



Interagency Ecological Program for the San Francisco Estuary

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2009 IEP Monitoring Workshop, Page 1 of 3 (DRAFT, 9/24/09)

2009 IEP Workshop Series, Workshop 5

Bay-Delta monitoring questions and tools for the 21st century

October 14-15, 2009

650 Capitol Mall, 5th floor, Delta room, Sacramento

***DRAFT* Agenda**

Workshop Purpose:

- Drawing from the previous four workshops in the 2009 IEP workshop series, synthesize objectives that potentially can be met with information from Bay-Delta monitoring and assessment.
- Discuss long-term and emerging questions, objectives, and initiatives relevant to environmental assessment and management of the Bay-Delta system and how to address them with suitable tools.

DAY 1

Synthesis of monitoring insights and ideas from the 2009 IEP workshop series

Chair: Anke Mueller-Solger, CALFED

Talks: 20 minutes each, followed by 10 minutes Q&A and discussion

9:00 – 9:20 Welcome, housekeeping, workshop purpose & program overview...

Anke Mueller-Solger, CALFED

9:20 – 9:50 Following food webs and fish into the future – TBA

9:50 – 10:20 New Questions and Monitoring Needed in Assessing the Role of Ammonia in the Delta and Suisun Bay Ecosystem – Stephanie Fong, CVRWQB

10:20 – 10:50 BREAK

10:50 – 11:20 From flow to fish: IEP review of hydrodynamic modeling of the (Bay)/Delta – Lenny Grimaldo, USBR

11:20 – 11:50 Reducing uncertainty in synthetic analyses – Erica Fleishman, UCSB

11:50 – Noon Morning Wrap-up – Anke Mueller-Solger

Noon – 13:20 LUNCH (not provided)

12:20-13:00 Brown-bag lunch talk: Questions and tools beyond the Delta: the new California Water Quality Monitoring Council – Jon Marshack, SWRCB

Discussion of monitoring questions, initiatives, and tools for a changing ecosystem

Chair & Facilitator: Bruce Herbold, USEPA

13:20 – 13:40 Introduction – Bruce Herbold



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13:40 – 14:50 Facilitated public discussion – Bruce Herbold

14:50 – 15:00: *BREAK*

Testing new monitoring technologies in the Bay-Delta

Talks: 15 minutes each, followed by 5 minutes Q&A and discussion

New Technologies, Part 1: Watching out for Water Quality

Chair: Roger Fujii, USGS

- 15:00 – 15:20 Measuring suspended sediments with flow sensors - Scott Wright, USGS
- 15:20 – 15:40 Title TBA – Diana Engle, LWA
- 15:40 – 16:00 Use of the ECOLAB multi-nutrient analyzer in an estuarine environment – TBA, SFSU
- 16:00 – 16:20 Experience with real-time, in situ organic carbon and anion instrumentation Dave Gonzales & Ted Swift, DWR
- 16:20 – 16:40 Seeing the Light: In Situ Optical Sensors for Studies of Organic Matter, Nutrients and Associated Constituents in Aquatic Systems - Brian Pellerin & Brian Bergamaschi, USGS
- 16:40 End Day 1

DAY 2

New Technologies, Part 2: Tracing and Tracking Molecules and Organisms

Chair: Cliff Dahm, CALFED

- 9:00 – 9:10 Welcome, format, housekeeping - Cliff Dahm, CALFED
- 9:10 – 9:30 Remote sensing applications in Bay-Delta monitoring – Susan Ustin, UCD
- 9:30 – 9:50 TBA
- 9:50 – 10:10 Using flowCAM technology for in situ phytoplankton identification in San Francisco Estuary - Peggy Lehman, DWR
- 10:10 – 10:30 Phytoplankton fingerprinting with the bbe FluoroProbe - Anke Mueller-Solger, CALFED
- 10:30 – 10:50 *BREAK*
- 10:50 – 11:10 Genetic barcoding techniques as monitoring tools - Natalia Belfiore, EcoAdapt
- 11:10 – 11:30 Development and use of genetic techniques for delta smelt population monitoring and analysis - Katie Fisch, UCD



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11:30 – 12:00 Wrap-up discussion – Cliff Dahm, CALFED

12:00 – 13:00 *LUNCH (not provided)*

New Technologies, Part 3: New Ways to Follow Fish

Chair: Jim Hobbs, UCD

- 13:00 – 13:20 Molecular and biochemical biomarkers to monitor sublethal contaminants in the delta smelt and other aquatic organisms - Richard Connon, Sebastian Beggel, Leandro D'Abronzio, and Inge Werner, UCD
- 13:20 – 13:40 In/ex-situ exposure systems for toxicity testing with invertebrates and fish – Inge Werner and Linda Deanovic, UCD
- 13:40 – 14:00 Monitoring of fish health in the San Francisco Estuary – Swee Teh, UCD
- 14:00 – 14:20 The application of otolith microchemistry in a state-of-the art monitoring program – Jim Hobbs, UCD
- 14:20 – 14:40 New mass-marking tools to monitor entrainment losses of delta smelt – Gonzalo Castillo, FWS
- 14:40 – 15:00 Underwater Video Imaging Systems for Monitoring Delta Fish Populations – Don Portz, USBR, and Darren Odom, SureWorks
- 15:00 – 15:20 *BREAK*
- 15:20 – 16:30 Facilitated wrap-up discussion – Bruce Herbold, USEPA
- 16:30 End Day 2