



Bay RMP Technical Review Committee Meeting
December 10, 2020 - San Francisco Estuary Institute

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	Yes
Tom Hall	EOA, Inc.	POTW	Yes
Ross Duggan	City and County of SF	CCSF	Yes
Anne Hansen Balis	City of San Jose	POTW	Yes
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	Yes
Tessa Beach	US Army Corps of Engineers	USACE	No

*Chair; alternates in gray and italicized

Staff and Others

- Becky Sutton - SFEI
- Jay Davis - SFEI
- Melissa Foley - SFEI
- Miguel Mendez - SFEI
- Nina Buzby - SFEI
- Cristina Grosso - SFEI
- Paul Salop - AMS
- Bryan Frueh - City of San Jose

1. Introductions and Review Agenda

Melissa Foley began the meeting by reviewing virtual-meeting practices and noted that participants may want to use the Zoom desktop client because the Data Challenge item will

involve an internet browser scoring sheet. After going through the agenda the TRC members had no questions for Melissa.

2. Decision: Approve Meeting Summary from September 10, 2020, and Confirm/set Dates for Future Meetings

Bridgette DeSheilds began by asking the TRC members for any comments on the past meeting's summary. Richard noted that the summary mentioned a potential future discussion on wildfires, which was not on the current meeting's agenda. Melissa explained there was no explicit decision to cover the topic at this meeting, but it can be added to the March agenda.

The TRC meetings are generally scheduled for the 2nd Thursday of the month, which falls right before NMS meetings on the 2nd Friday. To prevent back-to-back meetings for SFEI staff and many TRC members, the group agreed to switch to the 4th Wednesday for the June 2021 meeting that would take place on 6/23/21. The March meeting will remain on the 2nd Thursday, 3/11/21, due to scheduling conflicts.

Action Items

- Seek out an air deposition expert to present on wildfire pollution to the TRC (Melissa Foley, 3/1/21)
- Send out future TRC meetings calendar invites (Nina Buzby, 12/31/20)

Decision

- Richard Looker motioned to approve the September 10, 2020, meeting summary. Chris Sommers seconded the motion, and the motion was carried by all present members.

3. Information: MYP and SC Meeting Summary from October, 22, 2020

Because many of the TRC members were present at the October Multi-Year Planning (MYP) meeting, Melissa focused on the Steering Committee items from the afternoon. She did review the list of topics that the joint SC and TRC group brainstormed, including beneficial reuse and event-based monitoring (floods, wildfires). The SC discussed budget scenarios for 2023-2025 and noted that the Program will need to make hard decisions in the future as reserve funds become depleted in 2025 (based on current S&T costs). In addition to approving the 2022 Special Studies planning budget, the SC also conditionally approved the 2021 budget. The 2021 budget has a deficit due to the S&T redesign efforts and SFEI staff are looking at various options to address the shortage. The TRC members did not have any questions after Melissa's summary.

4. Information: Status and Trends Review Update

The second meeting of the water matrix expert group focused on reviewing the updated draft of wet and dry season sampling designs and identifying next steps for drafting a more in-depth write up linking the design to management questions and hypotheses. The initial goal of the meeting was to be close to finalizing the sampling design, though lingering questions necessitated a written document and an additional subgroup meeting.

Melissa reviewed the basic sampling designs and highlighted the differences between the two seasons for the TRC members. Luisa Valiela urged the RMP to be explicit in the drivers of the sampling designs - mainly that CECs are the major motivators, with copper as the 'floor' of efforts to adhere to related regulations. Chris Sommers added that the first few years will be a matter of gaining understanding of new contaminants.

Melissa noted that the redesign work is taking longer than expected, but the water matrix effort is providing a lot of lessons that will hopefully translate to future matrices. Taking the time to do things well seems valuable, in order to establish a program that can adapt in the future.

Melissa told the TRC members that efforts related to the sediment matrix have begun, specifically with a presentation from Maggie Dutch on a similar redesign effort in Puget Sound. Jay noted that the Puget Sound Program's movement away from a triad approach was a result of the three elements not correlating and working together in the intended manner. Melissa also noted the advantage the RMP has in covering multiple matrices in the same program, rather than being more siloed.

5. Decision: 2021 Status and Trends Sampling

The goal for this item was to confirm sampling plans for bird eggs and water in 2021. The TRC discussed the tern egg sampling at the previous meeting, though Josh Ackerman from USGS had recently relayed site access restrictions related to COVID limitations. Given sampling challenges and intentions to potentially revamp biota sampling as a part of the S&T redesign, staff posed the option of delaying bird egg sampling to 2021. TRC members asked for further details on access, noting options of people to talk to for help. Jay Davis discussed the technical merits of delaying or continuing with the sampling, noting a disrupted time series would not be a major loss. In response to the options, TRC members were comfortable pivoting plans as needed, but wanted a solid understanding of overall barriers to sampling.

The conversation then moved on to water sampling in 2021, which will have a design that is a hybrid of the existing efforts and the new redesign. While outlining analytes of interest, the group had further discussions on archiving efforts and chlorophyll sampling. One advantage of passive samplers is the ability to archive samples. Tom Hall brought up chlorophyll, wondering about the analyte's utility that Don Yee explained was more of an ancillary parameter and potentially useful in modeling efforts. The meeting participants agreed that it would be pertinent to confirm that the data is being used.

Melissa then shared details on boat availability, explaining continued conversations with Karina Nielsen (SFSU) and Alex Parker (Cal Maritime) have centered around the former SFSU boat - the Questuary. Because SFSU can't cover all the boat's costs, they are trying to find a solution like a shared agreement with Cal Maritime. Melissa has also talked with the USGS about opportunities to do additional sampling outside of the monthly cruises on the Peterson. Luisa commended Melissa on her efforts and also suggested reaching out to private sector dredgers. Melissa noted the importance of working with boat captains that are aware of what's needed for scientific monitoring.

Action Items:

- Look into chlorophyll uptake of short-chain PFAS and relay information back to the group (Becky Sutton, 3/11/21)
- Conduct utility analysis of chl-a and make recommendation on keeping or dropping the analyte to the TRC (Don Yee, 3/11/21)
- Communicate with Josh Ackerman about sampling in 2022 instead of 2021 (Melissa Foley, 12/20/2020)

*** Details from Josh Ackerman Dec. 2020 ***

Josh confirmed that despite other projects being postponed, his team would prioritize RMP bird-egg collections if made in 2022. With this assurance RMP staff agreed to hold collections until 2022 when the program will have gone through the tissue matrix review and be better able to inform the level of effort needed. Additionally, the postponement will hopefully allow for easier access to sites in non-pandemic conditions.

6. Information: AQUA-GAPS, Comparison of Passive Samplers to Grab Data

Miguel Mendez presented to the group on a study comparing two types of passive samplers. The AQUA-GAPS (Aquatic Global Passive Sampling) Program is a coordinated effort to understand geographic and temporal trends of organic contaminants. The study looked at co-deployed samplers that also had varying types of polymer sheeting. The resulting data were then compared to historical RMP S&T results. When looking at the data Miguel noted a weak correlation between AQUA-GAPS results and RMP PCB values, and a wider spread for organochlorine pesticide results. The caveats to the data comparison include varying matrices and timescales between the datasets.

After the presentation the meeting participants wondered how close the results are expected to be given the different time scales of sampling between grab and passive samplers. Miguel explained that the expected relationship wouldn't be exactly 1:1, but also wouldn't show incredibly drastic differences. Don added that RMP data could be thought of as error bars surrounding AQUA-GAPS data, which should fall somewhere between. Melissa also asked for further details on what led to the 'rejection' of some data points, to which Don proposed could be related to PAH blank contamination occurring in the naphthalene family.

Richard Looker then brought up potential hypotheses behind the data mismatch, noting the importance of understanding the 'why' in terms of developing proportional relationships. One of Richard's hypotheses was that the differences were 'real' in that the grab samples missed something that the passive samplers were able to detect. Tom Hall added that the NMS started HAB monitoring with passive samplers, but resulted in data that were difficult to interpret and prompted a focus on grab sampling. Don further explained that passive samplers can deplete in a sense, which is a reason for the use of performance reference compounds to determine the 'depletion rate.'

7. Decision: Data Challenge

Cristina Grosso began the item by reminding the TRC of the question posed to participants as well as the challenge eligibility and prizes. Cristina also shared some feedback from high school teachers, noting the COVID preoccupation within schools that provided some context on the low number of submissions. After going over the historic challenge participation, Melissa brought up the topic of discontinuing the Challenge that the group discussed after last year's low turnout. Luisa, Ian, and Mary Lou were in agreement with taking a hiatus for 2021 and possibly revisiting it sometime in the future. Chris Sommers added that if the TRC revisits the Challenge, the program should look at marketing and outreach strategies again. Richard Looker also noted that there is potential for outreach opportunities without the competition, specifically that the professors and teachers that are now familiar with CD3 should continue to share the resource with their students. Cristina suggested adding these contacts to the general RMP mailing list to also keep them updated on general RMP activities.

After Cristina went through each of the submissions, she reminded the TRC members of the evaluation criteria used in past years. Chris Sommers shared an initial response to the sole high school submission, saying he was really impressed with their ability to write python script and run regressions as a 10th grade student. After voting on the submissions, the group discussed how to divide the prize money given the single high school submission and low total participation number. The group decided to award a third place prize for the university student instead of awarding both the first and second place amount to the single high school submission.

Decision:

- Discontinue the Data Challenge for, at least, 2021 and possibly revisit in future years.
- Highschool winner: Eliana
- University winners (in order): Lesley, Lealia, Shambvati

Action Items:

- Announce winners in RMP eUpdate and on the SFEI website (Nina Buzby, 12/31/20)
- Send letters to winners (Melissa Foley, 12/31/20)

8. Discussion: Communications Update

Jay Davis began the item by reviewing the recent media coverage of microplastics and the tire component contaminant contributing to coho deaths in Puget Sound urban creeks. Related to the latter, Chris critiqued the discussion of green infrastructure as a mitigation strategy and noted that a focus on a source-control perspective would be most effective. While discussing the CEC coverage, Jay also shared the recent addition of Kelly Moran to SFEI staff. The TRC members were very supportive of this development and agreed with the idea to share this announcement in the upcoming RMP eUpdate.

Jay then focused on brainstorming potential topics of the 2021 Pulse. Some of the initial options he shared included nutrients, the Clean Water Act's (CWA) 50th Anniversary (which is actually in 2022), and highlighting responses to pandemic conditions. Yuyun and Mary Lou supported the idea to cover the RMP's adaptation during the pandemic. Tom Hall supported the nutrients topic, on the condition that there is coordination with the NMS because that program had raised the idea of holding a nutrient workshop or seminar. Luisa Valiela commented that covering the CWA should discuss the age of the legislation for an operating statute and the challenges that presents. Richard added that the emerging challenges of CECs could combine well with examining mirrored issues in the CWA. Chris was also in agreement, and said that the broader topic of "emerging pressures" could also play into issues like climate change, stormwater wildfire runoff, and the undefined challenges of microplastics. Anne Balis brought up a further suggestion of structuring the CWA discussion into sections covering the past, present and future. Jay appreciated the input from TRC members and said he would share their input with the SC, who would also discuss upcoming Estuary News article ideas.

Action Items:

- Communicate source-control perspective to Rebecca Sutton and Warner Chabot for CECs media coverage (Jay Davis, 1/31/21)
- Discuss Kelly Moran in upcoming RMP eUpdate (Jay Davis, 1/31/21)
- Share TRC ideas on 2021 Pulse with Steering Committee (Jay Davis, 1/27/21)

9. Information: Status of Deliverables and Action Items

In an effort to end the meeting on time, Melissa quickly reviewed the deliverables and action items. With no major action items of note, Melissa noted that many of the deliverables were related to catching-up after pandemic-related delays. In addition, Melissa shared a list of recently completed reports and manuscript submissions.

Action Item:

- Share Journals to which recent RMP manuscripts were submitted with TRC members (Melissa Foley, 12/31/20)

10. Discussion: Plan Agenda Items for Future Meetings

To begin the item, Melissa mentioned that the TRC usually receives an update from Data Services at their December meeting. However the RMP Data Services lead, Adam Wong, was taking care of his new baby and would give the update at the March meeting. Some other recurring items include confirming the Committee chair, reviewing special studies to ensure coordination, and providing guidance for workgroups. Related to Richard Looker's point from earlier in the day, the participants also agreed to add a discussion for future RMP priorities (i.e., wildfire impacts on water quality) to the next agenda. Finally, Jay suggested that there be a standing item on updating the group on the status of the S&T redesign efforts.

11. Discussion: Plus/Delta

Richard commended the group on the improvement with operating in virtual meetings. Luisa also asked Melissa to give a brief RMP staffing update, after Kelly Moran's recent addition was mentioned earlier in the meeting. Melissa explained that Kelly Moran was currently working part-time but would ramp up in the new year. Additionally, Lester Mckee moved back to New Zealand and his continuation with SFEI is depending on some funding opportunities. Lastly, Melissa shared that Julie Beagle, of the Resilient Landscapes team, was leaving SFEI for USACE. Melissa is hopeful that Julie's new role will allow her to engage with the RMP and increase the Corp's involvement in the program.

Adjourn