# Workgroup Activities – First Quarter 2014

## 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:
The Contaminant Fate workgroup did not meet in 2013.

Activities for the First Quarter of 2014:

- Finishing the modeling plan.
- Completing 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 met 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, PCB, and Mercury RWSM and POC monitoring.

Milestones:
Products in progress (in various stages of review):

- WY 2013 POC loads monitoring report – BASMAA is currently reviewing
- WY2013 EMC Development report – BASMAA is currently reviewing
- RWSM 2013 regional scale water, sediment, PCB, and mercury loads report

Activities for the First Quarter of 2014:

- Continued work on RWSM and EMC development.
- Stormwater monitoring for water year 2014 – waiting for rain.

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). Final report for Year 1 activities will be completed in May 2014.

Activities for the First Quarter of 2014:

- Continuation of work on the Mesohaline Index Development (SCCWRP).
- Continuation of work on bioanalytical tools study (finishing Yr 1 activities).
- 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.

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 next ECWG meeting is scheduled for April 15, 2014. During the meeting special studies for 2015 will be selected; additionally, the Bioanalytical Tool study, the PFOS study results, alternative flame retardant work, and current use pesticide result will be discussed.

Milestones:

- Completion of the CEC strategy document.
- 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). Stormwater samples were also collected in November.

Activities for the First Quarter of 2014:

- Completion of the current use mapping pesticide exercise.
- 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.

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 met on January 16th – 17th to begin a detailed work plan for model development in accordance with the approach laid out in the recently completed modeling tactical plan, "Model Development Plan to Support Nutrient Management Decisions in San Francisco Bay"

Milestones

- Moored sensors are currently deployed and regularly serviced at three sites in the Bay (2 with real-time data). Moored sensors also are placed on monthly cruises of the *R/V Polaris* to high spatial resolution data. Near-term priorities include data quality, calibration and visualization.
- A final draft of the "External Nutrient Loads to San Francisco Bay" was completed in January 2014.
- A final draft of "Model Development Plan to Support Nutrient Management Decisions in San Francisco Bay" was completed in January 2014.

Activities for the First Quarter of 2014:

- 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 February to solicit feedback on the modeling plan, monitoring program development, and other projects.

For more information, please contact David Senn at davids@sfei.org or Emily Novick emilyn@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.

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.

Meetings
The SFWG met on December 20th, 2013 to discuss the RMP's 2014 sport fish sampling effort, including the contaminants, species, and regions that will be sampled. Sampling will occur in the spring for Shiner Surfperch and in the summer for all other sport fish species.

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

## H. Items of Interest

Monitoring and Management of Restored Tidal Marshes Workshop

The Tidal Marsh Workshop was held at the California Department of Public Health in Richmond, CA on December 17th. 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 purpose of the workshop was to review information needs relating to managing mercury in restored tidal marshes and salt ponds in San Francisco Bay. The workshop also addressed the role wetland restoration and management play in mercury impairment locally and regionally.

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

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 Steering Committee met on December 2nd to discuss the Delta RMP's initial monitoring priorities.

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

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/