



## RMP Steering Committee Meeting

April 19<sup>th</sup>, 2011

San Francisco Estuary Institute  
Second Floor Conference Room  
7770 Pardee Lane, Oakland, CA  
10:00 AM - 12:30 PM

### DRAFT AGENDA

1.	<b>Approval of Agenda and Minutes</b> (Attachment)	10:00 Chair
2.	<b>Information: Committee Member Updates</b>	10:05 Group
3.	<b>Information: Technical Review Committee Meeting Summary</b> (Attachment) Topics of discussion at the March TRC meeting included: nutrient strategy and the NNE, modeling update, water quality report card, and the 2009 sport fish report.	10:10 Meg Sedlak
4.	<b>Information: Budget Status</b> (Handouts) An update on the status of the 2010 budget will be given. We are generally on track.	10:20 Lawrence Leung
5.	<b>Information: RMP Master Planning Meeting</b> A summary of the outcome of the Planning Workshop will be presented, and next steps will be outlined.	10:30 Jay Davis
6.	<b>Information: Status and Trends Strategy</b> The TRC has recommended that the RMP obtain input on a strategy for Status and Trends from the Water Board, BACWA and BASMA. Preliminary ideas will be presented.	10:50 Meg Sedlak

7.	<b>Discussion: Fact Sheets</b> (Attachment) Following up on discussion at the last SC meeting, next steps in the development and distribution of fact sheets will be discussed. SCCWRP is also working on fact sheets and we are coordinating efforts.	11:10 Jay Davis
8.	<b>Discussion: RMP Annual Meeting and Pulse</b> (Attachment) The TRC recommended October 4 <sup>th</sup> for the Annual Meeting. We reserved the downtown Oakland Marriott. We need to discuss the agenda and confirm key note speakers. An update on the status of the Pulse will be given.	11:40 Jay Davis
9	<b>Discussion: Water Quality Report Card for the Bay</b> Jay Davis has prepared a water quality report card for the Bay, one part of an overall report card on the State of the Estuary to be presented at the State of the Estuary meeting this fall. The report card is based largely on RMP data. A summary of the water quality report card will be presented.	11:50 Jay Davis
10.	<b>Information: Program Update</b> (Attachment/Handout) An update on deliverables, CTAG-TRC meeting, and workgroups will be presented. Discussion of Chair succession.	12:20 Meg Sedlak
11.	<b>Plus/ Delta on today's meeting</b> Set date for July SC meeting	12:25
12.	<b>Adjourn</b>	12:30

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**RMP Steering Committee Meeting**

**January 19<sup>th</sup>, 2011**

**San Francisco Estuary Institute  
Second Floor Conference Room  
7770 Pardee Lane, Oakland, CA**

**DRAFT MINUTES**

**Members Present**

Brad Eggleston, City of Palo Alto  
Kirsten Struve, City of San Jose  
Adam Olivieri, BASMAA (EOA, Inc)  
John Coleman, Bay Planning Coalition  
Tom Mumley, SFB RWQCB  
Dan Tafolla, Vallejo Sanitation and Flood Control District

**Others Present**

Rachel Allen, SFEI  
Meg Sedlak, SFEI  
Jay Davis, SFEI  
Lawrence Leung, SFEI  
Trish Mulvey, SFEI Board of Directors

**1) Approval of Agenda and Minutes**

Kevin Buchan, the Steering Committee (SC) Chair, was not present. Adam Olivieri served as interim chair in his absence.

Meg Sedlak reviewed the action items from the previous meetings. She noted that Jay Davis would present the draft of the triclosan fact sheet, which Amy Chastain and the Water Board have already commented on, and the SC would have a chance to comment on at this meeting. Craig Jones and SFEI staff are working on the Margins Conceptual Model. Meg Sedlak is working with the SFEI information technology team to create a web tool for uploading metals data from the wastewater treatment plants, which will be implemented in the summer of 2011. John Coleman announced that he is the new Executive Director of Bay Planning Coalition, replacing Ellen Johnck, and would follow up on items that were assigned to Ellen. Meg Sedlak is planning on developing the RMP status and trends (S&T) strategy in the 2<sup>nd</sup> quarter of 2011.

Tom Mumley noted that the SC will have an opportunity to discuss the scope of the S&T strategy at the Planning Workshop.

Tom Mumley motioned to approve the minutes from the November SC meeting, Kirsten Struve seconded, and the minutes were approved.

## **2) Information: Committee Member Updates**

There were no committee member updates.

## **3) Information: Technical Review Committee Meeting summary**

Meg Sedlak noted that the Technical Review Committee (TRC) meeting in December 2010 largely focused on what was accomplished in 2010. One issue of note was the change in direction of the modeling strategy, which was addressed in more detail later in the meeting.

In general, Kirsten Struve thought that shorter minutes would be acceptable; however Trish Mulvey and Brad Eggleston considered the level of detail appropriate for communication and new members.

### **Action items**

- Update the TRC minutes to reflect Adam Olivieri's comment on the total budget for upcoming Sources, Pathways and Loadings (SPL) projects.

## **4) Information: Budget Status**

Lawrence Leung gave an update on the status of the RMP budget. Tom Mumley noted that he prefers to transfer unspent money from previous years to the current year, so that only 1 year need be kept track of. Lawrence clarified that the 2010 surplus includes dredgers, subcontracts, and direct costs, and totals to about \$206,000. With these funds, he will set up two reserves. One of the reserves will be exclusively for dredgers to help balance out fluctuations in revenue from dredging activities.

Lawrence Leung indicated that 99% of RMP fees for 2011 were received, with the exception of Caltrans. The Caltrans fees for all years up to 2011 have been paid. Meg Sedlak thanked Tom Mumley for his hard work in obtaining the delinquent funds.

## **5) Information: Modeling Update**

Jay Davis noted that in hindsight the forecasting strategy now seems to have advocated the wrong approach. In 2010, the RMP started developing the SUNTANS model for contaminant fate with researchers at UC Berkeley and Stanford. The decision to pursue this approach was made with a lot of review, and though there were reservations, the CFWG and the TRC decided to move ahead with this strategy, in part due to John Oram's expertise in that area. With John Oram's departure from SFEI, the organization no longer has that in-house expertise. Additionally, the Master Planning process has helped highlight the modeling needs of the RMP, including providing better models for the next iterations of the Mercury and PCBs TMDLs. SUNTANS is slow moving and highly dependent on its partners, does not include sediment, and is not tailored to long-term predictions. In working with Craig Jones, RMP staff members have learned about other modeling approaches, such as the Delft3D model by USGS that recently became open source. Craig Jones suggested that with a \$100,000 per year investment in an alternative platform for the next 2-3 years, the RMP could have a useable product at the end of that time frame. These considerations will be discussed with the TRC and the Contaminant Fate Workgroup (CFWG) before any changes are implemented.

In the meantime, the RMP is still working on the Margins Conceptual Model and the Bioaccumulation Conceptual Model, both of which will be released soon.

Meg Sedlak noted that the RMP money and effort spent on this project was not wasted – it helped establish collaborations and funding, and in the long term, the RMP has the framework for making use of the final modeling product. Tom Mumley suggested that the SUNTANS model may be the best model of the Bay in the long term, and by establishing connections with it now, the RMP may be better able to make use of it once its full capacities are developed. The hydrodynamic platform of the SUNTANS model exists and is in use, but the sediment platform is still being developed. In contrast, the Delft3D sediment module is in use, and the USACE is using it in the North Bay, in lieu of their in-house model. Close coordination with the Corps is needed on our modeling work. Jay Davis suggested that the RMP include someone from the USACE at the CFWG meeting when these models will be discussed. The USACE (Megan Kaun and others) has already begun participating in Modeling Team meetings.

Chris Sommers asked that a table presenting the pros and cons of the available models be created. Jay Davis confirmed that these options would be discussed at the next CFWG meeting, and the modeling workplan would be brought back to the TRC in June and the SC in July.

### Action Items

- Include a representative from the USACE at the CFWG meeting.
- Develop a table comparing the various possible contaminant fate models.

### 6) Information: Nutrients and Phytoplankton

Meg Sedlak updated the SC on Jim Cloern's future retirement from USGS. She described the monitoring program in its current state and elaborated on its significance to the understanding of the Bay. Unfortunately, Jim Cloern will retire in 3 to 4 years, and USGS is likely not interested in continuing this work after his retirement. The RMP is starting to develop a strategy for how this important work can continue. In June 2011, the Nutrient Strategy Team will hold a workshop to inform the community about this issue and articulate key needs. A goal will be to encourage participation by POTWs and other stakeholders. Jim Cloern is interested in being involved in this process and being available as a resource. (*The first Nutrient Strategy meeting will be held on April 22<sup>nd</sup>.*)

Tom Mumley agreed that Jim Cloern's work needs to be sustained, and that SFEI is an appropriate home for the program. John Coleman offered the Bay Planning Coalition's assistance in establishing the workshop. Jay Davis suggested that the outcomes of the workshop form the basis for an RMP Nutrient Strategy. Because the program will be larger than the RMP can sustain on its own, the Strategy will address the broader plan and take into account the RMP's stake in it.

Meg Sedlak mentioned that SFEI may be able to identify a new senior staff member with experience in nutrients. (*Note added March 15, 2011: SFEI has recruited Dr. David Senn of the Swiss Technical University who will assist in the development and implementation of a nutrients strategy.*)

Brad Eggleston asked about the numeric nutrient endpoint (NNE) process, and expressed concern about possible redundancy. Meg Sedlak noted that it is underway, and the planning process will be finished this summer. The SC agreed that pursuing a Nutrient Strategy now is important to meet RMP needs while not forcing it to bear the full costs of the effort in the future. Tom Mumley suggested that other collaborators, such as IEP, be brought into the discussion. Adam Olivieri recommended that the Strategy be short and sweet, and suggested trying to obtain funding from the Water Quality Improvement Fund.

**Action Items**

- Develop a Nutrient Strategy based on the outcome of the Nutrient Workshop.

**7) Action: RMP Master Plan Workshop**

Jay Davis outlined the agenda for the upcoming Master Planning workshop. The goals of the meeting will be to provide guidance on anticipated information needs and broadly paint the RMP budget for 2012 special studies. He asked that the SC members review the Master Plan before the meeting, and assess whether it is accurate and up to date. Adam Olivieri asked that an updated version of the Master Plan be distributed at least one week before the workshop.

Kirsten Struve asked that the agenda include a discussion on criteria for prioritizing funding before specific priorities are addressed. She also suggested that the Master Plan note and anticipate permit requirements. Adam Olivieri noted that his priorities are fulfillment of permit requirements, investigatory work (on elements that may end up in permits, or that meet management needs), and research, in that order. Meg Sedlak relayed an inquiry from an ECWG panel member: "where do technical experts get a chance to comment on the Master Plan?". She wanted to be sure that the RMP is not missing an opportunity to have experts weigh in on strategic planning. Jay Davis suggested that this should happen at the workgroup meetings, and that the agendas be tailored to ensure that this discussion occurs.

Tom Mumley outlined some of the concerns that will be addressed at the Master Plan meeting. He noted that if all the proposed studies were to be accepted the RMP would be in the red for 2012. The information needs table on page 6 of the Master Plan currently focuses on Water Board needs. He asked the other agencies to consider their information needs for the Master Planning workshop.

**Action Items**

- Update the Master Plan and distribute it to SC members at least 1 week before the planning workshop.
- SC members to review the master plan and consider their information needs.

**8) Discussion: Joint CTAG-TRC meeting**

Meg Sedlak presented the proposed agenda for the upcoming joint meeting with the TRC and the Commission's Technical Advisory Group (CTAG) of the Southern California Coastal Water Research Project. This year will focus on nutrients and contaminant effects to aquatic life. Adam Olivieri suggested that recycled water would be another potential topic.

**9) Discussion: RMP Annual Meeting**

Meg Sedlak suggested Tuesday, October 4<sup>th</sup> as a possible date for the RMP Annual Meeting. If the SC is interested in considering venues other than the Oakland Museum, the Water Board auditorium (free) is a worthwhile option. She noted that the Oakland Museum costs about \$5,000 to rent the facility. Kirsten Struve noted that the San Jose Council meetings are held in the afternoon on Tuesdays, which could be a conflict if the RMP is interested in attracting elected officials or senior managers to the Annual Meeting. Meg Sedlak asked if the RMP was interested in teaming up with the State of the Estuary (SOE) Conference. Tom Mumley noted that the SOE conference is only two days this year. Meg Sedlak will follow up with Karen Taberski on the costs of appending the RMP

annual meeting as a third day to the SOE conference. Tom Mumley suggested that this collaboration be considered again for the 2013 SOE conference.

### **Action Items**

- Look into combining the RMP annual meeting with the SOE conference in 2011 and beyond.
- Consider other venues for the RMP 2011 annual meeting.

### **10) Information: Pulse and RMP Annual Meeting Speakers**

Jay Davis informed the SC that six articles are scheduled for the 2011 Pulse. Four of the articles have confirmed lead authors. He will be asking for volunteers from the TRC representatives to help on the articles. He will also include the EEWG panel members on some of the articles.

As keynote speakers for the Annual Meeting, Jay Davis suggested Jim Cloern or Dan Schlenk. Other presenters would be article authors and coauthors, and upper management would be included as panel members or speakers. Adam Olivieri suggested that Dan Schlenk could also give a good talk about the CEC ocean estuary effort, and offered to ask him about speaking. Adam Olivieri also suggested that Nancy Denslow (University of Florida) would be a possible speaker.

Tom Mumley asked how the articles would maintain consistency in scope and tone. Jay Davis confirmed that he would communicate closely with the authors as they write.

Meg Sedlak mentioned that SFEI is developing a Facebook strategy, partly in response to the lunchtime dot voting from the 2010 Annual Meeting. Kirsten Struve commented that it was not clear that the voting was intended to give recommendations on communication with RMP participants. Given that, she did not think that Facebook would be a useful platform for communication.

### **Action Items**

- Adam Olivieri to contact Dan Schlenk about speaking at the RMP annual meeting.

### **11) Information: Fact Sheets**

Jay Davis presented the RMP fact sheet plan. It is designed to give quick information on specific contaminants, and would be targeted at reporters, agency staff, decision makers, and scientists, as well as interested public, that is, people who are in communication with the general public. This would enable the fact sheets to strive for clarity and simplicity, but not be completely non-technical. The first fact sheet has been developed for triclosan, and needs input from the water board.

Kirsten Struve suggested that the summary be presented in bullets, rather than as a paragraph. Tom Mumley suggested that the summary may be unnecessary, as the document itself is intended as a summary. Given that triclosan is one of many contaminants we could focus on, Tom Mumley suggested that the RMP develop a list of priority pollutants for SF Bay, and develop fact sheets on all of the contaminants.

Kirsten Struve suggested that the fact sheet be united with a press release, in order to get the story out in as straightforward a manner as possible.

Adam Olivieri asked that the "Occurrence" section be renamed to "Occurrence and Potential Sources". He also asked that the toxicity thresholds include more than one measure. Tom Mumley suggested that the on-line version include electronic links to further RMP information on the subject.

The SC confirmed that the target audience is acceptable and that a 2 or 4 page document would serve the intended purpose – the length need not be limited to 2 pages. The fact sheet should be updated every few years, as new data and management is available.

The SC emphasized that the overall message - that the Bay Area community should not be using triclosan - should be highlighted.

Jay Davis and Steve Weisberg of SCCWRP are staying in touch about the development of fact sheets, and working together.

### **Action Items**

- Develop a list of RMP priority pollutants.

### **12) Information: Program update**

Meg Sedlak reviewed workgroup activities from the 4<sup>th</sup> quarter of 2010. Tom Mumley asked about the time frame for the 2011 project developing a CEC synthesis. Meg Sedlak noted that it would begin in June of 2011, following the recommendations from the SCCWRP science advisory panel on Recycled Water and Ambient Ocean.

### **13) Review Action Items/ Plus Delta/ Set Date for next meeting**

The next meeting is scheduled for April 19<sup>th</sup>, 2011. Trish Mulvey noted that Adam Olivieri did a great job as chair.



**Action Items: SC Meetings**

#	Action Items – January 2011	Who?	When?	Status 4/12/2011
1	Correct Adam Olivieri's comment on page 5 of the TRC minutes	Rachel Allen	January 2011	Done
2	Include a rep from the USACE at the CFWG meeting	Rachel Allen	May 12, 2011	Megan Kaun (USACE) is invited to the CFWG meeting
3	Develop a table comparing the various possible contaminant fate models.	Jay Davis	May 12, 2011	To be discussed at next CFWG meeting
4	Begin to draft an RMP nutrient strategy	Jay Davis, Meg Sedlak	Summer 2011	Preparing after June 29 <sup>th</sup> nutrients workshop
5	Include John Coleman in the discussions of the future of nutrient monitoring	Meg Sedlak	January 2011	Included in list of invitees.
6	Stakeholders to review the RMP Master Plan and report on whether their information priorities are reflected in it	SC members	By SC Master Planning workshop (Feb 7, 2011)	Completed
7	Investigate other venues besides the Oakland Museum for the RMP Annual Meeting	Meg Sedlak	Present at March TRC meeting	Completed
8	Contact Dan Schlenk about being a keynote speaker at the RMP Annual Meeting	Adam Olivieri	January 2011	Dan Schlenk confirmed to Meg Sedlak that he would speak at the RMP annual meeting
9	Incorporated comments on the triclosan fact sheet from the SC and Naomi Feger, and distribute it to the TRC for review. Continue to coordinate fact sheets with SCCWRP	Jay Davis	January 2011	Completed
10	Create a list of priority pollutants for future fact sheet topics for the San Francisco Estuary	Jay Davis	2011	On agenda for the next SC meeting

#	Action Items – November 2010	Who?	When?	Status 4/12/2011
3	Develop website tool for uploading of WWTP metal loads	Meg Sedlak	Summer 2011	IT team is working on a site for the 2011 invoicing.
7	Include a Program Review as a potential task for 2012 at the Planning Workshop	Meg Sedlak	To be included in Feb 7 <sup>th</sup> agenda	Time limitations at 2011 Master Planning meeting

#	Action Items – August 2010	Who?	When?	Status 4/12/2011
1	Speak with Rob Lawrence to encourage more participation by the USACE in the RMP.	John Coleman		Pending
4	Speak with the USACE about RMP and USACE coordination and funding collaboration.	John Coleman and Rainer Hoenicke		Pending

#	Action Items – January 2010	Who?	When?	Status 4/12/2011
5.	Develop a Strategy for Status and Trends	Meg Sedlak	Summer 2011	Pending

**RMP SC Meeting attendance**

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
4. Replaced Arleen Navarret as Large POTW Rep in Sep 2010
5. Replaced Ken Kaufman as Small POTW Rep in Nov 2010
6. Karin North filled in for Brad Eggleston
7. Replaced Ellen Johnck as Executive Director of Bay Planning Coalition

P = present	C = call-in
X = not present	W* = provided input at RMP master planning workshop 4/21/10
- = not a rep at time of meeting	

RMP Water Qual represented	MEMBER	Affiliation	2009				2010				2011			
			1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
POTW-Large	Dave Tucker (1)	City of San Jose	X	X	P	P	P	P	-	-	-			
POTW-Large	Arleen Navarret (3)	SFPUC	-	-	-	-	-	-	P	-	-			
POTW-Large	Kirsten Struve (4)	City of San Jose	-	-	-	-	-	-	-	P	P			
POTW-Med	Dan Tafolla	Vallejo Sanitation and Flood Control District	P	P	X	P	X	P	X	P	P			
POTW-Small	Ken Kaufman	South Bayside System Authority	X	X	X	X	X	X	X	X	X			
POTW-Small	Brad Eggleston (5)	City of Palo Alto	-	-	-	-	-	-	-	(6)	P			
Refineries	Kevin Buchan	WSPA	X	(2)	P	P	P	P	P	P	P	X		
Industry	Dave Allen	USS POSCO	X	P	P	P	X	P	P	P	X			
Cooling Water	Steve Bauman	Mirant Delta, LLC	X	X	X	X	X	X	X	P	X			
Stormwater	Adam Olivieri	BASMAA (EOA, Inc)	P	P	P	P	P	P	P	P	P			
Dredgers	Ellen Johnck	Bay Planning Coalition	X	X	X	P	P	W*	P	P	-			
Dredgers	John Coleman (7)	Bay Planning Coalition	-	-	-	-	-	-	-	-	P			
SF-RWQCB	Tom Mumley	SFB RWQCB	P	P	P	P	P	P	P	P	P			
SF-RWQCB	Karen Taberski (backup)	SFB RWQCB	-	-	-	-	-	-	-	-	-			
US Army Corps of Engineers	Rob Lawrence		X	X	X	X	X	X	X	X	X			

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**RMP Technical Review Committee Meeting**

**March 23<sup>rd</sup>, 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 6<sup>th</sup> 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 22<sup>nd</sup> to refine the preliminary questions. A full day workshop to introduce a broader audience to Bay nutrient issues will be held on June 29<sup>th</sup> at the David Brower Center, with a follow up strategy meeting on June 30<sup>th</sup>. 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 12<sup>th</sup>, 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 28<sup>th</sup>, 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 2<sup>nd</sup> 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 4<sup>th</sup>.

### **10) Discussion: Approval of the CTAG-TRC Agenda**

Meg Sedlak reviewed the agenda for the CTAG-TRC meeting, which will be held on May 19<sup>th</sup> 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 15<sup>th</sup>. 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 4<sup>th</sup> 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 7<sup>th</sup>.

| 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

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**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

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**RMP TRC / SCCWRP CTAG Joint Meeting****May 19th, 2011****SCCWRP****10:00 AM – 6:30 PM****(9:00 am start for CTAG members)****Lunch will be provided****AGENDA**

<b>0.</b>	<b>CTAG only - Business Meeting</b> (60 min) <ul style="list-style-type: none"> <li>• Approval of Feb 2011 meeting minutes</li> <li>• Contract review</li> <li>• CWA theme report</li> <li>• CTAG voting on draft SCCWRP Research Plan</li> </ul> <b>CTAG voting on draft SCCWRP Research Plan</b>	9:00 Tim Stebbins
<b>1.</b>	<b>Welcome, Introductions, and Goals for the Meeting</b>	10:00 Tim Stebbins/ Karen Taberski
<b>2.</b>	<b>Highlights of SFEI and RMP 2011 Study Plan</b> (Attachment: RMP Program Plan for 2011) Highlights from the 2011 RMP Program Plan and SFEI Program Plan will be presented (25 min presentation, 20 min Q&A).	10:15 Jay Davis
<b>3.</b>	<b>SCCWRP Director's Report &amp; Research Plan Highlights</b> (Attachment: SCCWRP 2010-2011 Research Plan) Highlights from the 2011 SCCWRP Program Plan will be presented (45 min presentation, 15 min Q&A).	11:00 Steve Weisberg
	<b>Lunch</b> (to be brought in)	12:00
<b>4.</b>	<b>Effects: SFEI/RMP and SCCWRP Activities</b> Presentations on effect work conducted to date will be presented <ul style="list-style-type: none"> <li>• Birds - Josh Ackerman/ Collin Eagle-Smith</li> <li>• Fish – Meg Sedlak ; SCCWRP</li> <li>• Benthos – Steve Bay (SQO, SFEI, SCCWRP)</li> <li>• Toxicity – Jay Davis; SCCWRP</li> </ul>	12:45

	<b>Break</b>	2:30
<b>5.</b>	<p><b>Nutrients</b></p> <p>The San Francisco Bay is unique in that it has relatively high nutrient concentration; however, it is a low productivity estuary as a result of elevated suspended sediment concentrations. There is some indication that the resiliency of the Bay is changing. The effects of nutrients in the Delta, North Bay and South Bay will be discussed. Nutrient projects in Southern California will be presented.</p>	2:45 Martha Sutula and Lester McKee
<b>6.</b>	<p><b>Update Collaborative Activities: Emerging Contaminants</b></p> <ul style="list-style-type: none"> <li>• NOAA Mussel Watch Activities/ Pro bono studies</li> <li>• 2011 RMP/SCCWRP Special study with NIST</li> <li>• State Review Panels (Recycled Water and Ambient Ocean Report)</li> <li>• Factsheets and Profiles (Triclosan and CECs)</li> <li>• Ideas for further collaboration and Q&amp;A (10 minutes)</li> </ul>	3:45 Susan Klosterhaus; Keith Maruya
<b>7.</b>	<p><b>General Discussion</b></p> <p>Discussion of:</p> <ul style="list-style-type: none"> <li>• Other potential opportunities for collaboration</li> <li>• Plans for future meetings (discussion of data management and communication)</li> <li>• Formal interchange between SCCWRP/SFEI working groups</li> <li>• Other topics that arise during the day</li> </ul>	4:45 Group
<b>8.</b>	<b>Wrap-up and Identification of Action Items</b>	5:15 Tim Stebbins, Karen Taberski
<b>9.</b>	<b>Adjourn</b>	5:30
	<b>Socializing</b>	5:30 to 6:30

## Workgroup Activities – Second Quarter 2011

### A. Contaminant Fate Workgroup

#### Meetings:

The Modeling Team met on November 23<sup>rd</sup> to discuss the Margins Conceptual report, the Bioaccumulation report, and progress on the 3-D SUNTANS model. In addition, Dr. Patrick Barnard presented USGS Sand and Mud Provenance studies that are currently underway, with the intention of receiving SFEI input on study design (e.g., sampling locations, techniques, etc.) for the Mud Provenance Study. The USGS Sand and Mud Provenance studies are primarily intended to inform the USACE's dredging operations; however, the USGS is interested in providing as much information as possible to increase our knowledge of sediment transport within the San Francisco Bay and along the coast.

#### Milestones:

- Acceptance of methylmercury simple mass balance manuscript to Environmental Toxicity and Chemistry.
- Completion of a Draft Air Deposition Strategy which will be sent to the workgroup for review.
- Submitted abstract to the Halifax International Mercury conference as part of the Mercury Synthesis project.
- Completion of 3D-Modeling effort (March)

#### Activities for the second quarter of 2011:

- Completion of a Draft Estimate of Atmospheric Deposition of Dioxin. We are planning on submitting an abstract to NorCal SETAC May meeting on the results of this study.
- Completion of Bay Margin Model (April).
- Completion of the Bioaccumulation Model (April).

The next CFWG will be May 12th. For more information, see previous CFWG minutes and agenda at our website [http://www.sfei.org/rmp/rmp\\_minutes\\_agendas.html](http://www.sfei.org/rmp/rmp_minutes_agendas.html) or contact the CFWG leader, Don Yee, at [don@sfei.org](mailto:don@sfei.org).

### B. Sources Pathways and Loading Workgroup (SPLWG)

#### Meetings:

The STLS team met in December, January, February and March to discuss BASMAA products and timelines, the WY 2011 POC monitoring, and 2011/2012 sampling sites/methodology. An update on the spreadsheet model was given and received feedback and guidance on next steps.

Milestones:

- Staff has been mobilized and wet weather sampling has been completed at 16 sites.

Activities for second quarter of 2011:

- Meeting with subset of STLS and SPLWG advisors to review wet weather sampling to date.
- Completion of Zone 4 Line A Report that summarizes four years of data (April 2011).
- Completion of Guadalupe HSPF manuscript (April 2011).
- Completion of the Regional Storm Water Spreadsheet Model and Land Use Classification (May 2011).
- Completion of the Mallard Island Report (June 2011). Report delayed due to lack of USGS SSC data.

The next SPLWG meeting will be May 12th. The STLS meeting will be held the following day. For more information, see previous SPLWG minutes and agenda at our website [http://www.sfei.org/rmp/rmp\\_minutes\\_agendas.html](http://www.sfei.org/rmp/rmp_minutes_agendas.html) or contact the SPLWG lead, Lester McKee, at [Lester@sfei.org](mailto:Lester@sfei.org).

## **C. Exposure and Effects (EE) Workgroup**

Meetings:

No meeting this quarter.

Milestones:

- Dr. Kelley completed his report titled “Characterization Studies of a Thyroid Endocrine Disrupted Condition in Wild Fishes of San Francisco Bay”
- Completion of 2010 small fish sampling.
- Preparation of a manuscript on the first year of the NOAA PAH and flatfish study.

Activities for the second quarter 2011:

- 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 (May 2011)

The next workgroup meeting will be held in June 2011. The advisory panel is being consulted in the selection of a date.

For more information, see previous EEWG minutes and agenda at our website [http://www.sfei.org/rmp/rmp\\_minutes\\_agendas.html](http://www.sfei.org/rmp/rmp_minutes_agendas.html) or contact the EEWG lead, Meg Sedlak, at [meg@sfei.org](mailto:meg@sfei.org).

## **D. Emerging Contaminants Workgroup**

### Meetings:

The ECWG met on March 25<sup>th</sup> to discuss updates on the NIST broadscan work, the PFC sources project, the measurement of PFCs in tributaries, the factsheets, and potential pilot and special study projects. The ECWG requested pilot studies on PFC sources and NOAA mussel watch coordination and collaboration.

### Milestones:

- Completion of draft CEC chemical profiles on Carbamazepine.
- Submittal of manuscript on PFCs in Bay Area Wildlife.
- Submittal to USEPA of chemical profile on Triclosan and Triclocarban.
- Invited Presentations:
  - “Flame Retardant Chemicals in San Francisco Bay: More Than Just PBDEs?”, USGS Seminar Series, Jan 13, 2011
  - “Emerging Contaminants in San Francisco Bay”, California Water Environment Association 38th Annual Pretreatment Pollution Prevention Stormwater Training Conference, February 28, 2011.

### Activities for the second quarter 2011:

- Completion of a manuscript on Sources of PFCs to San Francisco Bay (April).
- Preparation of a draft report/manuscript on alkylphenols and PPCPs in San Francisco Bay (April).
- Preparation of a draft report/manuscript on alternative flame retardants in San Francisco Bay (April).
- Continuation of NIST broadscan work. Samples of harbor seals and mussels have been sent to NIST for method development and analysis.

Next ECWG meeting date will be determined.

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

## **E. Ambient Sediment Conditions Discussion**

The Regional Water Quality Control Board is facilitating discussions among NOAA NMFS, the EPA, LTMS, and the USACE regarding the creation of threshold values for management and testing of dredged sediment.

### Milestones:

- The RMP gave two presentations, on February 10 and March 4, on the RMP sediment sampling plan and the calculation of ambient conditions using RMP data, as well as approaches for the calculation of ambient conditions.

### Activities for the second quarter 2011:

- Provide recommendations to the regulating agencies on appropriate statistical methods for calculation of ambient sediment conditions thresholds.

For more information, please contact Meg Sedlak at [meg@sfei.org](mailto:meg@sfei.org).

## **F. 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 the third quarter of 2011. 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 second quarter 2011:

- 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.
- Results are encouraging but incomplete. A draft report will be completed by the end of March 2011, with a final report and presentation to the EEWG in June 2011.

For more information, please contact Meg Sedlak at [meg@sfei.org](mailto:meg@sfei.org).

## **G. 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:

- Bruce Thompson and his collaborators completed a draft manuscript titled “Benthic Macrofaunal Assemblages of San Francisco Estuary and Delta.”
- Bruce Thompson and his collaborators completed a draft manuscript titled “Levels of Agreement Among Experts Using Best Professional Judgment to Assess Mesohaline and Limnetic Benthic Macrofaunal Condition in the San Francisco Estuary”, which was submitted to *Journal of Ecological Indicators*.
- Work on the mesohaline assessment method report is on hold pending the workgroup recommendation that a gold standard assessment of the taxonomy in freshwater and estuarine environments be conducted. The mesohaline assessment includes a comparison of good/bad indicators in BPJ samples to good/bad indicators in reference vs. non reference samples and tables based on presence/absence have been prepared.

Activities for the second quarter 2011:

- No activities are planned for the second quarter.

For more information, please contact the benthic workgroup lead, Aroon Melwani, at [aroon@sfei.org](mailto:aroon@sfei.org).



## **H. Status and Trends Sport Fish**

Sportfish results have been reviewed by SFEI. Preliminary results have been submitted to OEHHA to assist in the development of sportfish advisories. The draft SWAMP/RMP sportfish monitoring report is being reviewed by the TRC.

For more information, please contact Jennifer Hunt at [jhunt@sfei.org](mailto:jhunt@sfei.org).