

*San Francisco Estuary Institute*

7770 Pardee Lane, 2nd Floor • Oakland, CA 94621-1424  
Office (510) 746-SFEI (7334) • Fax (510) 746-7300



**RMP Planning Workshop**

**February 7th, 2011**

**San Francisco Estuary Institute**

**First Floor Conference Room**

**7770 Pardee Lane, Oakland, CA**

**10:00 AM - 2:30 PM**

**Draft Minutes**

**Attendees:**

Amy Chastain, BACWA  
Mike Connor, EBDA  
Brad Eggleston, City of Palo Alto  
Trish Mulvey, SFEI Board of Directors  
Tom Mumley, SFB RWQCB  
Adam Olivieri, EOA/ BASMAA  
Chris Sommers, EOA/ BASMAA  
Kirsten Struve, City of San Jose  
Karen Taberski, SFB RWQCB  
Dan Tafolla, Vallejo Sanitation and Flood Control District

**Others Present:**

Rachel Allen, SFEI  
Jay Davis, SFEI  
Meg Sedlak, SFEI

1. Goals, ground rules, chair selection

The group selected Adam Olivieri to serve as chair for the meeting. Jay Davis noted that the goal of the meeting was to get at the big picture, and not to dwell too much on the details.

2. Anticipated management decisions and policies, and related information needs

Jay Davis provided context for the table of current and anticipated water quality management decisions, policies, and actions (p. 6 of the draft Master Plan), and asked for updates on information needs from the meeting participants.

Mike Connor stated that he did not find the table helpful, because it lays out so many more issues than the RMP has money for. He suggested focusing RMP efforts on finding information that will affect the decisions being made.

Tom Mumley responded to Mike Connor, indicating that the issues on the table are drivers for information needs, and they will still need to be addressed even if they are not high leverage areas. For example, although PCBs and mercury may not change much in the future, the TMDLs will need to be updated on the timeframes listed, and RMP studies can and should inform those processes. Jay Davis concurred, noting that the modeling strategy is in the process of being revised so that it can inform the next round of TMDLs in 2016-2020.

Tom Mumley also noted that some of the items listed, such as pathogens, PBDEs, and pyrethroids, did not have policies or deadlines associated with them. Adam Olivieri suggested lumping those items together with contaminants of emerging concern (CECs) as a paragraph discussion of items to revisit in a given timeframe, such as over the next five years. The text should distinguish between regulatory drivers and research needs.

Meg Sedlak noted that the RMP study by Barnett Rattner on PBDE thresholds in terms was driven by a need for PBDE thresholds. Even though there was no regulatory driver for this study, the RMP found it important to pursue this information gap. Mike Connor indicated that the RMP may get more return on its investment if it focuses on pathogens and CECs now, rather than pushing them off for the future. Tom Mumley noted that the Water Board is planning on developing a policy on CECs, and that it is waiting for the RMP synthesis, which is due out in the first half of 2012. Adam Olivieri noted that the CEC panel is working with the Packard Foundation and State Board on a CEC report for marine and estuarine environments similar to the report produced for the State Board on CECs in recycled water and a draft should be available early fall.

Tom Mumley suggested that this table would address the questions of “why are we doing this?” and “can we afford not to do this?” when moving forward with RMP plans. It will help avoid making decisions in absence of sound technical information.

Action items:

- Change dates and column header listed as 2011-12 to 2011-2012 to reflect the fact that they represent windows of calendar years, not fiscal years, per Trish Mulvey’s comment.
- Tom Mumley will work with Jay Davis to revise the “Current and Anticipated Water Quality Management Decisions, Policies, and Actions” Table on page 6 of the Master Plan, and then the Table will be distributed to the group for discussion.
- Include PAHs on Water Quality Management Decisions table. Put pathogens, CECs, pyrethroids and PBDE in a paragraph at the bottom of the table.

**3. Existing plans and budgets**

Jay Davis presented an overview of the existing RMP plans and budgets as described in the Master Plan. This overview provided the background needed to address the questions of “how do we arrange plans and the budget in the long term?” and “how can we fund all of the special studies topics?” He noted that the Special Studies budget has been shrinking as costs go up and fees remain fixed.

In 2011, RMP staff will develop a Status and Trends (S&T) Strategy. Jay Davis noted that a review and revision of the S&T design was conducted a few years ago, but that the Strategy will be explicit about what questions the S&T program is trying to answer. It will also look for places to find efficiencies.

Mike Connor asked if S&T data are used for reasonable potential analyses, and Tom Mumley replied that reasonable potential analyses use RMP data, but they are not as powerful as they could be, as the highest results are used for the analysis. Adam Olivieri also pointed out that the dischargers do reasonable potential analyses in specific areas and Bay wide.

Chris Sommers thought it would be worthwhile to look at the power analysis that was performed. He noted that as a result of the last evaluation, the program saved a lot of money by cutting back on the sampling design. Mike Connor noted that the RMP trades time for space, and suggested that sampling less frequently than once per year could enable the RMP to do more detailed spatial analyses. Meg Sedlak noted that some of these questions have been articulated on page 26 of the Master Plan, and that the Strategy will go into how much uncertainty we think we can live with. It will be completed sometime in 2011, but the specific timeline has not yet been laid out. Adam Olivieri asked that the Steering Committee be kept informed of the timeline for developing the Strategy. Meg Sedlak indicated that she would have a list of Strategy questions for the TRC at the March TRC meeting. The TRC will be able to direct the rest of the Strategy development process at this meeting.

Tom Mumley asked that the Strategy address how other actions or climate change could affect what the S&T program does and how much information we need. Trish Mulvey asked: why do we look at specific chemicals? what are the trends for chemicals? how will the Bay be affected by large scale changes such as sea level rise and climate change? will changing brake pads make a difference? Mike Connor asked that the Strategy pose hypotheses for the strategy questions, for example “historically, we’ve found...”, or “we expect...”, that will indicate how quickly we expect to see change. In the future, the RMP may begin to incorporate more emerging contaminants into the S&T program.

Adam Olivieri and Tom Mumley suggested that S&T Strategy development will enable the Steering Committee to make an informed decision in the fall of 2011 about fee increases, because it will highlight the lack of funding for Special Studies.

Adam Olivieri asked that the RMP reconsider the reporting of work on page 9 of the Master Plan, because portraying Program Management as 40 percent of the costs sends out a red flag to administrators. Jay clarified that Program Management included all of

the program's activities such as data management and communications as well as contract and program management. Mike Connor suggested dividing the Program Management tasks up, with Data Management as its own category. Meg Sedlak elaborated on the "Communications" part of Program Management, which includes the Pulse, the Annual Monitoring Results, fact sheets, presentations, and the Annual Meeting; and "Direct Costs", which includes buying gear, honorariums for panel members, expenses, and renting the Museum for the Annual Meeting. Mike Connor suggested that these costs be broken out differently, and Karen Taberski suggested that the contingency funds should not be included in Program Management.

Tom Mumley asked if any modifications were being made to the communications element, and if they would affect the budget at all. Jay Davis indicated that the RMP is developing fact sheets, but that they can be produced within the existing budget.

Jay Davis pointed out that the number of recommended special studies far exceeds the available pool of funds. The Mercury Synthesis effort is under way, and recommendations for 2012 and beyond will be produced by May 2011. Possibilities for future projects include the development of a methylmercury fate model, more work on mercury isotopes, and more small fish studies.

The PCB Synthesis will be developed in the Fall of 2011 and will include suggestions for work in 2013 and beyond. Possible PCB studies include more small fish work and development of a model for PCBs in the margins. These synthesis efforts are part of a general quest to identify high leverage pathways.

The Dioxin Team will start a synthesis effort in 2013 or 2014, when results from current studies are in. A CEC Synthesis is scheduled to start in the 2<sup>nd</sup> half of 2011, finishing in the first half of 2012, so that it can inform studies for 2013. The broadscan screening project that NIST is working on will help the RMP identify compounds that are high priorities to evaluate. The EC Strategy will be partly based on the outcome of this work. The EC Synthesis is scheduled for the 2<sup>nd</sup> half of 2011 so that the statewide advisory panel recommendations for surface waters, due in the Fall of 2011, can be incorporated into the RMP summary.

The Small Tributaries Loading Strategy is the most fully developed of all the RMP strategies, and currently receives the largest allocation of RMP Special Study funds. Its plan includes monitoring to help the stormwater agencies meet permit requirements.

A number of Exposure and Effects studies are being wrapped up, and studies for this year include a sediment quality assessment of Bay sediment hotspots and an evaluation of copper and the impact on the olfactory nerve by NOAA. A synthesis on SQO drivers is part of the long term plan. The next EEWG meeting will evaluate fish effect studies and make recommendations for 2012. Jay Davis noted that SFEI is conducting a synthesis on Bay water quality for the EPA, which is relevant to the RMP but not using RMP funds. He will work on including matching funds in the Master Plan.

The Forecasting/ Modeling Strategy is currently being revised. The original Strategy was focused on developing the SUNTANS model of the Bay in collaboration with researchers at UC Berkeley and Stanford; however, recent developments have indicated that other currently available models may be more appropriate and timely for RMP 3D modeling needs. Craig Jones, an outside consultant to the RMP, estimated that with an investment of \$100,000 per year for 2-3 years, a 3D-model could be running for RMP use. The specific approach needs to be discussed with the CFWG in the upcoming months. Once in place, the improved model will be critical for updating the PCB and mercury TMDLs.

The RMP Master Plan does not yet include nutrients, for which a strategy will be developed in 2011. Jay Davis noted that Jim Cloern is planning on retiring in the next few years, and when he does, his funding from USGS will be discontinued. The RMP currently pays for approximately a quarter of this work. One of the goals of the Nutrient Strategy will be to identify other sources of funding for continued nutrient work.

Jay Davis noted that the studies on the books for 2012 need more funds than available for Special Studies, and that this does not take into account less developed strategies, like Forecasting. The challenge for the RMP group is to prioritize the Special Studies needs to fit into the existing budget, and to consider the consequences of decreasing funds due to static fees.

Kirsten Struve and Trish Mulvey suggested that the RMP look into collaborations and other funding sources, like SEPs, to maximize RMP resources.

#### Action Items

- Add a line to the Master Plan that indicates that it is updated annually (e.g. “This document is updated annually in January.”).
- Get feedback from the SC and TRC on the Status and Trends Strategy (page 26 of the Master Plan).
- Distribute the results from the previous S&T power analysis.
- Scope out the first part of S&T Strategy with the TRC.
- Reorganize the Program Management costs in the Master Plan to reflect the individual entities such as Communication, Data Management etc.
- Include matching funds in the Master Plan.

#### 4. Specific program priorities for 2012 and general priorities for 2013-2016

Jay Davis indicated that the goal for the remainder of the meeting was to come to agreement on the general budget allocation as estimated on page 11 of the Master Plan, and to review the specific plans for Special Studies in 2012.

Chris Sommers pointed out that in the past program elements that were dedicated to S&T had funds allocated to them indefinitely, and the money was not up for debate within the SS pool. Therefore, if the RMP is comfortable pulling more elements into S&T

designation, it would save the effort of debating their funding year after year. Jay Davis suggested that a compromise would be to commit to set timeframes of funding, such as 5 years, for specific projects, without necessarily designating them as S&T. This distinction is pertinent, because the current discussion focuses only on the SS funds, without discussing other portions of the budget such as program management or S&T.

Mike Connor suggested that the group prioritize funding to projects that will change management decisions. Adam Olivieri indicated that he prefers prioritizing projects based on 3 tiers: 1) permit related 2) investigatory and 3) research. Amy Chastain suggested starting with the studies currently in the budget, and asked whether using 50% of the budget for small tributary loading, for example, is appropriate.

In response to Amy Chastain's inquiry, Adam Olivieri noted that the small tributary loading studies were driven by the MRP, and that the municipal agencies are counting on this continued RMP funding in order to meet their permit requirement. The RMP's \$300,000 contribution covers approximately one third of the required monitoring. Chris Sommers pointed out that the Small Tributary Loading Strategy is well laid out, and has regular check-ins with its advisory panel. The current monitoring was designed to respond to the management questions posed in the strategy document. Therefore, the Small Tributary Loading Strategy will affect management decisions to the fullest extent. It will identify high leverage watersheds to focus management efforts on, and provide an estimate of loads to the Bay from small tributaries. Mike Connor suggested that the Strategy also include an evaluation of its effectiveness at identifying the high leverage watersheds. Kirsten Struve asked that the write-up of the small tributary loads monitoring work include a mention of the benefit it will have for other dischargers.

Tom Mumley indicated that the Small Tributary Loading Strategy is the clearest and most developed of the RMP strategies to date. For 2012, it allocates \$20,000 for the spreadsheet model, \$150,000 for dynamic modeling, and \$380,000 for load and land use monitoring. The dynamic modeling does not need to be pursued in the near future and could be deferred.

Tom Mumley noted that when the Small Tributary Loading Strategy was set in place, the RMP made a conscious decision to lock in funding for this work for a set period of time. Chris Sommers suggested that the group focus on locking in funding for other projects, for time periods as required.

Mike Connor mentioned that the stormwater monitoring could emphasize pathogens as a benefit to other agencies. In Southern California, for example, most of the benefit of stormwater control has been to neighboring beaches. In addition, most of the lawsuits brought against wastewater treatment plants are pathogen-related. Even though pathogens are not linked to a management decision, they may eventually serve as an indicator or need to be monitored. Adam Olivieri noted that the term pathogens is incorrect since no pathogens are being monitored, only indicators of pathogens. He added that pathogen concerns are significantly different in the Bay Area from Southern California because of the lack of beaches and potential for public exposure.

Tom Mumley stated that the group should also consider increases in the RMP budget in the context of using RMP funds. Kirsten Struve indicated that the large WWTPs would only be willing to increase fees to the RMP if it saves money overall due to reduction of other monitoring requirements. Mike Connor suggested that other collaborations or funding sources could include the Bay Area Ecosystems Climate Change Consortium, which recently hired Andy Gunther as their executive coordinator. Mike also pointed out that the dischargers spend money monitoring parameters such as the Whole Effluent Toxicity. If the Water Board gave some regulatory relief, perhaps these funds could be re-directed. Kirsten Struve suggested that the RMP could coordinate with the Salt Ponds program to align their questions with RMP questions. Meg Sedlak indicated that the RMP is working with Numeric Nutrients Endpoint project to see whether there are areas of overlap.

Chris Sommers suggested that the proposed STLS project on a dynamic model of a selected watershed is not ready for 2012 or 2013. Tom Mumley considered not continuing modeling in the Guadalupe River watershed a sign of failure. Chris Sommers stated that in fact it did serve the purpose of training and creating institutional knowledge about watershed modeling.

Adam Olivieri and Chris Sommers asked that the \$400,000 for the remaining STLS studies be “locked in” for 2012 – 2014 in the multi-year plan. This will provide BASMAA with the certainty it needs for long-term budgeting. A discussion ensued regarding the commitment of these funds for STLS studies. Amy Chastain was concerned that allocating \$400,000 to STLS work would significantly limit the funding available for other priority special studies. Tom Mumley pointed out that he was willing, but hesitant to lock in these funds because future needs for RMP Special Study money are unknown, and will be limited by this commitment. While these studies are clearly in support of the work required by stormwater permitting, they do not necessarily serve the needs of other RMP contributors, such as wastewater and dredging agencies. For 2011, STLS work utilizes about 40% of the special studies budget. Kirsten Struve and Brad Eggleston noted that they each wear two hats, representing both stormwater agencies and wastewater agencies, and see both sides of the discussion. Chris Sommers and Adam Olivieri reiterated that RMP funding covers only one quarter to one third of required stormwater monitoring, and that the agencies are relying on this source of funding to meet the permit requirements. The group present reached consensus that for planning purposes, \$400,000 per year should be locked in for STLS studies. This will be reflected in the Master Plan.

Amy Chastain pointed out that nutrients in particular will likely need a significant amount of money in the upcoming years. She suggested that RMP money be directed towards the development of a Nutrient Strategy. Adam Olivieri suggested that other players need to contribute to the nutrients research and that while the RMP has a role in the investigations, the local agencies that fund the RMP work should not be put in a position of needing to fund the entire project. He suggested that State and Federal agencies have a significant stake in this subject and should be funding the work. Brad

Eggleston noted that there are no currently known possibilities for nutrients funding. Tom Mumley predicted that the nutrients work could grow into a \$500,000 - \$1 million per year program.

Jay Davis noted that no specific plans for mercury work are slated for 2012 because the Mercury Synthesis is currently underway and will not have recommendations for future work until mid April 2011. He indicated that a few possibilities could be the development of a methylmercury model, more isotope work, and more small fish work. Chris Sommers suggested that the RMP could postpone mercury work to 2013 with no consequences. Mike Connor suggested that stormwater loads may be a major source of mercury to the Bay, and that future studies should be based on the loading estimates that will be developed during the 2010-2011 stormwater loads monitoring work. No allocations for mercury work were made for 2012. Similarly, PCB work will be put on hold for 2012, awaiting the recommendations of the PCB Synthesis which will be finished in late 2011.

Jay Davis noted that that the Dioxin Strategy recommends analyzing the 2012 Status and Trends (sport fish, bird eggs, and surface sediment) and stormwater samples. This totals \$68,000 for the small tributaries, and \$90,000 for the Status and Trends samples. Conducting the dioxin analysis in 2012 will enable it to inform the dioxin synthesis that is scheduled for 2013-2014.

Tom Mumley indicated that \$15,000 is locked in for the Emerging Contaminants Synthesis in 2012. Recommendations from that work can inform emerging contaminants studies in 2013. Therefore, for 2012, the ECWG need not make recommendations of emerging contaminants studies, because the RMP will not be likely to have available funding.

Other Sources Pathways and Loading projects, including Central Valley loads monitoring and atmospheric deposition, will be discussed by the Sources Pathways and Loading Workgroup. It is likely the workgroup will come back to the planning committee with recommendations for 2013. There is no stated need for air deposition work, but there will be more information available in one year's time.

Jay Davis indicated that the 2010 Master Planning workshop recommended a synthesis on SQO drivers. Mike Connor suggested looking at the bigger picture, and evaluating "to what extent are contaminants affecting the ecology of the Bay". Therefore, the scope of the synthesis was changed to "drivers of aquatic life impairment," and the scope should include consideration of sediment quality impacts. The final decision for this study will be made upon reviewing the scope of work.

Chris Sommers pointed out that no funds are allocated for modeling work. Jay Davis indicated that the CFWG will likely recommend a modeling strategy. Tom Mumley suggested allocating \$100,000 to modeling for each of the next three years. Mike Connor noted that modeling nutrients may become a higher priority than modeling mercury.



Jay Davis indicated that the trash particle monitoring included in the five-year plan was proposed in order to get a baseline estimate of trash conditions in the Bay as trash collection is implemented in the creeks over the next 3 years. Tom Mumley noted that he likes the idea of directing some attention to trash, but the RMP needs to develop a conceptual model and strategy. Without a strategy, it is not a priority for 2012 funding.

Mike Connor noted that it would be easier to get other organizations, such as BACWA, on board with a Nutrient Strategy if the RMP is contributing money. The first formal meeting of the Nutrient Strategy Team is April 22, and a workshop will be held on June 29 and 30. Mike Connor suggested allocating \$100,000 to nutrients in 2012, \$200,000 in 2013, and \$300,000 in 2014.

A \$5,000 coordination line item, originally connected with modeling coordination, was dropped from the five-year plan.

Jay Davis will take the direction from the Master Planning workshop back to the workgroups for proposal development and recommendations. Meg Sedlak noted that they will inform the workgroups that they are not looking for new proposals for 2012, although they are encouraged to develop long term strategies.

Adam Olivieri summarized the significant action items:

- 1) Review the S&T strategy
  - a. What does the revised budget look like?
- 2) Develop Nutrient Strategy (Define RMPs role)
- 3) Evaluate Program Management costs and present them differently
- 4) Evaluate modeling needs and define a clear overall strategy
- 5) Form a SC committee to develop an approach to submit proposals to SEP funding

Action items:

- Have the SPLWG make recommendations for Central Valley loads monitoring and atmospheric deposition work
- ECWG consider inclusion of CECs in stormwater load monitoring in the meantime while the CEC Synthesis is in development

## **5. Plus/Delta**

Brad Eggleston noted that it was useful to walk through the items before looking at the bigger picture. Mike Connor suggested that more long term funding strategies should be discussed.

**Action Items: SC Master Plan Workshop**

#	Action Items – Planning Workshop Feb 2011	Who?	When?	Status 4/12/2011
1	Revise Master Plan per SC comments	Jay Davis	April SC meeting	Pending
2	Develop S&T strategy and inform the SC of the timeline	Meg Sedlak	Prepare for March TRC meeting	Presentation to TRC in March, follow-up discussion at June TRC meeting
3	Distribute the results from the previous S&T power analysis	Meg Sedlak/ Rachel Allen		Done
4	Review reporting of Program Management costs	Meg Sedlak	Present to SC at the April 19 <sup>th</sup> meeting	On agenda
5	Develop a Nutrient Strategy	Jay Davis / Meg Sedlak	April 22 <sup>nd</sup> first Strategy Team meeting	Pending
6	Evaluate modeling needs	CFWG	May 12, 2011	On agenda
7	Form a SC subcommittee to submit proposals to SEP funding	SC, Adam Olivieri	Discuss status at April SC Meeting	
8	ECWG consider inclusion of CECs in stormwater load monitoring as part of the CEC synthesis	ECWG	March 25, 2011 ECWG meeting	Discussed at ECWG meeting – to be included as part of CEC synthesis
9	Have the SPLWG make recommendations for Central Valley loads monitoring (Mallard Island) and the need for follow-up atmospheric deposition work	SPLWG	May 12-13, 2011 SPLWG meeting	On agenda