

Workgroup Activities – Third Quarter 2014

A. Sources Pathways and Loading Workgroup (SPLWG)/Small Tributaries Loading Strategy Team (STLST)

Meetings:

- The STLS group continues to hold monthly phone conferences to plan for Water Year 2015 POC monitoring. So far in 2014, meetings have been held on January 22, March 19, April 1, April 16, May 15, June 9, July 2, August 29.

Milestones:

- Continued preparations for developing a monitoring design and site list for water year 2015 POC monitoring. Finalize POC monitoring locations in Contra Costa and San Mateo counties. Continuing to work with countywide programs and BASMAA to identify locations in Alameda and Santa Clara Counties,
- Continued the QA/QC process for water year 2014 POC data.
- Developed annotated outline for POC WY 2014 report

Activities for the Fourth Quarter of 2014:

- Stormwater sampling.
- Begin reporting and analysis for water year 2014 POC monitoring.
- Continue to meet with STLS on an as needed basis.

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

B. Exposure and Effects Workgroup

Meetings:

- The EEWG held a conference call on May 12, 2014. During the meeting, special studies for 2015 were recommended.

Milestones:

- Completion of a draft of the Mesohaline Index Development San Francisco Bay Index Report Phase I. Comments from workgroup's science advisors are being addressed. The report will be finalized by the end of November 2014.

- Completion of the Bioanalytical Year 1 Progress report. Comments from the ECWG and EEWG science advisors are being addressed. The report will be finalized by November 11, 2014.

Activities for the Fourth Quarter of 2014:

- Year 2 funds for the Bioanalytical Tools study have been released and contracting is underway.
- 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 using Chinook salmon. Coho salmon reared at the Montlake facility in Seattle are available for the study. However, switching to coho salmon required that smolting occur in the Spring of 2014. Most of the experiment has been completed. The end date for the project has been extended to December 31, 2014 due to equipment problems at the laboratory.
- UC Davis will conduct experiments to (a) establish a dose response relationship between *E. estuarius* survival and percent clay in sediment and (b) investigate whether clay particle shape is correlated with amphipod mortality. The deadline for this work has been extended to April 30, 2015 to allow for an experiment to be re-run.

For more information, see previous EEWG minutes and agenda at <http://www.sfei.org/rmp/eewg> or contact the EEWG lead, Phil Trowbridge, philt@sfei.org.

C. Emerging Contaminants Workgroup

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. After final input from co-authors and distribution to the ECWG, TRC and SC for comments, the manuscript was submitted to the journal Environmental Science and Technology. A revised manuscript responding to peer reviewer comments was submitted on October 31.
- Collected effluent samples for analyses of PFCs (and pro bono total organic fluorine analyses with Erika Houtz, DTSC), fipronil, and microplastics. Sample collection for 2015 effluent special studies was authorized in fall 2014 to allow for work during the dry season, preferred for fipronil.
- Collected alternative flame retardant effluent, seal, sediment, and bivalve samples.

- Collected bivalve samples for pro bono siloxanes analyses (with Derek Muir, Environment Canada).
- Collected sediment samples for pro bono quaternary ammonium compounds analyses (with Bruce Brownawell, Stony Brook University), and sediment and water samples for pro bono hindered phenol analyses (with Derek Muir, Environment Canada).
- Collected seal serum samples for PFOS and pro bono metabolomic analyses by AXYS Analytical Services.
- Performed QA/QC review of PBDE and PAH measurements in 2014 stormwater.
- Presented posters on alternative flame retardants in San Francisco Bay for the BFR 2014 conference in Indianapolis, the American Chemical Society conference in San Francisco, and the Society of Environmental and Toxicology and Chemistry in Vancouver.
- Presented overview of RMP work on flame retardants as part of UC Berkeley Green Chemistry seminar series.
- Presented CEC strategy update at the RMP annual meeting.

Activities for the Fourth Quarter of 2014:

- Begin QA/QC review of results for effluent analyses of fipronil and degradates, PFCs and precursors, and microplastics.
- Continue QA/QC review of results for alternative flame retardants in various matrices.
- Continue NIST broadscan work. NIST has provided the RMP with a final report for harbor seal samples and a preliminary report for mussel samples. NIST plans to publish the results from the seal samples in a manuscript (no date set). The NIST report on mussel samples was sent to the ECWG for review and no comments were received. A publicly accessible fact sheet describing the project and its findings is in preparation and will be shared with the ECWG, TRC, and SC prior to publication.
- Continue bioanalytical tools project undertaken by Keith Maruya (SCCWRP) and Nancy Denslow (University of Florida).
- Develop calendar of RMP CEC strategy deliverables for the next two years in conjunction with the Water Board.
- Develop 2016 special study proposals.
- Plan ECWG meeting for April 2015.
- Develop small fish archive guidelines.

For more information, see previous EC workgroup minutes and agenda at <http://www.sfei.org/rmp/ecwg> or contact the ECWG lead, Rebecca Sutton, RebeccaS@sfei.org, @beckysuttonphd.

D. Nutrients

Meetings

- The Nutrient Steering Committee met on October 27th to discuss budget and governance issues, and to discuss the scope and structure of the draft Science Plan for the Nutrient Management Strategy. A meeting of the Assessment Framework technical team was held

on October 7th and 8th to discuss potential metrics to be used in the nutrient assessment framework (not RMP-funded project, but still part of the overall Nutrient Science Program). David Senn co-chaired a special nutrients session at the Bay-Delta Conference on October 28th-30th.

Milestones

- The “Scientific Foundation for a San Francisco Bay Nutrient Management Strategy”, formerly known as the Conceptual Model, was finalized in October 2014 and was distributed to the Nutrient Technical Workgroup (NTW). It will be sent to the TRC/SC and posted on SFEI’s website shortly.
- A draft Year 1 Progress Report for the Nutrient Moored Sensor Program was completed in September 2014 and was distributed to the TRC/SC and NTW for feedback. It will be finalized in November 2014.
- A brief draft memo summarizing results from nutrient stormwater monitoring in WY 2012 and WY 2013 was completed in October 2014 and will be distributed for comment shortly.
- A draft detailed modeling workplan was completed in September 2014 and was distributed for comment. Comments are being incorporated and a final version is expected in November 2014.
- A beta web-visualization tool for visualizing moored sensor data is nearing it’s final beta version. This tool allows users to build interactive time-series of nutrient-related parameters at a number of SFEI and USGS sites across the Bay and Delta. It will be reviewed by collaborators in November 2014 and then released publicly. [Funded by NMS]

Activities for the Fourth Quarter of 2014

- Incorporate comments and complete final drafts of the moored sensor progress report, stormwater memo and detailed modeling workplan by November 2014.
- Finalize beta version of nutrient visualization website and release publicly by December 2014
- A draft report that synthesizes seasonal, spatial and temporal trends in ecosystem drivers (nutrients, sediments) and responses (chlorophyll, dissolved oxygen) in Lower South Bay is currently in development and is expected to be completed in November 2014. This report is not RMP funded, but will be reviewed by the Nutrient Technical Workgroup. [Funded by NMS]
- A draft report that summarizes issues related to forms and ratios of nutrients in Suisun Bay is expected to be completed in December 2014 (“Suisun Synthesis II”). This report is not RMP funded, but will be reviewed by the Nutrient Technical Workgroup. [Funded by NMS]

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

E. Sport Fish

Meetings

- The group decided (via email) to spend unallocated funds processing and analyzing striped bass caught in Artesian Slough.

Activities for the Fourth Quarter of 2014:

- Continued coordination of field activities, lab analysis, and data management for sport fish monitoring.

For more information, please contact April Robinson at april@sfei.org.

F. Selenium Strategy Team

Meetings

- The Selenium Strategy Team held its first meeting on April 22. The meeting was devoted to orientation for the members and preliminary discussion of a Strategy and workplan for 2015.
- A second meeting was held on June 3 that yielded proposals submitted to the TRC for their June meeting. The TRC accepted all Se proposals submitted by the Strategy Team.
- The next meeting will occur in Q1 or Q2 of 2015 to review results from the proposed 2014 study of sturgeon muscle plugs and develop a plan for 2016 work.

Milestones

- Coordination of field activities, lab analysis, and data management with CDFW and USGS.
- Conducted sturgeon muscle plug field sampling with CDFW. Sampling proved more difficult than anticipated due to low fish counts, difficulty in removing the tissue plugs from the fish, and small sample masses. Sampling methods were improved over the course of several days of fieldwork and through consultation with sturgeon researchers in Ohio. A total of 9 samples were collected, and preliminary dry weight calculations from USGS suggest 5 of these likely have enough mass to analyze for Se. A subset of the samples were improperly frozen and results from those samples will be flagged as questionable, however these samples should still be able to tell us whether this sampling method is viable for the future. CDFW staff were unable to collect muscle plug samples while performing their other field duties, but were able to accommodate having another person on board to collect samples.

Activities for the Fourth Quarter of 2014:

- Report results from sturgeon muscle plug sampling.

G. PCB Strategy Team

Meetings

- The PCB Strategy Team will meet again this year to discuss criteria for prioritizing margin units, set the stage for work to be conducted in 2015, and further flesh out the multi-year workplan for PCBs.

Milestones

- Workgroup members provided comments on the PCB Synthesis Report released in June.
- The PCB Strategy Report was finalized in October, 2014.

Activities for the Fourth Quarter of 2014:

- Preparations for the 2015 special study on Priority Margin Units.

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

H. Items of Interest

The RMP Annual meeting was held on October 14, 2014 at the Brower Center in Berkeley, CA. For copies of the presentations, go to <http://www.sfei.org/2014RMPAnnualmeeting>.

The RMP Update report was released at the Annual Meeting. The report can be downloaded from <http://sfei.org/rmp/update>.

Items of interest from SFEI-ASC and the RMP can be found in the [SFEI/ASC Newsletter](#) and the [RMP Newsletter](#).