



Bay RMP Technical Review Committee Meeting

September 19, 2018

San Francisco Estuary Institute

Meeting Summary

Attendees

TRC Member	Affiliation	Representing	Present
Nirmela Arsem	EBMUD	POTWs	
Mary Lou Esparza	CCCSD	POTWs	yes
Tom Hall	EOA, Inc.	POTWs	phone
Ross Duggan	SFPUC	POTWs	yes
Simret Yigzaw	City of San Jose	POTWs	yes
Bridgett DeShields*	Integral Consulting	Refineries	yes
Chris Sommers	BASMAA	Stormwater	yes
Shannon Alford	Port of SF	Dredgers	
Ian Wren	San Francisco Baykeeper	NGOs	yes
Richard Looker	SFBRWQCB	Water Board	yes
Luisa Valielas	USEPA	US-EPA IX	yes
Sheila Swett	USACE	USACE	yes
Naomi Feger	SFBRWQCB	Water Board	

*Chair

Guests and Staff

- Paul Salop - AMS
- Anna Hansen - City of San Jose
- Jay Davis - SFEI
- Phil Trowbridge - SFEI
- Ila Shimabuku - SFEI
- Don Yee - SFEI
- Nina Buzby - SFEI
- Cristina Grosso - SFEI
- Rebecca Sutton - SFEI
- Diana Lin - SFEI

1. Introductions and Review Agenda

Phil Trowbridge welcomed members of the Committee, quickly presented the agenda for the day, and allowed for introductions.

2. Decision: Approve Meeting Summary from June 14, 2018 and confirm/set dates for future meetings

No changes were made to the June 14 meeting summary before approval. Sheila Swett and Richard Looker were the only present TRC members not registered for the event. Chris Sommers asked to see the list of Annual Meeting registrations, to confirm that the desired audience would be present. (The TRC reviewed the list of registered attendance after lunch and did not have any concerns about those already registered.). Committee members were reminded of the October 24, 2018 Multi-Year Planning Workshop. There were no conflicts with the proposed dates for the March, June, or December 2019 TRC meetings. Bridgette DeShields mentioned a conflict with the September 2019 TRC meeting.

Decision:

- Chris Sommers motioned to approve the June 14, 2018, TRC Meeting Summary. Ross Duggan seconded the motion. The motion for approval was carried by all present members.

Action Items:

- Finalize the June 14, 2018, TRC meeting summary and post to the website. (Nina Buzby, 9/28/18)
- Reschedule September 2019 TRC meeting. (Nina Buzby, 10/3/18)

3. Information: SC Meeting Summary from July 25, 2018

Phil Trowbridge summarized the July SC meeting and highlighted the efforts by the TRC and SC in approving funding for 2019 RMP special studies. Phil informed the Committee of the SC's acceptance of the TRC recommendations with the addition of \$80K of Undesignated Funds for two more proposals beyond what the TRC had prioritized. Phil also noted that the quantity of proposals this year was greater than usual, and the Multi-Year Planning Workshop should be used to give better direction on the number and type of proposals the committees want. The SC discussion also included an extended discussion of the 2018 Annual Meeting agenda.

4. Decision: S&T Monitoring Design for 2019, Including Plans for Laboratory Intercalibration Studies

Phil Trowbridge presented an overview of 2019 S&T budgets and a few RMP-related activities: USGS moored Sensor support, USGS monthly nutrient and phytoplankton cruises, the RMP water cruise, 2019 sport fish sampling, and intercalibration studies. The budget for water sampling was comparable to previous spending, and slightly under budget when compared to the Multi-Year Plan estimate. The sport fish budget estimate was \$24K above the Multi-Year Plan estimate due to add-on studies and extra planning needs. However, Phil proposed to reduce the budget for intercalibration studies to \$47K instead of \$69K to make up this difference.

Ian Wren introduced the topic of Jim Cloern's (USGS, monthly nutrient cruises) retirement in March 2019. With Cloern's main technician (Tara Schraga) also retiring, USGS will need to backfill both of those positions to keep the program going. A decision will be made within three months as to whether or not the program will continue and the RMP and NMS may need to assess if they can provide support for the staff replacement.

Phil presented the target analytes for both the water and sport fish sampling efforts, noting the removal of nutrient collection from the Golden Gate Bridge site and addition of fipronil to sport fish sampling. The TRC asked to be included on the invite to the Sport Fish Workgroup strategy meeting in the fall. Phil also mentioned the two add-on projects to sport fish efforts: archiving samples for analysis of microplastic and analysis of PCBs in shiner surfperch at Probability Based Monitoring sites.

Don Yee presented the selenium intercalibration (IC) study which consisted of two types of tissue sampling (clam and sturgeon) as well as water sampling. Paul Salop suggested adding Physis Environmental Laboratories as a third lab in the study and the TRC agreed. Don presented the topic of using fillets or muscle plugs to assess tissue concentrations, and the TRC moved to include fillets in the IC study. The TRC was supportive of the idea to move the location of the sturgeon fillets and plugs so that they were co-located on each sturgeon, but will defer to the Sport Fish WG to make the final decision. If there is a change to the location of the fillets, this change should be well documented. A boat will be needed to collect the water samples for the IC study. It was suggested to contact the Bureau of Reclamation and to piggy back on their monthly water quality cruise. Don Yee also briefly outlined the PCBs in sport fish tissue IC study that will compare AXYS results to results from the previously used lab, WPCL.

Phil Trowbridge presented a recommendation to reduce costs for short-term archives. Options included discarding sediment and bivalve samples older than 10 years as well as older sport fish tissue that does not have a designated sample location. The TRC wanted to know how volume translated to cost reduction, as well as the frequency at which the short-term archives were utilized by SFEI or outside researchers. The TRC decided to move forward with the proposed archive discards, but would like SFEI to look into whether any of the sediment archives from random sites should be retained.

Phil Trowbridge asked for input from the TRC on collecting and reporting samples on alkylated PAHs. Bridgette DeShields noted the use of PAHs for fingerprinting in a current application with San Francisco Waterfront work. TRC moved to continue alkylated PAH monitoring in sediment given this fingerprinting advantage and also to continue monitoring in bivalves given the low cost, frequency, and to mirror NOAA mussel watch reporting of alkylated PAHs.

Decisions:

- The TRC approved the budgets for 2019 Status and Trends monitoring efforts.
- The TRC approved adding sport fish fillets to the selenium IC study design.
- The TRC approved the discarding of short-term archives as proposed by staff.
- The TRC agreed to continue analyzing alkylated PAHs in both sediment and bivalves for the foreseeable future.

Action Items:

- Invite TRC to Sport Fish Workgroup meeting. (Jay Davis, 11/1/18)
- Reach out to Physis for participation in Selenium IC study and confirm MDLs and particulate feasibility. (Don Yee, 9/24/18)
- Look into feasibility of using the Bureau of Reclamation Water Quality Cruise for the Selenium IC study water sample collection. (Nina Buzby, 9/28/18)
- Inspect details in sediment PBM, short-term archives to determine whether they can be discarded. (Phil Trowbridge, 10/31/18)

5. Decision: Recommendation for 2017 Water Cruise Results for Copper

Don Yee summarized the dissolved copper method change by Brooks Analytical Laboratories. The new method resulted in 20-50% higher concentrations than in samples using reductive precipitation (RP) method. Moving forward the RMP will continue both RP and triple quad (QQQ) methods to accumulate several years of data for possible comparison down the line.

Decision:

- The TRC moved to continue both RP and QQQ methods for future copper monitoring.
- TRC agreed to only publish copper data from 2017 that was measured using the RP method.

Action Items:

- Share the results of the copper IC study with SCWRPP. (Don Yee, 12/14/18)

6. Decision: Judging Criteria and Process for Data Analysis Challenge

Cristina Grosso presented an overview of the Data Visualization challenge that was previously discussed by the TRC, including the challenge scope, scoring criteria, and the judging schedule. The mission of the challenge is to attract folks to the RMP dataset and increase traffic to the CD3 data tool. The TRC provided sources to aid in challenge distribution. Richard Looker proposed that we record how participants found out about the challenge.

The TRC also gave a number of comments on the challenge flyer. These suggestions included a decision to change the challenge's name as well as a more specific approach to eligibility requirements. Participants must use at least some data from the SF Bay and submit an "Interpretive Summary/Abstract" that is up to one page. The TRC approved the judging schedule and the use of a 1-5 point scoring system on 4 equally weighted criteria and one binary/eligibility requirement relating to project completion. Phil Trowbridge suggested scheduling time in a future TRC meeting (possibly after the judging at the December TRC Meeting) to discuss what was gained and/or learned from the challenge.

Decisions:

- The TRC renamed the challenge to the: San Francisco Bay Data Visualization Challenge, Sponsored by the Bay RMP.
- The TRC finalized eligibility requirements - 1 page abstract, data must come from CD3 and at least some aspect must relate to the SF Bay.

Action Items:

- Incorporate TRC suggestions to challenge flyer. (Cristina Grosso, 9/24/18)
- Send the challenge webpage to members of the TRC so they can circulate within their networks. (Cristina Grosso, 9/24/18)

- Announce challenge and disseminate amongst networks. (Cristina Grosso, 9/24/18)
- Score submissions prior to next TRC meeting and choose top 10 for presentation to the TRC. (Phil Trowbridge, Cristina Grosso, Nina Buzby, 12/7/18)
- Schedule time during the March TRC meeting to discuss lessons learned from challenge.(Phil Trowbridge, 3/1/19)

LUNCH

7. Discussion: RMP Communications Products and Agenda for Annual Meeting

Jay Davis previewed various communication materials including the RMP Update and an upcoming article in the Estuary News. The TRC also was shown the agenda for the Annual Meeting, which, after feedback from the SC, focused more on looking forward and giving an update on the programs. The only post-SC change to the agenda was the replacement of Richard Looker with Naomi Feger as one of the moderators. Jay Davis facilitated discussion on possible themes for the 2019 Pulse to present to the SC, which included: nutrients, sediment, and pathways. Ian Wren highlighted the theme of pathways allowing for assessment of the challenges and success stories. Richard Looker proposed the theme of fate & transport, focusing on specific case studies, which may be useful for a following Pulse (after a pathways Pulse). The greatest level of support was for a theme related to pathways or fate & transport. Suggested topics for this theme were: pharmaceuticals in wastewater, stormwater loadings, PCBs in dredged material, nutrient modeling, dioxin synthesis, mercury isotopes (Joel Blum), and post-fire monitoring results.

8. Information: Preview of Annual Meeting presentations

Don Yee and Ila Shimabuku gave preview presentations of talks that will happen at the 2018 Annual Meeting. Don spoke about the Dioxin Synthesis, while Ila spoke about recently-received bisphenol data. The TRC provided feedback on both presentations as follows:

Dioxin

- The TRC encouraged more explanation about the background and context of dioxins and to organize the talk around the questions relating to the dioxin mass balance framework.
- Chris Sommers posed concern towards the point of co-management of dioxins with PCBs given the different sources for these two contaminants. He encourage

messaging that acknowledges PCBs management may also inadvertently address dioxins as well, but not that management for PCB sources will also be effective against dioxin sources.

- Chris Sommers suggested being more explicit that the 10x greater atmospheric deposition estimate relates to deposition directly into the SF Bay, while local tributary input refers to runoff, contributions, or loads from local watersheds.
 - The TRC also wanted to know when the atmospheric deposition modeling was conducted, which was in 2012.
- The TRC recommended making the maps in the presentation have uniform scale bars, and consequent icon sizes, so that comparison between RMP and DMMO data is consistent.

Bisphenols

- In the initial background of the presentation add more information why bisphenols are commonly used (ie. plasticizer, flame retardant). However, in general the TRC suggested spending more time talking about the data and less time on the context.
- Chris Sommers advised against using language of “Hot Spot” when describing a location with high concentrations in water in the Bay.
- The TRC suggested writing out acronyms.
- Richard Looker and Phil Trowbridge suggested filling summary statistics table that included “0” median detection levels with “ND” (non-detect).
- The TRC made suggestions on a graph comparing detection levels with the BPA PNEC value:
 - Apply a label for the PNEC line that identifies the value as BPA-specific.
 - Shorten the PNEC line so that it only applies to BPA detection levels, and not those related to BPS.
- The TRC suggested greater contrast/differentiation in maps colors.

9. Information: Status of Deliverables and Action Items

Phil Trowbridge noted a large fraction of reports are in the 95% finalized range, and the recent finalization of four small tributaries and loadings reports.

10. Discussion: Plan agenda items for future meetings

The TRC confirmed that the Pulse outline, an informatics update (from Amy Franz and Cristina Grosso), a presentation of the 2019 Workplan, judging and discussion of the

data challenge, and a presentation by Karina Nielsen on the MapCO₂ Buoy and Ocean Acidification should be included on the December 2018 meeting agenda.

11. Discussion: Plus/Delta

The TRC thanked staff for their efforts. Special thanks to Don Yee and Ila Shimabuku for pulling together their presentations in advance of the Annual Meeting. Chris Sommers and Richard Looker also noted the benefits of seeing the evolution of committee conversations through the copper monitoring and the data challenge work. There was also appreciation for seeing new faces in the room.

Adjourn