Sullivan**, Romberg Tiburon Center, San Francisco State University, studying *Prey Selection of Larval and Juvenile Planktivorous Fish in the San Francisco Estuary*.

**Christine Whitcraft**, Romberg Tiburon Center, San Francisco State University, studying the *Role of Exotics as Ecosystem Engineers Affecting Estuarine Food Webs in Suisan Marsh*.

**Christa Woodley**, Center for Watershed Sciences, UC Davis, studying *The Impacts of Global Climate Change on Delta Fishes: Predicting Fish Abundance, Distribution and Community Changes*.

For more information on Science Fellows, visit: <http://www.csgc.ucsd.edu/EDUCATION/CALFED/CALFEDClass06.html>

Each year the CALFED Science Program sponsors fellowships for doctoral and post-doctoral scientists in collaborative data analysis and research relevant to the CALFED Program

## PSP Awards Announced

### \$6 Million Awarded for New Research

The CALFED Science Program, through the *2006 Focused Proposal Solicitation Package* (PSP) has awarded \$6 million for research within the Sacramento San-Joaquin watershed and the San Francisco estuary. This year, the Science Program will fund 14 research proposals designed to fundamentally advance the understanding of this complex system. Funded research will aid resource managers, and policy makers, in making key decisions regarding the Delta.

This year's Focused PSP concentrated on environmental water; aquatic invasive (exotic) species; trends and patterns of populations, and system responses to climate change; and habitat availability and response to change.

In 2006, the solicitation process was streamlined as a Focused PSP to both accelerate the review period without sacrificing rigor, and meet the needs of resource managers by soliciting proposals for tightly focused research priority topics.

Three environmental water research projects were awarded \$1.8 million. Three grants totaling \$852,000 were awarded for research on aquatic invasive or exotic species. Funding to study trends and patterns of populations and system responses to a changing environment were awarded to three projects, amounting to \$1.4 million. Five projects received funding for research in habitat availability and response to change, totaling \$1.86 million.

For more information, visit [http://science.calwater.ca.gov/psp/psppackage\\_2006.shtml](http://science.calwater.ca.gov/psp/psppackage_2006.shtml)

## Environmental Water Account Reviewed

The Science Program, in collaboration with implementing agency scientists, convened a panel in November 2006 to conduct a comprehensive technical review of the Environmental Water Account (EWA). The review focused on the contribution of the EWA and other environmental water programs to protecting and restoring at-risk species in the San Francisco estuary and watershed. The review also provided feedback on plans for science needs and water allocation priorities for EWA Year 7, and identifying science components and water allocation strategies for a possible future environmental water program. The review panel's report will be available January 31, 2007. For more information on the review, visit the EWA Workshop website at <http://science.calwater.ca.gov/workshops/ewa.shtml>.

## December's Online S.F. Estuary and Watershed Science Journal Released

Volume 4, Issue 3 of the online journal San Francisco Estuary and Watershed Science is available at <http://repositories.cdlib.org/jmie/sfews/vol4/iss3/>. This issue offers articles about the effects of flow convergence in a tidal channel by a salinity minimum, and a comprehensive review of salmon and steelhead in the Central Valley.

San Francisco Estuary and Watershed Science is a peer-reviewed online journal dealing with all aspects of the San Francisco Bay-Delta estuary, its watershed and adjacent coastal ocean. It is published up to three times a year by the CALFED Science program.

## CALFED Science Conference a Success

The fourth biennial CALFED Science Conference, held October 23-25, 2006, was a great success. The conference, with the theme *Making Sense of Complexity: Science in a Changing Environment*, had over 1,200 attendees with 249 oral and 184 poster presentations. Among the high-priority issues presented were pelagic organism decline, mercury, invasive species, climate change and wetland restoration. Abstracts are available now, with brief summaries of the presentations (*Presentations-at-a-Glance*) available in late-February at <http://science.calwater.ca.gov/conferences/conferences.shtml>.

## What's New at CALFED

CALFED's 2006 *Annual Report* is nearing completion with an anticipated release date of February 15, 2007. The 2006 report highlights activities over the past year, provides an update of actions taken within each program area, includes an overview of the year, a review of legislative highlights and the 2005-06 state and federal cross-cut budget. This year's report will offer a more streamlined, user-friendly look.

Watch for the release of the 2006 CALFED *Annual Report* at the CALFED website <http://www.calwater.ca.gov>.

## Upcoming Science Program Events

### **Independent Science Board Meeting (ISB)**

February 21-22, 2007

CALFED Bay-Delta Program  
650 Capitol Mall, 5th floor  
Delta Room, Sacramento, CA

For more information, call Rebecca Fris at (916) 445-5031, or visit [http://science.calwater.ca.gov/sci\\_tools/isb.shtml](http://science.calwater.ca.gov/sci_tools/isb.shtml)

## Upcoming Events of Interest

### **National Conference on Science, Policy and the Environment**

February 1-2, 2007

Washington, D.C.

For more information: <http://ncseonline.org/NCSEconference>

### **Interagency Ecological Program 2007 Annual Workshop**

February 28 - March 2, 2007

Asilomar Conference Grounds  
Pacific Grove, CA

For more information: [http://iep.water.ca.gov/AES/Asilomar\\_2007.htm](http://iep.water.ca.gov/AES/Asilomar_2007.htm)

### **2007 California Estuary Research Society (CAERS) Annual Meeting**

March 18-20, 2007

Bodega Marine Lab  
Bodega Bay, CA

Abstracts and registration due February 16, 2007. For more information:

[http://online.sfsu.edu/~caers/CAERS\\_2007\\_meeting.html](http://online.sfsu.edu/~caers/CAERS_2007_meeting.html)

### **National Conference on Ecosystem Restoration**

April 22-27, 2007

Kansas City, MO

For more information: <http://conference.ifas.ufl.edu/NCER2007>