



## **SAN FRANCISCO ESTUARY INSTITUTE**

4911 Central Avenue, Richmond, CA 94804 • p 510-746-7334 • f 510-746-7300 [www.sfei.org](http://www.sfei.org)

### **RMP Steering Committee Meeting**

**January 28<sup>th</sup>, 2013**

**San Francisco Estuary Institute**

### **Draft Meeting Summary**

Tom Mumley\*, SFB RWQCB  
Mike Connor, EBDA  
Jim Ervin, City of San Jose  
Napp Fukuda, Large POTW (City of San Jose)  
Daniel Tafolla, Medium POTWs (Vallejo Sanitation)  
Karin North, Small POTWs (City of Palo Alto)  
Peter Carroll, Refineries (Tesoro)  
Dave Allen, Industry (USS POSCO)  
James Kelly, BACWA  
\*Chair

Jay Davis (SFEI)  
Meg Sedlak (SFEI)  
David Senn (SFEI)  
Ellen Willis-Norton (SFEI)  
Lawrence Leung (SFEI)  
Emily Novick (SFEI)  
Lawrence Leung (SFEI)

#### **Call-In**

Rob Lawrence, US Army Corps of Engineers

#### **1. Approval of Agenda and Minutes [Tom Mumley]**

Karin North motioned to approve the October 29<sup>th</sup>, 2012 SC meeting summary. Dan Tafolla seconded the motion, and the summary was unanimously approved. Meg Sedlak then briefly discussed two SC action items. She mentioned that she will be in touch with SC members shortly to organize the annual meetings with BACWA, BASMAA, and refinery representatives. Meg also noted that she is working with Jay to organize a meeting with USGS (including Jim Cloern), EPA, and the RMP to discuss the proposed increases in RMP's contribution to USGS's monthly monitoring program. Tom Mumley asked to join the meetings when possible to listen to the

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various parties' interests and to help with any issues that may arise. Karin North suggested including a BACWA representative at the meeting with Jim Cloern because the decisions may affect BACWA fees.

### Action Items

1. Meg Sedlak will include Tom Mumley and a BACWA representative when organizing a meeting on the RMP's contribution to USGS monthly monitoring, and will keep Tom informed about the annual meetings with stakeholder groups.

### **2. Information: TRC Meeting Summary [Meg Sedlak]**

Meg Sedlak highlighted the recent work by Dave Schoellhamer that was presented at the TRC meeting. Dave discussed a clearing trend in San Francisco Bay (40% decline in suspended sediment concentrations since 1998) and explained sediment flux at Dumbarton Bridge and the Golden Gate.

### Discussion

Tom Mumley explained Dave's finding that last year there was a net northern sediment flux at Dumbarton Bridge because of the higher volume of freshwater in Central Bay. Tom then relayed Mike Connor's suggestion to remind Central Valley water suppliers that high Delta outflow helps flush the South Bay, which Tom found interesting. Tom added that the summary of Dave's presentation made it seem like the partnership with the Exploratorium to install a deep station in Central Bay in 2013 was still tentative. He hoped that the station's creation was final and wondered about the status of the partnership. Meg Sedlak responded that she would check in with Dave regarding the status, but she also believes that the decision was final. *(According to Dave Schoellhammer, they are currently confirming the depth of the station as they have obtained conflicting information regarding depth.)*

Rob Lawrence asked about the implications of a reduced sediment load and if anyone was working on determining the impacts. Tom Mumley replied that a reduced sediment load makes the Bay more vulnerable to nutrients. Jay Davis added that deeper, more contaminated buried sediment could be remobilized and that there are ramifications for wetland restoration projects that use sediment. Jim Ervin noted that turbidity is what determines eutrophication. He said that in the South Bay there has been a similar drop in total suspended sediment concentrations, but until recently turbidity measurements haven't been taken. Jim postulated that turbidity in South Bay remains constant over time even with changing sediment loads due to the shallowness of the subembayment. Jay stated that Dave Schoellhamer wrote an article in a recent Pulse of the Estuary that explains changing sediment loads in the Bay in detail.

### **3. Information: Status of 2012 Budget and Expenditures [Meg Sedlak]**

Lawrence Leung presented the updated 2012 RMP Budget Summary with a new format that Adam Olivieri helped create. The proposed labor and subcontract carryover amounts for 2011 and 2012 are specified in the RMP Budget Summary ([http://www.sfei.org/calendar\\_events/4174](http://www.sfei.org/calendar_events/4174)). All labor, subcontracts, and direct costs are closed for 2010. There are two outstanding 2012 dredger fees; however, Beth Christian from the Water Board has set up a payment schedule for Glen Cove Marina and they are consistently paying

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\$1,000-\$2,000 checks. The second outstanding dredger, Allied Defense, is on the verge of submitting their check.

### Discussion

Tom Mumley made clear that the budget summary document was the first attempt at creating a new format for presenting the budget. He stated that 2011 and 2012 carryovers will all be incorporated into the 2013 budget so by next year the SC will only have to look at one year's budget. Meg Sedlak clarified that the carryover amounts will not physically move into the 2013 funds; but, she can show the SC the budget summary with all of the carryovers incorporated into the current year's budget. She added that the RMP intends to close out all 2011 and 2012 subcontracts by the end of 2013.

Tom Mumley said that his issue with the new budget summary is that the some of the values do not add up. Meg Sedlak responded that she will revise the summary as needed. She also indicated added that Lawrence Leung reconciles the budget summary with the bank balance. *(Based on these comments, the budget was reviewed and revised version was e-mailed to the SC.)*

The SC then discussed the status of subcontracts. Peter Carroll asked whether it was typical for subcontracts to carryover multiple years. Meg Sedlak responded that it depends on the timeline of the sampling, analysis, and submittal of results. Government agencies and some laboratories can be slow to invoice; she noted that the RMP will request invoices more frequently to assure that the contracts can be closed out more quickly. Peter asked if most of the work from the carryover tasks still needs to be completed and if there are any contracts that began a couple of years ago that are now obsolete. Meg replied that the majority of the subcontracts are the analysis of S&T samples, the bulk of which is completed. The 2011 and 2012 water and sediment S&T data went through QA/QC and formatting by the January 15 deadline, now only the formatting for bivalves remains. Only one subcontract is not related to S&T data, which is the contract with Sea Engineering (Dr. Craig Jones) to assist in the development of a Bay model.

#### **4. Action: Request for Carryover of 2012 Tasks and Approval of 2013 Budget [Meg Sedlak]**

##### *2011 and 2012 Carryover*

Meg Sedlak explained the rationale for carrying over each of the 2011 and 2012 labor tasks , the details of which are in Item 3, Attachment 3 of the agenda package. In 2011, there are seven tasks that are being carried over to 2013. The tasks include three S&T benthic reports; three stormwater loads monitoring reports; an extended RMP version of the recently published mercury synthesis; a PCB synthesis; a presentation to the TRC on dioxins in water and sediment; a write-up of the results from NIST's broadscan screening of biota; and finishing the EC synthesis. Meg noted that only a portion of the funds for the broadscan screening of biota will be carried over (\$5,000) because the RMP has not been as involved with the project as expected, mainly because SFEI will not be heavily involved in writing the report.

### Discussion

The SC suggested revisions to the table that describes 2011 and 2012 carryover tasks. Mike Connor noted that the line-item unencumbered funds do not add up to the total unencumbered.

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Meg Sedlak responded that the total unencumbered includes funds for data management's processing of bivalve data, which is not shown as a line-item task. Karin North suggested adding a column to the table labeled "adjusted balance" to more clearly see the difference between total carryover and total unencumbered. (*Lawrence and Meg sent a revised version of the table to the SC after the meeting.*) Mike Connor wondered if the decisions regarding the carryover budget had already been made and if the SC's role was simply to approve. Jay Davis said that in the instance, the SC's role was to approve. Karin North and Tom Mumley added that this year's proposed carryovers were easy to accept. If in future years there are carryovers that don't appear relevant, then the SC can make a decision on how to handle the funds.

### *Deliverables by Month and Project Lead*

Meg Sedlak presented two tables that showed the timeline of deliverables with the project lead listed to determine if the RMP team could accomplish the work in time. Meg noted that the deliverable timelines are mainly driven by the need to finish the task for workgroup meetings, the Annual Meeting, or as part of permit requirements. Jay Davis added that the table addresses Adam Olivieri's question regarding whether all of the deliverables could be completed in one year.

### Discussion

Peter Carroll observed that having two tables was repetitive because the timeline and project lead are available on both sheets. He also asked how informative it was to only list the project lead because the workload often depends on the available support staff. Meg Sedlak responded that the RMP uses an accounting software program, Deltek, to track the time support staff's spends on each project. Mike Connor wondered how realistic the timeline was for the PFC sources article, the S&T bird egg report, and the effects of PAH on flatfish report. Meg responded that she just needs to address the comments on the PFC report, John Incardona has promised the PAH report would be finished by the end of January, and a draft of the S&T bird egg report is already out. Tom Mumley asked why the 2011 AMR was late, and Meg replied that the deadline got pushed back so the revised QAPP for water and sediment could be completed on time. The draft of the 2011 AMR will be completed by February 15th. Peter Carroll wondered when the SC makes decisions about what deliverables to prioritize. Meg said that she engages the SC in project prioritization decisions when the deliverable is an external product or of high priority. In this particular case, she did not involve the SC because both projects are primarily driven by internal needs.

Tom Mumley asked if the SC had already acted on the 2013 budget; Karin North replied that the budget was approved with the stipulation of going through the budget with the new format during this meeting. Tom motioned to approve the 2011-2012 carryover tasks, the use of \$114,000 from the 2012 labor surplus (as proposed at the October 28th SC meeting) for the 2013 budget shortfall, and the approval of the 2013 budget. Napp Fukuda seconded the motion. The budget was approved unanimously. Meg ended the discussion by thanking Tom Mumley and Adam Olivieri for their input on the format of the new budget summary.

### Action Items

2. Lawrence Leung will produce a revised RMP Budget Summary every quarter that will be included in the agenda package.

**5. Information: 2013 Pulse and Annual Meeting [Jay Davis and Meg Sedlak]**

*Pulse of the Estuary*

Jay Davis reviewed the updated Pulse of the Estuary outline with the SC. He began the discussion by recommending changing the publication's name from "Pulse of the Estuary" to "Pulse of the Bay" because the document reviews the state of the Bay, not the Delta; there now is a Pulse of the Delta; and in 2015 there will be a State of the Estuary report. Tom Mumley noted that in the description of the RMP, it states that the RMP monitors contamination in the Estuary; Jay responded that the description should change as well, and the Committee agreed.

The main change to the outline is that Lorien Fono in collaboration with BACWA and the Water Board agreed to be the lead author for the management article. Tom was worried about the article discussing the CEC synthesis highlights because the CEC strategy is not complete. Meg Sedlak replied that the strategy has to be complete by the April 5th ECWG meeting. Jay added that he can make the CEC strategy a sidebar.

Jay mentioned that in 2015 both the State of the Estuary report and the RMP Pulse of the Bay are scheduled for publication. Jay asked if the RMP should adjust the Pulse's timeline so the RMP Update (aka Pulse Lite) is always published when the State of the Estuary report is distributed. Tom replied that the time schedule would be hard to plan because the State of the Estuary is not published every two years. He suggested creating a Pulse Lite whenever a State of the Estuary report was published, which may result in consecutive Pulse Lite publications. Karin North thought having the Pulse of the Bay at the RMP annual meeting was important because it created discussion at the meeting. Mike Connor and Tom agreed that the decision between creating a Pulse Lite and a full Pulse for 2014 should be discussed at the next SC meeting.

Mike then noted that all three of the proposed science articles overlap; Meg replied that the difference lies in the study design. Mike responded that the Pulse is not supposed to highlight various study designs, but report the overarching findings. He suggested combining the articles in the science section into one large article about CECs (similar to the management section). Tom agreed, adding that having an entire article on PFOS was unnecessary; why not include all flame retardants? Jay responded that the recently published Estuary Insert focused on flame retardants and it would be repetitive to include a similar article in the Pulse. Karin disagreed saying the Pulse should be something every level of manager can use a reference document. Therefore, everything the RMP has worked on should be included in the Pulse. She argued that a combined science article could become the new bible for CECs in the Bay. Mike added that the article could be something that managers looked at and say "here are the three CECs I need to pay attention to over the next couple of years." Jay said that the piece could turn into a guide to CECs rather than an article. The centerpiece of the guide could be the tiered risk framework, and the guide would discuss each CEC with attention devoted to the higher risk CECs. Peter Carroll suggested adding links to key datasets within the guide.

Meg said she was worried about the length of the guide, and Karin responded that simply stating what the CEC was and where it was located would be sufficient. Mike added that the higher risk

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CECs could have longer descriptions. Emily Novick thought it was also important to include what actions the RMP was already taking regarding monitoring CECs in the Bay. Karin agreed and said the description for each CEC should incorporate current efforts and future monitoring plans. Tom thought the management article could include a brief history of CEC work the RMP has already completed as a sidebar. Overall, the SC likes the idea of creating a guide to CECs for the 2013 Pulse rather than having the three separate science articles. Karin noted that the guide should not be too difficult to write since EC workgroup products and the CEC synthesis have already described many CECs in a similar format.

Tom quickly mentioned two issues he had with the outline. He disagreed with fipronil being a stand-alone CEC. Meg responded that fipronil is given attention because the RMP is monitoring it, it has been detected in the Bay, and it is exceeding some thresholds in stormwater in Sacramento and in Southern California. Tom said that fipronil is currently a freshwater issue. Mike suggested incorporating fipronil into a “new pesticides” section of the CEC guide. Meg agreed and suggested asking Kelly Moran, who researches future use pesticides, to write the section. Tom also wondered why under the Mussel Watch article there was going to be a section on “Long-term trends in legacy pollutants.” Jay said that the Mussel Watch study suggested declines in legacy pollutants; Mike suggested including the results in the following section, the “Latest Monitoring Results.”

### Action Items (Already Completed)

3. Meg Sedlak will ask Kelly Moran to help write the “new pesticides” sections of the Pulse. Meg will also call Kelly to ask her input regarding possible keynote speakers for the annual meeting.

### Action Items

4. Jay Davis will revise the Pulse Outline and email it to the SC.
5. Jay Davis will develop an analysis of alternatives for the annual schedule of Pulse publication, and this will be discussed at the next SC meeting.

### Annual Meeting

Jay Davis summarized the basic format of the State of the Estuary meeting, which includes morning plenaries and concurrent afternoon sessions with 8 20-minute talks. He mentioned that the morning plenary could also include a panel. The planning group is meeting monthly and they should have the program and speakers finalized by June. The overarching theme is “20 Years of the San Francisco Estuary Partnership,” which is also how long the RMP has been in existence. The RMP is going to take charge of the water quality portion of the meeting and the focus of the RMP portion will be on CECs. Jay emphasized that the RMP portion of the meeting should only last one day (so that RMP participants are not required to attend both days) and the main goal is to have a meaningful discussion about CECs. Jay then provided a handout possible RMP keynote speakers ([http://www.sfei.org/calendar\\_events/4174](http://www.sfei.org/calendar_events/4174)), noting that the keynote speakers should be charismatic and draw in a diverse crowd. Jay added that although Dave Sedlak is on the ECWG, he is focusing his energies on the National Science Foundation center he and Dick Luthy (Stanford) are directing - ReNUWIt (Re-inventing the Nation’s Urban Water Infrastructure) . Meg Sedlak had two other speaker suggestions: Lisa Rodenburg, a professor looking at

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debromination of PBDEs by photolysis or bacteria using the RMP data set, and Dr. Megan Schwarzman, a faculty member associated with Berkeley's Green Chemistry program.

### Discussion

The SC first discussed the topics for the concurrent afternoon sessions. Tom Mumley began the conversation by saying that there will be two concurrent sessions that the RMP will be charged with. Mike Connor proposed that the topics for the two concurrent sessions should be CECs and nutrients. Tom and Mike noted that by only focusing on CECs and nutrients some other important topics are ignored such as Delta Water quality, toxicity, selenium, and current use pesticides. Mike noted that nutrients will most likely be discussed on the second day as well; therefore, the session could be split between nutrients and other RMP topics. Tom wondered if there were enough speakers to have an entire session devoted to CECs. Jay responded that Derek Muir, Meg Sedlak, Kelly Moran, and John Kucklick could serve as speakers. Karin North suggested including someone who could discuss nano-materials and Meg recommended Lee Ferguson as a speaker. Therefore, there are enough speakers to make CECs an independent afternoon session.

Tom Mumley then turned the discussion to deciding keynote speakers and made clear that the keynote address did not have to relate to CECs. Tom wondered if talks related to the Bay or Delta RMP would appeal to the larger State of the Estuary audience. Mike Connor thought that Debbie Raphael, the director of the Department of Toxic Substances Control, would be the most logical choice for a keynote. She is an excellent presenter and would be able to show how green chemistry needs support from water quality players. Tom suggested Steve Moore from the State Board, he can speak to almost any subject. Tom did not think Gina or Debbie should speak about the water quality aspect of green chemistry; Mike then indicated that Derek Muir could speak on that topic, but he might be too technical for the general public. Meg responded that he could speak to a general audience if asked and that he would bring an interesting international perspective because he has served as head of SETAC World Council. Karin North suggested that Jennifer Field from Oregon State University would be a good presenter. But, her favorite choice would be a keynote that was affiliated with the European Union REACH (Registration, Evaluation, Authorisation and Restriction of Chemical substances) program. Mike suggested a faculty member at UC Berkeley, Michael Wilson, who is an expert on the REACH regulation. Karin replied that she had heard Michael Wilson at Senate hearings and agrees he would be a good keynote. Karin argued that inviting both Michael Wilson and Debbie Raphael as keynotes would make clear to the audience that product design is what determines water quality. Jay ended the discussion by saying the management article authors should continue to think of possible plenary speakers that support the topics presented in the Pulse management article.

### Action Items

6. Tom Mumley will convey SC input on SOE speakers to the SOE Conference Planning Team.
7. The Water Board will provide Jay Davis with a draft of the Pulse's management article by March 28.

### **6. Action: Approval of RMP Multi-Year Plan [Jay Davis]**

Jay Davis presented updates on the multi-year plan; the only major change was on page 10 showing the RMP's collaboration with other programs and organizations. Both Karin North and

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Tom Mumley agreed that more cleanup is needed. Karin noted that sometimes the plan discusses years 2013-2018, while other times the plan includes years 2013-2019. Similarly, when presenting historical information the years discussed varies. Tom noted that sometimes the plan refers to year 2012, when it should say 2013. Jay agrees that there is inconsistency and that he will make the appropriate changes. Jay will send out the final version via e-mail and requested that the SC send any comments to him within a week. Once he addresses the comments he will send the revised version to the committee for their final approval.

### Action Items

8. The SC will send Jay Davis comments regarding the Multi-Year plan by February 4th and he will email the revised version to the committee for their final approval

### **7. Action: Workshop Ideas for 2013 [Jay Davis]**

Jay Davis described the 2013 workshop proposal recommended by the TRC at the December meeting. The workshop will examine information needs relating to methylmercury in restored tidal marshes and salt ponds. Jay stated that there is a lack of coordination among agencies charged with restoring wetlands and that the projects need better planning. Jay maintained the workshop will enhance coordination, make clear how monitoring data can be used to inform decision-making, and identify gaps in monitoring information. SFEI staff are thinking of holding the workshop in April because the Hamilton restoration project is trying to get off the ground, but the date has not been discussed with other workshop planners.

### Discussion

Jim Kelly mentioned a possible location for the workshop, the California Endowment, a conference space next to the BART in downtown Oakland that is free of charge for qualified non-profits. Mike Connor noted that the majority of the RMPs funding comes from wastewater and stormwater agencies; he is interested in how the workshop is valuable for those agencies. Jay Davis responded that restored wetlands are one of the main sources of methylmercury for the Bay; therefore, restored wetlands projects may have regional impacts. Tom Mumley added that he agreed with Mike at first (RMP stakeholders are not charged with working on restored wetlands). But, he reasoned that solving the Bay's mercury problem on the back of wastewater agencies does not make sense; having a dialogue about mercury and wetland/salt pond restoration would be useful. Tom also mentioned that in dischargers' permits, there is a portion that states dischargers are required to increase information and reduce uncertainty regarding Bay contaminants. Mike replied that there are four ways the wastewater and stormwater agencies would benefit from the workshop: 1) if the workshop results in loosening the mercury goals for the agencies 2) if there is a threat that the mercury thresholds will be lowered for the agencies without the workshop 3) if the restored wetland projects decide to re-use stormwater channel sediments 4) if the restored wetland projects can make it easier to push stormwater into wetlands. Adam Olivieri also wondered how the information will be used to update the TMDL.

Meg then discussed the cost of the workshop, which will be around \$20,000 depending on if the RMP has to pay to use the facility. Tom Mumley noted that he does not know of any way in the short-term to use regulatory leverage to secure external funders. Mike Connor wondered if NOAA, CDFG, or other similar agencies could provide funds. Jay thought the U.S. Army Corps



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of Engineers may be interested in the workshop. Jay said he would check in with Rob Lawrence to see if he approved of the workshop.

Dan Tafolla asked about the workshop's benefit to the RMP. Jay responded that the results of the workshop can lead to a regional monitoring effort that should dovetail with the RMP.

Additionally, there is not much the RMP can accomplish concerning mercury in the open Bay. Reducing mercury concentrations in restored wetlands may be the most promising way to decrease mercury exposure in Bay species (species that use the open Bay, salt ponds, and marshes as habitat). Tom added that the workshop is an opportunity for the RMP to get closure on mercury. Mike ended the discussion by saying that the RMP's energy has been focused on mercury loads, but the main driver for exposure is methylation. Jay countered that according to the mercury synthesis, the long-term solution is reducing loads into the Bay. Tom recommended approval of the RMP's plan to sponsor a workshop of mercury in wetland/salt pond restoration. Karin North motioned to approve, Dan seconded, and the workshop proposal was unanimously approved.

### Action Items

9. Jay Davis will check with Rob Lawrence to confirm that he approves of the Mercury Wetland Restoration Workshop.

### **8. Information: Update on Nutrient and Modeling Activities [David Senn]**

Dave Senn provided a status overview for all of the nutrient projects. The final draft of the conceptual model will now be completed in May/June 2013. The loading study, moored sensor pilot study and the algal toxins study are on schedule. Dave Senn admitted that the timeline for the RMP modeling plan was overly optimistic. The modeling work involves stakeholders beyond the RMP, requiring advisory team meetings and a modeling workshop. Dave ended the status update by stating that there are a lot of questions regarding the status of the USGS monitoring program as it moves away from USGS. Dave listed both scientific and institutional questions and consequently noted that the shift in the ownership of the monitoring program presents opportunities for collaborating with other organizations.

### *Moored Sensor Pilot Program*

Emily Novick then presented an update on the moored sensor pilot program and asked the SC how the nutrient team should proceed with the project. She first described the original SFEI proposal, to deploy one moored LOBO sensor at Dumbarton Bridge. But, after meetings with sensor experts at USGS and DWR, Dave and Emily found out that there are many continuous sensors that are already deployed by the two agencies. For example, DWR has stations all throughout Suisun Bay and the data is available on DWR's website. Therefore, there is a chance to collaborate with programs rather than duplicate efforts. Dave mentioned the idea of creating an umbrella organization for purchasing and maintaining sensors across sites and parameters.

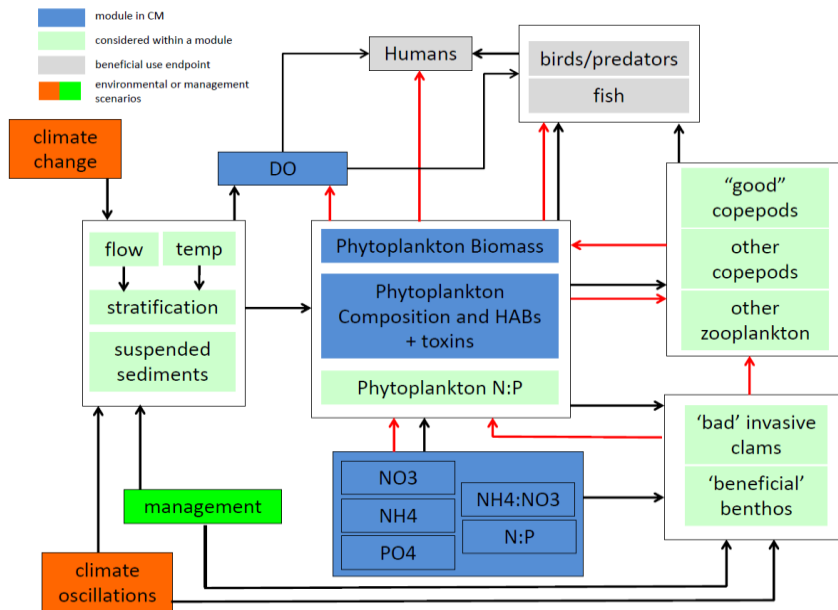
In addition to enhancing coordination between organizations, Dave and Emily are looking at purchasing two less expensive sensors that will cost the same amount as one LOBO sensor. Two YSI instruments with two associated nitrate sensors would provide information about spatial variability. Additionally, two sensors would be useful for instrument maintenance or possible malfunction. Emily and Dave wondered if they need the SC approval before purchasing sensors.

Discussion

Mike Connor said that he does not think the SC should micro-manage. Tom Mumley agreed and advised Dave and Emily to purchase whichever instruments they deem fit. Mike asked if DWR should run the moored sensor program because it appears that they are accomplishing all of the Suisun Bay data needs. Dave Senn replied that the DWR does not extend past Suisun Bay and that USGS maintains instruments in other sub-embayments, highlighting the need for collaboration. Jim Ervin mentioned that the City of San Jose has YSI sensors and Jim Cloern wants to fuse USGS data with their data. He added that having two YSI sensors is necessary because the maintenance for the sensors cannot be done in the field. Karin North suggested calling Eric Dunlavy to talk about YSI sensors since he has used them in the past.

*Conceptual Model Update and Role of the Nutrient Team within the RMP*

Dave Senn presented the overarching goal of the conceptual model, asked what the process should be for the model’s external review, discussed the status of nutrient monitoring program, and asked about what role the nutrients team should take within the RMP. Dave briefly described how the Bay system is changing and becoming less resilient to nutrients. He then explained that the conceptual model will inform the assessment framework, future monitoring and special studies, and the effectiveness of different management strategies for nutrient load reduction. The conceptual model attempts to explain what is causing the problems (e.g. low DO, toxic algal blooms, etc.). The model also attempts to discover the connections among the various parameters, as shown in the concept map below.



Dave then asked the SC what the external review process should be for the conceptual model. Tom Mumley, Jay Davis, and Mike Connor agreed that the draft should be sent out in parallel to the conceptual model technical team and to the nutrients stakeholder advisory group. Tom noted that the March 8 stakeholder meeting will provide a forum to discuss the draft. After the draft is reviewed by both groups, a second draft will be sent to outside national experts. Dave Senn said

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he was slightly worried about sending the draft to the stakeholder advisory group without allowing the technical team to review it first. Mike responded that Dave can then pre-send individual chapters to the technical team. Tom noted that by design, there are gaps in how well we understand the system and all disagreements with the model should be seen as ways to frame the discussion for what next steps need to be taken. Tom wondered how much money is left for completing the report. Dave responded that \$50,000 is currently available and there are still some unspent 2012 funds. There is enough funding to take three to four weeks to incorporate comments and create the final draft, once the nutrients team has received feedback.

Dave then discussed the state of the USGS monitoring program. By 2018 the USGS is likely to stop all funding to the program. Currently the RMP is providing \$138,000 to the program; the total program cost is around of one million dollars annually. Dave wonders if there is a possibility of obtaining additional funding from other sources, but managing the program through the RMP. Mike argued that it may be in the Water Board's interest to have the monitoring program managed by the RMP. He also encouraged Tom to talk with Feinstein's office or a senior USGS manager about the importance of USGS continuing the monitoring program.

Tom then brought up the future of the nutrients team within the RMP. He questioned whether a separate Nutrients RMP should be created (with a separate SC and TRC), if the current RMP should be expanded, or if an entirely different mechanism should be created. Mike stated that it seems a new agency or group is always created when there is a problem; he maintained that it is not effective to create a specific agency for monitoring nutrients and then have the RMP monitoring everything else. Therefore, it may be best for nutrients work to continue under the RMP. If the nutrients work is going to stay under the RMP, Mike agreed that more money will need to be put into the RMP. Jim Ervin suggested that a nutrients workgroup should be created since nutrients work will continue for longer than five years. Mike ended the nutrients update by asking if the stormwater nutrient loading estimates can be improved by the State of the Estuary meeting. Tom noted that the data will be ready by August and Dave said it was possible to have improved estimates by the meeting.

### Action Items

10. Tom Mumley will consider talking with Feinstein's office or a senior USGS manager about the importance of USGS continuing the monitoring program.
11. Dave Senn will inform the TRC of any changes regarding sensor equipment purchases.
12. Dave Senn will analyze alternatives for organizational oversight of the nutrient work and bring this to the SC for the next meeting.

### **9. Information: Deliverables and Workgroup Update [Meg Sedlak]**

Meg Sedlak went over the dates for the workgroup meetings: the ECWG meeting will be on April 5, the EEWG will be on May 16, the SPLWG meeting will be in July, and the joint Nutrients/CFWG meeting will be in March or April.

Meg then went through the deliverables that had a red or yellow stoplight code. The Broadscan Screening of Biota for ECs should be a red light, not green. The PFC seal work for the project will be completed by the end of March. There were some issues with the collection of small fish,

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this is on-going. Meg noted that the money for the PAH in Flatfish report and for the Broadscan Screening project was provided upfront so the RMP does not have much leverage in speeding up the delivery of the reports.. The Hotspot Sediment Quality Followup study is related to the other two benthic reports (the 2011 and 2012 SQO work and the SQO for the EBMUD site off Pt. Isabel). The final version of the reports will be completed by March. The Dioxins in Bird Eggs, Stormwater, and Sediment report is still unresolved, the sediment sampling has not yet occurred. Before sampling occurs, the project needs to be brought to the March TRC meeting because the sampling plan has changed. The Water Board suggested changing the study design from looking at dioxins in cores to looking for dioxins and other contaminants in the Bay margins.

### Discussion

Mike Connor was interested in preliminary results from the PAH in Flatfish report; Meg responded that they are not seeing much of an effect on juvenile flatfish. Mike also asked about the status of the Benthic Assessment for the Mesohaline report; Meg replied that the report is underway and Eric Stein is presenting an update at the EEWG meeting. Tom Mumley was worried that deliverables are listed as green that most likely will not be completed in time. For example, the PFCs in Bay Biota report will not be completed by March if the sampling is still underway Tom was also concerned about sending the new Dioxins in Bird Eggs, Stormwater, and Sediment study design straight to the TRC without consulting with the dioxin team first. Meg responded that she believes the plan has already been approved by the dioxin team, but she will double check. Mike speculated if any management actions could be taken even if high concentrations of dioxins were found in the Bay margins. Mike's final comment was that the loading studies are huge accomplishments and that the RMP may want to brag about the studies at the State of the Estuary meeting. Meg replied that 2011, 2012, and 2013 storm water data would be available in time for the meeting.

### Action Items

13. Meg Sedlak will make sure the Dioxin Strategy Team supports the proposal to use 2012 Dioxin Strategy sediment funds to monitor dioxins and other contaminants in the Bay margins.

### **10. Plus/Delta, Set next meeting date and Agenda Topics [Thomas Mumley]**

The next SC meeting is on April 23<sup>rd</sup> from 10 am to 3 pm. Possible topics include a discussion of the new Pulse outline, re-evaluating dredger fees, an update from the ECWG on the results from the PBDE synthesis, and re-evaluating the nutrients strategy and its connection the RMP. Peter Carroll mentioned that the SC never heard feedback from the RMP communications survey. Karin North said that the SC did talk about the results, but there wasn't much of a response. Peter said he would like to see the data from the survey at the next meeting. For plus/delta, Karin said she appreciated the nutrient update and the new budget summary format and Jay added that he appreciated the input on the Pulse outline.

### Action Items

14. Jay Davis will follow through as needed with distribution of the RMP communications survey and present the results at the next SC meeting.