

## Workgroup Activities – Third Quarter 2008

### A. Contaminant Fate Workgroup

#### Meetings:

A workgroup meeting was held on July 7<sup>th</sup> to discuss modeling strategies (see web site for a meeting summary).

#### Milestones:

- Five Year Plan
  - Draft completed and currently being reviewed.
- Sediment Coring Project
  - All bay and wetland sites planned (11+6) have been cored. Cores have been sectioned, and sections at coarse intervals (mid- and bottom-core) are currently being radiodated at USC to identify sections for subsequent contaminant analyses and finer resolution radiodating. The cores have been sent to the analytical labs for analyses. Results for metals have been received; organics should be available by December.
- Development of a methylmercury mass budget. Results of this exercise were presented at the CFWG meeting and will be presented at the Annual Meeting.

#### Activities for the fourth quarter of 2008:

- Evaluation of the ease of incorporating homologues into the existing PCB multi-box model.
- Developing a methylmercury sediment article.
- Review of core results.

The next meeting is scheduled for February 6th. Items to be included on the agenda are the sediment coring project and the mercury studies currently being conducted by Holger Hintermann (Diffusive Thin Films) and Joel Blum (Mercury Isotopes). This will be a joint meeting with the annual mercury meeting, which will be held on the 5th.

For more information, see previous CFWG minutes and agenda at our website

[http://www.sfei.org/rmp/rmp\\_minutes\\_agendas.html](http://www.sfei.org/rmp/rmp_minutes_agendas.html) or contact the CFWG leader, John Oram, at [Joram@sfei.org](mailto:Joram@sfei.org).

### B. Sources Pathways and Loading Workgroup (SPLWG)

#### Meetings:

The SPLWG met on May 14<sup>th</sup> 2008. The main agenda items were: 1. Update: Small Tributaries Loads Study #2 – Z4LA, Hayward, 2. Update: Modeling Sediment and Contaminant Loads, 3.

Collaboration Opportunity: USGS NAWQA Contaminant Trends in Lake Sediments, 4. SPLWG 5-year Workplan Revision, and 5. Proposed Pilot and Special Studies 2009 (Budget ~\$100k)

Milestones this quarter:

- Major focus of the workgroup was the development of a small tributary strategy. A meeting of interested stakeholders was held on July 11<sup>th</sup>. It is anticipated that a draft strategy should be available by the end of the year.

Activities for fourth quarter 2008

- Complete the small tributary strategy.
- Complete a draft report for review of Z4LA small tributaries loading study - yr 1 and send out for review.
- Complete and submit manuscripts for Mallard Island Hg and for PCBs and OC pesticides and trace metals in Guadalupe River.
- Begin work on Z4LA year 2 report
- Develop work plans for the coming winter field season

Next workgroup meeting is scheduled for November. An agenda package will be mailed out the week prior to the meeting.

For more information, see previous SPLWG minutes and agenda at our website [http://www.sfei.org/rmp/rmp\\_minutes\\_agendas.html](http://www.sfei.org/rmp/rmp_minutes_agendas.html) or contact the SPLWG lead, Lester McKee, at [Lester@sfei.org](mailto:Lester@sfei.org).

## **C. Exposure and Effects Pilot Study (EEPS) Workgroup**

Meetings:

A workgroup meeting was held on May 12<sup>th</sup> to get an update on the Causes of Toxicity study (SFEI), Mercury in Terns (USGS) and PAHs in juvenile flatfish (NOAA). In addition, the food web monitoring (Part 1- small fish and Part 2 – bird egg monitoring) element of the five-year plan was approved.

Milestones:

- Completed benthos collection as part of S&T cruise

Activities for the fourth quarter 2008:

- Continuation of analyses of fish tissue for contaminants as well as examining thyroid hormones.
- Continuation of USGS and USFWS study on terns and hatchability success and mercury egg concentrations.
- Continuation of the small fish study. Temporal collection has commenced at arrowhead marsh. SFEI staff are coordinating with Dr. Joel Blum and Holger Hintelmann to assure that the mercury isotope work and the DGT mercury films are well coordinated with the

small fish study. Development in consultation with RMP participants of a small fish spatial collection site map.

- Commencement of NOAA study on juvenile flatfish. First year study will focus on zebra fish as a model fish and will expose the fish to four and five ringed PAHs that are common in SF Bay sediments.
- Completion of the EEPS five-year plan

The next workgroup meeting will be held on November 13th to complete the five-year plan.

For more information, see previous EEPS minutes and agenda at our website [http://www.sfei.org/rmp/rmp\\_minutes\\_agendas.html](http://www.sfei.org/rmp/rmp_minutes_agendas.html) or contact the EEPS WG lead, Meg Sedlak, at meg.sfei.org.

## **D. Emerging Contaminants Workgroup**

### Meetings:

The workgroup met on April 3<sup>rd</sup>. A summary of this meeting is posted on the web.

### Milestones:

- Preparation of a report on the presence of pharmaceuticals in influent, effluent and Bay water samples. This report is currently being reviewed by the workgroup.
- Analyses of blood samples from the 2007 and 2008 events (Castro Rocks/Tomales) and 2004 (Mowry Slough) and data are currently being reviewed.
- Samples of seal blubber shipped to Gregg Tomy for gratis analyses of chlorinated paraffins.
- Sediments collected and analyzed for triclosan as part of pro bono work conducted by USEPA.
- Sample collection and analyses for alternative flame retardants.

### Activities for the fourth quarter 2008:

- Preparation for Emerging Contaminant Workgroup meeting in mid-October
- Evaluation and synthesis of alternative flame retardant data. Preparation of a manuscript.

Next meeting is scheduled for October 17th.

For more information, see previous EC workgroup minutes and agenda at our website [http://www.sfei.org/rmp/rmp\\_minutes\\_agendas.html](http://www.sfei.org/rmp/rmp_minutes_agendas.html) or contact the ECWG lead, Meg Sedlak, at meg@sfei.org.

## **E. Causes of Toxicity**

The following four sites were sampled and tested for sediment toxicity to amphipods in early April-2007:

- Rheem Creek (San Pablo Bay –east)
- Mission Creek (Central Bay – west)
- San Leandro Bay (Central Bay –east)
- San Mateo Creek (South Bay –west)

Note: The targeted Fruitvale site did not have appropriate sediment, so we did not use that site (too much shell debris, insufficient fine-grained sediment).

Mission Creek was sufficiently toxic to perform a TIE on those sediments (most of the TIE study is complete – validation chemistry data are pending).

A second sampling effort is currently underway (January 2008) to sample the following four sites in an effort to locate a sufficiently toxic site to perform the second TIE study.

- Lower San Mateo Creek (South Bay – east)
- Near the San Francisco Airport (South Bay – east)
- Islia Creek (Central Bay – east)
- Dumbarton Bridge (Lower South Bay – west)

Results of these sampling efforts (including the initial toxicity screening study and subsequent sediment chemistry/quality analyses and the TIE study/ies) will be included in the final report. A draft report has been prepared.

For more information, please contact Sarah Lowe at [Sarahl@sfei.org](mailto:Sarahl@sfei.org).

## **F. Benthic Workshops**

The Sediment Quality Objectives for Bays and Estuaries (Phase I) was promulgated in February 2008. Benthic indicators for mesohaline areas such as San Pablo Bay and South Bay and oligohaline area such as Suisun have not been developed. A benthic workshop was scheduled for the Fall of 2008; however, it has been postponed until early January to allow time for review and synthesis of data.

For more information, please contact Sarah Lowe at [Sarahl@sfei.org](mailto:Sarahl@sfei.org).

## **G. Status and Trends Sport Fish**

The results of 2006 sampling event (except striped bass) have been reported for metals and organics. The first round of otolith data are in and will be reviewed by SFEI and OEHHA. Sportfish planning meeting for the 2009 sampling will be held on November 5th.

For more information, please contact Jennifer Hunt at [jhunt@sfei.org](mailto:jhunt@sfei.org)