

**RMP Technical Review Committee Meeting
September 17th, 2007
San Francisco Estuary Institute
Meeting Minutes**

Attendees:

Bridgette DeShields (BBL/WSPA)
Tom Hall (South Bay Dischargers (EOA))
Rob Lawrence (US Army Corps of Engineers)
Jim McGrath (SFEI Board of Directors)
Trish Mulvey (SFEI Board of Directors)
Chris Pincetich (EBMUD)
Francois Rodigari (EBMUD)
Chris Sommers (Stormwater Agencies (EOA))
Karen Taberski (RWQCB)
Dave Tucker (City of San Jose)
Luisa Valiela (USEPA)

Mike Connor (SFEI)
Jay Davis (SFEI)
Ben Greenfield (SFEI)
Letitia Grenier (SFEI)
Katie Harrold (SFEI)
Lester McKee (SFEI)
Meg Sedlak (SFEI)
Don Yee (SFEI)

1. Introductions and Approval of Agenda and Minutes

Dave Tucker chaired the meeting. Meg Sedlak gave a brief update on the action items from the July TRC meeting. A list of sampling sites for the UCSC mercury special study has been sent to the TRC per its request. Andy Cohen has begun the invasive oyster project; anyone who is interested in serving on the advisory panel should contact Andy Cohen directly. A revised proposal was sent out per the TRC's request.

Meg Sedlak noted that Dave Tucker will be leaving the TRC to join the Steering Committee (assuming approved by BACWA) and SFEI Board of Directors. A new chair will need to be solicited and elected.

ACTION ITEMS:

- Meg Sedlak to solicit prospective chairs for TRC.

2. Information: Steering Committee July Meeting

Ms. Sedlak summarized the Steering Committee meeting that met on July 24th. The 2007 budget is largely on track. The SC approved a variety of additional expenditures including:

the acceptance of Copper Development Agency funding for analysis of cores for copper; the analysis of bird eggs; reanalysis of 2005 bivalve tissue; analysis of sportfish for dioxin; participation in the NWQMN; and the invasive oyster project. The SC also approved the proposed redesign of Status and Trends.

3. Action: Revised RMP Management Questions

Jay Davis presented a revised RMP management questions. A revision of the management questions was driven by each of the workgroups' developing a topical prioritized list of questions that the workgroups will address over the next five years. He noted that the previous version of management questions was not prioritized and that to have a prioritized list would improve management and guide RMP actions, such as selecting Pilot and Special Studies. He noted that the Contaminant Fate Workgroup (CFWG) has prioritized their goals and is considering writing a request for proposal (RFP) concerning mercury studies in the Bay.

Mike Connor asked to what extent do we use management questions and to what extent do we use TMDLs and permit processes to guide the RMP? Chris Sommers noted that ideally the needs for these two would converge. Karen Taberski noted that Regional Board staff is very involved in both the workgroups and the committees so the two should be integrated. Chris Sommers noted that this discussion is not just prioritization of the workgroups, but of the whole program. He stressed the need to be transparent and formalize the discussion.

Jay Davis elucidated the proposed changes of the management questions. The goal of the program is to provide information needed to support management decisions.

Francois Rodigari asked how the goals of the RMP are integrated with the information needs for NPDES permits and TMDLs. Karen Taberski noted that the Regional Board had developed a table several years back that outlined regulatory needs and RMP programs that address these needs.

A suggestion was made that this discussion of the establishment of linkages be made by the Steering Committee rather than the TRC. Dave Tucker noted that there are many competing interests. Chris Sommers suggested that the TRC make a recommendation to the Steering Committee. He suggested that the dischargers provide the RMP with a list of possible projects that they need help with. As an example, he stated that Lester McKee's Prop 13 proposal outlined what parts of the permit requirements his study would address.

Jay Davis then explained each of the changes made to the RMP objectives and management questions.

Objective 1: Describe spatial patterns and long-term trends of pollutant concentrations in the Estuary. Dave Tucker noted that question 1.3 does not have to be cost-effective, the effectiveness is much more important. He suggested taking out the "cost". Chris Sommers suggested incorporating question 1.3 into 1.1. He noted that 1.3 should be an inherent part of 1.1, not exclusive. Jay Davis noted that keeping the questions separate has the advantage of

justifying Special Studies to test new methods. Mike Connor suggested that the order of questions should be changed. He suggested that 1.3 is needed before 1.1 or 1.2.

Objective 2: Project future impairment. Jay Davis suggested that question 2.3 could be folded into earlier questions. Mike Connor asked how 2.2 is different than 2.1. Jay Davis suggested that there are cases where impairment is not being caused yet, but that the potential impairments need to be known and caught beforehand. Mike Connor suggested changing the wording to “predicted to cause impairment” instead of “increase”. Jay Davis noted that it is difficult to prove. Mike Connor noted that the question is missing the element of risk. Bridgette DeShields suggested changing the wording to “increase and may cause impairment”.

Objective 3: Describe sources, pathways, and loading of pollutants entering the Estuary. Mike Connor noted that question 3.3 is necessary. Jay Davis noted that it is a major driver for long-term monitoring versus Pilot and Special Studies. Dave Tucker suggested that “most” is necessary in 3.3. Chris Sommers suggested that “important” is not needed in 3.3. Trish Mulvey suggested that “management activities” is too limiting in 3.3. She suggested adding “and others”.

Objective 4: Characterize ecological and human health risks due to pollution of the Estuary ecology. Chris Sommers suggested that the level of risk needs to be defined in 4.1. He noted that everything poses some amount of risk. Dave Tucker noted that pollution can have different meanings beyond chemicals such as biological and physical. Jay Davis indicated that the program has a chemical focus. Mike Connor noted that 4.1 implies a TSCA-like emphasis on risk. He suggested that the question be merged with 4.2. He noted that the RMP relies on others to identify risks. Chris Sommers noted that impairment includes elements of risk and that in the case of emerging contaminants the potential for impairment and risk are unknown. Mike Connor noted that an outside perspective might see 4.1 as implying a different direction than if it were merged with 4.2. Chris Sommers noted that 4.1 could lead to a lot of basic research on emerging contaminants than has been done by the program in the past. Meg Sedlak indicated that the Emerging Contaminants Workgroup wanted “risk” as a screening tool when evaluating new compounds. Dave Tucker noted that the question was getting into the regulatory field. Bridgette DeShields suggested changing “risk” to “potential for adverse effects”.

Chris Sommers suggested that there is some merit to keeping the different management questions mutually exclusive. He suggested restricting the wording to keep out compounds known to impair the Bay. Jay Davis indicated that this is not always the goal. He cited studies looking at mercury in birds, to fulfill question 4.3 even though the Bay is known to be mercury impaired.

Objective 5: Use monitoring information for comparison to relevant regulatory guidelines and for establishing regulatory guidelines. Jay Davis indicated that objective 5 adds establishing guidelines as an explicit goal. Studies have been conducted for this purpose in the past, but it is now formalized. Dave Tucker suggested that the word “relevant” is unnecessary; he suggested it leads to the question “what are the irrelevant regulatory

guidelines". He also suggested that 5.3 should be reworded to make sure that the program is not stepping into the Regional Boards job. Jay Davis indicated that it was meant to be a management question and that managers need data to answer the question. Bridgette DeShields suggested changing the wording to "data". Mike Connor suggested that "appropriate guidelines" should be changed to reflect that the question is trying to get the data to inform an appropriate guideline, not set the guideline.

Jay Davis presented the mercury management questions.

Question 1: Where is mercury entering the foodweb. Jay Davis indicated that the CFWG is thinking that the Exposure and Effects Workgroup's Small Fish study may be useful on a larger scale in getting at question 1. Trish Mulvey noted that Kit Conaway's new paper, in press, suggested going lower in the food web than fish. Lester McKee suggested that uptake by vegetation could be interesting. He noted that the Engineer Research and Development Center (ERDC) is working on this topic. Jay Davis suggested creating a table of different indicators and their pros and cons.

Question 3: Can we do anything about these high-leverage processes, sources, and pathways. Chris Sommers asked how far 3.2 would go into the watershed. He noted that it could be interpreted as the RMP suggesting changes. Jay Davis noted that historically the RMP has not gone very far into watersheds. Dave Tucker indicated that objective three needs to be reworded; he was uncomfortable with "we do anything" and suggested using the wording of 3.2.

Jay Davis said that each workgroup will be coming up with their top questions as part of the five-year plan.

ACTION ITEMS:

- Jay Davis to update management questions based on committee's feedback and send out to TRC for comment before bringing to SC.

4. Action: Prioritization of 2008 Pilot and Special Studies

Meg Sedlak presented an updated table on the detailed scopes of work for the 2008 Pilot and Special Studies. The TRC requested detailed proposals from the top ranked studies. The summary table of proposals has been annotated to include science, policy, and permit relevancy. She noted that the goal is a recommendation to the Steering Committee as to which projects to fund. In 2008 there is a total of \$310,000 available for Pilot and Special Studies as well as an additional \$160,000 that is left over from previous year reserves.

Jay Davis noted that the Sources Pathways and Loading Workgroup (SPLWG) proposal "methyl mercury loading inventory for San Francisco Bay" will be funded through the 2007 Data Integration task. A 2007 Data Integration task was to complete the multi-box model and then continue with total mercury. But, because total mercury is no longer an emphasis, the funds budgeted for this task will be applied to the methyl mercury loading inventory.

Meg Sedlak noted that the 2008 Pilot and Special studies pertaining to mercury had been deferred until an RFP for mercury is developed. The mercury workgroup recommended setting aside \$200,000 for funding mercury studies.

Mike Connor asked if there are permit requirements that aren't covered. Dave Tucker asked what could be added, from a technical point, to address the risk component of permits.

Dave Tucker noted that a fish consumption study had been discussed before. Karen Taberski noted that a very well funded study on fish consumption was conducted approximately 10 years ago and that it is a difficult and expensive study to do. Mike Connor suggested using modeling and fish productivity to calculate how much mercury is being consumed.

Lester McKee presented his proposals. The "Guadalupe River watershed model development" study would look at rainfall runoff and modeling. Luisa Valiela asked if this budget included funding for heavy rain/first flush sampling. Lester McKee said that Mallard Island is still separate and that if a rain event in excess of 150,000 cfs occurred they would apply for contingency funds. Lester McKee indicated that the Guadalupe study will likely be funded through the Santa Clara Valley Watershed District and that it would be possible to include another contaminant of interest, such as PCBs, if the RMP had an interest. Chris Sommers asked if the second study, "watershed specific sediment loads – a new estimate for predicting sediment quality," would inform the first. Lester McKee said that it would generally, but that the two studies are at different time scales. Chris Sommers noted that the amount of sediment loads to the Bay and the amount of contaminants bound to sediment have to inform each other in order to extrapolate to a Bay-wide model. Lester McKee indicated that the Guadalupe study will provide a platform to extrapolate to other watersheds. Chris Sommers suggested that the Guadalupe study could be seen to fill in data needs as outlined in the MRP. Mike Connor suggested combining and refining the proposals based on the MRP; he suggested the committee approve the studies with the understanding that the project will be discussed with stakeholders.

Meg Sedlak presented the EEPS proposals. She noted that the "impacts of PAH-contaminated sediment on early life history stages of benthic fish" had been moved from 3rd to 2nd rank because of the questions about the appropriateness of the 1 ppm PAH effects threshold implement for management of dredged materials. She noted that Kevin Kelley's study, "characterization of thyroid endocrine disruption in San Francisco Bay fish" is attempting to link genetic changes to population effects. Dave Tucker asked how the study could be tied to population effects. Meg Sedlak noted that the endocrine system controls a number of factors including growth and reproduction. Ideally indicators identified in this pilot study would be used in the sportfish monitoring. Dave Tucker noted that the link is quite complicated. Karen Taberski noted that the study is much larger and includes looking at contaminants in individual fish livers and relating the contaminants to individual effects. She also noted that Kevin Kelley brings other funding to the project and that thus far she feels that the RMP has gotten its moneys worth and that one additional year of funding will allow the project to be wrapped up. Luisa Valiela noted that this project addresses objective 4 and that because the question is more complicated it will take longer than others to answer.

Karen Taberski noted that the project is making connections between contaminants and effects.

Meg Sedlak and Ben Greenfield presented the CFWG proposals. She noted that the "remote observation of episodic sediment transport patterns in San Francisco Bay, CA" project will fund Tasks 2 and 3 of an on-going 2007 project evaluating the use of satellite imagery to estimate suspended sediment loads. Ben Greenfield briefly presented the "comparison of contaminant patterns between San Francisco Estuary and the coast" proposal. This proposal is to compare RMP and City and County of San Francisco (CCSF) sportfish studies and to compare the Bay trends to off-shore trends. Karen Taberski asked if there is coastal fish contaminant data that could be used. Ben Greenfield noted that CCSF collects a small number of fish for risk assessment and that the data is available.

Meg Sedlak and Susan Klosterhaus presented the Emerging Contaminants Workgroup (ECWG) proposals. Susan Klosterhaus presented the "non-PBDE current use flame retardants in biota" proposal. She noted that other flame retardants are replacing PBDEs and that this project will serve as a general first-order screening for the expected replacements. Meg Sedlak presented the "perfluorinated compounds in biota" proposal. She noted that the concentrations of perfluorinated compounds are some of the highest in the world.

Jay Davis noted that the total cost of the proposed Pilot and Special Studies plus the \$200,000 for mercury studies is approximately \$470,000. If the EEPS small fish study is expanded to \$150,000, an additional \$100,000 in the budget would need to be identified.

Trish Mulvey asked about several prior proposals concerning mercury and clapper rails and mercury and song sparrows. Letitia Grenier presented these two EEPS proposals. The "quantifying sources of mercury in Clapper Rail diet to develop indicators for monitoring Rail exposure to mercury" study proposes to collaborate with an on-going USGS study, which is putting radiotelemetry on the birds. It is a unique opportunity to get blood samples from Clapper Rails, which are endangered, and could lead to the development of a surrogate for monitoring mercury in rails. In addition, it could determine where mercury in their diet comes from. The study is going on this winter and possibly next winter. The "surveying tidal marshes for mercury bioaccumulation: is elevation the factor controlling mercury in the food web?" is another unique collaborative opportunity. The South Bay Salt Pond Restoration Project will be surveying 30 ponds south of the San Mateo Bridge in 2008. The proposed study would fund parallel surveys in marshes in northern San Francisco Bay and Suisun Bay. The surveys will measure characteristics of the marshes such as elevation that may lead to mercury bioaccumulation.

Jay Davis and Meg Sedlak led a discussion on the budget for Pilot and Special Studies. Chris Sommers noted that high leverage mercury pathways are very important, but asked where the \$200,000 suggested budget came from. Jay Davis indicated that the number was from the CFWG Five-Year Plan. Chris Sommers asked if the RFP would be for methods or questions. Jay Davis said that Richard Looker had suggested "no-regret studies," which would provide valuable information regardless of the results. Trish Mulvey asked if some of the studies could be postponed one year in order to do the time-sensitive EEPS studies.

Chris Sommers asked what the importance of expanding small fish was. He suggested that in early 2008, \$50,000 be allocated based on responses to the RFP and that other studies be funded in 2009. It was noted that small fish sampling would occur in September and October of 2008. Chris Sommers suggested that the analyses be postponed until 2009.

Mike Connor suggested sending the mercury proposals to the Mercury Workgroup and Dave Tucker agreed. Trish Mulvey asked if the opportunity to do the time-sensitive EEPS studies would be lost if the decision was postponed. She asked if the Clapper Rail samples were archivable. Letitia Grenier indicated that it is possible to archive the samples but the analyses are only a small part of the budget because the samples have to be prepped before archiving. She said that the study could be conducted for \$46,000 if the chemical analyses were deferred. Chris Sommers asked what would be learned from birds that can't be learned from fish studies. Letitia Grenier noted that depending on the species, bay fish may represent a relatively large spatial area. In addition, bay residents are able move in and out of an area. The resulting picture from these Bay fish may be somewhat difficult to interpret. In contrast, in marshes, the fish may be trapped in ponds and a correlation between sediments, water and biota to fish quite distinct. Similarly, birds such as song sparrows have very limited ranges and this can provide a great deal of information regarding the uptake of mercury.

Dave Tucker suggested the Mercury subcommittee make a recommendation to the TRC and that approximately \$200,000 for the mercury studies be set aside. Dave Tucker motioned that the non-mercury studies, 1, 2, 5, 8, 9, 11, and 12, be funded. These included: SPLWG - 1) Guadalupe River watershed model development and 2) watershed specific sediment loads – a new estimate for predicting sediment quality; EEPS - 5) characterization of thyroid endocrine disruption in San Francisco Bay fish; CFWG - 8) remote observations of episodic sediment transport patterns in San Francisco Bay, CA and 9) comparison of contaminant patterns between San Francisco Estuary and the coast; ECWG - 11) perfluorinated compounds in biota and 12) non-PBDE current-use flame retardants in biota) be funded. Tom Hall and Chris Sommers seconded. The motion passed unanimously.

5. Information: Program Plan for 2008

Meg Sedlak presented the 10-year plan for the RMP and outlined the major elements for the 2008 plan which would be similar to year's previously.

6. Discussion: Planning for the Next Program Review

Mike Connor opened discussion on the next program review by asking how frequently reviews should occur, what level of detail they should include, and if the external reviews of the program are useful.

Karen Taberski noted that there has been internal discussion at the Regional Board regarding this issue. She indicated that if another review is going to be conducted a lot of effort will be necessary; the last review did not adequately inform the reviewers about the program and the results reflected the lack of information. Karen noted that the external review in workgroups

by the invited advisory panel members is very useful, particularly with regard to Pilot and Special Studies proposals.

Trish Mulvey suggested it may be premature to do another review until the internal restructuring is complete.

Dave Tucker indicated he felt that the RMP is doing too many reviews. He noted that it takes time, seven to ten years, to incorporate suggestions and see if the changes are in place and how they are affecting the program. Five-year reviews do not leave much time for adjustments; nonetheless, validation from an external group is valuable. Jim McGrath noted that with the perspective of time the first review was necessary, but now the RMP has built change into the culture and design of the program. He suggested asking the question of review in 7 years.

Mike Connor noted that the program is getting strong peer-review at the workgroup level, but that the big picture is not getting reviewed. He noted informing reviewers about the program takes a lot of energy. He suggested using external workgroup review-panel members. He noted that the Five-Year Plans are useful for looking at the path the program has/is following and how the program is changing.

Chris Sommers indicated that he generally agreed about the major issues: organizational structure, how decisions are made, etc. The major changes from previous reviews were adding more biological aspects and separation of the RMP and SFEI. He noted that the RMP is now dealing with questions of how to make decisions and how to deal with competing interests. He asked if peer-reviews can speak to organizational aspects.

Dave Tucker suggested two reviews, one by workgroup panel members and one by the Steering Committee and outsiders. Mike Connor noted that the major change since the last review was the end of the CEP. He indicated that the SC could discuss this change.

Luisa Valiela summarized the sentiment that the TRC does not see a strong need for a review right now and asked if the SC has a different perspective. Karen Taberski added that the TRC feels there is adequate technical review and suggested that the outstanding issues are structural.

ACTION ITEMS:

- Meg Sedlak and Jay Davis to bring question of another program review and TRC recommendations to the SC.

7. Information: Update on the Pulse of the Estuary and the RMP Annual Meeting

Jay Davis updated the committee on the status of the Pulse of the Estuary and the RMP Annual Meeting.

The Committee endorsed Chuck Weir's idea of personal choices affecting the Bay.

Jay Davis raised the issue of switching the Pulse to a biannual publication. He noted that the Pulse costs \$80,000 per year (\$60,000 for SFEI labor and \$20,000 for printing), which does not cover the full cost because many of the articles are by invited authors. The Regional Board had suggested switching to biannual publication.

Dave Tucker indicated that the question is not a TRC issue and should be raised with the SC, but that he uses the handout and believes that more money should be spent on raising awareness of the RMP and its activities. Francois Rodigari noted that the change could have a technical impact on studies because there would be less pressure to get results in a timely manner. Chris Sommers agreed with Dave Tucker that the Pulse is an important tool in raising awareness. He noted that many people do not pay attention to the RMP until they get the Pulse each year. He noted that city officials and regulated industries use the Pulse and it influences the understanding of the Bay, RMP activities, and decisions regarding permits. He indicated an annual reminder about what the funds support is extremely useful. Jim McGrath noted that the Pulse is also used as a curriculum tool in high schools and colleges around the Bay. Mike Connor agreed with the Committee that the Pulse forces many people to think about the Bay. The Committee also noted that \$80,000 is not a large sum given its substantial impact.

8. Information: QA/QC Comparison of Whole Water Results to Dissolved and Particulate Fractions

Don Yee presented a comparison of PCB results, 4 L whole water samples to 100 L dissolved (XAD2 columns) and particulate (filter) fractions. He noted that there does not appear to be a consistent bias. In 2003 only one site was compared, the 4 L results were greater than 100 L. In 2004 and 2005, two comparisons each year at different sites, one site had greater concentrations in the 4 L sample and one had greater concentrations in the 100 L sample. The bias would be expected to correlate with SS and DOC, but the results do not.

Francois Rodigari suggested that the results are due to a larger impact of blanks in the smaller concentration samples. Don Yee said he did not remember the 4 L samples being more blank contaminated than the 100 L. Francois Rodigari asked if labeled surrogates are used and Don Yee indicated that AXYS uses surrogates in both 4 L and 100 L samples but he thinks only one congener is used. Francois Rodigari suggested looking for breakthrough and stripping of filters and columns. Meg Sedlak noted that one column of each sample is spiked.

Jim McGrath asked what we are learning about PCBs. Mike Connor noted that organochlorine pesticides are decreasing in concentration and very close to being in compliance so being able to measure the low level concentrations is very helpful.

An alternative method would be to switch to liquid/liquid extraction. This method is accurate and low total organics concentrations, but underestimates the concentration when total organics concentrations are high. Also, the amount of water required is prohibitive. Maintaining the status quo would consist of continuing the comparisons, maintain awareness

of differences and possible sources, think of the results as minimum concentrations especially at low levels.

9. Action: Rationale for Inclusion of Pyrethroids in the Status and Trends Program

Don Yee presented a proposal for including pyrethroids in Status and Trends. Organochlorine and organophosphate (OP) pesticide concentrations are declining in the Bay. The RMP needs to change its analyte list to include the pesticides most likely to cause toxicity and gather trend data on replacement pesticides. The ECWG recommended, because pyrethroids are equal to or have surpassed OP pesticides as current-use pesticide, that pyrethroids are not an emerging contaminant and should be incorporated into Status and Trends.

Don Yee noted that although pyrethroids are mostly found in sediment they are diluted in Status and Trends sediment collection because the top 5 cm are mixed. Mike Connor asked if pyrethroids could be analyzed for in water. Don Yee indicated it would be difficult because of the compound's hydrophobicity it would be in particulates. Additionally, dry season sampling would reduce the chances of finding detectable concentrations. Chris Sommers noted that in statewide and CEP studies concentrations were higher in wet weather. He also recommended looking in sediment.

Don Yee indicated that the cost of including pyrethroids in Status and Trends would be approximately \$20,000 to \$30,000 (45 samples at approximately \$500 to 600 per sample). Mike Connor said that pyrethroids should at least be analyzed for in toxicity samples. Chris Sommers asked what the cost of OP pesticides analysis is and if their inclusion should be reevaluated. He noted that if OP pesticides are not being detected in creeks they probably will not be detected in the Bay.

ACTION ITEMS:

- Don Yee to write a proposal for inclusion of pyrethroids in Status and Trends to the TRC, including costs and current status of pesticides.

10. Information: Update on South Bay Salt Pond Monitoring

Letitia Grenier presented an update on the South Bay Salt Pond monitoring. The RMP provided \$25,000 in 2006 to fund part of the study. The study uses habitat-specific biosentinel species to study mercury cycling at the habitat scale. The biosentinels are abundant, year-round residents with small home ranges that play important role in food web. The study compares within species concentrations of mercury between the salt ponds and sloughs before restoration as well as between the salt ponds and tidal marshes after restoration.

An East coast marsh study found higher concentrations of mercury in birds that feed on insects than piscivorous birds. Concentrations of mercury in Bay marsh birds were found to be higher in the North Bay. Letitia Grenier noted that based on sediment and small fish results, the expected result would have been higher marsh bird mercury concentrations in the

South Bay. One hypothesis is that older higher marshes with more variable elevation have different processes that result in more bioavailable mercury than younger more subsided marshes. Elevation can be a proxy for frequency of wetting and drying, amount of organic matter (peat), and marsh age. Fish from tidal marshes and salt ponds had similar concentrations of mercury. Brine flies from pond A8, which is managed as a seasonal pond that dries out, had much higher mercury concentrations than brine flies from ponds that stayed wet year round.

Letitia Grenier said the report schedule is at the end of every year. Meg Sedlak sent the 2006 report out to the TRC along with the agenda package.

Letitia Grenier indicated that the group was currently identifying hotspots and the next step would be determine why they are hot spots. As an aside, Letitia Grenier also noted that they saw bill deformities in greater than seven percent of sparrows (n = 60). This could be an indication of PCB contamination. It is likely that many of the birds with bill deformities and other effects die young and are not being captured or counted. She indicated that a proposal is being developed to research the rate of deformities and determine if there is PCB contamination.

11. Program Update

Meg Sedlak presented the Program update. She noted that the workgroups have been very active. EEPS is meeting again November 26th and CFWG is meeting December 7th. The sport fish data is in and the report will be ready by the end of the year. The benthic group was in the Delta with DWR at the time of the meeting sampling.

USACE requested that the small fish study for 2007 include three additional sites at a cost to the RMP program of approximately \$5,000. The RMP will contribute approximately \$3,000 in labor and the USACE will contribute \$2,000.

12. Next Meeting

The next meeting will be Tuesday December 18th.