

CALFED Bay-Delta Program
Annual Workshop and Review of Mercury Projects

“An annual workshop should be convened to provide a forum for sharing, discussion, and integration of interim results.”—Mercury Strategy 2003

Dates: April 23, 24, 25, 2007

Location: Yosemite Room
Red Lion Hotel, 1401 Arden Way, Sacramento, CA 95815
916-922-8041
e-mail: sacramentosales@redlion.com
Website: <http://redlion.rdl.com/HotelLocator/HotelOverview.aspx?metaID=41>

Overall goals of meeting:

- Presentation of individual CALFED Ecosystem Restoration Program (EPR) mercury-related projects
- Review of individual Ecosystem Restoration Program mercury-related projects
- Develop consensus on major scientific findings
- Relate mercury projects to overall goals of the Ecosystem Restoration Program
- Communication of findings to managers and to public

Review Panel (Confirmed Members):

Dr. Carol Kelly (chair), R&K Research, Inc.
Dr. Jim Wiener, U. of Wisconsin at La Crosse
Dr. Brian Branfireun, U. of Toronto
Mr. Reed Harris, Tetra Tech, Inc.
Dr. John Cain, Natural Heritage Institute, San Francisco
Dr. Ed Gross, Bay Modeling, Berkeley

Meeting Day 1 (April 23, 2007)

Goal: To present and discuss the key findings of the CALFED/EPR-funded mercury projects to other scientists, agency staff, and interested members of the public.

Format: Open to the public. Participating researchers from seven CALFED/EPR-funded mercury projects will make summary presentations of project highlights, 25 minutes or shorter in length, to be followed by at least 20 minutes of questions and discussion for each project.

8:00 - 8:30 am: Informal coffee/light breakfast

8:30 - 9:00 am: Introductions and overview of meeting goals

9:00 - 9:45 am: Mercury Quality Assurance / Quality Control Program (Beverly Van Buuren)

9:45 - 10:30 am: Mercury and Methylmercury Processes in North San Francisco Bay Tidal Wetland Ecosystems (Don Yee, Stephen Schwarzbach, John Takekawa, Jules Evens, Mark Marvin-DiPasquale, Dave Krabbenhoft, Lisa Windham-Myers)

10:30 - 10:45 am: Break

10:45 - 11:30 am: Measurement of Mercury Release from Delta Wetlands: Amounts, Alterations, and Implications; and amendment to existing project 00-G01 (Roger Fujii, Brian Bergamaschi, Jacob Fleck, George Aiken)

11:30 am - 12:15 pm: Transport, Cycling and Fate of Mercury and Monomethyl Mercury in the San Francisco Delta and Tributaries, An Integrated Mass Balance Assessment Approach (Mark Stephenson, Chris Foe, Gary Gill)

12:15 - 1:30 pm: Lunch – on your own

1:30 - 2:30 pm: Mercury in SF Bay Delta Birds: Trophic Pathways, Bioaccumulation, and Ecotoxicological Risk to Avian Reproduction (Tom Maurer, Josh Ackerman, Collin Eagles-Smith, Gary Heinz, Keith Miles, Steve Schwarzbach, John Takekawa)

2:30 - 3:15 pm: Evaluation of Mercury Transformations and Trophic Transfer in the San Francisco Bay/Delta: Identifying Critical Processes for Ecosystem Restoration (Mark Marvin-DiPasquale, Robin Stewart)

3:15 - 3:30 pm: Coffee break

3:30 - 4:15 pm: A Pilot Program for Monitoring, Stakeholder Involvement, and Risk Communication Relating to Mercury in Fish in the Bay-Delta Watershed (Jay Davis, Mark Stephenson, Darell Slotton, Bob Brodberg, Alyce Ujihara)

4:15 - 4:45 pm: DRERIP Mercury Model (Charlie Alpers)

5:00 - 6:00 pm: social hour (no host bar)

6:00 pm: Dinner – on your own

6:00 - 9:00 pm: Review panelists meet in closed session

Note: Posters will be on display for all three days, and can be discussed during breaks and social hour.

Meeting Day 2 (April 24, 2007)

Goals: 1. To integrate scientific findings and to develop scientific consensus on the 6 core components of the Mercury Strategy for the Bay-Delta Ecosystem

2. To delineate ways in which the outcomes of the Ecosystem Restoration Program (ERP)-funded mercury projects further the overall goals of the Program

3. To identify, if appropriate, 1 or 2 joint publications that could be developed and written in the coming year

4. To assemble a presentation from each group for the Public Session on Wednesday

Format: Closed session for research teams and panelists. Initial brief common meeting to define the goals and questions, followed by simultaneous breakout groups, and recombining for whole-group discussions. Each breakout group will have a designated discussion leader, and will choose a second person to serve as presenter at the Public Session. During discussions, each group will produce a set of about 15-20 Power Point slides to communicate back to the whole group later in the day, and to act as the basis for preparing the talks for Wednesday's public session. During breakout sessions the review panel will meet in closed session.

8:30 - 9:00 am: Informal coffee/light breakfast, Ballroom Foyer

9:00 - 9:15 am: Opening presentation by Bellory Fong, Program Manager, Ecosystem Restoration Program, on ERP goals, objectives, targets

9:15 - 9:25 am: Defining goals and questions for discussion, Carol Kelly

9:25 - noon: Two breakout groups. Coffee available.

Noon - 1:00 pm: Lunch provided

1:00 - 2:30 pm: Continued meeting of the two breakout groups. Coffee available.

2:30 - 4:00 pm: Combined session. One person from each breakout group will report, and discussion will follow, resulting in identification of a set of findings deemed most useful to be presented at the public session

4:00 - 5:00 pm: The two presenters will finalize which PowerPoint slides will be used in the short presentations on Wednesday a.m.

5:00 - 6:00 pm: social hour

6:00 - 9:00 pm: Closed panel meeting

Day 2 Breakout Sessions—Questions and topics

Mercury Strategy–specific questions (numbers relate to numbers of Core Components of the Strategy):

Group 1 (biogeochemistry-oriented)

1. What mercury sources are most important in determining methyl mercury concentrations in the Delta? What is the degree of confidence in this determination?
2. What remedial actions would work best – control of upstream mercury loads, manipulation of methylation conditions in the rivers and the Delta, or something else?
3. Does our current understanding of mercury methylation in the Bay-Delta system allow prediction of the effects of ecosystem restoration, including wetland reconstruction, on methyl mercury production within the system?

Group 2 (biota-oriented)

4. What is the current assessment of risk to humans from methyl mercury in fish?
5. What is the current assessment of risk to wildlife?
**Related to 4 and 5. What would be the best "performance measure" of risk reduction going forward, as ecosystem restoration projects proceed?
6. Have the best remediation approaches (to reduce the methyl mercury exposure risk to humans and wildlife) been identified and tested?

Ecosystem Restoration Program (ERP)-specific points (Both Groups):

In the discussion of core components above, include the following where appropriate:

1. Ways in which the outcome of the ERP-funded mercury projects relates to planning and monitoring of Ecosystem Restoration Program Projects in the Bay-Delta system
2. Identification of future mercury-related projects, monitoring, or other activities that are recommended to help reach ERP objectives
3. Identification of risks such as sea level rise, earthquakes, levee failures, major water flow alterations, etc. that could affect mercury contamination of biota in the Bay-Delta system

Meeting Day 3 (April 25, 2007)

Morning-- Presentations and Poster Session

Location:

8:30 - 9:00 am: Informal coffee/light breakfast

9:00 -10:30 am: *Goal:* To present an overview of current findings of value to scientists and resource managers in a format that is also valuable to members of the public and news media

Format: Two 30-minute presentations by designated scientists from the two breakout groups on Day 2, with time for questions. Review panel will attend this session.

10:30 am - noon: *Goal for project investigators:* To provide for close interaction and information exchange between investigators and other mercury projects with the public, managers, agency staff

Format: Poster session (copies of posters also to be made available for the CBDA Website). Coffee available.

***Goal for Review Panel:* to prepare summary evaluation (in closed session) for presentation in the afternoon**

Format: Closed session

Noon - 1:30 pm: Lunch – on your own

Afternoon—Review Panel feedback

1:30 - 4:00 pm: *Goal:* To present the initial report of the Review Panel to P.I.'s

Format: Large common room, collective feedback in a group setting, emphasizing overall progress and synthesis at the individual project level and the multi-project level; main comments of the panel provided verbally by multiple panelists, supported by a PowerPoint presentation.