

Workgroup Activities – First 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:

The SC will discuss the need for a CFWG meeting in 2013 at the April SC meeting.

Milestones:

- The Modeling Technical Team held its first meeting on March 20th to discuss the draft outline of the Contaminant Fate and Nutrient Modeling Tactical Plan.

Activities for the Second Quarter of 2013:

- Development of tactical plan. Drs. Jones, Yee, Senn, and Davis have discussed an outline of a plan with a smaller group of RMP stakeholders and Water Board staff. There was support for integrating the modeling efforts as much as possible, but some differences in the spatial and temporal scales of interest and timelines for products needed for various management questions. Partnering efforts with other agencies already modeling in the Bay will be explored and developed. A second meeting with the technical team will occur in May to discuss the full draft of the tactical plan.
- A Nutrient Workgroup will be held in late Spring.

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)

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 SPLWG met on October 24th, 2012. The Small Tributary Strategy Loading team meets almost monthly to assure that RMP activities are coordinated with the Municipal Regional Permit requirements, Regional Board staff and BASMAA staff.

Milestones:

- STLS met on January 31st, 2013 to finalize source area layers for PCB and Hg for the sediment RWSM (funded by BASMAA), and to discuss BASMAA reporting needs.

Activities for the Second Quarter of 2013:

- RMP and BASMAA-designated staff are continuing to sample at the wet weather sites: North Richmond, Pulgas pump station, San Leandro Creek, East Sunnyvale Channel, Lower Marsh, and Guadalupe. The sites that will be covered by the RMP are North Richmond and Sunnyvale. These watersheds are being monitored for a variety of constituents including: PCBs, PAHs, PBDEs, pyrethroids, mercury, copper, selenium, suspended sediment, nitrate, and toxicity.

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.

Next SPLWG meeting is scheduled for mid-summer.

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 with the Emerging Contaminants workgroup to discuss bioanalytical tools and EEWG projects for 2013. The workgroup reviewed the progress on the copper and olfactory nerve project and the PAH and juvenile flatfish. The “Impact of dissolved copper on the olfactory system of seawater-phase juvenile salmon” report suggests that there is relatively little toxicity to the olfactory nerve at levels that are observed in the estuary. Similarly relatively few adverse outcomes were observed for juvenile flatfish at levels observed in the estuary; however, histology work remains to be completed.

Milestones:

- Completion of the EEPS summary report
- Completion of the NOAA report on the effects of PAH on Juvenile Flatfish
- Completion of draft 2011/2012 SQO Assessment and hotspot studies

Activities for the Second Quarter of 2013:

- Continuation of work on the Mesohaline Index Development (SCCWRP).
- Completion of the Sediment Hotspot Followup Study and 2011/2012 benthic studies.
- Commencing work on bioanalytical tools.

The next workgroup meeting will be held on May 16th 2013. 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:

- A manuscript was completed and submitted that summarize the National Mussel Watch sampling in California for chemicals of emerging concern. The paper will focus on personal care products, alkylphenols, current use pesticides, flame retardants and perfluorinated compounds. This work is being conducted by SCCWRP.
- Completion of the CEC strategy document (responded to comments).
- A manuscript on PFC sources was completed and will be submitted to a journal.
- Completion of the PBDE summary report

Activities for the Second Quarter of 2013:

- Convening a Current Use Pesticide focus meeting (likely April/May).
- Completion of NIST broadscan work. Samples of harbor seals manuscript and report are expected in April. Mussels analyses will be conducted in early Spring with a write up completed during the summer.

Next ECWG meeting will be held Spring 2014.

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, methods for monitoring nutrients/ indicators, and scenarios that may result in adverse impacts to the Bay.

Meetings

The Nutrient Stakeholder Advisory Group met on March 8th, 2012 EMILY CHECK DATE? to discuss current and future nutrient studies in Suisun Bay and to receive an update on the Suisun Synthesis report (completed by SFEI, funded by the Bay Area Clean Water Agencies)

Milestones

- Research on moored sensor monitoring equipment was completed and equipment was purchased in April. Based on a number of considerations, including optimal use of funds and investment in comparable technology to existing monitoring programs, 2 YSI EXO 2 sondes and one SUNA v2 nitrate sensor were purchased and should arrive by May.
- A draft of the Nutrient Loading Study was completed in early April and was distributed to the TRC and SC for review. The study estimated current nutrient loads from POTW and refinery discharge, stormwater runoff and Delta efflux, and characterized seasonal and spatial variability in the relative importance of different loading sources.
- Field work for nutrient stormwater measurements for water year 2013 is underway. This year, sampling will occur for 4 storms at each of 6 watersheds for the following analytes: total kjedhal nitrogen (TKN), total phosphorous, PO₄, NH₄, NO₃ and NO₂ (as the budget allows).

Activities for the Second Quarter of 2013:

- Work on the Nutrient Conceptual Model Report will continue through April 2013. A draft report is expected in April, and will be discussed at a meeting of the Conceptual Model Technical Team in scheduled for May 21st.
- Nutrients stormwater monitoring for water year 2013 will continue through Winter 2012-2013.
- Work will begin on exploring potential goals, structures and costs of a Nutrient Monitoring Plan for San Francisco Bay. Currently San Francisco Bay has no regionally-funded and regionally-coordinated nutrient monitoring program. 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. The technical advisory team will meet in early 2013, and draft report of recommendations will be completed by November 2013, with a final draft in December 2013. [This work is funded by the State Water Resources Control Board]
- Development of a laboratory and field calibration procedure for the moored sensor equipment will continue. Laboratory calibration will begin in May, and field deployment will begin in June (including a 1-month trial deployment on the Redwood City dock).

The Conceptual Model Technical Team will meet on May 21st to review the draft Nutrient Conceptual Model. The Nutrient Work Group will have a joint meeting with the CFWG in late April to discuss the modeling tactical plan and model development.

For more information, please contact David Senn at davids@sfei.org.

F. Dioxin

The dioxin strategy team met on October 26th, 2011 to review the sediment, water, and biota samples that have been collected to date. The water samples were dominated by the octa and the hepta congeners. Sediment samples were collected in both wet and dry seasons and no significant differences were noted; similarly, concentrations remain the same as those observed in 2000. Spatial patterns suggest broad regional trends. Again sediments are dominated by octa and hepta congeners. In the sediment cores, there appears to be a peak after WWII followed by a decline. Dioxin concentrations in shiner surfperch and white croaker continue to exceed the RWQCB guidelines. It was proposed that upon completion of the dioxin studies, it would be appropriate to conduct a dioxin synthesis (2014). Some members thought mass balance and food web model products should be folded into the synthesis rather than as separate reports.

Activities for the Second Quarter of 2013:

- Develop a scope of work for dioxin analysis of sediment (2012 work) based on strategy team recommendation.

For more information, please contact Don Yee at don@sfei.org.

G. Status and Trends Sport Fish

Purpose of Workgroup

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

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 late in 2013.

For more information, please contact Jennifer Hunt at jhunt@sfei.org.