

## Workgroup Activities – Fourth Quarter 2007

### A. Contaminant Fate Workgroup

#### Meetings:

Workgroup met on September 14<sup>th</sup> to discuss the draft Five-year plan and mercury strategy. Next meeting is scheduled for January 15, 2007.

#### Milestones:

- PCB Model
  - The PCB model project is nearing completion. A detailed presentation was given to the workgroup outlining progress-to-date and major achievements.
  - Following recommendations from the previous workgroup meeting, 10,000 model runs were re-analyzed to determine the aggregate model uncertainty.
  - Calibration of the model has been revised and improved from the outcome of sensitivity and uncertainty analyses.
  - USGS made improvements to the sediment code to account for sea level rise, subsidence, and to redefine box geometry. These changes were incorporated into the PCB code during the 3<sup>rd</sup> quarter of 2007. The model version number has been changed to v2.1 to reflect these updates.
  - Draft report on v2.1 is planned for 4<sup>th</sup> quarter of 2007.
- PBDE Mass Budget
  - A preliminary conceptual model was presented to the group in October 2006. This conceptual model has been further developed and now presents a mass budget of BDE 47 and BDE 209 in San Francisco Bay. The mass budget in manuscript form is currently being reviewed by workgroup members and SFEI scientists.
  - PBDE mass budget was part of the CM/IA funded by the CEP. The CM/IA is final as of September 6, 2007 and is posted on the CEP website.
  - PBDE mass budget presented at the national SETAC conference Nov 07.
- 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.

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

- PCB model final report (v2.1)
- Submit PBDE manuscript to peer-reviewed journal (ES&T, Chemosphere)

- Radiodating of remaining cores at large intervals to identify rough cuts for subsequent sectioning and chemical analysis (gamma counting typically requires ~2 days/section or longer, x17cores x 10sections/core = ~1 year).
- Development of Five-year plan and Hg strategy.

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 December 12. The main agenda items were 1. The review of the draft 5-year work plan and 2, the review of preliminary interpretations of Z4LA data as a back drop to the sampling plan for Year 2. We received a lot of feed back at the meeting. The 5-year work plan will be updated per comments received and then sent out to the group for written review. Review comments are due by January 31<sup>st</sup> 2008. Suggestions on analytical priorities or Z4LA will be taken into account when writing the lab sub-contracts.

### Milestones this quarter:

1. Draft SPLWG 5-year plan was completed ready for WG review.
2. Draft analysis of Zone 4 Line A loads was completed but the report will need to be completed in the 1<sup>st</sup> quarter of 2008. Initial interpretations suggest loads are similar to Guadalupe River for most substances except Hg but such comparisons should be treated as rough given the year for sampling had rainfall 65% of normal.
3. Zone 4 Line A small tributaries loading study. All of the data from the labs. QA of the data sets is ongoing. Data manipulation has begun via the collection of supporting data sets from other agencies (rainfall and land use) and the development of a hydrological model. Lester McKee worked with the County to obtain the permit but due to channel modifications the county has not (December 12) given us permission to install automatic equipment. We have been given permission to begin sampling and will collect stage and turbidity manually during storms through December with the hops of getting equipment in in January
4. The draft manuscripts for Mallard Island Hg for PCBs and OC pesticides in Guadalupe River.
5. Draft PBDEs in SF Bay article is currently undergoing internal review.
6. We are currently working on a draft trace metals in Guadalupe River manuscript.

Activities for first quarter 2008:

1. Complete Z4LA reporting
2. Rewrite SPLWG 5-year work plan
3. Write subcontracts and begin sampling for WY 2008 in Z4LA and Guadalupe River at Hwy 101 and 23B (Guadalupe River at Foxworthy).

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 November 26<sup>th</sup> to review the benthos, small fish, and avian monitoring elements of the five-year workplan. Key priority questions for each of the elements were agreed upon.

Milestones:

- Completion of draft five-year plans for the benthos, fish effects, and avian elements of the EEPS five-year plan.

Activities for the first 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.
- Completion of the EEPS five-year plan

The next workgroup meeting will be held in the Spring 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](mailto:meg.sfei.org).

### **D. Emerging Contaminants Workgroup**

Meetings:

The workgroup met on June 8<sup>th</sup> to discuss progress of 2007 pilot and special studies and to review a five-year plan.

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.
- Development of a five-year plan which outlines a strategy for identifying emerging contaminants. The panel recommended focusing on brominated flame retardants and perfluorinated compounds.
- Spring collection of harbor seal samples by the Marine Mammal Center; sample results have been received.

Activities for the first quarter 2008:

- Prepare for workgroup meeting in February/March.

Next meeting is scheduled for February/March.

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](mailto: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 (work is in progress).

SFEI staff will sample again next winter to find a second toxic site to perform the second TIE.

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

## **F. Benthos Analyses in the Delta**

The SFEI - Contaminant Monitoring and Research program's Delta-SQO project will perform three tasks:

- Participate in the Scientific Advisory Committee and other technical activities to develop SQOs for the Delta's estuarine regions (Lead Bruce Thompson)
- Assist in sampling logistics, analyses, and data management for ambient monitoring of the "triad" parameters (e.g., sediment chemistry, toxicity, and benthos). Sampling to occur in October, 2007. (Lead Sarah Lowe)
- Refine the SQO Framework and tools for indirect effects. (Lead Ben Greenfield)

For more information, please contact the leads on each task.

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

No committee meetings were held in the last quarter. 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.