



RMP PCB Workgroup Meeting

June 2, 2020 (teleconference)

Meeting Summary

Advisors and Workgroup Members	
Frank Gobas (Simon Fraser University)	Jon Konnan (EOA)
Bridgette DeShields (Integral Consulting)	Luisa Valiela (EPA)
Craig Jones (Integral Consulting)	Mary Lou Esparza (CCCSD)
Jan O'Hara (SFBRWQCB)	Ned Black (EPA)
John Coleman (Bay Planning Coalition)	Setenay Frucht (SFBRWQCB)

RMP Staff and Contractors:

- Alicia Gilbreath (SFEI)
- Diana Lin (SFEI)
- Don Yee (SFEI)
- Jay Davis (SFEI)
- Lester McKee (SFEI)
- Marco Sigala (MLML)
- Melissa Foley (SFEI)
- Nina Buzby (SFEI)
- Yeo Myoung Cho (Stanford University)

The last page of this document has information about the RMP and the purpose of this document.

1. Introduction, Meeting Goals, Agenda Review

Jay Davis began the meeting by welcoming participants and quickly reviewing tips for using the Zoom platform. While going through the day's agenda, Jay noted that the meeting would not be as overloaded as usual due to the call held earlier in the spring. With these previous discussions, main goals for the meeting would be prioritizing the 2021 study proposals and reviewing potential SEP proposals.

2. Information: RMP Planning Overview

Jay provided context on the organization of the RMP and how the decisions made at the day's meeting fit into the broader Program activities and budget. While doing so, Jay commented that the focus of RMP studies is informing management decisions. The management priorities

specific to the PCBWG include generating data that will help inform any PCB TMDL revisions and developing predictive modeling tools to evaluate potential cleanup actions.

Jay then explained the difference in funds that will likely be allocated to PCB studies compared to the preliminary estimates in proposed elements in the Multi-Year Plan. Jay suggested that participants should keep in mind any strategies for budget reduction (e.g., scaling, phasing, archiving) during the proposal presentations.

3. Discussion: Steinberger Slough - Draft Conceptual Model Report

With the goal of moving towards closure on the report, Jay gave a quick summary of the conceptual model work done on the Priority Margin Unit (PMU) made up of Steinberger Slough and Redwood Creek. The meeting participants then asked some final questions and provided additional comments. Jon Konnan brought up the topic of how clean-up activities are awarded credits - noting that the report may be overestimating the impact on loads from the Habitat for Humanity source area showing a high proportion of Aroclor 1242. Jon recommended that the report include more information on the Habitat for Humanity source area, which is less than 2 acres, how it could have such a big influence on loads, and the potential disconnect between load reduction and impairment.

There was additional discussion related to the lack of biota observed in the Steinberger Slough portion of the PMU. Multiple participants contributed ideas on possible contributing factors such as shallow waters and low tides, or possible toxicity to benthos. Marco Sigala, who attempted biota collections in the area, noted that the prey fish could prefer the adjacent marsh habitat over the channel's mucky bottom. Marco noted that he has trawled other shallow areas and obtained fish.

Jan O'Hara noted that the mass budget model suggests that this PMU would not respond markedly to load reductions, which raises the question of the impact to the Bay from upland source reduction, and suggests the possible need for revisiting aspects of the TMDL and/or refining models. Don Yee replied that the model is more illustrative than predictive, and may be underestimating the magnitude and timing of the response.

4. Information, Decision: Updates on Studies in Progress

Building off the discussion on biota in Steinberger Slough, Jay updated the group on the sport fish collection efforts in other PMUs. There were also difficulties in collecting shiner surfperch in Emeryville Crescent, and due to the coronavirus closure of the Moss Landing lab, fish processing was significantly delayed and data will not be available until later in the year.

Alicia Gilbreath provided the meeting participants with an update on stormwater sampling efforts, noting that the very dry rainy season resulted in fewer collections. With approximately \$33,000 available in the budget, SFEI recommended that these funds should be carried over to

the following year. To provide context on this recommendation, Alicia shared the results from the few watersheds with multiple data points. In response to these data, Dr. Frank Gobas asked about loads estimates and flow measurements. Alicia commented that the Regional Watershed Spreadsheet Model (RWSM) was the most useful tool, given that actual data collection would require costly equipment installation. The workgroup members were in support of carrying over funds to 2021 to allow for continued stormwater work.

Lastly, Diana Lin briefly explained the status of the 2020 special study deploying passive samplers in Steinberger Slough. Due to the shelter in place orders, SFEI and Stanford University have not been able to conduct fieldwork. However, the Department of Fish and Wildlife did not have any objections to proposed sites and SFEI recently enacted protocols allowing fieldwork for the summer. The remaining restrictions include scheduling work during low-low tides, as well as approval from Stanford. Diana also noted that delaying the field work to the wet season would not be an issue, as long as low tides occur during daylight hours.

5. Information: PCB Modeling in the RMP

Based on discussion during the April 20th PCBWG call, many management questions of interest could be addressed by modeling. To preface the proposed special study, Jay shared highlights of previous modeling efforts that contributed to the PCB TMDL, which included significant development of useful tools throughout the years. For example, a multi-box model allowed modeling of different bay segments independently. Craig Jones also noted that the USGS now has a Delft 3D model that could be helpful in reaching goals to develop a higher fidelity transport model.

Workgroup members contributed other perspectives on what steps and approaches will benefit PCB-related modeling work. Setenay Frucht noted possible overlap between PCB and sediment modeling and the importance of coordination on both management questions and model development, and other participants brought up additional connections with other RMP workgroups. In addition to integrating WG goals, Frank Gobas and Craig Jones noted that modeling would be a helpful platform to integrate and maximize understanding of existing data.

The importance of not overcomplicating the work was also discussed. Frank Gobas commented that finer resolution models are difficult to develop, provide data for, and interpret - The conversation covered what information various levels of resolution would provide. For example, a 1-box model is informative at a whole-Bay scale, while looking at differences between segments or at margin and channel transport would require finer resolution. Craig Jones recommended only adding complexity as necessary to answer management questions, and noted that building a lower resolution contaminant model on a higher resolution model of hydrology can be an effective approach.

6. Decision: PCB Workgroup Proposals for 2021, Updated Multi-Year Plan and SEP Ideas

The Workgroup was presented with three special study proposals; brief questions after each presentation were answered prior to a longer overall prioritization discussion. Don Yee began the item by presenting a proposal to calculate ambient sediment thresholds specifically for the Bay margins to provide dredgers with more specialized reuse limits and possibly allow more reuse options. Prior to the actual statistical analysis, Don noted that conversations would need to be held with stakeholders to discuss goals, followed by drafting and review of an analysis plan. The timeline of the study will also be dependent on when North Bay margins data are available. The plan for sample collection is for summer 2020, though current field work delays and lab closures could prevent the data from being available on time. Participants only had a few technical clarification questions after Don's presentation.

Diana Lin then presented a proposal for a study to begin monitoring efforts to detect the impact of remediation actions in the San Leandro Bay (SLB) PMU. The study would involve passive samplers and analysis of sediment trap samples, with in-kind support from Stanford University similar to that of the current Steinberger Slough work. The study was previously planned for a later year in the WG's Multi-Year Planning (MYP) table; however, there are upcoming cleanup actions planned for the area that increased the study's urgency to establish baseline data. The questions concerning this proposal spanned a range of method logistics, including deployment timing, number of sites and replicates, as well as planned response time after management actions are complete. There was agreement that the group should wait for follow-up sampling until a sufficient amount of time after clean-up actions are taken to ensure usable results. However, there was some uncertainty related to the sampling design because of the lack of experience in using passive sampling outside of recent work done by SCCWRP in Southern California. In relation to this point, Bridgette DeShields brought up the added benefit that this work would likely contribute knowledge to the sampling design, possibly providing details on whether trends in contaminant levels can be detected in such a manner.

Jay presented the final proposal to develop a PCB modeling strategy that would mainly fund labor hours to review existing modeling efforts by other RMP workgroups and the NMS and convene additional meetings with the PCBWG and staff from other modeling teams (e.g., sediment workgroup, ECWG). Craig Jones would also contribute labor and lead the project. Because the previous item included time for discussion on modeling goals there were few questions related to Jay's proposal presentation. Jon Konnan did comment that because load reductions are the biggest focus of the current TMDL, establishing a model that has a more refined understanding of load impact would be most valuable. Currently load reductions are deemed equivalent despite differences in area and impact on the Bay food web, and while a more refined, area-specific approach will impact regulatory logistics, modelling results would still be a helpful first step.

Before the conversation turned to prioritizing the proposals, Jay also mentioned ideas for SEPs, suggesting projects that are planned for further out in the MYP, including a surface sediment

survey in Steinberger Slough/Redwood Creek and a prey fish survey in Steinberger Slough/Redwood Creek. Jay also provided a few suggestions on scaling down the special studies to better meet the 'available funds' projection of \$65,000. Two approaches that the group agreed upon were phasing or delaying the margins ambient threshold work, given that the data would not be available right away at the beginning of 2021. Additionally, there was consensus to reduce the analytical costs of the SLB monitoring. Suggestions included reducing the number of sites, replicates, and archiving samples for later analysis. Because the study involves collaboration with Stanford, the proposal authors would need to confer to ensure that any reductions wouldn't impact Stanford's ability to conduct the project. SFEI staff were tasked to provide information on what could be accomplished at a lower cost.

Jay brought up the point that the modeling strategy work could possibly be funded through another funding channel like MMP or undesignated funds, given the fact that the work would overlap with multiple other workgroup goals. The group then voted on a ranking of the studies, which resulted in a close tie for top priority between the modeling strategy and SLB monitoring. Bridgette commented that this fact should be brought up during TRC discussions.

The group then agreed that the suggested SEP studies that Jay showed at the beginning of the item would be good options, and did not have any other ideas to add to the list.

7. Review Next Steps and Action Items

After the prioritization of the special studies, Jay reviewed the action items related to updating the proposals in preparation for the June TRC meeting, as well as next steps for the workgroup. These steps included discussing modeling strategies with other RMP Workgroups, finalizing the Steinberger Slough conceptual model report, and possibly planning a meeting for the fall to update management questions and revisit the MYP. Jay thanked the Workgroup members for their attendance and commented on the effectiveness of the participant's efforts in April in making this meeting a success.

Adjourn

About the RMP

RMP ORIGIN AND PURPOSE

In 1992 the San Francisco Bay Regional Water Board passed Resolution No. 92-043 directing the Executive Officer to send a letter to regulated dischargers requiring them to implement a regional multi-media pollutant monitoring program for water quality (RMP) in San Francisco Bay. The Water Board's regulatory authority to require such a program comes from California Water Code Sections 13267, 13383, 13268 and 13385. The Water Board offered to suspend some effluent and local receiving water monitoring requirements for individual discharges to provide cost savings to implement baseline portions of the RMP, although they recognized that additional resources would be necessary. The Resolution also included a provision that the requirement for a RMP be included in discharger permits. The RMP began in 1993, and over ensuing years has been a successful and effective partnership of regulatory agencies and the regulated community.

The goal of the RMP is to collect data and communicate information about water quality in San Francisco Bay in support of management decisions.

This goal is achieved through a cooperative effort of a wide range of regulators, dischargers, scientists, and environmental advocates. This collaboration has fostered the development of a multifaceted, sophisticated, and efficient program that has demonstrated the capacity for considerable adaptation in response to changing management priorities and advances in scientific understanding.

RMP PLANNING

This collaboration and adaptation is achieved through the participation of stakeholders and scientists in frequent committee and workgroup meetings (see Organizational Chart, next page).

The annual planning cycle begins with a workshop in October in which the Steering Committee articulates general priorities among the information needs on water quality topics of concern. In the second quarter of the following year the workgroups and strategy teams forward recommendations for study plans to the Technical Review Committee (TRC). At their June meeting, the TRC combines all of this input into a study plan for the following year that is submitted to the Steering Committee. The Steering Committee then considers this recommendation and makes the final decision on the annual workplan.

In order to fulfill the overarching goal of the RMP, the Program has to be forward-thinking and anticipate what decisions are on the horizon, so that when their time comes, the scientific knowledge needed to inform the decisions is at hand. Consequently, each of the workgroups and teams develops five-year plans for studies to address the highest priority management questions for their subject area. Collectively, the efforts of all these groups represent a substantial body of deliberation and planning.

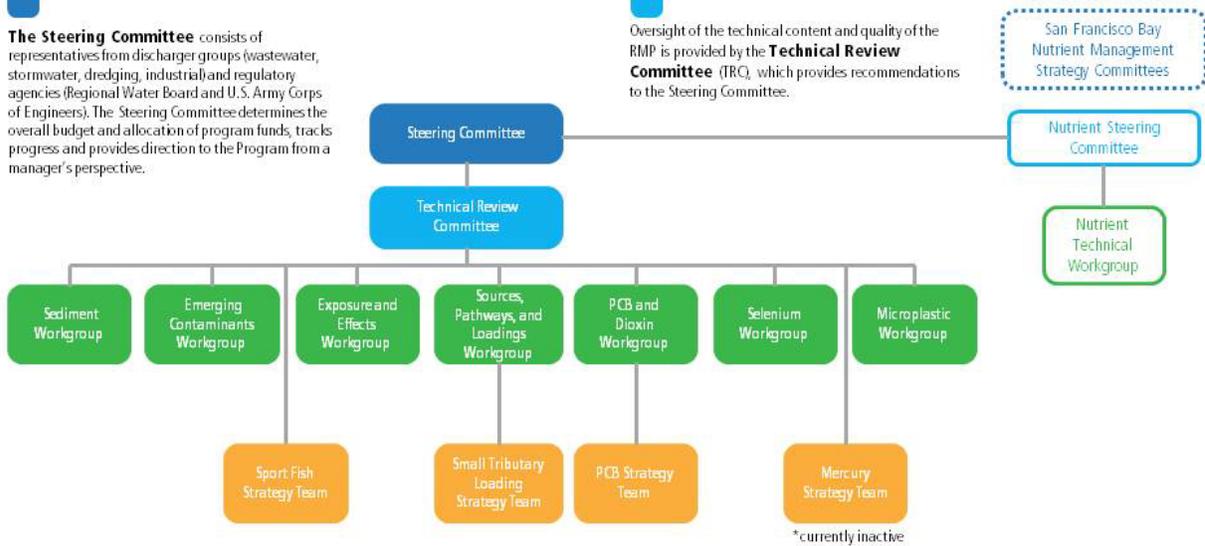
PURPOSE OF THIS DOCUMENT

The purpose of this document is to summarize the key discussion points and outcomes of a workgroup meeting.

Governance Structure for the Regional Monitoring Program for Water Quality in San Francisco Bay

The Steering Committee consists of representatives from discharger groups (wastewater, stormwater, dredging, industrial) and regulatory agencies (Regional Water Board and U.S. Army Corps of Engineers). The Steering Committee determines the overall budget and allocation of program funds, tracks progress and provides direction to the Program from a manager's perspective.

Oversight of the technical content and quality of the RMP is provided by the **Technical Review Committee (TRC)**, which provides recommendations to the Steering Committee.



Workgroups report to the TRC and address the main technical subject areas covered by the RMP. The Nutrient Technical Workgroup was established as part of the committee structure of a separate effort – the Nutrient Management Strategy – but makes recommendations to the RMP committees on the use of the RMP funds that support nutrient studies. The workgroups consist of regional scientists and regulators and invited scientists recognized as authorities in the field. The workgroups directly guide planning and implementation of special studies.

RMP strategy teams constitute one more layer of planning activity. These stakeholder groups meet as needed to develop long-term RMP study plans for addressing high priority topics.