

San Francisco Estuary Institute

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RMP Technical Review Committee Meeting

March 23rd, 2011

San Francisco Estuary Institute

First Floor Conference Room

7770 Pardee Lane, Oakland, CA

10:00 am – 3:00 pm

DRAFT MINUTES

Meeting Participants

Bridgette DeShields (Arcadis (WSPA))

Eric Dunlavey (City of San Jose)

Tom Hall (EOA, Inc. (South Bay Dischargers))

Mike Kellogg (City and County of San Francisco)

Francois Rodigari (EBMUD)

Chris Sommers (BASMAA (EOA, Inc.))

Karen Taberski (SFB RWQCB)

Luisa Valiela (USEPA)

Barbara Baginska (SFB RWQCB)

Amy Chastain (BACWA)

Mike Connor (EBDA)

Naomi Feger (SFB RWQCB)

Clover Lee (CSU Monterey Bay)

Kevin Kennedy (HDR, Inc.)

Trish Mulvey (SFEI Board)

Paul Salop (AMS)

Rachel Allen (SFEI)

Jay Davis (SFEI)

Lester McKee (SFEI)

Meg Sedlak (SFEI)

Don Yee (SFEI)

1) Introduction, Approval of Minutes, and Review of Action Items

Trish Mulvey pointed out that follow up on action items that refer to another committee are occasionally unclear. She suggested that the items be reviewed at the TRC meeting once they have been addressed, to close the loop.

Karen Taberski commented on page 7 of the minutes from the December TRC meeting, and clarified that the use of SUNTANS to model nutrients is currently a proposal, and not yet up and running.

Meg Sedlak reviewed the action items. Trish Mulvey asked about the timeframe for fact sheets. Meg Sedlak noted that the draft Triclosan fact sheet was developed in January 2011, and that additional fact sheets are also planned. The future of fact sheets will be discussed at the April SC meeting, and the TRC will get an update in June. Now that the

Triclosan fact sheet is in the final stages of review, Mike Connor asked that the Steering Committee determine a strategy for its distribution.

With regards to the joint North-South stormwater meeting, Chris Sommers noted that he knows of the RMP stormwater projects, but not of all the SFEI stormwater work. Meg Sedlak clarified that the meeting should be geared towards coordinating all SFEI projects with SCCWRP, not only RMP projects. Trish Mulvey and Mike Connor mentioned that the ASC and SFEI workplans and quarterly reports give good summaries of projects institute-wide. Meg Sedlak will send the quarterly report to Chris Sommers as a starting point for the discussions. Mike Connor suggested that the quarterly report also be distributed to a larger mailing list, and be posted on the SFEI website. Chris Sommers will also share the BASMAA workplan with SFEI and SCCWRP for these discussions. He is meeting with Ken Schiff on April 6th to initiate this conversation. Jen Hunt and Lester McKee are developing a draft agenda for this joint North-South stormwater meeting. Chris Sommers noted that of many issues and projects that the meeting could address, he, Ken Schiff, and Lester McKee will need to determine which are the most pertinent to discuss. In so doing, they will develop a broader list of projects and prioritize them.

Trish Mulvey asked if the RMP was tracking the San Francisco Bay Water Quality Improvement Fund proposals. She noted that they are currently in review, and that the RMP should be tracking this.

Meg Sedlak noted that she will work with Chris Sommers to standardize the format of RMP proposals for the next round of proposals coming in June 2011. She added that plans for a RMP Program Review will be discussed at the April 2011 SC meeting. Rob Lawrence, USACE, who has missed a number of SC meetings in recent years, has indicated that he is interested in being more involved with the RMP and will be present at the April SC meeting.

Karen Taberski motioned to approve the minutes from the December 2010 TRC meeting, pending her corrections. Francois Rodigari seconded the motion, and the minutes were approved.

Action Items:

- Update the TRC on developments with Triclosan and other fact sheets
- Determine a distribution strategy for the Triclosan fact sheet
- Send Chris Sommers the SFEI and ASC quarterly reports
- Post SFEI/ASC Board packages on the SFEI website
- Chris Sommers to share the BASMAA quarterly report/ workplan with SCCWRP and SFEI.
- Standardize the format of RMP proposals
- Discuss plans for RMP Program Review

2) Information: Steering Committee Minutes

There was no news from the SC meeting in January 2011.

3) Information: Planning Update

Jay Davis reviewed the allotment of funds for each of the Special Study areas for 2012 as outlined in the Master Plan. Looking beyond 2012, the Master Plan group locked in the funds for 2013 and 2014 for the Small Tributary Loading Strategy, and projected that funds for nutrients work would increase. Jay Davis noted that the Special Studies pool is shrinking, and the demands on funds for 2013 and 2014 are already greater than the available amount.

Chris Sommers suggested that reserve funds, cost savings from program management, or cost savings from the Status and Trends program could augment funding for special studies. He also suggested that the terminology be revised. Because “special studies” are rarely 1-year projects, that a term like “strategy specific” funds be used to describe longer term funding that is not intended to be incorporated into S&T. Naomi Feger noted that no new studies were approved for Emerging Contaminants work, in part because there is no EC strategy. She suggested that an updated EC strategy be developed once the EC synthesis is complete.

Jay Davis noted that he would review the Master Plan funds allotment with the individual workgroups so that they know what the SC is looking for in 2012, and so they have a chance to think about information needs in the context of the SC priorities. Chris Sommers noted that he is worried about spending time developing proposals that will not be funded, because they are not in the Master Plan. Jay Davis clarified that he is not sending out a call for proposals, only asking the workgroups to note if there are any important topic areas that are not articulated in the current version of the Master Plan. If there are topics/study ideas, he will suggest that they should be brought forward.

Regarding a question on the dredger surplus in 2010, Meg Sedlak noted that these surplus funds from the dredgers in 2010 had been set aside in a special reserve for the dredgers, to help mitigate the effects due to variability in income from dredging. However, the RMP reserve of unallocated funds could potentially be used to fund special studies.

Mike Connor noted that there is a flood warning in the Delta due to the large amount of rain and snowfall this year. He would like to have a “quick and dirty” action plan pre-approved by the committees in case the RMP decides to sample at Mallard Island due to increased flow from the Delta. Lester McKee noted that currently the criterion for sampling is a flow of 375,000 cfs, but that this should be reconsidered in the action plan. He suggested that his group consider monitoring nutrients. Karen Taberski noted that the Suisun Bay study will be sampling daily at Mallard Island for 10 weeks; however the start date was pushed back by two weeks, and will start in early April.

Trish Mulvey asked that the names for special studies be consistent between the Master Plan table and the deliverables scorecard.

Action Items:

- Develop and obtain approval for a plan for contingency sampling at Mallard Island
- Make project names consistent between the Master Plan budget table and the deliverables scorecard

4) Discussion: S&T Strategy

Meg Sedlak outlined the S&T program, with a focus on the management questions for the water and sediment portions. She was looking to the TRC for an assessment of the questions and if the design as it currently exists accurately addresses them. Could the RMP save money on its S&T work, and still generate the information it needs? Because the biota work is done less frequently, she does not think that there are significant cost savings in that portion (e.g., bivalves, sport fish and bird egg monitoring).

During the discussion of the existing program and data, Mike Connor suggested that the RMP analyze the S&T data to a greater extent, and ask more sophisticated questions. He suggested that future studies be driven by hypotheses. Jay Davis noted that the mercury data, for example, would be investigated more fully in the context of the mercury synthesis project.

Although sport fish have limitations as an indicator of contaminant trends, the Water Board is increasingly shifting towards using sport fish as indicators for beneficial use impairment. Chris Sommers added that water column data may be more sensitive to short term trends, while sport fish is a better long term trend indicator. He noted that while the San Francisco Bay has one of the best contaminant monitoring programs in the world, management decisions are not made on an annual basis. Therefore, it may be in the interest of all to have monitoring reflect more closely the timeline for management decisions and increase cost-savings. However, as Bridgette DeShields pointed out, the monitoring still needs to satisfy the existing Water Board regulations, some of which call for annual updates based on RMP data.

Naomi Feger pointed out that both programs were designed to detect trends based on maintaining long term monitoring. Tom Hall suggested that the sampling design is disconnected with the use of the data for Reasonable Potential Analysis, which singles out the maximum value detected.

Mike Connor suggested that in presenting RMP data and management questions, loading estimates be presented along side ambient trends, along with the history of management actions for that contaminant. Chris Sommers cautioned against trying to link management actions with ambient trends, noting that RMP S&T data reflects the condition of the Bay as a whole, and that the impact of management actions is best determined as close to the intervention as possible.

Trish Mulvey and Francois Rodigari suggested that the water question about the effectiveness of management actions be specific to each contaminant. Meg Sedlak indicated that the S&T strategy would outline the management actions on a contaminant by contaminant basis.

While the option of monitoring less frequently is reasonable, Lester McKee suggested that more data, collected as often as monthly, would also be scientifically justified, enabling more detailed spatial and temporal trend analysis.

Mike Connor suggested creating a TRC subcommittee to work with Meg Sedlak to develop the S&T strategy. His suggested approach is to identify two to three obvious changes to make, and compare their pros and cons. Meg Sedlak will meet with the Water Board to outline options. She will also give a presentation to BACWA and BASMAA on the RMP S&T monitoring program. Mike Connor indicated that this may reveal just how useful RMP data is. Following these meetings, a subcommittee consisting of Meg Sedlak, Bridgette DeShields, Trish Mulvey, Mike Kellogg, Mike Connor, Jay Davis, and a Water Board representative will develop a preliminary S&T strategy, which Meg will bring to the next TRC meeting in June 2011. Naomi Feger suggested that the Strategy include a decision tree. As permitting requirements are identified during Strategy development, Trish Mulvey suggested that the Water Board could make adjustments to any that call for annual updates of data, but do not really need it. That is, permit requirements need not necessarily constrain the optimization of the RMP S&T monitoring design.

Jay Davis pointed out that water is not the best matrix to detect trends, so while the sample design was set up to detect trends, this is not necessarily its best goal. However, Meg Sedlak noted that before reducing sampling, the group should consider what information could be missed by not monitoring.

Trish Mulvey asked about the causes of sediment toxicity, and a discussion ensued regarding the Sediment Quality Objectives (SQO) triad approach. The group decided to consider the SQO approach during Strategy development.

Action Items:

- TRC subcommittee to meet to develop a Status and Trends strategy, including a decision tree.
- Meg Sedlak to give presentations soliciting input on the RMP Status and Trends goals and management questions to RWQCB, BACWA, and BASMAA.

5) Information: Update on the Numeric Nutrient Endpoint Project

Lester McKee gave an update on the Numeric Nutrient Endpoint (NNE) project. The report from this project is in draft form, and will undergo formal review in April. The final product will include a 5-page workplan as well as the full literature review. The TRC will have 3 weeks to review this during April, in order to have it complete for the

TRC meeting in June. The workplan will give a prioritization of recommended next steps as agreed upon by scientists and stakeholders.

Three indicators were identified during the NNE project: dissolved oxygen, phytoplankton, and macroalgae. Mike Connor asked about the rationale behind the selection of macroalgae. Lester McKee and Mike Connor discussed the value of macroalgae as an indicator in mudflats. Karen Taberski pointed out that if we expect to see the effect of nutrients in the Bay changing, that macroalgae could be an important endpoint to monitor.

6) Information: Nutrient Strategy and Workshop

Meg Sedlak introduced preliminary management questions for nutrients, which will be used to initiate the creation of the Nutrient Strategy. A meeting of the Nutrients Strategy Team will be held on April 22nd to refine the preliminary questions. A full day workshop to introduce a broader audience to Bay nutrient issues will be held on June 29th at the David Brower Center, with a follow up strategy meeting on June 30th. Chris Sommers asked if the RMP will be funding the strategy meetings, and how the overall nutrients strategy will incorporate the RMP's goals and responsibilities along side those of other partners and interested parties. Amy Chastain noted that BACWA is providing additional financial resources for this workshop.

7) Information: Status of RMP Modeling Efforts

Jay Davis updated the TRC on RMP Modeling efforts. Reports from Ed Gross and Mark Stacey on the 2010 SUNTANS work will go out to the TRC and the CFWG for review soon. A draft of the Margins Conceptual Model, prepared by Craig Jones with help from Don Yee, Lester McKee, Jay Davis, Ben Greenfield, and Aroon Melwani, is undergoing internal review and will be distributed to the CFWG and TRC for review within the next 2 weeks. Aroon Melwani is making progress on the Bioaccumulation Conceptual Model, and will distribute a draft in April. A CFWG meeting is scheduled on May 12th, which will focus on a revised modeling workplan. Plans to use the \$100,000 allotted to modeling in 2012 will be presented and reviewed. There are a number of documents that will shortly be coming out for review, and Jay Davis noted that he will try to give 3-4 weeks for review for each.

Mike Connor noted that the DELFT3D model is currently being used for sand, and may be the best model for nitrogen modeling. Jay Davis indicated that the workplan will likely recommend use of the DELFT3D model.

8) Information: Water Quality Report Card

Jay Davis gave a presentation on the San Francisco Bay Report Card that is in development. SFEI is collaborating with other organizations in the creation of this document, and is in charge of the water quality section. The water quality portion will be organized by beneficial uses that are affected by water quality: sport fish consumption,

wildlife health, and contact recreation. Jay Davis has received input from Tom Mumley and others at the Water Board, and is looking for suggestions for refinements and format improvements from the TRC.

Bridgette DeShields commented that the “distance to goal” axis is confusing, because it shows the longest bars for the items that have reached the goal. Francois Rodigari suggested showing “distance” along the x-axis (by flipping the graph to horizontal), and having longer distances be represented by longer bars.

Mike Connor noted that the “Is the Bay Safe for Aquatic Life?” chart has “others” listed twice on the x-axis, and that this is not clear enough. It should be specified more clearly. He also added that this plot seems to indicate that the two biggest risks to aquatic life are from exotic species and trash. He suggested that while trash may be a risk, it is not one of the most significant, when compared with exotic species or mercury.

Mike Kellogg suggested labeling the green level as “low risk” rather than “safe”.

Jay Davis indicated that he has been promoting the use of letter grades as a way to summarize information across the report cards, because it provides an intuitive interpretation of the information. Chris Sommers pointed out that the A-F grades may elicit an emotional response from the public, because of their linkage to schooling, and that an “F” grade inherently reflects poorly on managers of the Bay, suggesting that they are not trying. He prefers an indicator such as one to four stars, which could be more easily interpreted as reflective of the status of the Bay, rather than the effort of its managers. Luisa Valiela suggested that grading may not be so ambiguous, and the statement “the Bay gets a C” would be an acceptable conclusion from the report card.

Jay Davis pointed out that he wants the report card to show that a lot of improvements have been made since the 70s, but that there is a lot yet to be done to get to the Bay condition that we want to leave for future generations.

Mike Kellogg presented data on beach monitoring for bacteria for the “Safe to Swim” portion of the report card. Because some beaches were sampled only once per week, there are no available data for about 85% of the days of each year. Based on the available data, the beach at Aquatic Park exceeded bacteria thresholds 3% of the days in 2006 to 2010. Chris Sommers pointed out that while the beaches are sampled only once per week, the data could be interpreted to represent a longer period than a single day. He will work with Mike Kellogg on how best to present the data for beaches.

Jay Davis noted that the report card will be distributed to the TRC for input during the week of March 28th, and that he will ask for a 1 week turnaround for comments.

Action Items:

- Update the Water Quality Report Card based on TRC comments.
- Chris Sommers to work with Mike Kellogg on the interpretation of beach data.

9) Information: Results of 2009 Sport Fish Monitoring

Jay Davis presented the results of the 2009 Sport Fish Monitoring, which combined the SF Bay monitoring by the RMP, the Bight '08 monitoring by SCCWRP, and statewide monitoring, as part of the Surface Water Ambient Monitoring Program (SWAMP). The statewide data shows that San Francisco Bay sport fish are not extremely different from sport fish across the state. However, Karen Taberski pointed out that the 2nd year of sport fish data is currently being analyzed, and will likely indicate a larger difference between more unimpacted coasts and SF Bay.

The report has been distributed to the TRC, and comments on it are due back to Jay Davis by April 4th.

10) Discussion: Approval of the CTAG-TRC Agenda

Meg Sedlak reviewed the agenda for the CTAG-TRC meeting, which will be held on May 19th at SCCWRP. It will focus on effects studies, in conjunction with the 2011 Pulse and Annual Meeting, as well as nutrients and emerging contaminants.

11) Action: Pulse and Annual Meeting Update

Jay Davis indicated that draft articles for the Pulse will be distributed by April 15th. The Benthos article has been reduced to a sidebar because SFEI has not found any viable candidates for the Senior Scientist position, who was intended to be the author of the full article. Naomi Feger noted that she is interested in reviewing the phytoplankton article.

The Annual Meeting will parallel the Pulse, with presentations by the main authors of the articles as well as Jim Cloern and Dan Schlenk as keynote speakers. Meg Sedlak presented options for the venue. Bridgette DeShields indicated that the TRC prefers the Marriott and the Berkeley City Club. The group also settled on October 4th as the date for the 2011 RMP Annual Meeting.

Naomi Feger suggested that a future RMP Annual Meeting could combine with the Delta RMP, and discuss overlapping topics between the Delta and the Bay such as Pelagic Organism Decline. Meg Sedlak and Jay Davis will speak to the Steering Committee about the idea of uniting the two programs for a future Annual Meeting.

Action Items:

- Send Naomi Feger a draft of the phytoplankton Pulse article for review.
- Bring to the SC the idea of combining the Delta RMP with the RMP for a future annual meeting.

12) Information: Program Update and Laboratory Data Status

Meg Sedlak gave an update on the RMP workgroup plans and the deliverables scorecard. She noted that the RMP may be able to use the Bureau of Reclamation's vessel, the Endeavor, for the water and sediment cruises, freeing up \$50,000 from the Status and Trends budget.

Naomi Feger asked about the status of the SQO sediment hotspots project. Meg Sedlak noted that Sarah Lowe changed her role at SFEI, and will not be leading the project. Jay Davis stated that a project lead will be identified soon, and he will update the TRC as progress is made.

There have been issues with contracting for the effects of copper on the olfactory nerve of salmon study, however Meg Sedlak has been checking in with David Baldwin regularly, and assured the group that the work is going forward regardless of the contracting difficulties.

Karen Taberski suggested including a talk on molecular TIEs at the Annual Meeting, and that Chris Vulpe may be a good candidate for this.

Francois Rodigari asked about the status of the Dioxin analyses in sediment core samples. Meg Sedlak noted that the data should be received at SFEI shortly. She will add this project to the RMP deliverables scorecard.

Meg Sedlak noted that almost all data from the 2010 Status and Trends cruises have been received.

Action Items:

- Update the TRC on the status of the SQO Hotspot project.
- Consider having a talk on RMP molecular TIE work at the RMP Annual meeting.
- Add the 2010 Dioxins in sediment cores work to the RMP deliverables scorecard.

13) Action: Set Agenda and Date for Next Meeting, Plus/Delta

The next meeting will be held on June 7th.

Meg Sedlak informed the group of relevant news from SFEI: that Kelleen Griffin is joining the staff as Deputy Director, and David Senn from the Swiss Technical University will begin at SFEI in October. Part of his work will be on the Nutrient Strategy.

Action Items: TRC Meetings

#	Action Items – March 2011	Who?	When?	Status 4/12/2011
1	Update the TRC on developments with Triclosan and other fact sheets	Jay Davis	June 2011	
2	Determine a distribution strategy for the Triclosan fact sheet	Steering Committee	April 2011	On agenda for the next SC meeting
3	Send Chris Sommers the SFEI and ASC quarterly reports	Meg Sedlak	March 2011	Completed
4	Chris Sommers to share the BASMAA quarterly report/ workplan with SCCWRP and SFEI.	Chris Sommers		
5	Standardize the format of RMP proposals	Meg Sedlak, Chris Sommers	Next round of proposals	Pending (see action items from June 2010)
6	Discuss plans for RMP program review	Meg Sedlak, Jay Davis	April 2011	On agenda for the next SC meeting
7	Develop and obtain approval for a plan for contingency sampling at Mallard Island in response to a high flow event	Lester McKee	ASAP	On agenda for the next SC meeting
8	Make project names consistent between the Master Plan budget table and the deliverables scorecard	Meg Sedlak/ Rachel Allen	Before SC April meeting	Completed for April SC meeting
9	TRC subcommittee to meet to develop a Status and Trends strategy, including a decision tree	Sedlak, Connor, Feger, Kellogg, DeShields, Mulvey, Davis	June 2011	
10	Give presentations soliciting input on the RMP Status and Trends goals and management questions to RWQCB, BACWA, and BASMAA	Meg Sedlak	May 2011	
11	Update the Water Quality Report Card based on TRC comments.	Jay Davis		Comments addressed
12	Chris Sommers to work with Mike Kellogg on the interpretation of beach data.	Chris Sommers, Mike Kellogg		

13	Send a draft of the phytoplankton Pulse article to Naomi Feger for her review	Meg Sedlak	March 2011	Completed
14	Consider combining the Delta RMP with the RMP for a future annual meeting	Meg Sedlak, Jay Davis	Discuss at April SC meeting	On agenda for the next SC meeting
15	Update the TRC on the status of the SQO Hotspot project	Meg Sedlak, Jay Davis	June 2011	
16	Consider having a talk on RMP molecular TIE work at the RMP Annual meeting	Meg Sedlak, Jay Davis	Discuss at SC April meeting	On agenda for the next SC meeting
17	Add the 2010 Dioxins in sediment cores work to the RMP deliverables scorecard	Meg Sedlak	Complete for April SC Meeting	Completed

#	Action Items – Sept 2010	Who?	When?	Status 3/15/2011
5	Develop a 2012 RMP proposal for incorporating mercury into SQO indirect effect models	Ben Greenfield	June	To be addressed at EEWG

#	Action Items – June 2010	Who?	When?	Status 3/15/2011
4	Chris Sommers and Ken Schiff (SCCWRP) will work together to plan a joint north-south stormwater meeting in the next 6 months.	Chris Sommers, Ken Schiff	Tentatively set for June 2011	Meeting discussions in progress
7	Review existing information on shellfish, and consider designing a comprehensive shellfish survey.	Meg Sedlak and Jay Davis	Spring 2012	To be addressed as part of Master Planning in 2012

RMP Water Qual represented	MEMBER	Affiliation	2009				2010				2011			
			1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
POTWs	Francois Rodigari	EBMUD	P	P	P	P	P	(2)	P	P	P			
POTWs	Rod Miller	SF PUC	X	P	P	X	X	X	P	X	X			
South Bay Dischargers	Tom Hall	EOA, Inc.	P	P	P	P	P	P	P	P	P			
CCSF	Mike Kellogg	City and County of San Francisco	P	P	X	P	P	P	P	P	P			
City of San Jose	Eric Dunlavey	City of San Jose	P	X	P	P	P	P	P	P	P			
Refineries	Bridgette DeShields	Arcadis/WSPA	P	P	P	P	P	P	P	P	P			
Industry	Dave Allen	USS POSCO	X	X	X	X	X	X	X	X	X			
Stormwater	Chris Sommers	BASMAA (EOA, Inc.)	P	P	P	P	P	P	X	P	P			
Dredgers	John Prall	Port of Oakland	P	P	X	P	P	X	X	X	X			
Corps of Eng.	Rob Lawrence	Army Corps of Engineers	X	X	X	X	X	X	X	X	X			
SF-RWQCB	Karen Taberski	SF-RWQCB	P	P	P	P	P	P	P	P	P			
US-EPA IX	Luisa Valiela	US EPA	X	C	X	C	P	X	C	C	P			

Notes:

1. Richard Looker substituted for Karen Taberski	X = not present	P = present
2. Saskia van Bergen substituted for Francois Rodigari		C = call-in