

## Workgroup Activities – First Quarter 2007

### A. Contaminant Fate Workgroup

#### Meetings:

There was no CFWG meeting this quarter. The group last met October 30<sup>th</sup> 2006 to discuss the uncertainty analysis conducted by Tetra Tech, the one-box PBDE model that will be included in the CM/IA, and ideas for pilot and special studies for 2007. The next workgroup meeting is planned for May 2007.

#### Milestones:

- PCB Model
  - Sensitivity and uncertainty analyses rerun (on the 10,000 simulations previously run by Tetra Tech) following guidance of the CFWG.
  - Calibration of the model has been revised and improved from the outcome of sensitivity and uncertainty analyses.
- PBDE Conceptual Model / One-Box Model
  - The model was presented to workgroup at last WG meeting. Written review comments from the WG and from CEP reviewers will be incorporated into a revised report.
  - Elements of the PBDE conceptual model will be incorporated into the reporting of the Guadalupe River PBDE loads.
- 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.
- 2008 Special Study Development
  - Discussions were conducted with UCSC and U Michigan for developing and revising mercury study proposals for 2008 examining mercury fractionation and partitioning.

#### Activities for the second quarter of 2007:

- PCB model final report
- 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,  $x17\text{cores} \times 10\text{sections/core} = \sim 1\text{ year}$ ).

A workgroup meeting is planned for the second quarter of 2007. The agenda will include discussion of the multibox draft report, updated results of the sediment coring study, a draft 5 year workplan, and 2007 pilot and special studies.

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:

No meetings in the 1<sup>st</sup> quarter. Lester McKee emailed with the WG twice during the 1<sup>st</sup> quarter to ask for special and pilot studies proposals and to select a date for the next SPLWG meeting to be held during the week of May 21-25, 2007.

### Milestones this quarter:

1. We have continued to implement our work plan for our new small tributaries loading study at Hayward. To-date (March 14<sup>th</sup>) we have collected 18 samples + 1 duplicate sample for analysis of PCBs and PBDEs, 6 samples + 1 duplicate sample for analysis of PAHs and OC pesticides, 16 samples for dissolved organic carbon, 33 samples for HgT including 2 duplicates, 25 samples for trace metals including 2 duplicates, 14 samples for MeHgT, MeHgD, and HgD including 1 duplicate, and 87 samples for SSC including 2 duplicates.
2. Nicole David and Lester McKee continued work on the Mallard Island Hg manuscript. Lester is pleased with the way it is coming along. It is nearly ready to pass to our coauthors (Flegal Conaway, Schoellhamer, and Ganju for their input. We are on target for a full draft by mid April. This is an exciting piece of work!
3. Jon Leatherbarrow is devoting 1 day a week to work on a manuscript for PCBs and OC pesticides in Guadalupe River. Lester McKee and John Oram are coauthors. We anticipate a draft manuscript ready for review by the WG in mid to late April
4. John Oram is working on several manuscripts on trace organic loadings for five years of Mallard Island data and two years of Guadalupe River data. The Mallard Island paper will cover PCBs, PBDEs, OC pesticides and PAHs and will be coauthored by Jon Leatherbarrow and Lester McKee. The Guadalupe Paper will cover just PBDEs and will be coauthored by Jon Leatherbarrow and Lester McKee and perhaps other SFEI staff and external colleagues. If the coauthorship gets expanded this paper might be delayed, otherwise we anticipate drafts of both papers going out for WG review mid to late April.
5. Lester McKee has been working on a paper on trace metals in Guadalupe River. The draft is fairly advanced but as yet he has not offered it to his coauthors for their valuable input. We anticipate completing a draft for WG review mid to late April.

6. Lester McKee presented a discussion of Hg in Coyote Creek in comparison to Guadalupe River at the RMP mercury coordination meeting.
7. Lester McKee wrote an abstract on Guadalupe river mercury for the RMP mercury news letter.

Activities for second quarter 2007:

1. We will hold a SPLWG meeting during the week of May 21-25, 2007
2. We will complete sampling for the small tributaries loading study at Cabot Blvd in Zone 4 Line A watershed on April 30<sup>th</sup>. Will receive data from AXYS and MLML ready for reporting at the WG meeting.
3. If there is sufficient precipitation, we will collect falling stage samples for Hg analysis at Hwy 101 in the Guadalupe River.
4. We will complete five technical manuscripts and begin sending them to Journals for review:
  - a) Guadalupe trace metals,
  - b) Mallard Is. Hg
  - c) Mallard trace organics
  - d) Guadalupe PCBs and OC pesticides
  - e) Guadalupe PBDEs

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:

No meetings were held this quarter.

Milestones:

- Release of the report: Pyrethroids Workshop: Facing Up to the Challenges in Pyrethroids Methods Development and Field Monitoring
- Contracts written for continuation of second year of endocrine disruption in fish and mercury analyses in tern eggs.

Activities for the second quarter 2007:

- Continuation of analyses of fish tissue for contaminants as well as examining thyroid hormones.

- Revision of the EEPS five-year plan

The next workgroup meeting will be held on May 24<sup>th</sup> to discuss the five-year plan for EEPS and present initial results on endocrine disruption and mercury analyses in tern eggs.

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:

No meetings were held this quarter.

### Milestones:

- Initial reporting of results of influent, effluent, and bay samples for pharmaceuticals. Results indicate that approximately half of the 38 pharmaceuticals analysed for were detected in the influent. It appears that no samples were detected about the detection limit or blank limit in the Bay.
- Initial reporting of three blood samples collected in the summer of 2006 showed relatively high concentrations of perfluorinated compounds and polybrominated diphenyl ethers. Due to insufficient volume, samples were not analyzed for hexachlorobromododecane.
- Samples will be reviewed for QA/QC issues.

### Activities for the second quarter 2007:

- Seal sampling to collect blood from seven additional seals will likely occur in May. The Marine Mammal Center is coordinating the field collection effort.
- The strategy white paper will be revised to reflect the workgroup's comments. A list of compounds will be developed.

Next meeting is scheduled for June 8<sup>th</sup>, 2007.

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**

Several Toxicity Workgroup participants met on March 13<sup>th</sup> to develop site selection criteria and prioritized the list of sampling stations. Initial sampling was planned for the second half of March.

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

**F. Benthos Analyses in the Delta**

Since the last TRC meeting this project has been shifted into a different SFEI program area (the Contaminant Monitoring and Research program where the State Sediment Quality Guidelines (SQO) is located. The benthic work for 2007 will continue to pursue collaboration with the IEP-DWR to sample sediment quality triad measures, and develop recommendations for the lower regions of the Delta.

**G. Status and Trends Sport Fish**

We have not held a committee meeting in the last quarter. We did approve the striped bass analysis plan with the committee. The RMP striped bass analyses and report will be a stand alone report that will combine both RMP and FMP striped bass data. This report will be completed after the 2006 S&T fish report. Timeline for this report will be dependent on the results of a corresponding otolith study on striped bass. The otolith project is under way.