RMP Technical Review Committee Meeting
December 9, 2009
San Francisco Estuary Institute
Draft Meeting Minutes

Attendees:
Mike Connor (EBDA)
Bridgette DeShields (Arcadis/WSPA)
Eric Dunlavey (City of San Jose)
Naomi Feger (SFRWQCB)
Tom Hall (South Bay Dischargers (EOA))
Mike Kellogg (City and County of San Francisco)
John Prall (Port of Oakland)
Francois Rodigari (EBMUD/BACWA)
Paul Salop (Applied Marine Services)
Chris Sommers (Stormwater Agencies (EOA))
Karen Taberski (SFRWQCB)
Trish Mulvey (SFEI Board of Directors)
Rachel Allen (SFEI)
Jay Davis (SFEI)
Cristina Grosso (SFEI)
Susan Klosterhaus (SFEI)
Lester McKee (SFEI)
John Oram (SFEI)
Meg Sedlak (SFEI)

By telephone:
Aroon Melwani (SFEI)
Luisa Valiela (US EPA)

1. Introductions and Approval of Agenda and Minutes

Meg Sedlak asked for comments on the minutes from the September 22, 2009 meeting. She noted that, per requests from that meeting, a conference call regarding the copper effect on salmon study is scheduled with David Baldwin, Richard Looker, and some of the South Bay treatment plants. Bridgette DeShields noted that Joe Meyer will be calling in for her. Karen Taberski expressed her interested in the call.

Rachel Allen reported that no national thresholds for PBDE toxicity to birds exist, per Mike Connor's request for a search at the last Technical Review Committee (TRC) meeting. Chris Sommers clarified that Dr. Connor was interested in planned or ongoing research, rather than completed studies. Karen Taberski mentioned that Margy Gassel has been following progress in establishing a screening value for sport fish, but that there are no recent developments. Karen Taberski will check in with Margy Gassel about potential "water cooler" developments on PBDE thresholds.

Meg Sedlak noted that Aroon Melwani is working on a factsheet on striped bass, which will be coming out in January of 2010. Chris Sommers suggested that it be passed around to the TRC for feedback. He also asked that a list of potential topics for factsheets be distributed to TRC for ranking. Francois Rodigari asked where the factsheet would be published. Meg Sedlak replied that it had not yet been determined,

but that it would likely be distributed like the newsletter, in print and on the web. Trish Mulvey asked if the RMP has a template for creating factsheets, that outlines the plan regarding the target audience, the approach, etc. Chris Sommers added that factsheets should be focused on the general public or elected officials, and stressed the importance of determining the points, tone, audience, and images ahead of time. Trish Mulvey offered to send out a "creative brief" from another project that could help begin the process of creating factsheets. Francois Rodigari asked who was funding the project, and Meg Sedlak replied that the money would come from the information dissemination task. There are a few other projects that could become factsheets, and Jay Davis suggested that the RMP complete 2 to 4 factsheets this year, in a pilot fashion, and that in 2011 if it works well, the effort can be expanded. Jay pointed out that the fact sheets would provide valuable material for the RMP website. Francois Rodigari mentioned that factsheets are useful also for his website, as a simple, tangible way of distributing information. A plan for fact sheet preparation will be discussed at the next TRC meeting.

Francois Rodigari made a motion to approve the minutes, Karen Taberski seconded, and the minutes were approved by consensus.

Action items: Karen Taberski will check in with Margy Gassel about potential "water cooler" developments on PBDE thresholds. Jay Davis will compile a list of potential topics for factsheets. A plan for fact sheet preparation will be discussed at the next TRC meeting. The TRC will discuss their success and the possibility of expanding them to more topics late in 2010.

2. Information: Steering Committee Minutes

Meg Sedlak reported on the Steering Committee (SC) meeting from October, 2009. At the meeting, she summarized the financial audit of SFEI from July 2009, and noted that there were no significant issues. As of December 8, 2009, a 5-year contract with Caltrans was signed, for future work. Communications are ongoing to receive the past fees.

The SC also approved adding on the full 209 congener suite to some of the small tributary samples (at one quarter of the sites). Francois Rodigari asked if AXYS calibrates all 209 congeners, and noted that EBMUD does. He was interested in being able to compare their data. SFEI will check with AXYS and will evaluate whether standardization of methods in this vein is needed..

Chris Sommers asked that the TRC meeting review the list of action items from the previous meeting. Specifically, he was interested in the proposed effort to present SEP projects to BACWA. Jay Davis noted that this idea arose as a possible way to help SFEI during the 2009 budget crunch, and that currently SFEI staff have a lot going on and the need is less compelling. He asked how much of a priority developing a list of potential SEP projects would be. Trish Mulvey stated that her goal is to make more funds available for relevant projects with a larger scope by having the Water Board pool funds from different enforcement cases. This would be a good topic for discussion by the ASC Board. BACWA has a greater stake in this than the other RMP participants. Francois Rodigari noted that BACWA itself does not have much money, but that there are funds

available in individual agencies. He suggested working with the Board to develop a relationship, such that the RMP could receive funds for study needs from discharger fines. Mike Connor noted that BACWA members have not yet developed a position on Trish's suggestion. Chris Sommers recommended that a list of suggestions of study priorities come from the Water Board, which could be vetted through the TRC, to be sent to the San Francisco Estuary Project (SFEP). Karen Taberski offered to talk with Dyan Whyte and Tom Mumley about changing the SEP process.

Meg Sedlak described the NOAA Mussel Watch meeting that took place at SFEI in October, and noted that EMAP plans to sample SF Bay in the summer of 2010. Chris Sommers asked that someone from the EPA brief the TRC on the project at the next TRC meeting.

Action items: Susan Klosterhaus and Don Yee will check with AXYS about calibrating the full suite of PCB congeners, and evaluate whether standardizing congener analysis would be appropriate. Karen Taberski will talk with Tom Mumley and Dyan Whyte about possible changes to SEP process, to facilitate application of funds to broader-scale, high priority projects. Susan Klosterhaus will get information on the EMAP 2010 sampling, and if appropriate arrange a briefing for the TRC.

3. Annual Meeting and 2010 Pulse

Jay Davis distributed a handout with proposed future Pulse themes. After a discussion with Adam Olivieri and the BASMAA board on a stormwater theme, they approved the idea, and proposed the title "Linking Watersheds and the Bay". Jay Davis asked for comments and author suggestions on the proposed articles.

Chris Sommers and Mike Connor suggested combining the Prop 13, Zone 4 Line A, and Guadalupe River articles into one summary article on big picture loads and monitoring, which would include Delta Loads, and how our overall knowledge has changed. Lester McKee mentioned that this type of article was written for a previous Pulse. He also noted that completing an article on Prop 13 by the proposed deadline of March 19 would be very challenging. Mike Connor asked for the major points of a loading overview article. Lester McKee cited the finding that in general, mercury has more diffuse sources and is attached to smaller particles than PCBs, which have more point sources and are attached to larger particles. This makes mercury, in general, harder to treat.

Mike Connor summarized three possible articles: 1) something on a BACWA white paper on stormwater diversion that should be available in February, author Ben Horenstein 2) something on a study on impacts of blended effluent, written for WERF by Don Gray, and 3) EBMUD's report on the pilot diversion at Ettie Street. Meg Sedlak commented that the white paper is a hot topic.

Chris Sommers noted that in general, topics for the Pulse should be chosen on a consensus basis, and that this document is not for leveraging a particular position.

For a management article, Chris Sommers noted that the MRP, what it is, and its plans for the next 5 years should be a straightforward piece, with joint authorship on BASMAA and the Water Board.

Jay Davis noted that outside help is available for the writing of Pulse articles, including Chris Werme, Glen Martin, Ariel Okamoto, and SFEI staff.

Regarding a SWAMP article, Chris Sommers thought that not much information would be appropriate on the regional side. Karen Taberski and Jay Davis suggested that it could be about linking the watersheds to the bay. Chris Sommers suggested bringing in Terry Fleming and describing the statewide effort, and asked Karen Taberski to discuss the possibility with SWAMP.

For the second management article, Jay Davis noted that the small tributaries loading strategy was important to include, and suggested that he and Lester could write it. Chris Sommers offered to help as well. Lester McKee suggested that the article cross reference the other strategy documents, and focus on a synthesized linkage, including modeling, dioxins, mercury, small tributaries, and the PCB strategy. Chris Sommers noted that all RMP strategies are linked to this loading work, and that the article needs to explain this, but he wondered what it would address beyond this point.

LM also noted that since the Prop 13 technical report is due at the end of March, he will be unable to produce a Pulse article by March 19, the proposed draft deadline. Chris Sommers offered to help pull figures from the document, and Lester McKee noted that Don Yee would be the only other SFEI staff capable of writing the report.

Chris Sommers and Jay Davis thus suggested the following articles:

1) MRP
2) Small tributaries loading strategy, written by SFEI and BASMAA
3) Prop 13
4) SWAMP
5) Loading overview

For the sidebars, Jay Davis suggested trash, linked with the SFEP grant, and stormwater monitoring, from the PCB and mercury grant from the EPA. Chris Sommers thought this might be redundant with the MRP, but that Janet Cox from SFEP could write a trash management sidebar. Jay Davis also suggested climate change, and Trish Mulvey offered to send out information on the link between black carbon and mercury. Chris Sommers suggested a summary of LID projects or a case study example. Jay Davis also suggested the usual regulatory status update on the 303D list. Meg Sedlak suggested one on the garbage patch. Mike Kellogg suggested a sidebar on adopt-a-creek programs; Karen Taberski will ask Dale Hopkins about writing one on Volunteer Watershed Monitoring.

Chris Sommers noted that he appreciated the opening to the 2009 Pulse, that it set the tone for the Pulse well, and recommended that we continue including this overview.

Meg Sedlak asked for possible dates for the next annual meeting, avoiding the Calfed meeting the week of Sept 19, 2010. Jay Davis suggested the first week in October. Regarding the location, Chris Sommers, Bridgette DeShields and Karen Taberski all preferred the museum to the Scottish Rite center. Mike Connor would check with BACWA regarding their retreat the first week of October, but that it was likely later in the week.

Action items: Karen Taberski will talk to SWAMP about writing a management article for the Pulse and Dale Hopkins about writing a sidebar on Volunteer Watershed monitoring. Trish Mulvey will send out information on black carbon and its link to climate change and pollutant loads, and Rachel Allen will check on dates for the BACWA retreat to avoid conflict with the RMP Annual Meeting.

4. Annual Revisit of the Redesign

Meg Sedlak noted the SC request that the TRC check in annually on the Status and Trends design, including on the direction for 2010. She described recent changes to the Status and Trends (S&T) portion of the program, including the first sediment cruise to be held during the wet season, this January. As this will be the first wet season cruise, she recommended sticking with the plan. She also noted that the sport fish and bivalve monitoring programs, currently biennial, are very good trend indicators, and she recommended maintaining the status quo.

Meg Sedlak mentioned that the NOAA Mussel Watch is suspending its national analyses for a year in order to perform a pilot study on emerging contaminants in mussels in California, looking at 80 sites across the state. SFEI staff, on behalf of RMP, are assisting in planning the study and coordinating the effort with RMP and RMP stakeholders. .

Bird egg monitoring has been incorporated into the S&T portion of the RMP, and current monitoring includes cormorant and tern eggs. Small fish are currently in the third year of a 3 year project, so next year the project should be evaluated. Should small fish monitoring continue annually? Or perhaps be downgraded to a triennial effort? How many PCB congeners should be analyzed?

2010 is a big year for river loading studies, since all three tributaries are being studied. Meg Sedlak recommended staying with the current program for the time being.

The water cruise had its number of stations reduced to 22 in 2009. Fewer numbers of stations complicates the calculation of averages for determining trends, however it is possible to calculate rolling averages. Most organics were reduced to every other year, however PBDEs are still being monitored every year. Scaling back PBDE analysis should be considered in the coming years. PCBs, PAHs and the rest of the organics were analyzed in 2009, so they will not be analyzed in 2010.

Meg Sedlak suggested that a S&T strategy could be developed, detailing when to reevaluate and undergo peer reviews, articulating questions, and outlining check-ins on contaminants.

Mike Connor suggested that the water cruise should be reevaluated at some point, including if it needs to be done every year, how many sites, and if sensors could be placed to gather data independently. He also suggested looking at the Monterey Bay Aquarium's approach to water monitoring. Meg Sedlak mentioned that there are remote sensing vehicles, such as REMUS, that can collect data autonomously, that are perhaps worth investigating. Mike Connor recommended that the RMP evaluate what questions are being addressed with water data. Tom Hall mentioned that it would be worth looking at the next 303D listing, and addressing when a data set can be cut off and taken off the 303D list. Chris Sommers supported the comments regarding the water cruise, adding that trends are very hard to determine in water data, and that if the data are not very useful, it needs to be minimal. He suggested that more sediment coring is likely more valuable.

Jay Davis suggested that the strategy development task could get started when Meg Sedlak returns from her sabbatical.

Mike Connor congratulated SFEI and SCCWRP on the project with NOAA.

Action items: Meg Sedlak will develop a strategy document for Status and Trends, including a re-evaluation of water sampling.

5. 2010 Joint Meeting with CTAG and TRC

Meg Sedlak informed the TRC that she and Rainer Hoenicke went to the most recent CTAG meeting. They witnessed the SCCWRP approach, which involves stakeholders saying what their research needs are, and Steve Weisberg, the program manager, responding to them relative to SCCWRPs abilities and appropriateness.

The joint meeting is scheduled for May 11, and the agenda is slated to focus on stormwater, and updates on emerging contaminants and sediment quality. Mike Connor mentioned that since about 15 RMP representatives will be coming, the SFEI meeting room will be crowded. Given 30-50 expected people, Francois Rodigari offered to find a meeting location in EBMUD facilities. Bridgette DeShields mentioned that the agenda looked good, and Jay Davis asked if there was SCCWRP input on it. Meg Sedlak will send it to Steve Weisberg and CTAG to get their input. A small group including Bridgette, Karen, and Jay will develop the agenda further with SCCWRP.

Action items: Meg Sedlak and Jay Davis will get input from Steve Weisberg on proposed joint CTAG/TRC agenda, number of attendees, and confirmation of the date.

6. 2009 Highlights and 2010 Workplan

a. Mercury and PCB Strategies

Jay Davis presented an update on the RMP Mercury Strategy, which is currently organized into 5 questions. Question 1, on Patterns in Mercury Uptake, focuses, in 2008-2010, on small fish monitoring. After the report, due in the summer of 2010, the small fish effort will need to be reevaluated. The overall mercury strategy should also be reconsidered after results from the DGT and isotope studies are in.

Mike Connor mentioned the 3-5 fold decreases in mercury loading from the 1970s, and suggested considering tracking other processes, such as wetlands.

Chris Sommers outlined the current take on the methylmercury question, stating that total mercury doesn't track with tissue concentrations, but that tissue in organisms is more spatially correlated, with sites that have high methylation potential. We do not, however, have a very good idea of what is controlling this. Mike Connor and Chris Sommers agreed that the reconsidered mercury strategy needs to look beyond small fish.

Jay Davis suggested that the updated mercury strategy would include conceptual model development.

Jay Davis continued the Mercury Strategy presentation, noting that a report on uptake patterns in small fish is due in December of 2010, and that in general, most fish are above the target mercury concentration. The isotope study is risky, but cutting edge, but there is no data yet to report from this project. The Diffusive Gradient in Thin-films (DGT) study data from year 1 did not match the small fish data, however, adjustments were made to the approach for your 2. Updates on both studies will be given at the CFWG meeting in January of 2010, and reports will be produced by May of 2010. For the Mercury Strategy, 2010 will be a check in point, where the future direction should be discussed based on results from work to date. In June, after receiving the two aforementioned reports, studies for 2011 should be recommended. The Mercury Strategy team will need to be reconvened, along with the CFWG. Taking a break from small fish for a year, while data are processed, is probably a good approach.

Chris Sommers asked that the draft reports be submitted to the CFWG earlier than May, and at least 2-4 weeks before the Strategy meeting.

Jay Davis also presented the RMP PCB strategy, whose team met in April and June of 2009. Recent developments discussed at that meeting include Bay sediment and bivalves declining, but sport fish and small fish increasing. The PCB-11 congener is also a new concern. Core data are still coming in; the general trend indicates lower concentrations in Bay sediments than in wetlands, due to mixing. Consistent with small fish results, wetland cores are showing PCBs settling out near tributaries, and persisting near the Bay margins. Future decisions include the next PCB TMDL, including when it should be considered, and what maximum load is appropriate. The studies recommended for the RMP are partially underway, such as the small fish monitoring, and the PCB conceptual model update (slated for serious consideration in 2011), and scheduled for consideration,

such as small tributary wetland cores in 2011, and a RFP on degradation rates, following the literature review as part of the PCB model update. For the 2010 small fish study, Jay Davis recommended analyzing all 209 congeners. Jay noted that the final report is due in the spring of 2011. The conceptual model for bioaccumulation report is due in August of 2010, and will include mercury, PCBs, and other contaminants, and will synthesize recent RMP information.

Regarding wetland coring, Mike Connor mentioned that it provides a historical picture of PCB loading. Chris Sommers mentioned that in the management role, surface sediment data might be more relevant. Luisa Valiela asked how small fish concentrations correspond with declining water concentrations, and Chris Sommers mentioned that tributary loadings are not representative of what PCBs are entering the food web. Meg Sedlak and Naomi Feger clarified that the full set of 209 congeners will be studied in an effort to target PCB-11, which has gained attention recently because it has been detected disproportionally in national studies and Bay discharges. Jay Davis will distribute a recent paper on PCB-11. Paul Salop requested that the PCB analyses be reported in terms of the typical 40 and the full 209 congeners, to make them more comparable. Chris Sommers and the group agreed to analyze the full 209 congener suite. Francois Rodigari asked that the method for comparing the data sets be standardized, including the calibration approach.

There were no comments on the agenda for the 2010 Mercury Meeting.

Action items: Rachel Allen and John Oram will set up a meeting for CFWG in May/June to discuss studies for 2011. CFWG will need several weeks to review Blum/Hintelman reports. Jay Davis will revise the Hg Strategy after review of small fish, isotope, and DGT projects – include update of conceptual model, and Meg Sedlak will distribute the PCB-11 paper to the TRC.

b. Modeling Strategy

John Oram gave an update on the Modeling Strategy, addressing outstanding questions from earlier TRC discussions. The remote sensing effort has been delayed, and the Guadalupe River watershed model is delayed, waiting for data from Lester. The goal of the Modeling Workplan is to predict the effect of management, by means of a bay-wide model. The model will be based on a flexible grid, and will predict the fate of sediments and contaminants and identify high leverage tributaries and sources and loss pathways, which will enable it to predict the effects of management. Once finalized, the model will never be real time, nor be able to predict exact outcomes of specific events, but it will give more general predictions of similar types of events. It will be tested with existing RMP sediment, contaminant, and physical data, though there are many potential data needs. The model is a collaboration effort with other organizations, including USGS, Stanford, UC Berkeley, and consultants. The South Bay model project, undertaken by UC Berkeley, has its funds indefinitely frozen. Though the workplan is dependent on the contributions of the collaborators, they have expressed their long-term commitment to this effort. Contingency plans are outlined, but less efficient than carrying on with the

collaboration effort. The tasks for 2010 are the South Bay sediment model and the biota conceptual model, and will result in more information on the priority margins and watersheds. Naomi Feger asked whether the model could be applied to other questions, such as placement of dredged material or wetland restoration and scour. Though a new model for the San Francisco Bay is necessary because the questions are specific, it could potentially be used to answer other questions. Eric Dunlavey and Francois Rodigari expressed concern about extending a model based on South Bay to the Bay as a whole. Mike Connor asked whether the empirical data from South Bay could be scaled to the whole Bay. John Oram replied that this would not be a problem with this process-oriented model.

Trish Mulvey commented that the failing of a similar effort in Chesapeake Bay was that the model was not reality-based and useful. Mike Connor stressed the importance of good interim deliverables for the modeling project. It will be important to demonstrate success early on. Focusing on specific areas of interest would be a good approach, such as San Leandro Bay, Hunter's Point, or Redwood City harbor. Chris Sommers suggested that having the South Bay results in 2012 would be good. Chris Sommers imagined using the model in 5 years to adapt management activities. Naomi Feger commented on the importance of addressing multiple contaminants.

Jay Davis mentioned that the modeling workplan, though still unwritten, is in progress, and that the CFWG meeting, in January, will review the plan. Mike Connor proposed releasing the $100,000 for the project, contingent on the CFWG approval of the plan. Bridgette DeShields supported it, and it was agreed to contingently fund the model plan. Jay Davis will report on it at the next TRC meeting.

Action items: Jay Davis will report to TRC on CFWG approval of Modeling Workplan at the next TRC meeting.

c. Small Tributary Loading Strategy

Lester McKee updated the TRC on the Small Tributary Loading Strategy. There are ongoing river loading projects at the Sacramento River, the Guadalupe River, and the Zone 4 Line A stormwater outflow site. Dr. McKee outlined the analytes and budget at the three sites, and described the large storm event in October of 2009 at the Zone 4 Line A sampling site. 2010 may be the last year of monitoring at Zone 4 Line A; this will be discussed at the next SPLWG meeting. Remaining tasks include developing criteria and ranking watersheds, exploring high ranking watersheds, optimizing sampling methods, and scoping out needs for land-use specific loads monitoring.

Mike Connor asked if the RMP could develop an SEP to map predicted rainfall for storms in the Bay Area, which most participants do already on their own. Lester McKee will talk to Chris Sommers and Tom Mumley about developing a regional tool for rainfall monitoring.

Chris Sommers mentioned that the Municipal Stormwater Progress Report is due in September of 2010, and that it will present an alternative to the Water Board, and may require updating techniques. He also suggested that stormwater monitoring can become more efficient, and still answer the questions. Future monitoring techniques will be determined by evaluating current data, and subsampling it to find the best way to get the most information about the system. Changes to the monitoring required in the MRP may be called for based on the multi-year sampling plan – this needs to be discussed with the Water Board.

Action items: Lester McKee will talk to Chris Sommers and Tom Mumley about developing a regional tool for rainfall monitoring.

d. Effects Studies

Aroon Melwani reported on the Benthic Workgroup and the 2009 Effects Studies, via conference call. Workshops were held in June and August of 2009 to revise and develop benthic assessment methods for the San Francisco Estuary. There was general agreement on the benthic assemblage classification in the Estuary, a Best Professional Judgement (BPJ) exercise was conducted for the participants, and the classification analysis is being finalized, with a report due in January of 2010. The workshops did attempt to take into account the changes in benthic communities that may be noticed in the winter, but they will see more differences after the first winter sediment cruise in January of 2010.

The special studies slated for 2010 include 2 more workshops for SQO assessments and guidance by the EEWG, with 2 reports due in December of 2010. Steve Bay and Chris Vulpe, of SCCWRP, are working on the Molecular TIE project. Samples will be evaluated with the new technique, based on how they respond to contaminant stress. A technical report summarizing the work will be completed in December of 2010.

Meg Sedlak described the 2010 study on the relative sensitivity of tern to PBDEs, which will begin field work in March. The study will inject eggs with PBDEs, and will assess embryo survival and hatching success.

e. Data Management

Cristina Grosso reported to the TRC on progress in Data Management in 2009. The data management team has focused on uploading new data to the database, maintaining the SWAMP and CEDEN comparability, enhancing field entry and COC data tools, modifying a data submittal tool, and improving the website design and reporting.

Goals for 2010 include reporting data within one year, uploading data via a web-based submittal tool, enhancements to the web query tool, and continuation of coordination as a Regional Data Center.

Mike Connor and Chris Sommers agreed that the web query tool was very good. Mike Connor asked about easily capturing and downloading images and graphics, a feature

which is not yet possible. Cristina Grosso clarified for Chris Sommers that the tributary loading data are not yet in SWAMP format, but will be added in 2010.

Action items: Cristina Grosso will develop a tool to easily capture graphics from the web query tool.

f. Contaminants of Emerging Concern

Meg Sedlak reported on the Sources of PFCs study, which has a report due in June of 2010, and the White Paper on Emerging Contaminants, which will be ready in early 2010, from 2009. Karen Taberski asked when NOAA will begin sampling for the Mussel Watch Pilot Project, and Meg Sedlak noted that the work has started and will be completed this summer.

Susan Klosterhaus described the Alternative Flame Retardants work, noting that data are still coming in, and the manuscript will be done in 2010. A CEC workshop was held in April 2009, which helped communication between scientists, stakeholders, and policy makers on emerging contaminants. Dr. Klosterhaus is also organizing a session on emerging contaminants for the American Chemical Society meeting in March 2010. SFEI is assisting with the NOAA Mussel Watch Pilot Study, which is focusing on CECs. An analyte list and set of sites are developed for California, 4-5 of which will be in the Bay. AXYS and SFEI are also collaborating on a Pro Bono study to look at CECs in Bay mussels, with an expanded suite of ECs. The study uses new methods, and is looking for bioaccumulative compounds, including parent compounds and metabolites. The results, due in March, will help guide the NOAA Mussel Watch Pilot Study.

For the pro bono project, Mike Connor recommended going to Petaluma, Naomi Feger suggested Bel Marin Keys, Mike Kellogg suggested the marsh in San Rafael, and Karen Taberski mentioned near Richmond.

Year 1 of the 2010 Broadscan Pilot Study screening seal and mussel tissue for anthropogenic pollutants will begin with method development with NIST standard reference materials, and collection of field samples. In year 2 of the study, chemicals will be identified and quantified in the local samples. A brominated dioxins pro bono project with AXYS will look at sediment, sport fish, and seal blubber. Susan Klosterhaus mentioned that brominated dioxins likely have greater toxicity than chlorinated dioxins, but they are not regulated yet. Dr. Klosterhaus also updated the TRC on the dioxin study, which in the 2009/2010 tributary studies will be coordinated with the full 209 PCB congener suite for a subset of the analyses. SFEI is also working with NIST to develop a strategy for long term storage of some samples. Dr. Klosterhaus will bring the developments in this strategy to the next TRC meeting.

Action items: Rachel Allen will send out the agenda for the ACS session on Emerging Contaminants, and Susan Klosterhaus will present the strategy for long term storage of RMP samples with NIST at the March TRC meeting.

7. Date for next TRC meeting

Karen Taberski proposed March 18, 2010, for the next TRC meeting, and the TRC generally agreed. Bridgette DeShields made a motion to approve the detailed workplan, Karen Taberski seconded it, and it was approved.

ACTION	WHO	STATUS
Talk to Margy Gassel and Bob Brodberg about potential plans to develop PBDE thresholds for human health	Susan Klosterhaus	
Check with bird folks (Rattner, Fry, Maurer) on whether they are aware of any plans to develop avian thresholds	Susan Klosterhaus	
Develop a list of projects from which fact sheets could be created, determine factsheet audience, outline a strategy	Jay Davis	To be completed for March TRC meeting
Send a factsheet template document ("creative brief") for outlining and planning	Trish Mulvey	Done
Check with AXYS – do they calibrate all 209 congeners? QA team develop recommendations for standardizing congener analysis	Susan Klosterhaus Don Yee	
Karen talk to Tom and Dyan about possible changes to the SEP process to facilitate application of funds to high priority projects	Karen Taberski	
Get info on EMAP sampling in 2010, if appropriate arrange briefing	Susan Klosterhaus	At the March TRC meeting
Talk to SWAMP colleagues about writing a management article for the Pulse	Karen Taberski	
Send out information on black carbon and its link to Hg	Trish Mulvey	
Ask Dale Hopkins about writing a sidebar for the Pulse on the Volunteer Watershed monitoring	Karen Taberski	
Check on dates for the BACWA retreat to avoid conflict with the Annual Meeting	Rachel Allen	
Develop strategy document for Status and Trends, including a re-evaluation of water sampling	Meg Sedlak	
Get input from Steve Weisberg on proposed joint CTAG/TRC agenda, number of attendees, and confirmation of the date	Meg Sedlak Jay Davis	
Confirm with Francois Rodigari use of BACWA conference room for CTAG-TRC meeting	Rachel Allen	
Set up a meeting for CFWG in May/June	John Oram	

to discuss studies for 2011. CFWG will need several weeks to review Blum/Hintelman reports	Rachel Allen	
Revise Hg Strategy after review of small fish, isotope, and DGT projects – include update of conceptual model	Jay Davis, Mercury Strategy Team	
Distribute to the TRC the PCB-11 papers	Meg Sedlak	
Report to TRC on CFWG approval of Modeling Workplan	Jay Davis	To be presented at March TRC meeting
Develop tool to easily capture graphics from the web query tool	Cristina Grosso	
Send out agenda for ACS session on Emerging Contaminants	Rachel Allen	
Bring the completed archive strategy to the TRC in March.	Susan Klosterhaus	To be discussed at March TRC meeting