



Bay RMP Technical Review Committee Meeting

September 21, 2022

Meeting Summary

Attendees (all participants remotely attending)

TRC Member	Affiliation	Representing	Present
Yuyun Shang	EBMUD	POTW	Yes
Mary Lou Esparza	Central Contra Costa Sanitary District	POTW	No
Tom Hall	EOA, Inc.	POTW	Yes
Heather Peterson	City and County of SF	CCSF	Yes
Anne Hansen Balis	City of San Jose	POTW	No
Bridgette DeShields*	Integral Consulting	Refineries	Yes
Chris Sommers	BASMAA (EOA, Inc.)	Stormwater	Yes
Shannon Alford	Port of San Francisco	Dredgers	No
Richard Looker	SF Bay Regional WQCB	Water Board	Yes
Luisa Valiela	US EPA	US EPA-IX	Yes
Ian Wren	Baykeeper	NGOs	No
Tessa Beach	US Army Corps of Engineers	USACE	No

*Chair; alternates in gray and italicized

Staff and Others

- Jay Davis – SFEI
- Melissa Foley – SFEI
- Don Yee – SFEI
- Warner Chabot – SFEI
- Martin Trinh – SFEI
- Paul Salop – AMS
- Bryan Frueh – City of San Jose

1. Introductions and Review Agenda

Bridgette DeShields opened the meeting with a round of introductions and a brief review of the day's agenda. Key items on the agenda were updates on the joint RMP/NMS Water Quality Improvement Fund (WQIF) proposal, Status & Trends Monitoring, and the upcoming RMP Annual Meeting.

2. Staffing Change for RMP Manager

Melissa Foley formally announced to the Technical Review Committee that she would be stepping down from the Regional Monitoring Program Manager position following the Multi-Year Planning Workshop. She will be staying at SFEI, transitioning to the Resilient Landscapes (RL) Program to work with the Urban Nature lab. She hopes to be a bridge between RL and the RMP. Melissa will be available to train the new RMP Manager. Jay requested that TRC members recommend any candidates they think would be a good fit. The TRC voiced support for Melissa's transition and echoed words of admiration for all the work Melissa has done for the RMP.

3. Decision: Approve Meeting Summary from June 15, 2022, and Confirm/Set Dates for Future Meetings

Bridgette DeShields asked the group for any final comments on the previous meeting's summary. Receiving no comments, Bridgette confirmed the dates for upcoming meetings. The date of the upcoming Steering Committee meeting was confirmed to be November 2, 2022. TRC members were invited to attend the Multi-Year Planning Workshop preceding the SC meeting; the MYP meeting will be from 9 AM-1 PM. There is a possibility this meeting could be held in a hybrid format with the option to attend in-person at SFEI or virtually on Zoom. If the meeting cannot be hosted by SFEI, Tom Mumley has suggested holding the meeting at the Water Board. Bridgette DeShields, Luisa Valiela, and Richard Looker expressed interest in the in-person option.

The next TRC meeting was confirmed for December 8, 2022. Luisa Valiela noted the Restore America's Estuaries 2022 Coastal and Estuarine Summit would be meeting in person in New Orleans from December 4-8 so she is tentative for the December TRC meeting. Bridgette will not be able to attend the next proposed date of March 23, 2023. Melissa proposed moving the meeting to the following week on March 29, 2023. The 2022 RMP Annual Meeting will be held on Monday, October 3, 2022, and Melissa Foley confirmed that a post-meeting gathering will be held at the Study Hall in Berkeley.

Action Item:

- Send out calendar invites for March, 29, 2023, TRC meeting (Martin Trinh, September 24, 2022)

Decision:

- Heather Peterson motioned to approve the meeting summary. Bridgette DeShields seconded the motion. The motion was carried by all present members.

4. Information: SC Meeting Summary from July 20, 2022

Melissa Foley provided an overview of the July SC meeting, noting it had a similar agenda to the June TRC meeting, covering topics such as WQIF funding, workgroup meetings, and Special Studies funding. The RMP and Nutrient Management Strategy (NMS) teams submitted a joint proposal to the EPA Water Quality Improvement Fund. The focus of the discussion with the SC was around the use of RMP funds as match (required 1:1 matching funds). The RMP allocated matching funds from already-funded Special Studies or Status & Trends monitoring.

Melissa relayed feedback from the SC on the TRC's proposed Special Studies funding. The SC largely approved what the TRC had put forth, with Melissa noting the only study not approved by both committees was the microplastics air deposition/dryer study. The SC expressed they would be willing to revisit this study if additional funding was acquired, with the Ocean Protection Council identified as a potential source. Melissa noted there could be two additional funding sources to help cover the budget overage (\$119k) that exists with the approved suite of Special Studies. There is an in-progress Supplemental Environmental Project (SEP) for \$120k. Additional funding could arrive from the Municipal Regional Stormwater Permit provision for municipalities to contribute an additional \$100k to the RMP in lieu of individual CEC monitoring. The status of both potential funding sources should be known by the end of November.

Melissa previewed topics of interest the SC identified for the upcoming Multi-Year Planning workshop. Potential agenda items include: the full MYP update for 2024; cross-workgroup coordination and staffing constraints; and potential collaborative efforts to support RMP work, particularly with other regional entities to help support the Emerging Contaminants, Microplastics, and Sediment workgroups. A small group of TRC and SC members usually meet before the workshop to help plan the agenda. Tom Mumley and Karin North have volunteered and Melissa asked the TRC for any interest on their end. Luisa suggested Chris (not present at the time) and Richard Looker will check with Tom to see if he should be involved. Melissa will send an email to gauge interest and follow up with Chris.

The Annual Meeting and 2022 Pulse were also discussed at the SC Meeting but Melissa saved details because they were discussed in a later agenda item.

Action Item:

- Send out a one page PDF of the studies funded for 2023 (Melissa Foley, September 25, 2022)

5. Update:RMP Proposal for Water Quality Improvement Funds

Melissa and Jay led a discussion on the joint RMP/NMS proposal for the Water Quality Improvement Fund. The groups submitted their proposal on Monday, September 19, 2022. The proposal requested \$5.9 million, with half being provided from the EPA and half being matched by the RMP and NMS. The RMP will contribute ~\$2 million of the match. The project will be completed over four years and will focus on developing a water quality toolbox to support monitoring and modeling of PCBs, CECs, sediment, and nutrients. The proposal emphasized the role of modeling to improve water quality. The modeling plan in the proposal was outlined by Craig Jones in the In-Bay Modeling Strategy (SFEI Contribution #1090). The modeling in the proposal will be supplemented by \$400k from a Supplemental Environmental Project. Craig Jones will be the technical lead on the project, with SFEI and Integral staff supporting the work. Jay thanked Ian Wren and Melissa for their contributions to the proposal.

Luisa gave an update on the timeline of the overall process. Successful applicants will be notified by the end of November and awards will be given out in December and January. There were 25-30 applicants. If the RMP and NMS proposal is successful, SFEI will likely need to hire additional staff or obtain assistance through subcontractors to complete the work. SFEI submitted two additional proposals to the WQIF, and Jay helped All Positives Possible with their proposal.

6. Discussion: Status & Trends Monitoring for 2023

For this item, Melissa described the monitoring activities that will be occurring in 2023. This is a big year for Status & Trends. Wet season Bay water sampling will continue for a second year. Bay water was sampled during the wet season at nearfield and deep Bay sites in a pilot study last year. One storm was sampled with a focus on CECs, with tire contaminants added as a Special Study. Dry weather water sampling will also be conducted in 2023. CECs monitored include PFAS, bisphenols, and organophosphate esters.

Sediment samples from deep Bay and margins stations will also be collected, with a focus on PFAS and bisphenols. PCBs and metals will be sampled every 10 years with the next round of sampling planned for 2028. Paul Salop stated that AMS will be able to assist with dry season sampling (water and sediment), but will be harder to coordinate with in the wet season.

Prey fish will be sampled at targeted nearfield sites and will be paired with sediment sampling. Likely sampling locations include Richmond Harbor, San Leandro Bay, Redwood Creek, and Lower South Bay. A PCB Special Study for prey fish in Steinberger Slough successfully obtained samples, which was good news because fish collection in this area has been challenging in the past.

Marine mammals will be sampled opportunistically as part of a Special Study pilot, with hopes to add this sampling to Status & Trends. Blood and liver samples will be collected from seals and harbor porpoises.

The Status & Trends external advisors emphasized the importance of overlapping sampling locations. The target locations include Redwood Creek/Steinberger Slough, San Leandro Bay, and Lower South Bay, across the three matrices of water, sediment, and biota (prey fish and sport fish).

For interlab comparisons for 2023, Melissa outlined a potential method comparison for copper in water as well as for CECs in sediment and prey fish. Don added that two commercial labs will be analyzing PFAS samples for the RMP, which provides a straightforward pathway for doing an interlab comparison. He is hopeful that this can be done successfully, but warned the TRC that each lab has idiosyncrasies in their methods that could skew the results. Don stated that he is confident Brooks Applied Laboratory's new method for copper is sound. The RMP has been analyzing water samples via two methods for the last three cruises. Brooks is eliminating their legacy method, which was more unstable. However, he cautioned that results from the new method could be slightly higher than the old method, but no results last year were above the copper site-specific objective.

Melissa notified the group that they would have the opportunity to provide feedback on the interlab comparison plans. Don will present a proposal for the PFAS intercomparison study at the December meeting. Additional monitoring details for the prey fish and targeted sediment locations will also be given.

Action Items:

- Present interlab comparison study at December TRC Meeting (Don Yee, December 8, 2022)
- Present prey fish and nearfield sediment sampling plan (Jay Davis/Miguel Mendez, December 8, 2022)

7. Discussion: Communications Update

Jay began the agenda item by reviewing the status of the Pulse. Jay noted that the Pulse would be released in an electronic format, with hard copies available by request. Physical copies will not be available by the Annual Meeting, but electronic copies should be. Writeups on nutrients and BOD are out for review and should be finalized soon. Once permission is obtained to publish the historic photos in this issue, the layout will be finalized and a draft will be sent for revisions.

For the upcoming Annual Meeting, Jay announced that Congresswoman Jackie Speier had submitted a short video that will serve as an introduction to the meeting and Clean Water Act, while providing a springboard for the WQIF presentation. Jay thanked Bridgette and Eric for agreeing to moderate and Luisa for presenting.

The Estuary News is set for the next two issues. The September issue will focus on the impact of drought conditions on the RMP's monitoring. The EN editor, Ariel, liked the previous profile on SFEI staff (Martin Trinh) and will feature one on Miguel Mendez in the October issue.

Melissa thanked Chris for his contribution to the drought story. The December issue will highlight the 50th anniversary of the Clean Water Act and the RMP Annual Meeting. For future issues, TRC members suggested a focus on preparing for unforeseen events. Tom Hall recommended a post-mortem on the recent harmful algal bloom, interviewing different scientists working on it. Jay explained that the timing of that topic is delicate as it would be advantageous to highlight this issue soon to capture public attention, but there is a need to wait to ensure accurate information about the event is published.

8. Information: Status of Deliverables and Action Items

Melissa reviewed the deliverables and action items with the TRC members. Beginning with overdue items, she requested that any TRC members with a contact at MTC help the RMP push them to provide the updated land use layers for the Bay. MTC is currently a year and a half behind schedule with no update on their timeline. Two projects in the RMP have had to be paused as a result of this delay. Tan and David cannot continue PCB modeling for the Watershed Dynamic Model; the update to the regional Watershed Spreadsheet Model is also on hold. These efforts are approaching the three year deadline for SEP projects. Tony Hale of SFEI has been in communication with the MTC, but it seems as though the person responsible for the land use layer update has recently left the position.

Overdue items that should be completed soon include the sediment erosion and deposition in SF Bay report that is undergoing internal review within the USGS, a Watershed Dynamic Model Sediment model calibration report, PCB sediment thresholds report, and floating percentile methodology report. Stanford is turning the Steinberger Slough PCBs report into a manuscript. A draft of the Sediment Conceptual Model report should come out before the upcoming Annual Meeting, where Katie McKnight will present the model.

Tom Hall asked about the RMP's current contracts with labs. Melissa replied that labs have been good communicators on the whole. Brooks Applied Labs have had some delays in data reporting, but the RMP has begun meeting with them every two weeks to better communicate our needs. Don noted that Eurofins is still adapting to our reporting methods, particularly with uploading to CEDEN. Their methodology and data are sent quickly but they are adapting to converting to e-files.

Projects that will be completed soon are the non-targeted analysis in sediment and water following a meeting with Lee Ferguson and UCSD; the sediment settling velocity in the South Bay and sediment flux at Benicia Bridge reports which will be completed by USGS by the end of the month. The margins report is delayed as Don is building remote samplers. The QA summary for 2020 is waiting for the margins data. The stormwater conceptual model has been completed for the state but the Bay-centric version is delayed due to workflow issues. Bird eggs have all been collected but the USGS and SGS AXYS are in the process of procuring the permits to send the samples internationally (to British Columbia).

9. Discussion: Plan Agenda Items for Future Meetings

Melissa previewed topics of interest to discuss at future meetings. The TRC expressed interest in getting to know the new RMP Manager if possible or, at least, being updated on the job search. The upcoming interlab comparison for PFAS analysis will be discussed. Finally, an update will be given on the status of the WQIF proposal as well as the timing of the first year of projects associated with the proposal. With the increased effort and amount of studies required to support the WQIF work, TRC members voiced concern about SFEI's bandwidth and ability to adequately handle this work. As key members continue to vacate important positions, TRC members asked if SFEI is in a position to take on more work, especially since the pandemic has affected hiring. Warner Chabot of SFEI agreed that there is a challenge associated with the large amounts of funding to come from the state and other entities. He ensured the TRC that SFEI is anticipating these issues and strategically thinking about the hiring process. Finally, he assured the TRC that although there have been key departures recently, SFEI has been able to identify and hire extremely passionate and capable new members to help ease those transitions.

10. Information: Preview of Annual Meeting Presentations

RMP Environmental Analyst, Martin Trinh, practiced his presentation for the upcoming RMP Annual Meeting, soliciting feedback from the TRC. Martin presented the RMP's findings on their recent PFAS in San Francisco Bay study. He began by giving a background on PFAS as a class of contaminants and outlined their bioaccumulative and toxic properties. He proceeded to introduce the RMP's role in monitoring PFAS in the Bay and outlined the program's many studies across various matrices. Following this, he overviewed the study design and objectives of the recent study monitoring PFAS in ambient Bay water samples. After discussing spatial and temporal trends, he concluded with key takeaways regarding classification of concern for PFAS levels in the Bay. TRC members recommended stripping down some of the more technical aspects of the background and including more current events, such as legislative and community building (environmental justice) efforts, and to speak to a more general audience. Additional feedback was given concerning how to best explain spatial trends, particularly the cluster of data points observed in Lower South Bay.

Jay outlined his presentation on ongoing RMP efforts on PCBs. He will overview long term trends observed by the RMP, particularly that the decreases expected are not being observed. He will also expand on efforts observing loadings from the General Electric property and collaborations with Stanford in Steinberger Slough. Melissa Foley briefly outlined her presentation, which will conclude the Annual Meeting and will provide an update on the inclusion of CECs in the revised Status & Trends Program and other RMP efforts.

Adjourn