



SAN FRANCISCO ESTUARY INSTITUTE

4911 Central Avenue, Richmond, CA 94804 • p 510-746-7334 • f 510-746-7300 www.sfei.org

RMP Steering Committee meeting

April 23rd, 2013

San Francisco Estuary Institute

Draft meeting summary

Attendees:

Tom Mumley*, SFB RWQCB

Jim Ervin (City of San Jose)

Dan Tafolla, Medium POTWs (Vallejo Sanitation and Flood Control District)

Karin North, Small POTWs (City of Palo Alto)

Peter Carroll, Refineries (Tesoro Golden Eagle Refinery)

Adam Olivieri, Stormwater (BASMAA/EOA Inc)

Todd Hughes, Industry (USS POSCO)

Mike Connor (East Bay Dischargers Authority)

Jay Davis (SFEI)

Ellen Willis-Norton (SFEI)

Lawrence Leung (SFEI)

Meg Sedlak (SFEI)

Becky Sutton (SFEI)

Dave Senn (SFEI)

*chair

1. Approval of Agenda and Minutes [Tom Mumley]

There were no changes to either the January 2013 Steering Committee (SC) minutes or the agenda for the day's meeting. Karin North motioned to approve the January 2013 SC minutes, Peter Carroll seconded and all members voted in favor. Karin also informed the group that Jim Ervin (City of San Jose) would be replacing Napp Fukuda (City of San Jose) as the large POTW representative to the Steering Committee.

2. Information: TRC Meeting Summary [Meg Sedlak]

Meg Sedlak updated the group on important topics considered at the March 2013 Technical Review Committee (TRC) meeting:

1. 2012 Dioxin bird egg and stormwater sampling is complete. The TRC considered whether sediment sampling would occur, and if so, whether core or margin samples are most useful. The TRC decided that the SFB Regional Water Quality Control Board (Water Board) should reevaluate their priorities with regards to dioxin and that dioxins sampling in the margins may occur if other margins sampling efforts are underway (see below).
2. Jay Davis gave a preview of the upcoming PCB conceptual model report, a draft of which is expected in May 2013. One major finding was step changes in concentrations in sediment over the past 10 years.
3. The TRC discussed changing Status and Trends (S&T) sampling to include margins sediments. The group agreed that the proposal needs to be developed further, including how to conduct sampling and what areas to target.

Discussion

Peter Carroll asked if there has been any analysis of on-going PCB loads (runoff and effluent) and sediment response. Jay Davis said the data exist, but this analysis has not occurred. Tom Mumley added that runoff loads, not effluent loads, were the major source of PCBs to the Bay. Municipalities are working to reduce loading, and the Sources, Pathways and Loadings Work Group (SPLWG) will use the Regional Watershed Spreadsheet Model (RWSM) to refine estimates of runoff loads. Tom agreed that margins sediments would be first to respond to a reduction in loads, but wondered if there was a forum to make progress on S&T margins sampling design. Meg Sedlak said the TRC would provide technical review, and Tom agreed this dialogue needs to happen in the near future. Adam Olivieri was concerned the TRC meeting summary didn't state clearly that the funds for dioxin sediment sampling had been put on hold, and Meg offered to revise the summary to include this.

Action Items

1. Meg will update the March 2013 TRC meeting summary to reflect the status of the dioxin sediment funds (i.e. Dioxin sub-contract closed out and funds returned to reserve)

3. Information: Status of 2013 Budget and Expenditures [Lawrence Leung]

Lawrence Leung reviewed the current budget memo with the group (Item 3, attachment 1 of agenda package). 91% of 2013 participant fees have been received. There is an outstanding 2012 payment issue with Allied Defense Recycling, and Beth Christian (Water Board) will help try to address this. 41% and 49% of approved 2012 labor and subcontract carryovers (respectively) have been expended, and 49% and 89% of approved 2011 labor and subcontract carryovers (respectively) have been expended. Lawrence then discussed the budget summary (Item 3, attachment 2 of the agenda package). Approximately \$2.4 million will be spent in 2013. There is \$280,672 in unencumbered funds, and \$662,272 in unencumbered funds after collections (anticipated, but not yet received).

Discussion

Tom Mumley said the recent edits to the budget summary layout make the document easier to read at a glance. He noticed a ~\$50,000 difference in 2013 unencumbered funds between the budget memo and the budget summary. Meg Sedlak believed this was due to contingency fund of \$50,000 (*and later confirmed this*). Adam Olivieri asked if the RMP was on track to spend all 2012 labor carryover by June 2013, a deadline indicated in the budget summary. Meg said that she expects the work to be done by June, but some projects are coming in under budget. 2013 expenditure is reasonably on track, and Adam suggested discussing potential carryover for 2013 at the August SC meeting.

4. Action: Dredger Fees for 2014-2016 [Lawrence Leung]

Lawrence Leung presented a draft letter that will be distributed to dredgers in November 2013 regarding 2014-2016 disposal fees. Every 3 years, the RMP revises dredgers fees (based on 5-year averages of dredge disposal volume). The RMP does not anticipate a fee increase for 2014-2016. Rob Lawrence (USACE) has approved the letter, but John Coleman (Bay Planning Coalition) received the letter but did not provide comments. Mike Connor motioned to approve the letter, and Karin North seconded.

Discussion

Lawrence said that collections have been much better in recent years. Meg Sedlak added that phone calls from the Water Board to dredgers has helped, although small dredgers can still be somewhat challenging.

5. Information: 2013 Pulse and Annual Meeting [Jay Davis and Meg Sedlak]**I. Pulse [Jay Davis]**

Jay Davis informed the group that the 2013 Pulse is coming together nicely. Jay has commented on draft contaminant profiles from a number of authors (Chris Werme, Kelly Moran, Meg Sedlak, Becky Sutton) and is working on getting revised versions to send for broader review. The management article is not as far along.

Discussion

Tom Mumley said he plans to devote time to editing the management article in the next few days and will send to Jay, hopefully to be included with the contaminant profiles to be sent out for review. Mike Connor suggested getting the articles out for review by RMP participants by May 1st, with comments back by May 15th. Tom said the comment process needs to be streamlined, and there should be one point person for comments from each RMP participant group. Karin North suggested Lorien Fono for POTWs, Peter Carroll will serve as a reviewer for refineries and there will be a contact from stormwater (to be identified at upcoming BASMAA meeting). Jay said that comments received on May 15th will be addressed and final articles will be given to Linda Wanczyk on June 1st for her to begin the layout (Jay will confirm this date works for her)

Action Items

1. Jay will distribute draft Pulse contaminant profiles and management articles for review by May 1st (with a comment period through May 15th)
2. Jay will confirm June 1st is a good date for Linda Wanczyk to begin Pulse layout

II. Annual Meeting [Tom Mumley, Meg Sedlak]

Sessions are currently being developed for the 2013 Joint State of the Estuary (SOE)/RMP Annual meeting. The RMP Annual Meeting will overlap for Day 2, where there will be two morning plenary sessions (one of which will feature Debbie Raphael, Derek Muir and Jim Cloern) and two afternoon water quality sessions (with a total of 7 speakers). RMP participants have a say in the topics for the water quality sessions on Day 2 (nutrients, contaminants of emerging concern (CECs)). There will be 2 additional afternoon water quality sessions on Day 1. There has been a lot of interest in a Day 1 water quality session on trash, but the RMP could advocate for an alternate water quality session.

Meg Sedlak updated the group on the registration process. Based on the costs of previous Annual Meetings, RMP staff proposed paying \$15,000 for 100 RMP participants to attend the Day 2 for free, and they will also be eligible to attend Day 1 for a reduced rate (\$100, using a registration code). Meg believes 100 spots are sufficient, and efforts will be made to ensure all RMP stakeholders are equitably represented. Tom said the program will be available by mid-June, and the process for RMP registration will then be finalized.

Discussion

Jay Davis proposed a CEC and nutrients session for Day 2, and an additional CEC session for Day 1. The Day 1 CEC session could feature local experts, and the Day 2 CEC sessions could feature regional/national experts (i.e. Lee Ferguson and Da Chen, who might be interested in seeing the plenary speakers on that day). Karin North agreed that having a CEC session on Day 1 (in addition to the trash session) would draw in a more diverse group of people, although it might compete with the trash session. Mike Connor said that if the Day 1 CEC session doesn't happen, then the Day 2 CEC session should not just be outside speakers. Jim Ervin will attend the April 30th planning meeting, where he will propose Day 2 session topics and a Day 1 CEC session. *(Jay Davis also participated in this meeting).*

Jay asked the group to brainstorm a list of speakers for the different sessions. For nutrients, the group proposed Tom Mumley (or Naomi Feger), David Senn and Raphe Kudela. For CECs, the group suggested focusing on alternative flame retardants, biomonitoring (in human blood, if there are results to share) and current use pesticides. Adam Olivieri suggested Kelly Moran could give a talk on current use pesticides, and Tom agreed this would be a good science-management hybrid. Karin North mentioned that a pharmaceutical disposal bill is in committee at the moment, and Mike thought someone could do a science-management hybrid talk on pharmaceuticals as well. Jay added that there has also been policy action on

alternative flame retardants. He proposed Becky Sutton to give this talk, which could include PBDEs (RMP has data on how management actions have affected concentrations). Tom suggested these three talks (alt flame retardants, current use pesticides and pharmaceuticals) could be preceded by a summary talk on the status of CECs in the Bay, and Jay proposed this summary talk could be given by Water Board staff (with a management angle). Day 1 CEC talks (if the session happens) could include PFCs, nonylphenol and biomonitoring. Tom wondered if legacy pollutants/persistent organic pollutants should be included, but Adam responded that focusing just on CECs in more in-line with the Pulse, and Karin agreed.

6. Action: Pulse Plan for Next Few Years [Jay Davis]

Jay Davis presented several options for the Pulse schedule and format:

- Option 1: produce a full Pulse in the same years as SOE (odd years), except for 2015, when there will be a large SOE report for the Bay and Delta. A Pulse update will be produced in years without a full Pulse.
- Option 2: Same as option 1, except that a full Pulse will be produced in either 2014 or 2016 to account for missing 2015
- Option 3: produce a full Pulse in off-SOE years (even years), with the exception of 2013.

Discussion

Peter Carroll asked if the 2012 Communications Survey shed light on how RMP participants feel about the Pulse. Jay indicated that he would circulate the survey to BACWA, but Mike said BACWA members show the Pulse to their boards. Karin North asked if the Pulse could be embedded into the 2015 SOE report, but Jay thought it was unlikely the SOE could devote enough pages to include a full Pulse. He added that skipping the Pulse in 2015 would save about \$100,000, but there would be four years between full Pulses (2013 to 2017). Karin thought this would be too long and supported option 2. The Pulse is the main communication with RMP participants, and that the Pulse Lite, by its very nature, is not as comprehensive. Adam Olivieri suggested identifying potential full Pulse topics to help make a decision between option 1 and 2. Mike Connor suggested loadings to the Bay, but Tom Mumley said he wasn't able to commit to this and doesn't see another good 2014 topic. He added that a decision on the 2014 Pulse needs to come at the next meeting, or it is too late. Karin suggested that the RMP could put together an internet/email newsletter that includes RMP updates and links to recent publications. Jay and Jim Ervin support this format. Karin recommended adding communication options to the July SC meeting.

Action Items

1. Jay will develop potential 2014 Pulse topics for July SC meeting and SC will decide if/when to do a Pulse (2014, 2016 or 2017)
2. Add a discussion of communication options (e-mail/online) to July SC meeting

7. Update: Modeling [Jay Davis, Dave Senn]

Jay Davis informed the group that after discussions with the Modeling Technical Team, it was decided that a mechanistic model will not be developed for PCBs and other contaminants, and instead modeling efforts will focus on nutrients. It was deemed too difficult to address management questions and environmental processes for both issues at the same time, and margins modeling is still relatively undeveloped in SFB. In addition, there is a paucity of data, particularly in the margins. In the place of this more sophisticated modeling, Tom Mumley has suggested pursuing simpler approaches for contaminants. The PCB conceptual model report will help identify these simple approaches, and that a proposal could be submitted to the RMP in 2015.

Mechanistic modeling will continue for nutrients, and Dave Senn updated the group on the progress of this project. There is currently no coupled nutrient-phytoplankton models in the Bay, and developing this tool could still have potential benefits to legacy and emerging contaminants in the future. Stakeholders have already been engaged in developing the key management questions, and the modeling program white paper is expected in July 2013, developed with input and guidance from the technical team. The first modeling technical team meeting was held on March 20th. At this meeting, technical team members supported Delft3D as the modeling platform. It has a large user-community, including local experts at USGS, who are willing to share their sediment transport model (although it has been sparingly calibrated in South Bay). After completion of the white paper, model development and implementation will begin, beginning with a complex hydrodynamic model and simple water quality models, eventually coupled to form a 3D nutrient/phytoplankton model. Dave informed the group that of the original \$200,000 allocated in 2012 and 2013 (combined), there will be ~\$140,000 remaining after the completion of the white paper. He expects modeling will cost \$300,000-\$500,000 per year and Dave asked the group if he should propose the RMP partially fund this in 2014 (with additional funding elsewhere). Jay informed the group that there was \$200,000 earmarked in 2014 for modeling, but Tom would want to see a plan for how this will be used.

Discussion

Adam Olivieri agreed the Bay margins present a modeling challenge, but supports continuing with simpler modeling efforts. Tom Mumley added that pursuing a mechanistic model only for nutrients is a no-regrets decision. There is a greater need to do so for nutrients, and the results are more likely to affect decisions. Pursuing simpler approaches down the line could give time to incorporate CECs, since evaluating the fate of CECs is part of the CEC strategy. Mike Connor agreed that the model sophistication should be proportion to the amount of data to support it. Tom wondered if there was time/budget to play around with an existing simple model to inform a 2015 proposal, but Jay said the PCB synthesis budget is pretty much spent. Adam proposed returning to this issue after the PCB synthesis is complete.

8. Action: Nutrient Oversight [Dave Senn]

I. Nutrient deliverables update

Dave Senn began with an update on RMP-funded projects. The conceptual model will be sent to the TRC, SC and technical teams by the end of the month, and the technical team will meet in late May to discuss. There is about \$15,000 remaining to incorporate comments into a final draft. A draft loading study report was sent on April 9th, and there is ~\$7,000 left to incorporate comments. Dave mentioned that estimated stormwater nutrient loads to San Pablo Bay were larger than expected, but given the limits of the RWSM (used to estimate loads) and limited land-use concentration data, there is uncertainty in these estimates. Dave proposed repurposing most of the ~\$30,000 allocated for analyzing 2012 and 2013 stormwater nutrient data (of which there is little) for refining the load estimates, and Mike Connor supported reducing the uncertainty around these estimates (possibly using SPARROW model, fertilizer application data, Water Board reports on Napa River and Sonoma Creeks).

Discussion

Tom Mumley was concerned that there are little funds left to review these two recent nutrient deliverables (conceptual model, loading study). He suggested that any comments that merit substantial review should be put towards a next generation of the report, rather than delaying the current version.

II. Nutrient oversight/governance

Tom Mumley then updated the group on work of key stakeholders (BACWA, Water Board, Water Contractors, EPA) to develop a nutrient governance and oversight structure. He said that accounting for the RMP is complex, since it includes some but not all of the nutrients stakeholders. The Water Board has brought in an outside consultant (David Ceppos) who will seek input from stakeholders, including major players in the RMP, on what forums and representation are needed. By the next SC meeting, he may be ready to solicit RMP representation on a nutrients SC. While the big picture structure is being worked out, there are still nutrients deliverables and proposals being produced that need review.

Discussion

Jay Davis said that nutrient projects need to have stakeholder and high-level technical review (as other RMP projects do). Dave asked the SC for input on who should provide that review. Meg Sedlak said that RMP projects and proposals are typically vetted through workgroups, and simply going through the SC and TRC does not include external technical experts. Dave said that although it doesn't have stakeholder representation, the conceptual model technical team will review the conceptual model, but there still needs to be a process for reviewing the loading study. Mike Connor wondered if the oversight group that the Water Board develops could serve as the RMP nutrient oversight group, but Tom responded that there are some TRC members that want a RMP-specific nutrient forum. Tom added that until the bigger-picture governance planning by the Water Board is complete, it will be

difficult to identify nutrient proposals to the RMP by June. He proposed approving the earmarked amount, with specific projects to come later and to be review by the oversight structure that is developed.

Action Items

1. Dave Senn will develop a process for reviewing the loading study in the absence of a nutrient work group.

9. Information: Spotlight on a Multi-Year Plan Element –CECs [Becky Sutton]

Becky Sutton updated the group on the RMP's CEC strategy, which has three elements:

1. Prioritize established CECs using a risk-based screening framework (tiered management diagram in RMP CEC strategy document) and monitor prioritized CECs
2. Review scientific literature for CECs identified by the monitoring program, including journals, government documents and management/monitoring programs
3. Conduct non-targeted research to identify new CECs, including the use of bioanalytical tools and NIST broadscan analyses (EEWG will be updated on bioanalytical tools at May meeting)

As part of Element #1, the CEC strategy document (draft now available) ranks Bay CECs from Tier I (possible concern) to Tier IV (high concern, none currently). Becky highlighted a few of the CECs identified in this report. Fipronil was ranked as a Tier II contaminant, and the RMP recommends water monitoring in areas with high sediment concentrations and also effluent monitoring. PBDEs were ranked as Tier II. Several forms have been phased out in the last few years, and there have been declines in concentrations in Bay wildlife. Alternative flame retardants (replacement for PBDEs) were ranked as Tier I, and Becky recommended monitoring for compounds that have already been detected and other compounds from the literature (i.e. soluble phosphates in water, which are high in the Bay but not accumulating in biota).

Becky outlined the upcoming RMP research priorities for CECs. In 2013, the RMP will focus on monitoring of fipronil and pesticides, and will host a current use pesticide workshop. In 2014, the RMP will add alternative flame retardants and PFCs, and in 2015 will focus on new PPCPs (to be identified). On-going monitoring for PBDEs, pyrethroids and other compounds will continue throughout, as will development of non-targeted analyses.

Meg Sedlak added that three deliverables have gone out recently. The draft EC strategy has gone to ECWG, the PBDE synthesis has gone to ECWG and the EC synthesis has gone to ECWG and TRC.

Discussion

Peter Carroll asks if the Tier I-IV system was RMP specific. Becky said it was, but Tom Mumley added that the ranking is fairly systematic (based on toxicity thresholds). Peter Carroll asked about total equivalent quotients for assessing toxicity. Meg responded that nonylphenol has one developed, but she doesn't know other than that, and Jay added that the bioanalytical tools study is addressing the fact there is no standard estrogen equivalent. Tom also mentioned he would like to create an updated list of current use pesticides of concern. Mike Connor suggested contacting the TriTAC pesticide workgroup, and Karin North added that Melody LaBella from CCCSD would be a good contact for this. Regarding research priorities, Tom said that the cost of element needs to be considered compared to what is currently earmarked for CECs, and what parts of this are considered S&T costs.

10. Action: Revision to the Sediment S&T Element [Meg Sedlak]

Meg Sedlak said this agenda item is a result of the 2012 moderate toxicity workshop. Thus far, there has not been a strong correlation between survival and chemistry, with only very weak correlation to seasonality and % clay. At the workshop, there were a number of hypotheses on the causes of toxicity (e.g., grain size, health of amphipods, rare earth metals). She said there is currently a fair amount of confusion on what is causing toxicity in the Bay, and she wondered if it makes sense to continue collecting data if the new information is not informative (and not being used much outside the RMP). The TRC has proposed putting benthic and toxicity analysis on hold for 2014, and reapply the funds towards determining the cause of toxicity. The TRC has proposed continuing sediment chemistry testing because it gives useful insights on trends in the Bay and has helped explain some small fish work.

Discussion

Mike Connor wondered if the sediment chemistry data would be useful without the toxicity and benthos data, and said it would be worth investing \$100,000 to know that conditions are not changing. Tom Mumley responded that we don't understand the data from the current monitoring, but he is open with exploring other options that are more informative, or a revising the program at a lower cost. He added that he wants an RMP product (either Pulse, AMR or Report) that shows how the SQO's are being implemented and summarizes the program thus far (with a few graphs and bulleted points), and Meg said that 2011 and 2012 data is being written up now. Karin suggested tabling this discussion until July, when the data has been written up. Meg also offered to show the data to the TRC and bring their feedback to the SC meeting.

Action Items

1. Meg to present SQO data to TRC in June and bring feedback to July SC meeting
2. Decision of benthos/toxicity monitoring on agenda for July SC meeting

11. Action: Check-in on Guidance Workgroups from MYP [Jay Davis]

Jay Davis distributed an updated 5-year plan from that incorporated comments on the MYP. Some of the earmarks are already worked out (SPL), and nutrients/modeling are in progress. Meg mentioned there are more studies in ECWG than just the bioanalytical tools. Tom Mumley noticed a significant negative balance for pilot and special studies. Tom added that additional proposals are welcome, but that this might cut into the reserve. Jay proposed not convening the CFWG because there aren't any proposals to discuss. Jay asked if the EEWG should put together proposals, and Tom thinks that they should be developed in spite of the current negative balance.

12. Information: Deliverables and Workgroup Update

Jay Davis informed the group that the PCB synthesis is planned for August (draft in May), and the Mercury synthesis will follow (once the PCB synthesis and Pulse are done). Meg Sedlak said the broadscan study is behind, but she is pleased with the results to date and these results were presented at the ECWG meeting in April 2013. Collection is still occurring on the PFC special study, but a report on the seal and cormorant data will be out by August. 2006/2009 Bird Egg report is behind and has a new date, and the USGS sediment fact sheet is expected by June.

Discussion

Jay wanted to repeat that the scorecard should indicate final due dates, not draft.

13. Plus/Delta, set meeting date

The next meeting was scheduled for July 17th from 10am-3pm. It will cover the 2013 Pulse, a decision on SQO's, an update to the MYP, 2014 proposals, options for e-communication and a presentation from Lester McKee on SPLWG. Peter Carroll thought we may have delved too much into the details of the SOE meeting, but that he enjoyed the workgroup presentation.