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



RMP Steering Committee Meeting

October 19th, 2010 San Francisco Estuary Institute First Floor Conference Room 7770 Pardee Lane, Oakland, CA 10:00 AM - 12:30 PM

AGENDA

1.	Approval of Agenda and Minutes (Attachment)	10:00
1.	Review of action items.	Chair
2.	Information: Committee Member Updates	10:05
		Group
3.	Information: Technical Review Committee Meeting Summary	10:10
	(Attachment)	Meg Sedlak
	Topics of discussion at the September TRC meeting included:	<i>3 3 3 3 3 3 3 3 3 3</i>
	pilot and special studies for 2011; the RMP Master Plan and	
	Annual Meeting/Pulse.	
4.	Action: 2010 Budget Status (Attachments/Handouts)	10:20
	An update on the 2010 budget will be given. We would like to use	Meg Sedlak
	a portion of the existing subcontractor budget to retain a	
	consultant for the completion of the Margins Conceptual Model	
	report.	
	Desired outcome: Approve using a portion of the 2010	
	subcontractor budget to pay a consultant to assist with the Margins	
	Conceptual Model report.	
5.	Action: Approval of 2011 Draft Program Plan/ Budget	10:35
	(Attachment/ Handout)	Meg Sedlak
	The draft Program Plan has been prepared. In addition, the line	
	item budget for 2011 will be presented. There is currently a	
	dredger shortfall of \$11,000. We would like to request that	
	reserve funding be used to cover this shortfall.	
	Desired Outcome: Approval of the 2011 Program Plan and the	
	2011 budget.	
6.	Action: Approval of 2011 Master Plan (Attachment)	10:55
	The Master Plan has been revised in response to comments and is	Jay Davis
	ready for Steering Committee approval.	
	Desired Outcome: Approval of the 2011 Master Plan.	

7.	Action: Dredger Fees for 2011 to 2013 (Attachment)	11:15
	Every three years, the dredger volumes for the top five dredgers	Lawrence
	are recalculated based on rolling five year averages. The new	Leung / Meg
	volumes will be calculated based on years 2006 through 2010 (see	Sedlak
	attached letter). At this point, we are not proposing a fee increase.	
	Desired Outcome: Approval of dredger letter with recalculated	
	volumes.	11.25
8.	Action: 2012 Budget (Attachment)	11:35
	Staff is proposing a two percent increase for the 2012 budget.	Jay Davis
	Desired outcome: Approval of 2012 fees.	
9.	Action: Annual Meeting and Pulse (Attachment)	11:50
	Plus/Delta on this year's Annual Meeting, follow-up discussion on	Jay Davis
	short format communication products, decision on a theme for	
	next year's Pulse and Annual Meeting (the TRC has recommended	
	"Contaminant Effects"), and discussion of coordination with the	
	2011 State of the Estuary meeting.	
	Desired Outcome: Decisions on theme for the 2011 Pulse and	
	coordination with SOE.	
10.	Information: Program Update (Attachment/Handout)	12:15
	An update on deliverables will be presented including:	Meg Sedlak
	RMP Annual Mercury Meeting? Other workshop ideas?	
	USGS and Jim Cloern retirement	
	Deliverables update	
	Workgroup updates	
11.	Plus/Delta on today's meeting	12:25
	Set date for January SC meeting.	
12.	Adjourn	12:30

REGIONAL MONITORING PROGRAM STEERING COMMITTEE MEETING DRAFT MINUTES August 4th, 2010

Members Present:

Dave Allen, USS POSCO Kevin Buchan, WSPA Mike Connor, EBDA Ellen Johnck, Bay Planning Coalition Trish Mulvey, SFEI Board of Directors Tom Mumley, SFB RWQCB Arleen Navarret, SFPUC Adam Olivieri, EOA/BASMAA

Others Present:

Rachel Allen, SFEI Jay Davis, SFEI Rainer Hoenicke, SFEI Lawrence Leung, SFEI

1. Approval of Agenda and Minutes, Update on Action Items

Kevin Buchan made a motion to approve the minutes from the May 5th 2010 Steering Committee (SC) meeting, which Adam Olivieri seconded. The minutes were approved. The committee then reviewed action items from previous meetings.

Kevin Buchan indicated that he had followed up with his contacts to encourage more participation. Ellen Johnck indicated that she would talk with Rob Lawrence of the US Army Corps of Engineers (USACE) to encourage more participation on their part as well. Arleen Navarret introduced herself as the new large POTW representative, replacing Dave Tucker. As a member of BACWA, she will look into finding a new small POTW representative to the SC as a replacement for Ken Kaufman.

Jay Davis recommended that the SC not discuss a process for voting on issues, as the current consensus based system largely works, and that methods of voting (majority, super majority, etc.) was discussed extensively previously and the SC agreed that the consensus system best meets the needs of all parties involved. Kevin Buchan concurred with Jay Davis' recommendation that a discussion of voting methods could be disregarded.

Trish Mulvey and Adam Olivieri will wait for Meg Sedlak's return before further developing the set of accounting terms to describe the RMP budget (action item #5). This task will be completed by the October SC meeting.

Regarding the USACE fees, Kevin Buchan noted that their contribution is largely voluntary, and Adam Olivieri suggested that by asking for a fee increase, we could jeopardize the funding that we currently receive from them. Rainer Hoenicke mentioned a discussion he had with a USACE chief scientist, who indicated that the USACE might be interested in routing more money through the RMP as a means of funding research in the Bay without the USACE bureaucratic hurdles for contracting. Ellen Johnck and Rainer Hoenicke will speak with him about increasing collaborations between the USACE and the RMP and potentially increasing RMP funding. Jay Davis mentioned that their work could benefit from the technical oversight provided by the RMP.

Jay Davis mentioned that a discussion of RMP factsheets has been delayed to the October meeting.

Regarding the outstanding question of modifying the SEP process to potentially fund Bay projects that do not receive RMP funding, Tom Mumley indicated that the issue is consolidating small monies to create a pool to fund larger studies, and that the RWQCB is currently reviewing options for doing this. He will update the SC in October.

Action items:

- Ellen Johnck will talk with Rob Lawrence to encourage more participation by the USACE in the RMP.
- Arleen Navarret will look for a new small POTW representative to the SC among the ranks of BACWA.
- Trish Mulvey, Adam Olivieri, and Meg Sedlak to develop a set of accounting terms for the RMP budget discussion by the October 2010 meeting.
- Ellen Johnck and Rainer Hoenicke to speak with USACE about the possibility of increasing RMP funding from USACE through additional Bay research projects that are of mutual interest.
- Tom Mumley will continue exploring options for streamlining SEP funds to RMP high priority projects.

2. Committee Member updates

There were no further committee member updates.

3. Technical Review Committee Meeting Summary

At the joint Technical Review Committee (TRC) – Commission's Technical Advisory Group (CTAG) in May 2010, the group discussed convening an all-day joint Northern California-Southern California meeting on stormwater. Chris Sommers and Ken Schiff are leading this effort with input from Lester McKee. A similar meeting on nutrients was also suggested; however it will likely occur in early 2011. Tom Mumley indicated that that while a meeting on the emerging issue of nutrients is warranted, it is not urgent.

At the June TRC meeting, the group recommended that the supporters of the regional rainfall tool, primarily Mike Connor, Chris Sommers, and Lester McKee, define its goals and purpose better, and the idea will be reconsidered in 2011.

Tom Mumley pointed out that the SC recommendation regarding the role of TRC members in the Pulse review process was not consistent between the TRC and the SC minutes. The SC minutes, he felt, accurately expressed his intent to streamline the Pulse review process and remove the redundancy between participants. At the TRC meeting, it was indicated that the TRC should "begin developing a review process for future Pulses", which is a larger task that would not necessarily serve the aim of providing good and timely reviews. Jay Davis noted that he is looking for adequate review of the Pulse, which has not happened in recent years. He wishes to avoid instances where stakeholders or others do not approve of the final product, as was the case with Jay Ach (Port of San Francisco) regarding the PAH effects sidebar a few years ago.

Trish Mulvey and Arleen Navarret suggested that the SC review the table of contents to determine if there are articles that require additional review, either with regard to technical or policy issues, and then designate an appropriate individual to review these pieces. Ellen Johnck suggested that it is the author's responsibility to ensure that his or her article is adequately reviewed before it is published. Adam Olivieri suggested considering that the detailed special studies portion of the Pulse be published only once every two years, to reduce the burden on Jay Davis and the funders, with another means, such as factsheets, for conveying information from RMP special studies.

Action Items:

• Define a Pulse review process that provides adequate oversight and is more efficient.

4. Budget Status

Lawrence Leung reviewed the status of the budget, noting that it is on track for 2010. Jay Davis changed some of the terms in the budget memo to better describe RMP funds, which had been labeled as "revenue". Expenditure is expected to increase in August and September, to bring the budget closer to target for the year.

There was a revenue shortfall in 2009 due to a reduction in the number of industrial dischargers. There are not many changes to previous year budgets since the last meeting. Assuming Caltrans continues to pay their fees in full, the reserve will contain \$514,000 by the end of 2010.

Lawrence Leung demonstrated the new format for the budget summary in the second attachment. The numbers in this handout are not finalized, but the format is designed to provide an overview of the budget without too much detail. Kevin Buchan noted that he liked the "status of the reserve" table on page 5 of the budget memo.

Ellen Johnck noted that as a director of a non-profit organization, she is used to a different, standardized organization of budget information. She offered to share an example of her accounting spreadsheets with RMP staff and the SC.

In response to Adam Olivieri's question, Rainer Hoenicke noted that the RMP is audited as part of the SFEI audit package, as its own division. He will ask Steve Slakey, the WSPA Chief Financial Officer, who is serving as the RMP representative on the independent audit committee to pay particular attention to the RMP component of the audit report. The report is due by the end of August, and the committee will finish its review by the end of October. At that point, the audit report and the independent review will be available to SC members.

Tom Mumley suggested moving towards paperless reporting of loading for POTWs. A discussion ensued regarding the mechanism for calculating POTW fees. Given that the annual adjustments are slight, Arleen Navarret suggested that she work with Lawrence Leung to use data from the last 5 years to set a flat rate for POTWs, to reduce the annual workload of recalculating fee distributions. This will be presented at the October SC meeting.

Kevin Buchan suggested having a further discussion of RMP fees in October, at which point the issues of what to do when permit holders cease discharging or operating (e.g., power plants close) and are therefore no longer part of the RMP can be addressed. Ellen Johnck mentioned that dredging disposal locations are changing, which may also have implications for RMP fees.

Action items:

- Ellen Johnck will send an example of the standard balance sheet to Lawrence Leung and SC members.
- Lawrence Leung and Arleen Navarret to propose a method for calculating flat fees for POTWs.
- Discuss at the October SC meeting how to address fees when there is a change in the number of permit holders.

5. SFEI Salary Adjustment Plan

As SFEI salaries adjust with staff promotions and cost of living increases, if RMP fees do not increase as well, the amount of work that the program can produce will necessarily decrease. At the current time, Rainer Hoenicke noted that the cost of living is not being adjusted, so it is not an issue. As the economy changes, this will need to be revisited.

6. Planning Update

a) Approval of Minutes

Regarding the action items from the SC Planning Workshop in April 2010, Jay Davis noted that the strategy development ideas are on the long-term list of things to do, and the

LTMS discussion between Meg Sedlak and Ellen Johnck will be held this fall. All items are being addressed.

Adam Olivieri asked that it be noted on page 9 of the minutes from the SC Planning Workshop that he agreed with Mike Connor on regarding shallow water discharges, and Ellen Johnck corrected a statement attributed to her on page 8: that she is interested in "coordination with" the Regional Board on treated materials, rather than regulation. Adam Olivieri motioned to approve the minutes with these changes, which Ellen Johnck seconded. The minutes were approved.

b) Annual Planning Cycle

Jay Davis presented two options for the Steering Committee annual planning cycle, which will henceforth include an annual Planning Workshop. Detailed on the item 6 handout, the first option is a slight modification of the status quo, and aims to complete planning early in each year. The second option is designed to avoid having to skip years for multi-year strategies, and pushes planning later in the year so that 2011 work, for example, can inform studies proposed for 2012. This could be done on a targeted basis, when strategy teams are conducting syntheses or conceptual model updates.

Trish Mulvey noted that she likes the first option, and suggested including placeholder funds in the special study budget for mercury studies to be developed based on the results of the mercury synthesis report. Tom Mumley and Arleen Navarret voiced their support for option 1, noting that it allows sufficient time for the workgroups to convene and assess studies. Additionally, July approval of SS allows projects that need to start in the fall, such as stormwater work, to begin with assured funding.

Kevin Buchan supported the use of a placeholder, but he suggested that the RMP identify studies that could use the money, if less mercury work is needed than was assumed. The TRC should be informed of this process, so that they can recommend studies appropriately. Decision points for evaluating which studies receive these placeholder funds should be highlighted in the planning cycle. The group agreed that option 1, with the placeholder amendment, was their preferred option.

Rainer Hoenicke noted that SFEI can also help find other funding sources for RMP suggested projects that do not receive RMP funds.

Adam Olivieri noted that BASMAA drafts its annual budget in October – December, but it is not ratified until March or April. Until that point, he cannot guarantee any budget increases. He is attempting to provide more lead time to the organization by recommending fee increases two years in advance. Trish Mulvey suggested that the RMP adopt this rolling two-year planning strategy as well, thus discussing 2013 fees and a rough Master Plan as well as the 2012 fees and Master Plan at the January 2011 Planning Workshop.

Kevin Buchan noted that while it may feel better to approve the budget and the Master Plan at the same time, traditionally the budget dictates what work can be done and all planning is based on a set budget, so there is no need to approve them concurrently. Mike Connor noted that a finalized Master Plan may be a long shot for October, given Jay Davis' workload with the Pulse and the Annual Meeting.

c) Master Plan

Jay Davis presented the internal Master Plan, which is nearing its final version. Page 5 contains a new "bull's-eye" figure, which is designed to illustrate the process for creating a cleaner SF Bay and how the RMP structure fits into this process. Adam Olivieri noted that the ultimate goal should be a "Cleaner" rather than a "Clean" Bay. Trish Mulvey noted that the diagram is especially helpful in defining the expectations on the TRC, which needs to be able to consider scientific issues from a management perspective. The group expressed their confusion regarding the figure, noting that its goal needed clarification and that its organization is misleading, especially the elements around the border.

Jay Davis noted that the current version is designed specifically for the SC, and that once the group is satisfied with it, he will develop a slimmed down external version. He presented a mock-up of the external version, which would provide the same broad outlines in about 10 pages. Adam Olivieri noted that the external version is important because it will go to the RMP funders, and will hopefully promote support by RMP participants. It should include a condensed version of the last table. Ellen Johnck noted that she hopes to take this external Master Plan to the LTMS, to promote more synergy between the RMP and the LTMS.

Tom Mumley suggested that the last table presenting detailed funding allotments for the 5 year plan indicate better where the RMP expects to spend money in the future. Areas that do not yet have defined projects should have a placeholder, rather than \$0.

Jay Davis asked for SC members to send him by email their detailed comments on the Master Plan by the end of August. He specifically asked for input from Tom Mumley to fill in the Current and Anticipated Water Quality Management Decision, Policies, and Actions Table. Tom Mumley noted that the next 303(d) listing will occur in 2012, and that it is important that the RMP is comfortable with Regional Board priorities.

Action Items:

- Make the recommended changes to the minutes from the Planning Workshop.
- Revise the Bull's-eye figure in the Master Plan.
- SC members to review the Master Plan, and send their comments to Jay Davis by September 1, 2010.

7. 2011 Special Studies

Jay Davis noted that TRC removed the placeholder funding for modeling work for 2012, but the work is continuing in 2011 with 3D model development and conceptual model updates. If the work is ready to move forward in 2011, the SC can consider financing it with unallocated funds. Otherwise, this will shift all of the modeling work back by 1

year. He added that most of the work is being subcontracted out, and Ben Greenfield is taking on John Oram's oversight role. Ellen Johnck noted that the USACE is also conducting modeling work, which should be coordinated with SFEI's project.

Ellen Johnck motioned to approve the 2011 special studies budget, which Adam Olivieri seconded. The budget was approved.

8. Pulse

Jay Davis suggested considering Effects for the 2011 Pulse, given that a review on Contaminants of Emerging Concern (CEC) is scheduled to be completed in 2012. The 2011 Pulse will be discussed at the October SC meeting.

9. Annual Meeting

Jay Davis asked for SC input on the proposed agenda for the Annual Meeting. He noted that Rainer Hoenicke will be the Master of Ceremonies.

The group agreed that a talk on LID would be appropriate and interesting at the meeting, and Adam Olivieri suggested that Laura Prickett would be a good speaker. Nicole David could potentially help with this talk, though Mike Connor suggested having fewer SFEI speakers.

Mike Connor suggested asking Dave Schoellhamer to talk about the status of sediment the Bay, as a wrap-up from last year's meeting, and Susan Klosterhaus to provide an introduction to CECs, as a preview to next year. This could include information on Meg Sedlak's PFC report that will be coming out.

Jay Davis noted that his regular Status and Trends update is absent this year, but that with the development of the Estuary Report Card, next year will be a good time to bring it back.

Action items:

• Adam Olivieri will inform Laura Prickett that Jay Davis will be contacting her about speaking at the RMP Annual Meeting.

10. Deliverables Update

The Deliverables update will be conducted via email following the meeting.

Action Items:

• Jen Hunt will send out the deliverables update to SC members.

11. Adjourn

The next SC meeting will be held on October 19th, from 10:00 to 12:30.

Tom Mumley and Kevin Buchan both noted that they liked holding SC meetings in the $2^{\rm nd}$ floor SFEI conference room.

#	Action Items – August	Who?	When?	Status
	2010			8/5/2010
1	Speak with Rob Lawrence to	Ellen Johnck		
	encourage more			
	participation by the USACE			
	in the RMP.	A 1 DT		
2	Find a new small POTW	Arleen Navarret		
	representative to the SC.	T:1 M 1	0 1 00	
3	Develop a set of accounting	Trish Mulvey,	October SC	
	terms for the RMP budget discussion.	Adam Olivieri,	Meeting	
4		and Meg Sedlak Ellen Johnck		
4	Speak with the USACE about RMP and USACE	and Rainer		
	coordination and funding	Hoenicke		
	collaboration.	Hoemeke		
5	Continue looking into	Tom Mumley		
3	streamlining SEP funds to	10m Mumicy		
	RMP high priority projects.			
6	Define a Pulse review	SC Members	October SC	
	process that provides	SC Wiemocis	Meeting	
	adequate oversight and is		Triceting	
	more efficient.			
7	Send an example of the	Ellen Johnck		
	standard balance sheet to			
	Lawrence Leung and SC			
	members.			
8	Develop an option for flat	Lawrence	October SC	
	fees for POTWs.	Leung and	Meeting	
		Arleen Navarret		
9	Develop a proposal for		October SC	
	addressing potential		meeting	
	shortfalls due to changes in			
	participants in the program			
10	Make the recommended	Rachel Allen		Completed
	changes to the minutes from			
4.4	the Planning Workshop.			
11	Revise the Bull's-eye figure	Jay Davis		
1.0	in the Master Plan.	CC M 1	D G : 1	
12	Review the Master Plan, and	SC Members	By September	
1.2	send comments to Jay Davis.	A 1 01: : :	1	
13	Inform Laura Prickett that	Adam Olivieri		
	Jay Davis will be contacting			

	her about speaking at the RMP Annual Meeting.		
14	Send out the deliverables update to SC members.	Jen Hunt	Completed

#	Action Items – January 2010	Who?	When?	Status 8/4/2010
1.	Prepare a communications plan for the fact sheets that addresses the purpose, audience, and updates necessary for factsheets	Jay Davis	March TRC meeting	Discussed at March TRC meeting – to be discussed by SC at the August meeting
3.	Proceed with the fact sheets pilot in 2010	Jay Davis, staff	2010	In progress, first topic: triclosan and triclocarban. Pending input from the SC.
5.	Develop a Strategy for Status and Trends	Meg Sedlak	Fall 2010	Pending

Item 1 Draft SC Minutes

RMP Sector	MEMBER	Affiliation	2008			2009				2010				
Represented			1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
POTW- Large	Dave Tucker (1)	City of San Jose	X	P	P	P	X	X	P	P	P	P	X	
POTW- Large	Arleen Navarret (3)	SFPUC	X	X	X	X	X	X	X	X	X	X	P	
POTW-Med	Dan Tafolla	Vallejo Sanitation and Flood Control District	P	P	P	P	P	P	X	P	X	P	X	
POTW- Small	Ken Kaufman	South Bayside System Authority	X	X	X	X	X	X	X	X	X	X	X	
Refineries	Kevin Buchan	WSPA	P	P	P	P	X	(2)	P	P	P	P	P	
Industry	Dave Allen	USS POSCO	P	P	P	P	X	P	P	P	X	P	P	
Cooling Water	Steve Bauman	Mirant Delta, LLC	X	X	X	X	X	X	X	X	X	X	X	
Stormwater	Adam Olivieri	EOA, Inc	P	X	P	P	P	P	P	P	P	P	P	
Dredgers	Ellen Johnek	Bay Planning Coalition	X	P	P	P	X	X	X	P	P	W*	P	
SFBRWQCB	Tom Mumley	SFB RWQCB	P	P	P	P	P	P	P	P	P	P	P	
USACE	Rob Lawrence		С	X	X	X	X	X	X	X	X	X	X	

P = present

 W^* = provided input at RMP master planning workshop 4/21/10

C = call-in

X = not present

Notes:

- 1. Dave Tucker elected to SFEI Board, June 2008
- 2. Marcus Cole filled in for Kevin Buchan
- 3. Replaced Dave Tucker as Large POTW Rep in May 2010

San Francisco Estuary Institute

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



RMP Technical Review Committee Meeting

September 21st, 2010 San Francisco Estuary Institute First Floor Conference Room 7770 Pardee Lane, Oakland 10:00 am-2:30 pm

Meeting Participants

Mike Connor (EBDA)
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)
Rod Miller (SF PUC)
Trish Mulvey (SFEI Board of Directors)
Francois Rodigari (EBMUD)
Karen Taberski (SFBRWQCB)
Luisa Valiela (US EPA) (call in)

Rachel Allen (SFEI) Jay Davis (SFEI) Rainer Hoenicke (SFEI) Susan Klosterhaus (SFEI) Lester McKee (SFEI) Meg Sedlak (SFEI) Don Yee (SFEI)

1. Introductions and Approval of Agenda and Minutes

Meg Sedlak and Jay Davis reviewed action items from the previous TRC meetings, noting that Steve Bay is scheduled to come to the October 20th Benthic Workgroup meeting. There were no comments on the minutes from the previous meeting. Mike Kellogg made a motion to approve the minutes, Karen Taberski seconded, and the minutes were approved by consensus.

2. Information: Steering Committee Minutes

Meg Sedlak noted that Kirsten Struve was replacing Arleen Navarret as the large POTW representative to the Steering Committee (SC). Ms. Sedlak will work with her to take on tasks begun by Arleen Navarret. The SC could still use a new small POTW representative. Jay Davis and Meg Sedlak asked Francois Rodigari to recommend a colleague prior to the next SC meeting on October 19th. There is currently no formal definition of "small POTWs". A discussion ensued concerning dredger participation on the TRC and SC. John Prall from the Port of Oakland is currently the TRC representative from the dredger community.

Meg Sedlak informed the committee that the SC approved the package of special studies for 2011.

Action Items

• Francois Rodigari to recommend a possible small POTW representative to the SC.

3. Information: Pulse and Annual Meeting Update

Jay Davis reviewed the agenda for the RMP Annual Meeting, which will be held on October 5th at the Oakland Museum. Two keynote speakers will be presenting: Tom Schueler from the Chesapeake Stormwater Network and John Sansalone from the University of Florida. Jay Davis asked for feedback on the lunchtime audience participatory activity. He proposed audience voting on various possible factsheet topics. The pilot factsheets, on triclosan and triclocarban, will be available in the 4th quarter of 2010. Mike Connor suggested voting on topic areas for the proposed expanded Pulse. Jay Davis will be meeting with Tom Mumley on September 22 and will discuss expanding the Pulse and combining the RMP and State of the Estuary (SOE) meetings in 2011. These ideas will be discussed with the SC in October. Rainer Hoenicke mentioned that additional funding would have to come from SFEP for the expanded Pulse. Jay Davis is also working with Andy Gunther and the SFEP to develop an improved report card for the Bay. This will certainly be a topic of discussion at the 2011 SOE meeting.

Trish Mulvey noted that SFEI does not have an annual meeting, and asked how the RMP fits into the overall picture of SFEI.

Rod Miller suggested moving from a periodic newsletter or Estuary Insert to electronic updates. Mike Connor noted that Rainer Hoenicke's quarterly report to the Board of Directors could be relatively easily converted to an electronic update, and Meredith Williams is working on the format for distributing this to a larger audience. He also mentioned that the Bay Area Clean Water Agencies (BACWA) recently began this type of communication, which was well received.

Francois Rodigari noted that BACWA and the Regional Water Quality Control Board (RWCQB) will be meeting to discuss factsheet topics, and suggested that Jay Davis participate in this discussion to coordinate RMP efforts with BACWA and Water Board projects. Jay will seek their help in adding a management component to the technical factsheets that SFEI will produce. Tom Hall suggested that Adam Olivieri be contacted if the CEC factsheets will address monitoring, because of his work on the state recycled water document.

Jay Davis also suggested getting audience feedback on communication platforms for the lunchtime activity. Trish Mulvey added that the activity could include written feedback, along with "sticky dot voting". The group agreed that the lunchtime activity should solicit feedback on communication platforms.

Jay Davis mentioned that the 2010 Pulse is going to the press, and thanked Karen Taberski for her hard work. He suggested that the 2011 Pulse focus on wildlife effects due to contaminants, and 2012 would be an appropriate year for a focus on Contaminants of Emerging Concern. The 2011 Pulse could feature Meg Sedlak's summary of the Exposure and Effects Pilot Study; some of the recently completed effects studies such as mercury and PBDE work in birds, PAHs in flatfish, benthic TIE studies, and endocrine disruption; and a summary of the status of wildlife populations. Luisa Valiela asked if this would overlap with the concurrent Bay Report Card, and suggested that it would be a good opportunity to highlight and coordinate both efforts, rather than duplicating work. Trish Mulvey noted that a Pulse on Effects may need more time for reviewing and editing,

because of the potentially sensitive nature of the content. Jay Davis mentioned that he deliberately proposed "Ecological Health" as the title so as to avoid to more controversial "Effects", however Karen Taberski pointed out that the topics differ significantly. The exact title will need to be more carefully considered to accurately reflect to the focus of the Pulse.

Lester McKee gave a preview of his Annual Meeting presentation on "Recent Findings on Stormwater Loadings and BMPs/Multi-Year Watershed Loading Sampling Plan". With the implementation of the Municipal Regional Permit (MRP), there is increased focus on stormwater contaminant loading. Using PCBs as a model, Dr. McKee illustrated how we can identify and track contaminants from their sources to the Bay, to inform effective management and control.

Regarding a table showing PCBs still in use, Lester McKee noted that PG&E and oil refineries were conspicuously absent from the list of current transformer users, and speculated that the total mass of PCBs in use is significantly higher. Bridgette DeShields mentioned that one of the listed sites is actually demolished. The list is incomplete and not current because it is based on information provided to the EPA as of 2007.

Rainer Hoenicke and Trish Mulvey asked about the effectiveness of management actions for PCBs. Some potential sources include the large barrels of PCBs found by CEP in 2004, and air deposition. The only research on loading in the Bay Area from air deposition has been in dry conditions, while the literature shows that wet conditions can have 2 to 20 times the loading of PCBs than dry conditions. Lester McKee noted that PCBs are often mobilized from local sources and begin entering the water system due to redistribution by foot traffic and local wind. Thus, he considers that the atmospheric component of the PCB TMDL is likely underrated, but not grossly.

Lester McKee suggested that PCB regulations be improved to the level of mercury regulations. For example, it is illegal for contractors not to dispose of mercury containing equipment. PCBs also continue to be used in dielectrics. Mike Connor noted that the replacement product may be worse than the current problem. Because PCBs that enter the Bay are not evenly distributed, there are "high leverage areas" for management actions.

Action Items

- Jay Davis to coordinate with BACWA and Regional Board on factsheets.
- Meg Sedlak and Jay Davis to create a list of RMP factsheet topics.

4. Action: Dioxin Sediment Sampling

The SC approved funding for analysis of additional surface sediment and core samples, and is looking to the TRC for guidance on which samples to analyze. Susan Klosterhaus and Don Yee reviewed the samples that have been analyzed to date. For surface sediments, 47 samples collected in the 2009 dry season have been analyzed. There are samples collected for dioxins from the 2008 dry season (47 samples) and from the 2010 wet season (27 samples). The three options for analysis are:

- A) 47 dry season samples (provides increased spatial coverage)
- B) 27 wet season samples (provides wet-dry comparison)

C) Hybrid: all wet season samples, plus some additional dry season samples (wet-dry comparison, plus repeat dry season sites, which enable some statistical calculations)

The objectives of surface sediment sampling for dioxins are to: assess spatial variation in Bay, estimate the reservoir in Bay sediments, determine if recent loadings are different from historical loadings, and collect data for food web and mass budget models. Although option (A) would enable further assessment of spatial variation, Don Yee noted that the estimate for the dioxin reservoir will be unknown until a dry/ wet comparison is made. Higher wet season concentrations would indicate that there is loading from the tributaries, whereas lower wet season concentrations could suggest that the tributaries are cleaner than the existing Bay reservoir.

Mike Connor suggested using a tracer contaminant, such as dioxin congener profiles, from the tributaries to help estimate dioxin loading in the wet season. However, congener patterns may not be strong enough for this. Dioxin data from a few tributaries during the 2009-2010 wet season should be available shortly.

Bridgette DeShields, Karen Taberski, Tom Hall, Rod Miller, and Meg Sedlak all weighed in supporting the hybrid option (C). Francois Rodigari suggested doing option (A) now, and analyzing wet season data in 2012. Don Yee agreed that there is no disadvantage to that plan, but he considers the unknown seasonality factor more important than better spatial coverage. Trish Mulvey suggested asking for \$30,000 more, to fund the analysis of all samples (A plus B). It was generally agreed to move forward with option (C).

Don Yee discussed the goals of analyzing cores for dioxins: to determine if there is a legacy pool, to assess exposure risk to biota, and to observe a trend in loading (from pre- to post-industrial). There is no more material in the existing cores for the sections that have been dated, however sections just below or above the dated pieces can be analyzed, allowing their dates to be interpolated. He presented the options for analysis:

- A) 4 sections in each of the Bay cores (sections 1,2, and 3 plus bottom section)
- B) 4 sections in each Bay core (sections 1,3, and 5 plus bottom section)
- C) Use wetland cores

The wetland cores, being purely depositional, do not show the mixed layer or give an idea of exposure to biota, but would give a better estimate of the loading history.

Mike Connor noted that it would be good to verify a decline in dioxin loading because of the significant effort that has been done to control dioxin loading, and suggested using the wetland cores for this. Bridgette DeShields concurred, noting that it is suspected that there are no large sources in the Bay, but it would be good to verify that current loadings are lower than historic loadings. The exposure question can be answered by surface sediment analysis.

Don Yee will bring this recommendation back to the Dioxin Team, to determine if they agree with analyzing the wetland cores. The next Dioxin Team meeting will be held via phone or email, and should occur before the SC meeting in October 2010.

Lester McKee stated that an introductory meeting on nutrients will be held at the Water Board on October 4th, 2010, with a technical advisory group that includes Dick Dugdale, Jim Cloern, Clifford Dahm, Ralph ??? (Santa Cruz), and potentially Tom Hall. Brock Bernstein and Martha Sutula will be leading the group. The group will assess how to monitor if nutrients are changing in the Bay. Luisa Valiela noted that the EPA will attend the meeting. Amy Chastain, Mike Connor, and other BACWA members will also attend.

Action Items

• Discuss TRC recommendations on dioxin analyses with the Dioxin Team, before the October 19th SC meeting.

5. Information: Update on PFCs

Meg Sedlak presented an update on PFC monitoring in the Bay. Perfluorooctanesulfonate (PFOS) has been found at high levels in seal blood and cormorant eggs in the South Bay, however small fish, sport fish, bivalve, and ambient water concentrations throughout the Bay are at levels more comparable with those seen worldwide. All water samples, including wastewater, tributaries, Bay margins, and ambient water, had higher concentrations of perfluorooctanoic acid (PFOA) than PFOS. Though there is a similar spatial trend between seals and cormorants, the relationship between high concentrations in some species and low water concentrations is not yet understood.

The concentrations in South Bay cormorants is above the predicted no-effects value (PNEC), however Jay Davis suggested that it would be difficult to identify effects on the population or pinpoint PFCs as the cause. Lester McKee suggested that the stormwater data indicate that PFCs are urban contaminants, because of the high concentrations seen at Z4LA and GR101, both sites receiving urban stormwater. Because of the strength of the carbon-fluorine bonds, PFCs do not degrade in the environment. Their half life in cormorants is quite short, however, so because the cormorant concentrations are not decreasing, there must be consistent sources.

Meg Sedlak recommended that the next steps in the PFC project are to continue with bird and seal sampling, and to continue to characterize sources.

6. Action: Water Pesticide Analyses

Don Yee presented two potential methods for pesticide sample collection for the RMP Status and Trends water samples:

- 1) 4 or 8 liter whole water grab
- 2) Infiltrex (filter/XAD) (equivalent to about 20L)

The whole water samples (option 1) have the advantage of no collection artifacts, but are logistically more difficult. The Infiltrex filters are easier to handle and have a larger volume equivalent to sample, but there is incomplete recovery in the filtering. A comparison of data analyzed using both sampling methods shows that the Infiltrex can have incomplete recovery, but fewer non-detects.

Don Yee recommended the whole water sampling technique, because it produces better recoveries for most analytes, which he suggested is more important than fewer non-detects. The grab whole

water samples thus produce less unknown uncertainty than the filtered samples. The current list of pesticides includes multiple DDTs and chlordanes, however Don Yee also noted that as AXYS develops methods for new pesticides, the RMP will be able to easily analyze for these new contaminants

The TRC agreed with Don Yee's recommendation, and decided to continue with whole water grab samples (option 1).

7. Information: Sediment Quality Objectives - Indirect Effects

Ben Greenfield updated the TRC on progress in the statewide Sediment Quality Objectives (SQO) program, including how monitoring data are interpreted, and the potential effect of sediment contaminants on human health. The assessment framework is designed to improve the quality of sediment assessment across the state and determine if pollutant concentrations in sediment pose a risk to human health. It is set up in a tiered fashion, such that each tier requires more effort and data. If a location does not meet SQO at the first tier, it moves on to tier II, which is more detailed.

The models are currently designed for organic pollutants such as PCBs, and have not yet incorporated mercury. Trish Mulvey suggested that Ben Greenfield develop a proposal to the RMP to focus on mercury linkage between sediment and biota in the Bay, which could help advance the SQO work. Mike Kellogg suggested that the RMP could take an active role in developing and implementing SQO. Karen Taberski agreed that the indirect effects assessment framework is a logical way to interpret sediment data. Ben Greenfield noted that SQO is scheduled for implementation by January of 2011, but the program will likely negotiate for the next year.

The TRC embraced the idea of looking at indirect effects of sediment, and was interested in aligning the effort with the RMP.

Action Items

• Develop a RMP proposal for including Hg in SQO.

8. Information: Planning Update

Jay Davis updated the TRC on the status of the Master Plan, which was discussed at the August SC meeting. He will meet with Tom Mumley to go over feedback on the Master Plan on September 22. He also presented the new annual planning cycle, which is designed to keep the program moving forward and incorporating results from synthesis reports and multi-year studies by using placeholder budgeting. For example, the planning workshop will be held in January, and the budget will be set for 2012 in October of 2010. The workgroup meeting schedule was also presented. The Modeling Team is scheduled to have more regular meetings to map out the 3 modeling tasks to be completed.

In the first quarter of 2011, the Meg Sedlak will begin working on the Status and Trends Strategy. If she has recommendations from this evaluation, they may be able to influence the planning cycle in 2012.

Don Yee noted that an Air Deposition Strategy meeting was held in May 2010. There was little call for new information, and the team noted that the RMP is already addressing the top priorities, such as dioxins. By the end of 2010, they will document the work to date on air deposition, and summarize why it is desirable to move forward on dioxins only.

Jay Davis suggested that the TRC and SC could start considering holding the next RMP program review in 2012. He was not necessarily recommending this, but it is within the realm of possibility.

9. Information: Program Update and Laboratory Data Status

Meg Sedlak noted that the next modeling meeting is scheduled for November 15th, the benthic workgroup meeting is scheduled for October 20th, and the stressor ID workgroup will be held in November.

Regarding RMP deliverables, the Sources, Pathways, and Loadings team at SFEI is working to fill two positions, which when filled should help Lester McKee to meet the deadlines. Meg Sedlak noted that the program is right on budget for field work, and she expects no delays from the subcontractors.

10. Action: Set Agenda and Date for Next Meeting

The next meeting is set for Wednesday, December 15, 2010. Bridgette DeShields asked for comments from the group on things that went well and improvements to the meeting (plus/delta). Trish Mulvey and Bridgette DeShields noted that the presentations and recommendations were focused and efficient. Eric Dunlavey appreciated the discussion on dioxin sampling in cores. Bridgette DeShields suggested that the meeting get out on time as an improvement.

#	Action Items – Sept 2010	Who?	When?	Status 9/27/2010
1	Recommend a possible small POTW representative to the SC	Francois Rodigari	Before the October 19 th SC meeting	
2	Discuss fact sheet needs and development with BACWA and Regional Board	Jay Davis	November	Pending
3	Create a list of RMP factsheet topics	Meg Sedlak, Jay Davis	November	Pending
4	Discuss analyzing the wetland cores with the Dioxin Team	Don Yee	Before the October 19 th SC meeting	Done – Hybrid proposal recommended
5	Develop a proposal for Hg in SQO	Ben Greenfield	??	

#	Action Items – June 2010	Who?	When?	Status 9/28/2010
1	TRC members to identify alternates to ensure good attendance and participation at TRC meetings	TRC members	On-going	Meg to contact TRC and SC representatives regarding next meeting (Prall and Lawrence)
2	Contact Joe Germano about sediment profiling in SF Bay.	Jay Davis	Next BWG meeting	Contacted Joe and have information on this issue.
3	Send a list of SFEI stormwater projects to Chris Sommers.	Lester McKee	July	
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	By December 2010	
5	Explore holding a joint meeting between SFEI and SCCWRP on nutrients in about a year.	SFEI Staff	2011	
6	Standardize the format of RMP proposals	Jay Davis, Chris Sommers	Next round of proposals	
7	Review existing information on shellfish, and consider designing a comprehensive shellfish survey.	Meg Sedlak and Jay Davis	Spring 2011	
8	Begin developing an improved review process for future Pulses.	Jay Davis	Spring 2011	

#	Outstanding Action Items – March 2010	Who?	When?	Status 9/28/2010
1	Create web pages for the reports	Rachel	As needed	
	coming out of RMP each year	Allen		
2	Take fact sheet plan to the Steering	Jay Davis	August SC	
	Committee		meeting	
3	Coordinate with SFEP, BACWA,	Jay Davis		Pending
	and BASMAA on fact sheets			

Notes: P = p

P = present C = call-in X = not present

1. Richard Looker substituted for Karen Taberski

2. Saskia van Bergen substituted for Francois Rodigari

RMP Water Qual represented	MEMBER	Affiliation	2008		2009				2010					
			1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
POTWs	Francois Rodigari	EBMUD	P	P	P	P	P	P	P	P	P	(2)	P	
POTWs	Rod Miller	SF PUC	X	P	P	X	X	P	P	X	X	X	P	
South Bay Dischargers	Tom Hall	EOA, Inc.	P	P	P	P	P	P	P	P	P	P	P	
CCSF	Mike Kellogg	City and County of San Francisco	P	P	P	P	P	P	X	P	P	P	P	
City of San Jose	Eric Dunlavey	City of San Jose	P	P	X	P	P	X	P	P	P	P	P	
Refineries	Bridgette DeShields	Arcadis/ WSPA	P	P	P	P	P	P	P	P	P	P	P	
Industry	Dave Allen	USS POSCO	X	X	X	X	X	X	X	X	X	X	X	
Stormwater	Chris Sommers	EOA, Inc.	P	P	P	X	P	P	P	P	P	P	X	
Dredgers	John Prall	Port of Oakland	P	P	X	X	P	P	X	P	P	X	X	
Corps of Eng.	Rob Lawrence	Army Corps of Engineers	X	X	X	X	X	X	X	X	X	X	X	
SF- RWQCB	Karen Taberski	SF-RWQCB	P	P	(1)	P	P	P	P	P	P	P	P	
US-EPA IX	Luisa Valiela	US EPA	X	P	X	P	X	С	X	С	P	X	С	

San Francisco Estuary Institute

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

October 12, 2010

To: Steering Committee

From: Meg Sedlak, RMP Manager

Re: Request to use remaining subcontractor budget to retain a consultant for completion of the Margins Conceptual Model report

In 2009, the RMP embarked on the development of a conceptual model of contaminant transport through the San Francisco Bay margins. Bay margins are the shallow, near shore regions of the Bay that serve as the primary interface between watersheds and open Bay waters. This conceptual model will characterize the role margins play in controlling the exchange of contaminants between the watershed and the Bay. The Margins Conceptual Model report will establish the current state of knowledge in regards to water, sediment, and contaminant transport in San Francisco Bay, and establish a foundation for quantitative modeling of contaminant fate on the Bay margins.

John Oram began working on this project in 2009; however, with his departure in 2010, we find ourselves in need of additional assistance to complete the Margins Conceptual Model. We have identified Dr. Craig Jones of Sea Engineering as a key individual who can assist us in the completion of this project by December 2010. The cost for Dr. Jones to assist in the completion of this document is \$15,000. We currently have approximately \$13,400 remain of the \$40,000 that was allocated to the task. We believe we will need the existing \$13,400 funding for RMP staff. We are requesting that SC approve using residual funds in the subcontractor budget to pay for Dr. Jones' service.

The existing subcontractor budget has approximately \$16,300 remaining in it with all subcontracts written. This surplus is the result of cost-savings from a variety of measures including maintaining subcontractor fees at 2009 rates. We would like to use \$15,000 of this residual to retain Dr. Craig Jones of Sea Engineering to assist in the completion of the Margins Conceptual Model report.

San Francisco Estuary Institute

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



MEMORANDUM

To: RMP Steering Committee

From: Jay Davis, RMP Lead Scientist and Meg Sedlak, RMP Manager

Date: October 12, 2010

Re: RMP Participant Fees for 2012

At the April 2005, the SC agreed that the program would be held to a zero percent increase for 2006 and then would increase by two percent for 2007, 2008, and 2009. After 2009, changes in fees would be reconsidered and in 2010, the fees were increased by two percent. Due to poor economic climate in 2010, a zero percent increase was approved for 2011.

We are recommending that the Steering Committee consider a two percent increase in Program fees for 2012. The target fees for 2011 are \$3,236,734. A two percent increase would result in the new fees being \$3,301,469 (a \$65,000 increase over 2011 fees).

We are recommending a two percent increase based on the 2009 Consumer Price Index for Bay Area last year of 2.6 (http://www.bls.gov/ro9/cpisanf.htm). In addition, many of our subcontractors have indicated that they cannot sustain a zero percent increase over an extended period of time due to increases in their fixed costs (e.g., energy, health care, etc.). Additional concerns, discussed previously by the Steering Committee, have to do with SFEI's initiative to bring staff salaries into greater parity with partner organizations and to avoid a reduction in the amount of funds left available for RMP special studies.

Workgroup Activities – Third Quarter 2010

A. Contaminant Fate Workgroup

Meetings:

The Contaminant Fate Workgroup meeting was held June 7, 2010. Topics of discussion included: progress on mercury isotope and DGT studies; 3-D Bay modeling project; coring study; and atmospheric deposition.

Milestones:

- Completion of a draft version of remote sensing report.
- Submission of methylmercury simple mass balance manuscript to Environmental Toxicity and Chemistry.

Activities for the fourth quarter of 2010:

- Completion of 3D-Modeling effort.
- Completion of Bay Margin Model.
- Completion of the Bioaccumulation Model.
- Incorporating comments from workgroup meeting into atmospheric deposition strategy.
- Completion of air deposition report for dioxin.

For more information, see previous CFWG minutes and agenda at our website http://www.sfei.org/rmp/rmp_minutes_agendas.html or contact the CFWG leader, Don Yee, at don@sfei.org.

B. Sources Pathways and Loading Workgroup (SPLWG)

Meetings:

Previous meeting was held on May 6th to discuss recommendations for 2011 special studies and to review status of current projects. Presentations and minutes from the meeting are posted to the SFEI website.

The meeting focused on the review of draft outcomes of the small tributaries loading strategy (STLS) tasks:

- 1. Develop criteria and rank watersheds (for loading related studies)
- 2. Optimize sampling methods for loads and trends
- 3. Recommend special studies for 2011

Secondary topics included:

- 4. Update on modeling tasks.
- 5. Update of loadings studies for the year (Z4LA storm drain, Guadalupe River, and Sacramento River).

Milestones during the third quarter:

• All laboratory data from 2009/2010 wet season has been reviewed by the data management team.

Activities for fourth quarter:

- Finish reconnaissance of 30 watersheds for wet weather sampling by October 1. Will present recommendations for sampling at approximately 16 sites.
- Complete report Zone 4 Line A (summarizing four years of data).
- Complete report for Guadalupe HSPF.
- Complete report on Mallard Island.
- Prepare for upcoming 2010/2011 wet season.

For more information, see previous SPLWG minutes and agenda at our website http://www.sfei.org/rmp/rmp_minutes_agendas.html or contact the SPLWG lead, Lester McKee, at Lester@sfei.org.

C. Exposure and Effects (EE) Workgroup

Meetings:

A workgroup meeting was held on March 11, 2010. Updates were given on the following topics: improving benthic assessment tools (SFEI); the UC-Davis Granite Canyon study on Causes of Sediment Toxicity; UC-Berkeley/SCCWRP Molecular TIE project; Development of a mercury threshold for egg hatchability in terns (USGS); and Effects of PAHs on juvenile flatfish (NOAA).

Milestones:

• Kevin Kelley with assistance from Rusty Fairy successfully collected staghorn sculpins at several Bay locations including Oakland, Redwood City, Coyote Creek and beneath the Bay Bridge. Dr. Kelley continues to investigate effects to the thyroids and anticipates a report summarizing his current work to be completed by October 2010.

Activities for the fourth quarter 2010:

- Site selection for the small fish study, which will commence in October.
- Continuation of NOAA study on juvenile flatfish. The first year of the study was focused on zebra fish as a model fish and exposure of the fish to four and five ringed PAHs that

are common in SF Bay sediments. As a result of the oil spill, NOAA's resources have been moved to the Gulf. This prevented John Incardona from collecting sediments from Kitimat Alaska for the second year of his study which will focus on exposure of field sediments to juvenile California halibut. He anticipates conducting this study in the Spring of 2011 when halibut larvae are available.

- Dr. Barnett Rattner will continue his PBDE and terns study. At present, no changes to tern skeletal systems was noted based on exposure to PBDEs. Kestrel hatchlings were found to have reduced skeletal lengths and deformed spines. These results will be further investigated. No effects to the bursa follicle were noted from exposure to PBDEs. (Bursa follicle is an epithelial and lymphoid organ found only in birds.)
- Completion of the EEPS Synthesis document.

The next workgroup meeting will be determined.

For more information, see previous EEWG minutes and agenda at our website http://www.sfei.org/rmp/rmp_minutes_agendas.html or contact the EEWG lead, Meg Sedlak, at meg@sfei.org.

D. Emerging Contaminants Workgroup

Meetings:

A workgroup meeting was held on March 26, 2010. Topics of discussion included: RMP alternative flame retardant work, the RMP archiving strategy, AXYS Analytical pro bono analyses of brominated dioxins and CECs, the NOAA Mussel Watch CEC California Pilot Study, and the CEC White Paper. Proposed pilot and special studies for 2011 were also reviewed.

Milestones:

- Moderated a session at the American Chemical Society national meeting in San Francisco on Contaminants of Emerging Concern.
- Completion of the Archive Strategy and Memorandum of Understanding with NIST for storage of RMP samples. Sportfish (2009) and sediments (2010) have been shipped; bivalves (2010) and bird eggs (2009) will be shipped in the next quarter.
- Completion of draft CEC chemical profiles on alkylphenol ethoxylates and antimicrobials.
- Collection of sediment samples for the Sources of PFCs special study.
- Preparation of manuscript on PFCs in Bay area wildlife.
- Completion of sample collection for NOAA Mussel Watch CA Pilot Study.

Activities for the fourth quarter 2010:

- Completion of a manuscript on Sources of PFCs to San Francisco Bay.
- Preparation of a draft report/manuscript on alkylphenols and PPCPs in San Francisco Bay.

- Completion of draft CEC chemical profiles on carbamazepine.
- Preparation of a draft report/manuscript on alternative flame retardants in San Francisco Bay.

Next ECWG meeting date will be determined shortly.

For more information, see previous EC workgroup minutes and agenda at our website http://www.sfei.org/rmp/rmp_minutes_agendas.html or contact the ECWG lead, Meg Sedlak, at meg@sfei.org.

E. Causes of Toxicity

The scope of work for the UC-Davis Granite Canyon work under the Causes of Toxicity element includes:

- Develop LC50 thresholds of effects for three compounds (cyfluthrin, chlordane and pyrene).
- Develop a collaborative state-wide workgroup and research effort to address causes of persistent moderate toxicity.
- Further research solid phase toxicity identification and evaluation (TIE) methods.

Milestones:

- The first of two Stressor Identification work group meetings was held at SFEI on April 7, and a second meeting is planned for November. The Agenda and Minutes from the first meeting are available on the SFEI website at: http://www.sfei.org/node/3117.
- Exposed amphipods from selected RMP Status and Trends monitoring stations were provided to UC Berkeley researchers for the development of gene microarray technology for *Eohaustorius estuarius*. Additional exposed amphipods will be provided as additional exposures are conducted with cyfluthrin, pyrene, and trans-chlordane.

Activities for the fourth quarter 2010:

- Range finding tests indicate that pyrene and trans-chlordane are not sufficiently toxic to *Eohaustorius estuarius* to conduct TIE method development. Definitive tests will be conducted for pyrene and trans-chlordane to determine the LC-50.
- TIE Method Development will be conducted for cyfluthrin using both sediment and interstitial water.
- A second stressor ID workshop is planned for November.

For more information, please contact Sarah Lowe at <u>Sarahl@sfei.org</u>.

F. Benthic Workshops

Meetings:

Sediment Quality Objectives for Enclosed Bays and Estuaries (SQO Phase I) was promulgated in February 2008. Benthic indicators form one line-of-evidence in the SQO assessment procedure. However, in mesohaline areas of San Francisco Estuary, such as San Pablo and South bays, current benthic indices require revision. In oligohaline areas, such as Suisun Bay, benthic indices have yet to be developed.

Milestones:

 Work continues on the mesohaline assessment method report. A comparison of good/bad indicators in BPJ samples to good/bad indicators in reference vs. non reference samples has been conducted and tables based on presence/absence have been prepared.

Activities for the fourth quarter 2010:

- Aroon Melwani will finish the Mesohaline Assessment report.
- Bruce Thompson and the benthic team will complete and circulate two manuscripts for review.

The next benthic workgroup meeting will be held on October 20th.

For more information, please contact the benthic workgroup leads, Bruce Thompson, at brucet@sfei.org, Aroon Melwani, at aroon@sfei.org, or Sarah Lowe, at Sarahl@sfei.org

G. Status and Trends Sport Fish

Sportfish samples have been submitted to the laboratories and the results are starting to come in. We will review the data in the next quarter and begin summarizing our findings. The draft SWAMP/RMP sportfish monitoring should be prepared by the end of the year with a final report available in the first quarter.

For more information, please contact Jennifer Hunt at jhunt@sfei.org.