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Workgroup Activities – Fourth Quarter 2013

A. Contaminant Fate Workgroup

Purpose of Workgroup

The purpose of the workgroup is to evaluate the fate of contaminants in the Bay, to understand the contribution of Bay margins to the overall health of the Bay, and to assess the potential impacts of Bay management actions on Bay recovery.

Meetings:

Fate workgroup will not meet this year.

Activities for the Fourth Quarter of 2013:

- Finishing the modeling plan.
- Preparing a coring manuscript.

For more information, see previous CFWG minutes and agendas at our website http://www.sfei.org/rmp/cfwg or contact the CFWG leader, Don Yee, at don@sfei.org.

B. Sources Pathways and Loading Workgroup (SPLWG)/Small Tributaries Loading Strategy Work Group (STLS)

Purpose of Workgroup

The purpose of the workgroup is to monitor storm water, small tributaries, and delta outflow to understand contaminant loads to the Bay, to identify high priority tributaries for management actions, to evaluate how loads are changing over time, and to assess possible options for improving water quality.

Meetings:

The workgroup will meet on October 23, 2013 from 10 AM to 4 PM.

The STLS group continues to hold monthly phone conferences to discuss project progress on the sediment RWSM and POC monitoring, and to discuss potential EMC monitoring in water year 2014.

Milestones:

Products in progress (in various stages of review):

- WY 2013 POC loads monitoring report
- RWSM 2013 regional scale water, sediment, PCB, and mercury loads report
- Draft PBDE and OC pesticides profiles to support RWSM structure submitted to BASMAA (BASMAA funding)
- Draft Sediment RWSM report submitted to BASMAA (BASMAA funding)

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 Draft QAQC protocol for continuous stormwater data submitted to BASMAA (BASMAA funding)

Activities for the Fourth Quarter of 2013:

- Continued work on RWSM and EMC development.
- Stormwater monitoring for water year 2014 on-going.

For more information, see SPLWG minutes and agenda at our website http://www.sfei.org/rmp/splwg or contact the SPLWG lead, Lester McKee, at Lester@sfei.org.

C. Exposure and Effects Workgroup

Purpose of Workgroup

The Exposure and Effect workgroup (EEWG) seeks to answer the following questions: Are pollutants individually or in combination having adverse impacts on Bay biota?; Are there spatial and temporal trends?; Which pollutants are responsible for the impacts?; Are there cost-effective tools that can be used to easily monitor these impacts?; and What are the appropriate guidelines?

Meetings:

• The workgroup met on May 16th to discuss bioanalytical tools and EEWG projects for 2014.

Milestones:

- Completion of 2008-2012 SQO Assessment report; reviewer comments were received and addressed, the final version has been posted to the web.
- Completion of the Bioanalytical Year 1 Progress report (sent to workgroup for comment).

Activities for the Fourth Quarter of 2013:

- Continuation of work on the Mesohaline Index Development (SCCWRP).
- Continuation of work on bioanalytical tools.
- Copper and olfactory nerve project. The study originally planned on collecting olfactory data from juvenile Chinook salmon late summer 2013 (both before and after smolting in estuarine water). A shutdown of the salmon aquaculture facility at the Mukilteo Research Station earlier this year prevented the study from being able to use Chinook salmon. Coho salmon reared at the Montlake facility in Seattle are available for the study. However, switching to coho salmon requires that smolting occur in the spring of 2014 (around March). This is when the experiment will now take place. No additional funds are needed. A pilot experiment using older juvenile coho (too old to smolt) was planned for this fall. The experiment will involve a limited sample size and test freshwater-phase coho in both freshwater and estuarine water. The pilot was delayed as several project schedules needed to be shuffled due to the government shutdown in October. Data collection has now begun and will continue over the next few weeks.

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The next workgroup meeting will be held in 2014. For more information, see previous EEWG minutes and agenda at our website http://www.sfei.org/rmp/eewg or contact the EEWG lead, Meg Sedlak, at meg@sfei.org.

D. Emerging Contaminants Workgroup

Purpose of Workgroup

The purpose of the emerging contaminant workgroup is to identify contaminants of emerging concern (CECs) that have the potential to adversely impact beneficial uses of the Bay.

Meetings:

The ECWG met on April 5th, 2013 to discuss the recently completed strategy document, the PBDE summary report, siloxanes, and an update on the non-targeted screening of Bay Wildlife and recommendations for 2014 work.

Milestones:

- Completion of the CEC strategy document.
- A manuscript on PFC sources was completed and will be submitted to a journal.
- Completion of the PBDE summary report.
- Pro bono work by AXYS Analytical on PFC precursor analyses of Bay Area effluent and sediment. The study is underway; results presented at national SETAC meeting.
- NIST has prepared a draft confirmation report on the seal broadscan work. Initially 9 compounds were tentatively identified using the broadscan methodology. Standards were obtained for these 9 compounds; however, only 3 were confirmed in the seal blubber samples analyzed (2,2-dichlorobenzil, 9,10 dichloroanthracene, and dichloro PAH). NIST staff concluded that for hydrophobic compounds, the bulk of the contaminants appear to be legacy POPs. A manuscript is forth-coming.
- Collection of alternative flame retardant samples in ambient Bay water during the 2013 S&T water cruise (July 30-August 8), USGS cruise (October) and City of San Jose cruise (November).

Activities for the Fourth Quarter of 2013:

- Evaluate Current Use Pesticides used in agricultural areas of the Bay Area.
- Continuation of NIST broadscan work. Samples of harbor seals manuscript in preparation. Mussels analyses will be conducted in the summer with a write up completed during the fall.
- Collection of alternative flame retardant samples in stormwater.

Next ECWG meeting will be held Spring 2014.

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For more information, see previous EC workgroup minutes and agenda at our website http://www.sfei.org/rmp/ecwg or contact the ECWG lead, Meg Sedlak meg@sfei.org.

E. Nutrients

Purpose of Workgroup

The purpose of this workgroup is to evaluate nutrients status and trends, methods for monitoring nutrients/ indicators, and scenarios that may result in adverse impacts to the Bay. A governance structure for the broader nutrient effort is under development. The role of a nutrient workgroup and the mechanism(s) for RMP input and oversight are part of that discussion, and it is anticipated that a draft governance plan will be presented to RMP stakeholders for feedback.

Meetings

The Nutrient Modeling Technical Team had their second meeting on September 11th, 2013 to discuss the second draft of the Modeling Tactical Plan and plans for model development.

Milestones

• Moored sensor equipment was deployed on July 3 at Dumbarton Bridge, and maintenance was conducted in late July and early August. On Sept 5th-6th, additional sensors were deployed at San Mateo Bridge and in Alviso Slough. The San Mateo and Alviso stations are pilot deployments, launched with the goal of gathering data during the fall bloom period to inform site selection in 2014. Moored sensor equipment was also included aboard the R/V Polaris full Bay cruise on 9/26/2013 and continuous data was recorded during this transect.

Activities for the Fourth Quarter of 2013:

- Continued development of laboratory and field calibration procedures for the moored sensor equipment.
- Completing the stormwater nutrient loads assessment and modeling report.
- Revise RMP-funded conceptual model report.
- Begin exploring potential goals, structures and costs of a Nutrient Monitoring Program
 for San Francisco Bay. With the guidance of a technical advisory team, key goals of a
 monitoring plan will be identified, possible programmatic structures and institutional
 agreements will be explored and costs estimates will be developed.
- A nutrient workgroup meeting will be held in January to solicit feedback on the modeling plan, monitoring program development, and other projects.

For more information, please contact David Senn at <u>davids@sfei.org</u> or Emily Novick Emily@sfei.org.

F. Status and Trends Sport Fish

Purpose of Workgroup

The purpose of the workgroup is to design RMP studies relating to sport fish contamination.

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Meetings

RMP sport fish monitoring has been switched from a three-year cycle to a five-year cycle to maximize cost-effectiveness and to coordinate with state-wide monitoring efforts. The next round of sampling will occur in 2014. A planning meeting will be held some time in the first two weeks of December.

For more information, please contact Jay Davis at jay@sfei.org.

G. Monitoring and Management of Restored Tidal Marshes Workshop

The Tidal Marsh Workshop, scheduled for October 9th, has been postponed to December 17th. The workshop will be held at CDPH in Richmond, CA. The purpose of the workshop is to review information needs relating to managing mercury in restored tidal marshes and salt ponds in San Francisco Bay. The RMP mercury synthesis (Davis et al. 2012) recommended a focus on the design and maintenance of restored marshes and managed ponds as a means of potentially reducing methylmercury impairment in Bay wildlife. Additionally, the Mercury TMDL Implementation Plan includes monitoring of wetland restoration projects to address concerns that as restoration projects develop into fully functioning tidal marshes, they may increase the exposure of fish and wildlife to mercury. There is a need for a consistent regional approach to monitor these wetland restoration projects. The workshop will address the role wetland restoration and management play in mercury impairment locally and regionally, and the workshop will help inform decision-making about monitoring efforts.

For more information, please contact Jay Davis (jay@sfei.org).

H. Items of Interest

Delta RMP

On October 3rd and 4th, the Central Valley Regional Water Board adopted a resolution to enable dischargers to participate in the Delta RMP in lieu of individual compliance monitoring efforts. On October 10th, key members of the RMP community including Adam Olivieri (BAASMA), Dave Williams (BACWA), and Kevin Buchan (WSPA) shared their experience with the San Francisco Bay RMP in a vibrant and informative panel discussion about the challenges and opportunities involved in developing and implementing a regional monitoring program. The next Steering Committee meeting is on December 2nd and the goal is to decide on the initial monitoring priorities between methylmercury, nutrients, pathogens, and toxicity/pesticides.

For more information, contact the Delta RMP Project Lead, Thomas Jabusch, at thomas@sfei.org

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Oakland Museum

The Oakland Museum exhibit "Above and Below: Stories From Our Changing Bay" opened on August 30th, 2013 and will run until February 23rd, 2014. SFEI Historical Ecology and RMP staff, led by Robin Grossinger and Ruth Askevold, helped develop the Bay exhibit. The exhibit celebrates the opening of the Bay Bridge, explores the complex ecosystem of the Bay, and encourages viewers to discuss the Bay's future. Meg Sedlak and Paul Salop led a scientific discussion of the exhibit on Friday November 22, 2013 as part of the OMCA on-going talks at the exhibit.

For more information on the exhibit please visit the webpage: http://www.museumca.org/exhibit/above-and-below. http://oaklandlocal.com/2013/09/omca-our-changing-bay-831/



