



## Bay RMP Technical Review Committee Meeting

March 29, 2023

### Meeting Summary

#### Attendees

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
Heather Peterson	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	No
Jamie Rose Sibley Yin	US Army Corps of Engineers	USACE	Yes

#### Staff and Others

- Jay Davis – SFEI
- Amy Kleckner - SFEI
- Bryan Frueh - City of San Jose
- Tom Mumley – SFBRWQCB
- Paul Salop – AMS
- Xavier Fernandez - SFBRWQCB
- Warner Chabot - SFEI
- Rebecca Sutton - SFEI
- Miguel Mendez - SFEI
- Don Yee - SFEI
- Martin Trinh - SFEI

## 1. Introductions and Review Agenda

Bridgette opened the meeting with a round of introductions and previewed the upcoming agenda. Jamie Yin from the US Army Corps of Engineers was introduced to the TRC as she will be replacing Tessa Beach going forward. Jamie has previous experience working with the Delta RMP. The new RMP manager, Amy Kleckner, was formally introduced to the TRC as well. Jay proceeded to outline upcoming agenda items: updated 303(d) list by the Water Board, Wet Season S&T Monitoring Update and Design, Bay Margins Sediment Survey, and Floating Percentile Method Report.

### **Action Item:**

- Send Charter and Multi-Year Plan to Jamie Yin (Jay Davis, April 15, 2023)

## 2. Decision: Approve Meeting Summary from December 8, 2022, and Confirm/Set Dates for Future Meetings and Confirm TRC Chair

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 next TRC meeting was confirmed for June 20, 2023. The TRC scheduled the fall meeting for September 19, 2023. To end this item, the TRC approved the December meeting summary and reconfirmed Bridgette DeShields as chair, with her acceptance.

### **Action Item:**

- Send out calendar invites for September 19, 2023 TRC meeting (Martin Trinh, April 15, 2023)

### **Decisions:**

- The motion to approve the December TRC meeting summary was carried by all present members.
- The motion to reconfirm Bridgette DeShields as meeting chair was carried by all present members.

### 3. Information: SC Meeting Summary from January 25, 2023

Jay Davis went over the notable items from the January Steering Committee meeting, beginning with the approved Multi-Year Plan (MYP) and Mandatory Minimum Penalty (MMP) projects. Analysis and reporting of Non-Targeted Analysis for Sediment Data and the PFAS in Archived Sport Fish Communications Supplement were approved by the SC, but the Committee identified a need to formalize a process for reviewing MMP proposals. Luisa Valiela asked Tom Mumley if he preferred to have a ranked list to assist prioritizing and identifying needs. Tom clarified that MMP funds can be amassed without having to be assigned, with Xavier Fernandez agreeing that it is good to have projects in the pipeline. Chris Sommers reminded the TRC that a barebones process used to exist and could be revived. The SC should confirm that the current SEP list is up to date, with the TRC potentially adding periodic reviews of the list throughout the year. The TRC is hesitant to add to the workload of the RMP workgroups, but Chris suggested that appropriate workgroups annually receive the list of applicable SEP projects with suggested modifications from RMP staff and provide input on the list, including what to take off of it. Additionally, the SC approved the addition of Dr. Barbara Beckingham as an advisor to the Microplastic workgroup

The SC also allowed for the inclusion of pathway monitoring in S&T and model maintenance in a separate long term funding category.

Other notable topics from the Steering Committee meeting, such as the status of incomplete projects, approval of additional funds for wet season monitoring, and communications products were also on the March TRC agenda.

### 4. Information: Water Board Presentation of Updated 303(d) List

Xavier Fernandez of the San Francisco Bay Regional Water Quality Control Board provided an overview of the recently updated 303(d) list with an integrated report set to be released for Region 2. Xavier reported there would be 14 new listings for indicator bacteria in the Bay, with four listings being driven by shellfish harvesting use. Xavier clarified for Luisa that these bacteria listings were all beaches, but Chris informed the group that there are a few freshwater surface waters (creeks) proposed for listing based on bacteria (Castro Valley Creek and Lower San Mateo Creek). Other notable items have been listed as Category 3 due to insufficient data, but beneficial uses are potentially threatened. Temperature, ocean acidification, and microplastics are being considered. A brief discussion ensued on microplastics, with Tom Mumley explaining that Richard Looker and he had microplastics classified as category 3 which is

essentially a watch list. Tom clarified for Luisa that data collected by SFEI would not need to be submitted to the state database.

Tom Hall inquired if bacteria listings were linked to shellfish harvesting, with Xavier clarifying that the Water Board was currently investigating that. The time may have arrived for the RMP to monitor bacteria in the Bay, especially in relation to shellfish harvesting water quality. The 4 beaches with listings driven by shellfish harvesting are Crown Beach, Encinal Beach, Fort Baker (Horseshoe Cove), and Keller Beach.

Jay inquired if there were any data needs the RMP could fill, particularly regarding ocean acidification. Xavier clarified that drivers like climate change are outside of the scope of the RMP and not actionable. Luisa offered to connect Jay to labs at UC Davis working on this. Tom Hall mentioned efforts at SCCWRP that feature Lorien Fono on the technical advisory group. Tom Mumley referenced the new listing of dissolved oxygen in the Pacific as an outgrowth of SCCWRP studies and increased coastal monitoring.

## **5. Discussion: Wet Season Sampling Update**

Alicia Gilbreath of SFEI gave an update on this year's historic wet season sampling. To date, this year has recorded 154% of the normal rainfall and currently ranks as one of the top five wettest wet seasons in San Francisco's rainfall record. This is in stark contrast to the drought-like conditions of the previous years. This has allowed the stormwater team to obtain samples for a variety of efforts for both legacy and emerging contaminants for both the Water Board and EPA. However, Priority Margin Unit (PMU) samples remained elusive until earlier this week, when the planets aligned to allow the storm team to sample for PCBs near the GE property at low tide. To accommodate the increased rainfall, the SC approved a request for additional stormwater funds to sample potential future storms this year for Pollutants of Concern (POC: PCBs, total Hg, and SSC) monitoring.

Alicia clarified for Yun Shang that results of the PMU monitoring could be available by later this year or early 2024, with Luisa inquiring if these data could be expedited. Chris commented that EOA had also been experiencing delays with AXYS for data release. Tom pointed the RMP to Setenay Frucht as the Water Board's point of contact for PCBs.

Don Yee was asked about the viability of remote samplers for tidal areas and CECs sampling. Luisa inquired about the security of leaving these samplers out, but Don clarified that tidal channels tended to be more gentle and pointed to the recent PMU sampling that deployed a passive sampler near the Oakland flea market.

**Action Items:**

- Do what we can to expedite the turnaround of the GE data (Amy Kleckner, June 30, 2023)

## 6. Discussion: S&T Monitoring Update and Design

Jay introduced this agenda item by informing the TRC that it would remain a standing item during the early implementation phase of the S&T redesign. Amy proceeded to give an update on the S&T monitoring occurring in the past year as well as in the upcoming year. She began by reviewing the timing of the various S&T efforts with wet season water sampling ongoing between October and April, dry season water along with Bay sediment by SFEI and AMS between July-September, near-field prey fish and sediment along with margins sediment with Moss Landing Marine Labs in August, and marine mammals with the Marine Mammal Center beginning now through September.

Going into further detail, Amy reviewed the S&T monitoring that had been conducted earlier in the season to measure contaminants of emerging concern (CECS: PFAS, bisphenols, and OPEs). Four targeted near-field and four paired deep Bay stations were sampled three times in WY 2023. The upcoming dry season sampling will include sampling for PFAS, bisphenols, OPEs, Cu, and CN from 22 stations distributed across the five Bay segments: Six of these stations are fixed: one in each of the five subembayments and an additional one in the LSB. 16 sites will be randomly selected using the GRTS framework. Marco Sigala (SJSURF) will conduct the sediment sampling occurring in the dry season. 12 targeted stations were selected to overlap with wet season water sampling, with PFAS, bisphenols, TOC, N % solids, grain size to be sampled in August 2023. The same analytes will be sampled at 12 random stations in the margins. 17 total stations (seven targeted stations (1 in each subembayment + 2 more from CB/SB/LSB) and 10 random stations (all located in the CB/SB/LSB region) will be sampled for the deep Bay sediment effort for PFAS, bisphenols, TOC, N % solids, grain size, and PBDEs (to be discontinued after this year). The water cruise will most likely embark on the TomCat again following a successful outing in 2021. However, there have been issues scheduling a sampling vessel for the sediment efforts. The USGS Turning Tide, used for the 2018 effort, is not available this year, nor is the IEP Endeavor. The TomCat remains an option, as a winch will be installed in May. The CSUM Questuary is also available for use as it has an operating hydraulic A-frame and winch, however, it does not have a lot of deck space. Other options include chartering sport fish vessels, but this remains an expensive last resort.

Jay proceeded to expand on the near-field sediment and prey fish pilot effort. Currently 12 stations have been budgeted for sediment and fish, which will be sampled

concurrently by Marco Sigala. The effort will focus on areas where there is an overlap with near-field wet season water, PCB PMU, and sport fish sampling. At the December meeting, the TRC discussed adding the airport stations. The effort will collect Mississippi silverside or topsmelt as primary indicator species at 12 stations with three composites per station for PFAS analysis. Samples will be archived for potential analysis of other contaminants (e.g., bisphenols, OPEs, other CECs, PCBs). There have been indications of bioaccumulation of bisphenols and OPES, although not as strong as PFAS, so some samples will be archived. The original draft had a budget in the MYP of \$120K. Following more detailed planning, Jay requested an additional \$31K to fund the inclusion of staghorn sculpin collection at nine stations (1 composite per station, totaling \$19K, with other additional costs of \$12K). Sculpin had the highest levels of PFAS in a previous prey fish pilot study. An additional request of \$7K was made for analysis of PCBs at PMU stations in San Leandro Bay, which covers an element of the PCB multi-year plan).

A marine mammal pilot will begin this year with 2023 as year one of a two year special study. The goal is to analyze 10 harbor seals and 10 harbor porpoises, with animals recovered within the Bay as the highest priority. SGS AXYS will analyze PFAS in the liver and serum, while the Crimmins lab (AEACS, Clarkson Univ.) will conduct nontarget analysis (NTA) of liver and blubber. The Hoh lab of SDSU will also conduct NTA of blubber. The Marine Mammal Center is collecting the samples starting now (April 2023). The end goal of this effort is to provide a recommendation to the final S&T study design by June 2025.

Amy concluded her section by reporting that the S&T Design Report currently had a draft in review. Following final advisor comments, a final draft is expected to be delivered on or around early June 2023.

**Decision:**

- The Committee approved of the proposed funding for the prey fish pilot study.

## 7. Break

## 8. Discussion: Bay Margins Sediment Survey – North Bay Report and Future Design

Don Yee reviewed the 2020 North Bay Margins Sediment results. The North Bay study was the last in the series of margins pilot studies, with Central Bay completed in 2015 and South Bay in 2017. The objectives of the study were to assess contaminant

concentrations in the margins and determine whether those levels are of concern and if they are different from concentrations measured in the open Bay. The South Bay margins constitute a much larger proportion of area relative to the North Bay, which is in turn larger than the Central Bay. The North Bay margins were expected to be influenced by the heavily industrial land use (e.g., refineries) and Delta inputs, including mercury from historic gold mining in the Sierra. This effort completed the boxed set. Comparing total Hg in the North Bay to the whole Bay, highest concentrations most likely resulted from large watersheds and had some redistribution. PCBs more met expectations with South Bay and Central Deep Bay concentrations at lower concentrations than their respective margins, although the opposite trend was observed in the North Bay. Many pollutants show significant correlation to fines and TOC across margin regions. Evaluating all the margins against each other, concentrations in the CB margins were higher. Isolating comparison between just the North and South Bay, the South Bay was found to have higher concentrations using raw values, but even normalized, those values were decidedly higher.

In conclusion, as expected, concentrations in the NB margins were lower than those in the CB margins, due to fewer high sources/loads and large diluting clean Delta loads. NB margins concentrations were also less than those found in the SB margins, likely due to lower inputs and faster hydrodynamic turnover. Looking at raw values, the NB margins were surprisingly lower than concentrations found in the deep North Bay. Normalizing TOC flips concentrations back to being higher in the North Bay margins than the deep North Bay.

Overall, observations somewhat followed expectations for legacy contaminants. Margins concentrations were highest in the Central Bay followed by the South and North Bays respectively. For PCBs, concentrations were highest in the margins as compared to the deep Bay (except for in the North Bay). Hg was found to be higher in the deep Bay than the margins in NB & SB. Since sampling density in NB and SB was low, it cannot be definitely concluded there are no “hotspots in the North Bay, but it is likely any potential hot spots would not be abundant.

Don is working on completing the final margins report and requests any comments/edits by April 12, 2023. He noted this effort was a good start, but continued to state that sample counts were much lower than the samples taken in the Central Bay. The North Bay may have hotspots even if they are not abundant. Finding these potential hotspots through random sampling requires huge N or luck.

For the upcoming round of sampling, Don described the plan for S&T sampling at 12 targeted “near-field” sites at some repeat sites to evaluate trends near known expected sources, often upstream of margins “frame”. The proposed plan for margins sampling



calls for 24 stations, including new GRTS sites for discovery and some fixed stations. The proposed plan calls for 17 deep Bay sites sampled for CECs every 5 years (7 historical + 10 GRTS random CB/SB/LSB) and 27 sites sampled for CECs and CTR/legacy contaminants every 10 years (possibly 7 historical + 5 GRTS repeat + 15 GRTS random).

Tom Mumley inquired as to what benefit is there in continued margins sampling, given the lack of a major difference between margins and deep Bay and the plan for near-field sampling to monitor watershed loading. Don noted the importance of margins habitat for exposure of humans and wildlife, an area for entry of new contaminants, and the lack of data for this area. Jay noted this work had already been included in the budget and redesign report. Tom agreed on keeping margins sampling roughly as planned, and pointed out the need to coordinate with the Wetland Regional Monitoring Program. Luisa Valiela agreed on coordinating with the WRMP and suggested scheduling a meeting with Christina Toms to discuss fixed stations to complement WRMP biological monitoring and fill the sediment contaminant monitoring data gap for the WRMP. Xavier Fernandez supported this action item. The Committee approved of the deep Bay 5 year design (7 historical + 10 GRTS random CB/SB/LSB), and stated that the deep Bay 10 year design can be decided further down the road.

**Decisions:**

- The Committee approved of moving forward with margins monitoring.
- The Committee approved of the 5 year sampling plan for the deep Bay (7 historical + 10 GRTS random CB/SB/LSB)

**Action Items:**

- Schedule a meeting with Christina Toms to discuss possible coordination of RMP fixed station locations with the WRMP (Amy Kleckner, May 15, 2023)
- Check with Marco Sigala on whether he can wait until the June TRC meeting for a final decision on margins sediment sampling locations (Amy Kleckner, April 30, 2023)
- Either schedule a TRC call before the next meeting or have an agenda item at the next meeting to present a recommended design for approval (Amy Kleckner, June 20, 2023)

## 9. Discussion: Floating Percentile Method Report

For this agenda item, Don reviewed the recently completed Floating Percentile Method Report. The goal of this effort was to derive sediment thresholds for “surface” vs “foundation” re-use based on distribution of local paired chemistry and toxicity tests. Commonly tox thresholds are determined for chemicals one at a time in lab tests, while for specific locations toxicity might occur at higher or lower concentrations due to



antagonistic or synergistic effects of multiple chemicals and ancillary characteristics. Thus the FPM attempts to find appropriate local thresholds based on the results of local tox tests. For this effort, we collated local data, most of it from RMP and the DMMO databases. For sediment re-use, biota are more exposed to surface sediments, so it is desired that they be less toxic (in this case the 5th percentile was sought), while foundation sediments are buried deeper with less exposure to resident biota, so can be more toxic, and 75th percentile was calculated.

FPM was used in a 2004 report to the Coastal Conservancy/Port of Oakland comparing different methods of deriving sediment quality guidelines. When SFEI attempted to use the tool with several analytes at once like in the prior effort, it was shown to be unstable. When datasets were duplicated for analytes and given dummy names, the first analyte had different surface and foundation results, but the dummy analyte just went straight to its max value for both. Similar issues were found with unduplicated data, e.g. if the names for As and Zn data were swapped in in the source data table, thresholds would be expected to be swapped, but instead totally different results were obtained. Because of this, the FPM calculations were conducted one analyte at a time.

Major differences in this effort as compared to 2004 were that the prior effort ignored non-detects, leaving the data set truncated. This was likely an artifact of increased foundation and surface values (e.g., 50% NDs yield surface value > median).

PAHs were an example of a well behaved dataset, with few non-detects, and many detected samples without toxicity, so a concentration where a 5th percentile of the toxic results were found could be determined. Through a middle range of concentrations around 1000, the frequency of toxicity found rises rapidly, suggestive of PAH-caused toxicity, and a 75th percentile concentration in toxic samples is also easily found.

In contrast, chlordanes were an example of a problematic dataset. Over half of the results were non-detect, and within that half of samples that were non-detects, nearly 40% of the all toxic samples with chlordanes reported were found. In this case, the 5th percentile of toxic results is indeterminate, so the surface calculation instead is set at the concentration where increasing concentrations appear to start increasing the incidence of toxicity. The 75th percentile is still in a quantitative zone though, with toxicity rising continually with increasing concentrations.

When analytes were run one at a time we were able to calculate low and high percentiles of toxic results for each of the chemicals, using the 5th and 75th percentiles for most cases. Interestingly, the FPM foundation (75th percentile) results for both

amphipods and mollusks were in a pretty similar range as the 2000 Water Board surface sediment criteria. Looking at the results from the prior FPM study, it also appears the analysis sequence artifact impacted their calculations, as only a few of the analytes had differing surface and foundation results.

For the surface values, 5% of toxic hits were used like in 2004. Usually, <30% of all samples (including non-toxic) occur below the FPM-derived surface value. Results were often 10x or more lower than 2004 FPM results and all well below SFBRWQCB surface criteria.

In conclusion, FPM was limited by reported/considered analytes. Unreported analytes may drive toxicity and synergism was unaccounted for (e.g., 1 analyte at 7th percentile might be less toxic than 10 analytes at 4th). Single analyte FPM resulted in much lower surface and foundation values than 2004, however multi-analyte FPM were unlikely to yield higher surface guidelines. SFBRWQCB surface values were near the FPM foundation values (75% of tox hits). FPM surface values would need to be near 75th percentile of all data to match current surface values. Beyond the FPM, 75th percentile of tox results were greater than or equal to the 75th percentile of all results, so criteria just based on (total) percentiles would be virtually the same.

## 10. Break

## 11. Discussion: Interlaboratory Comparison Studies for 2023

For this agenda item, Don reviewed a recently completed interlaboratory comparison study conducted by the RMP and sought advice for a potential PFAS interlaboratory comparison in 2023. There are \$60K in funds dedicated for intercomparison studies this calendar year.

Working with Brooks Applied Laboratory (BAL), the RMP compared BAL's legacy "reductive precipitation" method (1640m) with their new column chelation method (BA-5021). The legacy method precipitated solids to preconcentrate but required frequent re-runs. The column chelation method holds the advantage of being faster and automated but early years returned very high, biased results. In the first round of testing in 2017, the column chelation methods returned results around 50% higher than the reductive precipitation method. Differences in results have steadied at 15% in subsequent years of testing in 2019 and 2021 which is within the target range. These two years were conducted pro-bono. 2023 results also registered a difference of 15% between the two methods. Don asked the TRC if these results indicated that the intralab

comparison and the legacy method could be retired. The TRC answered affirmatively, but would like Richard Looker to provide the final confirmation.

Don provided some context into past studies SFEI has conducted for PFAS in different matrices, primarily working with SGS AXYS for Status & Trends as well as Eurofins for other studies. He introduced a preliminary study design that would compare a total of six paid samples by both SGS AXYS and Eurofins - two nearfield/Bay samples provided in duplicate, two effluent samples provided in duplicate, with the labs analyzing their own control samples in triplicate and cross-sending those LCS for duplicate analysis. Stormwater could be considered in place of effluent samples but the variable SSC may be troublesome. Becky voiced support for effluent testing.

Other analyte candidates include PBDEs in sediment (in the final year of their study, and thus low priority), bisphenols or OPEs (although methods may be immature and labs few), water metals (have conducted intercomparison in the past with CCSF), and cyanide (finicky method with many non-detects). Another possibility for interlab comparison would be to send three or four of the highest concentration sediment samples to a second lab for PFAS analysis, following results from AXYS. This would require archiving samples for all sites. In case this option is approved, Don advocated for storing sediment samples anyways.

The Committee tentatively approved of the initial PFAS in nearfield/Bay and effluent water.

**Decisions:**

- Move forward with PFAS intercomparison using near-field, Bay, and effluent samples (Don Yee, December 31, 2023)

**Action Items:**

- Check with Richard Looker on ending the intercomparison for the copper analysis (Don Yee, May 15, 2023)
- Reach out to CCSF to see if they could be the primary metals lab along with Brooks. If not, look into commercial labs such as CalTest (Don Yee, May 15, 2023)
- Check with Eurofins if they have results from EPA method validation intercomparison (Don Yee, May 15, 2023)

## 12. Information: Progress on Workgroup Strategy Updates

Jay introduced this agenda item by informing the TRC that it would remain a standing item through the remainder of this year as the RMP workgroups update their respective strategy documents.

The Microplastics workgroup held a strategy meeting on March 14 and will hold a full WG meeting on Monday, April 10, 2023 where they will also update their management questions. Current projects overlapping with other workgroups include the Stormwater monitoring (SPLWG, ECWG), Air monitoring (ECWG) and planned future projects with overlap include stormwater monitoring (SPLWG, ECWG) and air monitoring (ECWG). Additionally, a state plastics monitoring strategy and pilot have been planned so the RMP process can inform state activities.

The Emerging Contaminants team will hold a workgroup meeting on April 19-20, 2023 and expects to finalize their management questions (particularly question four) at these meetings. Current projects overlapping with other workgroups include the SPL monitoring/modeling, in-Bay model and planned future projects with overlap include SPL monitoring/modeling, in-Bay model, air monitoring. Science and Stakeholder (SST) meetings will help integrate EC and SPL strategy (includes selecting near-term MQs specific to this effort). Introductory strategy revision chapters were shared with the strategy subgroup in mid-March.

The Sources, Pathways, and Loadings (SPL) team will hold a strategy meeting on April 12 with a core group to update management questions with full workgroup meeting days meeting with ECWG on Apr 20, one day on May 23. Current projects overlapping with other workgroups include the CEC stormwater groundwork (ECWG), IWBMS (PCBWG, ECWG, SedWG, MPWG) and planned future projects with overlap include stormwater M&M, WDM application.

The RMP is developing a Stormwater CECs Approach as a cross-workgroup project between the ECWG and SPLWG to address ECWG management questions and support Status & Trends CECs work. This effort currently uses \$250K-\$300K per year of Special Study funds and is overseen by an external advisory group drawn from ECWG & SPLWG (a Stormwater CECs Stakeholder Science Advisor Team (SST)). Monitoring will be piloted in WY 2024 with near-term priority sub-management questions to guide the Approach being discussed at the ECWG/SPLWG joint meeting on Apr 20 with the goal to obtain feedback and finalize. A project update will also be provided at the joint meeting, with the next SST meeting in summer.

The Sediment Workgroup conducted strategy meetings on January 31, 2023 (Part 1. MQ3-5), February 8, 2023 (MQ 1-2), and March 23, 2023 (Part 2. MQ 3-5). A full workgroup meeting is scheduled for May 11, 2023 where management questions will be updated. Current projects overlapping with other workgroups include the In-Bay model (PCBWG), IWBMS (SPLWG) and planned future projects with overlap include the In-Bay model (PCBWG) and WDM applications (SPLWG). The workgroup is currently focused on developing a sediment monitoring & modeling workplan and updating MQs 3-5. Updating MQ 1-2 was put on hold after the strategy meeting with SC members. The workgroup is still considering adding a 3rd advisor. A draft sediment conceptual model report was shared with the workgroup on March 16.

The PCBWG will meet in the beginning of June. Its management questions are currently updated. Current projects overlapping with other workgroups include the In-Bay model (ECWG, SedWG, Nutrients) and IWBMS (SPLWG). Jay noted most of the PCBWG multi-year plan funding is covered by the WQIF and a SEP.

### **13. Discussion: Communications Update**

Jay opened discussion to brainstorm ideas for various RMP communication products. In preparation for the upcoming RMP Annual Meeting, Becky Sutton offered to provide some highlights from the CECs in stormwater screening study along with some big picture thoughts on future work. Phase 2 BACWA PFAS - Diana and Lorien could speak on phase two of the BACWA PFAS study. Additionally, the RMP could discuss the CEC Strategy Revision or share preliminary data on the Quaternary Ammonium Compounds effort as well as the floating percentile method and a wet season sampling report. As for this year's RMP Update, Jay proposed featuring the CECs in stormwater effort.

Jay concluded the item by reviewing the communications strategy developed by the Steering Committee in 2014. He noted that many communications elements have changed over the years, particularly noting how the Annual Meeting's new hybrid format has allowed for a wider audience. He shared the results of a SC and TRC wide poll that emphasized the high prioritization of the Annual Meeting, RMP Website, and shorter format summaries for interested parties. Luisa suggested that Warner could feature the RMP more prevalently in his email communications.

#### **Action Item:**

- Jay talk to Warner about featuring RMP items in his emails (Jay Davis, May 15, 2023)

## 14. Information: Status of Deliverables and Action Items

Amy reviewed the deliverables and action items with the TRC members. The spotlight report for this meeting was recently updated with the 2022 and 2023 deliverables. Amy began by reporting the short-term RMP sample archive purging, Margins Draft Report, Floating Percentile Draft Report, Stormwater Conceptual Model Report - SFEI Contribution #1109 and study design for Special Study: PFAS in Archived Sport Fish had all been recently completed.

Following with overdue items, she expanded on the PCB In-Bay contaminant modeling report section, for which modeling work began earlier this year with a revised timeline to be developed at PCBWG meeting in June 2023. Sturgeon sampling is currently being conducted for sturgeon selenium monitoring data management

Overdue items scheduled for completion soon include the NB Selenium Clam and Water Data Report (4/30/23), 2020 QA Summary for S&T Activities (3/31/23), and 2021 QA Summary for S&T Activities currently waiting for bird egg data (5/31/23). The CECs stormwater monitoring strategy document has been delayed due to complications in the stormwater groundwork project (2/28/24) while the Sediment Flux Richmond Bridge Data Release will not be moving forward in 2023 as planned due to USGS staffing issues (12/31/24).

Projects due before the June TRC meeting include the Sunscreen in wastewater technical report, Sediment conceptual model report, S&T QA Reports, North Bay Selenium Report, Floating percentile sediment guidelines, and Integrated watershed modeling and monitoring strategy for which a draft is in review and expected to be completed by mid-May.

Bridgette applauded Amy's conciseness and suggested the abbreviated deliverables list be included in future agenda packages in addition to the more detailed spotlight reports.

## 15. Discussion: Plan Agenda Items for Future Meetings

The group was aware the June meeting would focus mostly on special study prioritization. The Annual Meeting and RMP Update will be discussed. An update on S&T implementation will be given as well as a discussion and decision on margins stations.

## 16. Discussion: Plus/Delta

Overall, the group was commended for their sustained effort and focus throughout the day. The TRC voiced their appreciation for the science updates from Don and expressed their desire to hold the June TRC in person.