

RMP Technical Review Committee Meeting
October 2nd, 2008
San Francisco Estuary Institute
Draft Meeting Minutes

Attendees:

Bridgette DeShields (BBL/WSPA)	Mike Connor (SFEI)
Tom Hall (South Bay Dischargers (EOA))	Jay Davis (SFEI)
Mike Kellogg (CCSF)	Susan Klosterhaus (SFEI)
Francois Rodigari (EBMUD/BACWA)	Meg Sedlak (SFEI)
Rod Miller (CCSF/BACWA)	Sarah Lowe (SFEI)
Chris Sommers (Stormwater Agencies (EOA))	
Richard Looker (RWQCB)	
Paul Salop (AMS)	

1. Introductions and Approval of Agenda and Minutes

Richard Looker introduced himself and indicated that he would be the representative from the SF Regional Board, substituting for Karen Taberski. A motion for approval of the minutes was made by Mike Kellogg and seconded by Bridgette De Shields.

2. Information: Steering Committee Report

Meg Sedlak reviewed the major items from the Steering Committee meeting on August 5th. Due to maintenance issues, the Bureau of Reclamation boat was not available for the S&T cruise. The RMP rented vessels to conduct the sediment and water cruises. Both the sediment and water cruises were slightly overbudget as a result of inclement weather. Overages will be paid for out of the direct costs. RMP fees from Caltrans have still not been received (approximately \$175,00). The SC supported the recommendation by the TRC that \$121,000 be approved for the dioxin strategy for activities in 2008 (i.e., surface sediment samples and cores). The SC approved the 2009 pilot and special studies approved by the TRC with three exceptions. The following three studies were not funded: xenoestrogens in fish (NOAA); mercury risks to wading birds (USGS) and studies of lake cores (USGS). The SC decided not to include the article on Contact Recreation in the 2008 Pulse.

3. Update on RMP Planning

Jay Davis reviewed the draft outline of the RMP Master Plan and solicited feedback on anticipated regulatory and management initiatives and developments. Jay Davis specifically asked for feedback on anticipated regulatory developments that would benefit from RMP monitoring such as the MRP or areas of wetland restoration. It was determined that each of the stakeholder groups will work with Jay individually to determine their information needs by the next TRC meeting. Jay would like to include each of the stakeholder group's information needs in the report. Members of the TRC will be the point of contact for each of the stakeholder groups.

Bridgette DeShields suggested adding dioxin to the list of high priority pollutants.

Chris Sommers suggested that similar to the recently developed dioxin strategy, we develop a strategy for other pollutants, such as PCBs, and that this be addressed in the Master Plan.

Mike Connor noted that the importance of tying the RMP into regional permit issues in the future so that the RMP remains as relevant as possible. He asked if others thought we should re-organize the RMP workgroups and/or spend less time on annual monitoring and instead put more effort into special projects. Chris Sommers noted that the S&T long term monitoring was a key element of the RMP. Richard Looker suggested developing a process for evaluating the studies. Chris recommended that the Master Plan outline how each of the workgroups overlap and how they relate to the core management questions. He also stated that he thinks the current organizational structure makes sense and that there is no need to meet annually to discuss the different strategies (e.g. PCB, dioxin). The mercury meeting is an exception because there is so much working being done on this outside SFEI. Mike Connor suggested meeting once a year to discuss each strategy. Francois Rodigari didn't think routine meetings were needed unless there was a failure. Bridgette DeShields thought we should also meet soon after a large amount of data is generated. Chris recommended not using strategy teams, that the TRC should direct these studies and identify outsiders when needed. He stated that the TRC should evaluate annually whether the workgroups are answering the management questions and track the progress. Jay noted that he plans to do this in the appendix. Richard Looker agreed that separate strategy teams aren't necessary. Tom Hall suggested a top down approach. Chris thought the arrow should go both ways, that the TRC should identify management questions for each workgroup and promote specific studies with these in mind. He thinks the current structure is resulting in unnecessary competition among the workgroups and that the TRC should be directing the RMP more than it currently is. Francois thought this idea will result in more work for the TRC. Jay Davis suggested evaluating studies and our current state of knowledge by workgroup and by pollutant because several pollutants cut across the workgroups.

Mike stressed that we need to get equal stakeholder input and that we currently don't know what the dredgers needs are. Jay noted that the Master Plan will be pollutant-specific in the budget. He requested that TRC members send him their statements of needs by December. He will have the draft completed in March and the final report in June.

Jay also provided an update on the strategy development for each RMP element. He also noted that a sediment toxicity workgroup, which is a subgroup of exposure and effects workgroup members, will be meeting on Nov. 6th to discuss the observations of toxicity of Bay sediments and whether the appropriate toxicity methods are being used. At the meeting they will determine if a strategy is needed.

A strategy for small tributary loading including management questions will be developed by Richard, Chris, and Jay. This will be reviewed by the strategy team, the SPLWG advisory panel and then to the SPLWG. It was also suggested that a modeling strategy be developed.

Mike Connor asked if the TRC thought we needed a PCB strategy developed. Chris thought we might not need it since PCBs are being captured in the contaminant fate and sources, pathways,

loadings workgroups. Jay noted that we don't know where PCB uptake is occurring in the Bay. Mike added that this has not been addressed by the workgroups. Mike suggested the RMP develop a strawman strategy to address this and submit it to the TRC/SC for comment. A separate one day or half day meeting can be scheduled to address the issue. It was recommended that Jon Konnan, Fred Hetzel, and Andy Jahn be included on this team..

Action items:

- TRC members send their statement of information needs to Jay by December 9th TRC meeting.
- Develop a PCB strategy, submit to TRC for comment, and schedule meeting to address the strategy.
- Develop a modeling strategy, submit to TRC for review and schedule meeting to address strategy.

4. Update on the Dioxin Strategy

Susan Klosterhaus provided an update on the Dioxin Strategy meeting that was held September 18th. She reviewed the study questions, study design elements, and budget. The RMP is seeking input and approval of the strategy so work can begin. Funding for 2008 and 2009 work will come from unallocated reserves.

Paul Salop noted that when we do wet season sediment sampling, only 27 samples will be collected, in contrast to the 47 sites sampled during the dry season. If the S&T begins wet weather sampling in 2009 for sediments, this will reduce the funding needed.

Richard Looker commented that the atmospheric deposition element seems under-resourced, especially since we are likely to find that it will be a substantial pathway of dioxin to the Bay. Susan indicated that we do not have any direct deposition data and that collecting these would be labor intensive and require much more funding. Richard commented that the burden of doing this shouldn't only be on the RMP since this is a state and national issue. Chris Sommers stated that air deposition and watershed loading are likely to be tightly linked and that the air deposition is likely the main source to the watersheds. Richard commented that the link to the watershed loading has to be 'bullet proof' and that we need to engage EPA on the issue.

Chris stated that he would like to see air deposition estimates from local sources and we should include these in our analyses. Tom Hall indicated that Lila Tang from the Regional Board included this as part of her dioxin work in the past. It was suggested that the RMP strategy include these estimates and put them in context. Paul noted that in Lila Tang's estimates, dioxin from medical incineration was included; however this is no longer operational so loading from this source may have changed. Illegal backyard burning is a source to consider. Richard commented that the core argument is that impairment is driven by combustion sources and we need to have EPA involvement. Chris suggested that we review the atmospheric source estimates in the dioxin CMIA since it is unclear whether there will be additional funding available for more work or an interest in further monitoring.

Chris suggested that the RMP develop pollutant-specific links on the website which would include management questions for each and useful links (toxicity info, other data sources). These would serve as a point source on the topic and would be very useful to people.

Richard asked if we are spending too much on ambient surface water analysis for dioxin. Susan stated that the majority of the dioxin will be sorbed to particles. Richard suggested analyzing water for dioxin only once (2009). Whether or not to analyze Bay water in 2011 could be re-assessed later. Jay asked if the TRC is approving the strategy. Chris commented that the design element is fine but that they cannot approve the funding at this time. Bridgette DeShields motioned for approval of the dioxin strategy; Chris Sommers seconded and The TRC approved the dioxin strategy. Chris indicated that approval of the funding was under the purview of the SC.

Action items: RMP to develop pollutant-specific links on the website

5. Wet Weather Sediment Sampling 2009

Meg Sedlak reviewed the variation in sediment toxicity results observed by the RMP over the past several years. Higher toxicity has been observed during the wet season sediment sampling as compared to the dry season and toxicity results have been dependent on the type of toxicity test used. The current recommendation is to alternate sediment sampling between wet and dry seasons each year and reduce the number of sites sampled in the wet season to 27. Meg also reviewed and requested input on the management questions for the wet season sampling and provided an update on the sampling logistics. It is not known at this time whether we will be able to use the Bureau of Reclamation boat for the wet season sampling. The cost for an alternative boat is \$15,000 and would have to come from RMP contingency funds. The RMP is currently working with Don Stevens on the statistics associated with the sampling re-design. Meg indicated that there may be some statistical issues with beginning the plan in 2009 and that Sarah Lowe was currently working with Don Stevens to assess this.

Richard asked Meg to elaborate on what we know about the causes of the observed sediment toxicity. Sarah Lowe mentioned that sediment TIEs are also being conducted but that these are separate from the routine toxicity testing. TIEs are only conducted at sites where substantial toxicity is observed. The Granite Canyon lab is working on making the TIEs more sensitive. In addition to spatial and temporal variation in toxicity, Sarah also indicated that we don't know the duration of the toxicity. Chris Sommers commented that we need to understand toxicity information from other programs and get a state-wide perspective. He stated that sediment toxicity is the biggest unknown of the RMP and that there are major ramifications if it is linked to pesticides. He stated that we need to understand how much of the toxicity is associated with pyrethroids. Meg indicated that this is why pyrethroids were added to the analyte list for 2008 and 2009 S&T sediment monitoring. Sarah noted that the RMP is holding a toxicity meeting on November 6th where they will review the available data and re-evaluate the plans for toxicity testing, including which tests to use.

The TRC approved the management questions.

Sarah reviewed the statistical considerations for the sediment toxicity sampling design. Previously there were concerns about spatial bias in the sampling and this was corrected in 2007. Sarah requested feedback from the group on whether the RMP should focus on getting better spatial coverage or better trend information.

Chris asked if we needed to compromise one to get the other. Meg indicated that we will always have the historic sites for the trend analysis and the question was whether we should focus more on pulling the random sites or the repeat sites (sites that are visited annually, every five years, ten years and twenty years). Sarah Lowe indicated that she was still discussing this issue with Don Stevens and that she would have more information at the December meeting.

Action item: Provide update on statistical elements of re-design at December TRC meeting.

6. Program Plan for 2009

Meg Sedlak reviewed the 2009 RMP budget and program plan. The RMP anticipates receiving substantially less interest this year due to the current economic crises. Unused funding from bird egg analyses will be carried over from this year to next year. Funding for the dioxin strategy was not budgeted so it is unclear where this will come from. Francois Rodigari indicated that BACWA has offered to fund the QA/QC work; however at this time the scope of work is unclear. He indicated that the lab workgroup was meeting shortly and that they would address the QAQC plan and assess necessary costs and present an update at the December meeting. The TRC approved the 2009 program plan. Chris suggested adding a row to the budget which notes whether the funding has been approved or if it is pending. Color coding was also suggested as a way to clarify the table.

Action Item: Update on the Dioxin QA/QC plan will be given at the December TRC meeting.

7. 2009 Pulse

Jay Davis solicited feedback from the TRC on potential themes for the 2009 Pulse of the Estuary. He requested that the contents be determined by the October 21st Steering Committee meeting. Jay indicated that he would like to develop a list of potential themes at this meeting and then have attendees of the RMP Annual Meeting vote on these.

Mike Connor suggested adding a theme related to the ‘edge of the Bay’. He commented that sediments may be better for 2010 because we will have more data by then.

Bridgette DeShields suggested that the theme not be a pollutant since we seem to alternate between pollutants and issues and mercury was the 2008 theme. Chris Sommers agreed and asked when the core data would be available. He commented that BASMAA and others are very interested in the core data. Jay said the core data is expected early next year. Chris said that sediment was his first choice for a theme. Meg stated that we would have the core and mothball fleet sediment results by early next year. Richard Looker agreed that sediments are important but that the cores will take awhile to interpret and it may take longer to interpret their context. He suggested that we delay the sediment theme for a year because we may miss an opportunity to

get a deeper look at their context. Chris suggested a two part series with the cores since we have enough sediment data to discuss already. Mike Connor stated that we'll have the majority of the information in six months and that we shouldn't wait a year to talk about it. Mike Kellogg mentioned that the SQO information is important to consider. Chris supported the SQO idea and Mike Connor said this information is already published. Jay indicated that he would need the draft articles by April.

Richard Looker suggested climate change as a theme; specifically how it affects water resources and regulatory mandates instead of the science of climate change. Mike Connor thought climate change was outside the scope of the RMP.

Mike Connor also suggested wetland restoration but commented that this tends to be mercury focused and we don't have a lot of other information. Jay suggested other issues related to wetland restoration. Richard suggested green chemistry or emerging contaminants. Bridgette suggested beneficial uses. Mike Kellogg suggested exotic species. Mike C. noted that eelgrass, creosote, phytoplankton and invasive clam issues could be tied to restoration. Paul Salop suggested human health effects (e.g. emerging contaminants) and how the RMP is related to this issue.

The group agreed on the top five potential themes: sediments, wetland restoration, emerging contaminants/green chemistry, human health, and urban runoff/pathways (article on each pathway). Exotic species and urban runoff (MRP) are the runners-up.

For the sediment theme, potential articles include SQOs, sediment cores, sediment supply (Shoellhamer), sediment fate and transport, bathymetry, mothball fleet, and edge of the Bay (John Oram is working on this now).

Richard Looker suggested Bruce Jaffe as an author for sediment supply/sediment fate and transport.

Meg commented that NOAA's mothball fleet report will include information on chemical contaminants in sediment cores, surface sediments and bivalve tissues. The report is due to congress in January. Richard noted that permitting for the clean-up of the mothball fleet is a public policy issue. How the military operations have affected the Bay was suggested as a future theme.

Action items:

Send summary of mothball fleet activities to Richard Looker

8. RMP Newsletter

Jennifer Hunt reviewed the current process for producing and distributing the RMP newsletter. One newsletter and one insert into the Estuary newsletter are produced each year but the audience and purpose has been somewhat ambiguous. Jennifer proposed new options and solicited feedback from the group. Two ideas are to do a web-based newsletter only (pdf on the

SFEI website) and send an email to people when it is ready or have a separate, interactive website.

Bridgette DeShields stated that SETAC is having similar issues with their newsletter and they ended up switching to a web-based format.

Francois Rodigari commented that a pdf is an easier transition from a hard copy and that the interactive website is more difficult to look at and get used to.

Chris Sommers commented that it is better to send a pdf out as an email attachment and it may also broaden the distribution. He said that an interactive website is good if you use it repeatedly but that a newsletter is used once.

Jay Davis asked if the group thought it was worth continuing the newsletter. Chris and others said it is valuable and an opportunity to present information that does not fit in the Pulse theme. It is also an opportunity to reach more people and get their feedback. Rod Miller suggested using emails with fact sheets instead. Chris commented that fact sheets are a nice balance between science and ability to communicate it and suggested adding a list of ongoing studies to the factsheets or newsletter with links to each of them on the website. The newsletter could provide links to the factsheets on the website.

Jennifer asked if the newsletter should be more technical. Chris thought the current format is fine. Francois recommended providing links to factsheets in the newsletter. Chris commented that factsheets aren't news; that factsheets are topic-specific and provide an information resource. Jay stated that the RMP will get feedback from the Steering Committee. Richard suggested asking RMP participants if they prefer a hard copy or email attachment. If in email, they could print it only if they are interested.

Action items:

- Discuss incorporation of factsheets at next TRC meeting
- Get feedback on the factsheets from the Steering Committee

9. AMR – New Tools for Presenting RMP Data

John Oram presented an overview of new tools the RMP is developing for presenting data on the web. He solicited feedback from the group and suggestions for other data management needs.

Bridgette DeShields commented that she has concerns about others being able to add their data to the application. John said that this will not affect the SFEI databases. Sarah Lowe indicated that there will be grading available that describes how well the data meets QAQC criteria.

Richard Looker suggested adding data drivers and links to other SFEI documents on the query tool ('intelligent searching' in advance).

Chris asked if there was funding available to finish the tool development. Mike Connor stated that the RMP is not asking for more funding.

John indicated that the plan is to have only text in the AMR and have all the figures online.

It was suggested that ‘cool new tools’ be a newsletter topic.

Chris commented that the current website is awkward. John indicated that SFEI is currently working on updating the website. Chris said that BASMAA has ideas for improvement of the website and they would like to discuss these with us.

Action items:

-Follow-up with Chris (BASMAA) on ideas for website development.

10. Update on Invasive Oysters

Andy Cohen presented an update on the status of his RMP-funded research on invasive oysters. He reported that they will continue sampling in 2009 and that they have sampled 25% of the hard substrate area thus far. The number of invasive oysters collected has decreased over time. They are conducting a source analysis and it appears that there may be settlement from two source populations, with multiple cohorts.

Paul Salop noted that for the first time he found small oysters in the bivalve cages from the RMP S&T bivalve deployment in the summer of 2008. Andy commented that there are a lot of native oysters this year and it may have been a good year.

11. Program Update

Meg Sedlak provided an update on the RMP. She reviewed the activities of each RMP workgroup and upcoming RMP meetings on sport fish sampling and sediment toxicity. Meg reported that a laboratory intercomparison exercise was conducted for PBDEs in bivalve tissues using AXYS and CDFG. The AXYS data was much better due to a higher number of congeners detected. AXYS is doing the PBDEs in bivalve tissues this year and they will analyze the 2006 bivalves soon.

Action items:

-Find out if CCSF can analyze selenium.

The next TRC meeting is scheduled for Tuesday, December 9th.

ACTION	WHO	STATUS
Develop a data integration task description to examine PCB congener fingerprints in tributaries, bay, and fish	Jay Davis	
Revise ten-year plan to include unallocated reserves	Meg Sedlak	
Evaluate whether a strategy is needed for the issue of persistent sediment toxicity	Meg Sedlak	Discussed at November 6 th Toxicity workgroup meeting. Consensus that this is needed and will be developed through workgroup
Stakeholders need to send a short statement of information needs to Jay Davis by December 9 th	Jay Davis	
Develop a PCB strategy for TRC comment and schedule meeting	Jay Davis	
Develop strategy for small tributary loading including management questions	Jay Davis, Richard Looker, Chris Sommers	To be reviewed by SPLWG advisory panel and workgroup
Develop a modeling strategy	John Oram and Jay Davis	
Provide an update on statistical element of redesign at TRC meeting	Sarah Lowe	
Send summary of mothball fleet to Richard Looker	Meg Sedlak	
Develop pollutant-specific links on the website. Include management questions and reports of interest.	John Oram / Meg Sedlak	To be considered as part of the RMP redesign of the website
Update on the scope of work for the QA/QC portion of the dioxin strategy	Susan Klosterhaus/ Francois Rodigari	
Discuss incorporation of factsheets at next TRC meeting	Meg Sedlak	
Get feedback on the factsheets from the Steering Committee	Meg Sedlak	
Find out if CCSF can analyze sediments for selenium	Meg Sedlak	
Follow-up with Chris (BASMAA) on ideas for website development.	John Oram/ Meg Sedlak	