

Workgroup Activities – Second 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 Second 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 STLS group continues to hold monthly phone conferences to planning for Water Year 2015 POC monitoring.

Milestones:

- Finished Water Year 2014 monitoring at the Richmond pump station.
- Completed 6 out of the 8 planned storm events for monitoring pollutants of concern at the East Sunnyvale site.

Activities for the Second Quarter of 2014:

- Complete monitoring at East Sunnyvale station.
- Begin analysis for POC reporting.
- Convene the Sources Pathway and Loadings Workgroup meeting on May 29th.
- Continue to meet with the STLS workgroup to discuss next winter's POC monitoring design

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:

- None to date

Milestones:

- Completion of a draft of the Mesohaline Index Development San Francisco Bay Index Report Phase I. Report is currently being reviewed by the workgroup.
- 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 Second Quarter of 2014:

- 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. 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. Data collection for the freshwater-phase coho is halfway complete and will be finished within the next few weeks. A subset of the coho will be ready to transition to seawater in early May.

A conference call will be held May 12th to discuss progress of the Mesohaline work and to review a possible SQO study for 2015. 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 April 15th, 2014. During the meeting special studies for 2015 were recommended. Updates were given on the Bioanalytical Tool study, the PFOS precursor study results, alternative flame retardant work, and current use pesticide mapping exercise.

Milestones:

- Finished the Draft PBDE manuscript and will circulate for review among ECWG, TRC and SC.
- Collection of alternative flame retardant effluent samples.
- Completion of the current use mapping pesticide exercise; presentation to TRC and ECWG.
- Completion of the draft pharmaceuticals and personal care products report (out for comment).
- Preparation of a CEC table for the State Panel describing RMP activities in relation to State Panel's recommendation for monitoring estuaries.

Activities for the Second Quarter of 2014:

- Preparation of proposals for the June TRC meeting.
- Continuation of NIST broadscan work. Harbor seals manuscript in preparation. Mussel report undergoing internal NIST review.
- Preparing for the collection of seal samples for alt. flame retardants.

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

In accordance with the newly-developed governance structure for the Nutrient Management Strategy, a Nutrient Technical Workgroup and a Steering Committee have been convened in Q1 and Q2 2014. Project-specific technical team meetings have also taken place for the Assessment Framework Development (February 11th and 12th, 2014), Model Development (January 16th – 17th, 2014) and Monitoring Program Development (February 3rd and March 12th, 2014).

Milestones

- “External Nutrient Loads to San Francisco Bay” was finalized in January 2014 and estimates seasonal, spatial and temporal variability in nutrient loads from a number of sources.
- “Model Development Plan to Support Nutrient Management Decisions in San Francisco Bay” was also finalized in January 2014. This document lays out the approach for developing a biogeochemical model for SF Bay, including the modeling platform, and is the basis for the detailed workplan that is currently being developed.
- “Suisun Bay Ammonia Synthesis” was finalized in March 2014. [This report was funded by BACWA].
- “Development Plan for the San Francisco Bay Nutrient Monitoring Program” was completed in March 2014. This report makes initial recommendations for future monitoring program structure and identifies highest priority data investigations/pilot studies to address remaining questions, and the report will be revised/updated as the results become available. [This report was funded by the State Water Resources Control Board].

Activities for the Second Quarter of 2014

- “Scientific Foundation for a San Francisco Bay Nutrient Strategy” will be completed in May 2014.
- A technical memo on the results of WY2012/WY2013 nutrient stormwater sampling is nearly complete and is expected in May 2014.
- Two deliverables for the moored sensor pilot program are expected in May 2014. One is a technical report that summarizes lessons learned about sensor operation, scientific analysis of pilot year data and recommendations for year 2 of the moored sensor program. The second is a manual that will provide guidance on sensor servicing and maintenance.
- The detailed modeling workplan is currently being developed and is expected to be completed in May 2014.

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 this summer.

Meetings

The Sportfish Workgroup 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.

Activities for the Second Quarter of 2014:

- We are currently in the process of developing contracts and coordinating field activities for sport fish monitoring. Draft subcontracts have been sent to CC&R and SJSU Foundation for their approval.

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

G. Selenium Strategy

The RMP is developing of a Selenium Strategy in response to the upcoming North Bay Selenium TMDL. The Strategy will be focused solely on monitoring. The first meeting was held on April 22nd, 2014. Meeting summary will be posted shortly.

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

H. Items of Interest

Delta

The Technical Advisory Committee (TAC) and its four ad-hoc subgroups are in the process of developing various components of the initial monitoring design for the initial priorities of the program: current use pesticides, methylmercury, nutrients, and pathogens (*Cryptosporidium* and *Giardia lamblia*). POTWs have identified a station network of proposed key locations for reasonable potential analysis. The plan is to integrate these various elements into a unifying design by September, with the intent to start collecting samples in 2015. SFEI staff currently

engaged in these planning efforts include: Thomas Jabusch, Jay Davis, David Senn, and April Robinson.

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

Resilient Landscapes

The Resilient Landscapes team is contributing to an animated flyover of the historical Delta. The flyover will visualize what the Delta was like a century and a half ago, and builds on the Sacramento-San Joaquin Delta Historical Ecology report, developed by the Resilient Landscapes team in 2012 (Alison Whipple, Robin Grossinger, et al.). The project is funded by Metropolitan Water District, and the team is working closely with 34 North in building the animation. The animation will be premiered by Robin Grossinger at the Orange County Water Summit May 16th. <http://www.ocwatersummit.com/>

I. Transitions

Meg Sedlak will be taking a leave of absence to spend time with her two teenage kids (one a high school junior; the other an incoming freshman), her husband (now published author – Water 4.0), and her deranged but always entertaining dog, Enkidu. She hopes to be back at the Institute in some capacity in a year or so. The Institute has selected a new RMP program manager, an MIT engineer who has over 14 years' experience running an estuary program on the east coast. This candidate will start work mid-May. An announcement will be forthcoming.