RMP REGIONAL MONITORING PROGRAM FOR WATER QUALITY IN SAN FRANCISCO BAY
sfei.org/rmp

Bay RMP Steering Committee Meeting

April 15, 2024
San Francisco Estuary Institute

Meeting Summary

Attendees

SC Member	Affiliation	Representing	Present
Eric Dunlavey	City of San Jose	POTW-Large	**Y**
Amanda Roa	Delta Diablo	POTW-Small	**Y**
Karin North**	City of Palo Alto	POTW-Medium	**Y**
Adam Olivieri	BAMSC / EOA, Inc.	Stormwater	**Y**
Cameron Carr	Bay Planning Coalition	Dredgers	**Y**
Ellie Covington	US Army Corps of Engineers	USACE	**N**
Tom Mumley*	SF Bay Regional WQCB	Water Board	**Y**
Maureen Dunn	Chevron	Refineries	**Y**

* Chair, ** Vice Chair, alternates in gray and italicized

Staff and Others:

- Jay Davis, SFEI
- Amy Kleckner, SFEI
- Martin Trinh, SFEI
- Beth Birmingham, SFEI
- Luisa Valiela, EPA
- Matt Heberger, SFEI
- Xavier Fernandez, SFBRWQCB

1. Introductions and Review Goals for the Meeting (00:02:30)

Tom Mumley began the meeting with a brief round of introductions, giving a special welcome to Cameron Carr who is attending as an interim representative for Bay Planning Coalition. He then reviewed the day's agenda. Key agenda items included presentations on the USEPA San Francisco Bay Program Office funds, introducing SFEI's new watershed modeler, workgroup planning updates, Status & Trends (S&T) updates, and the upcoming 2024 RMP Pulse.

2. Summary from SC Meeting on January 22, 2024; Confirm Dates for Future Meetings (00:03:50)

Tom Mumley asked the group for any final comments on the previous meeting's summary. Receiving no comments, he continued to confirm the dates for upcoming meetings. The SC meeting was confirmed for August 12, 2024, and the proposed date for the Multi-Year Planning (MYP) Workshop/SC meeting was approved for November 4, 2024. The Technical Review Committee (TRC) will meet on June 13, 2024, September 24, 2024, and December 12, 2024. The RMP Annual Meeting has been confirmed for October 16, 2024.

Action Item:

- Send out calendar invitations for the November 4, 2024 SC meeting (Martin Trinh, May 1, 2024)

Decision:

- Eric Dunlavey motioned to approve the meeting summary. Adam Oliveri seconded the motion. The motion was carried by all present members.

3. Information: TRC Meeting Summary from March 26, 2024 (00:05:20)

The March 26th TRC meeting began with the usual agenda items. Following these items, Alicia Gilbreath presented an update on this year's wet season sampling efforts. Alicia emphasized the growth and diversification of project goals in recent years, including expanded pollutant monitoring, piloting of remote samplers in previously inaccessible areas, bioretention monitoring, and near-field S&T sampling. She reported on the progress on current manual sampling, and deployment of remote samplers at multiple locations and sampling events. She discussed the challenges faced this year related to obtaining permits for stormwater sampling efforts. With the efforts to obtain permits being time consuming and often costly, Alicia also emphasized the variability in permit issuance, noting that about ⅓ of municipalities readily approved permits while

others were requiring extensive time and effort to obtain. She shared some of the lessons learned this year during the piloting of the remote samplers. Alicia also highlighted the recent blank test of vacuum samplers meant to address tubing contamination issues and the discussion raised concerns about the practical implementation of vacuum samplers. The TRC acknowledged that the technical and logistical challenges discussed need to be further addressed.

The next agenda item was an update on S&T monitoring. Amy began with an update on the wet season water sampling pilot study which is in its third and final year. All wet season samples have been collected and we now only need to collect once during the dry season to complete the three-year pilot study of the new water design. Changes were made to bird egg sample processing for this year. In an effort to streamline the delivery of the bird eggs to the labs, the RMP has asked Moss Landing to do the post-collection processing, compositing, and aliquoting instead of SGS AXYS this time around. This will result in the eggs only crossing the international border once instead of twice and potentially eliminate some of the permitting and shipping issues that held up the process last time. In addition, the eggs will be shipped through an AXYS facility in WA where there has been better success with keeping samples temperature-controlled during shipping. However, MLML could not fit the effort in until April 2025. Sport fish monitoring is well into the planning stages. ICF will handle the sampling and this year's effort will include a focus on PFAS monitoring and coordination with the SWAMP Realignment. 2024 is year two of a two-year pilot study on marine mammals and is currently underway. The Marine Mammal center is once again handling sample collection and the aim is to sample 10 harbor porpoises and 10 harbor seals. Amy also introduced details of a non-RMP study ("Selenium Impacts on Aquatic Life") which involves the sampling of water and fish from Carquinez Strait for selenium.

In the next agenda item, the TRC was introduced to SFEIs new watershed modeler who will also be introduced today.

Next Jay presented information on workgroup planning efforts, which began with an update on the potential significant funding from the EPA San Francisco Bay Program Office. He then turned it over to the workgroup leads who summarized the proposals they are planning to present to their workgroups. Afterwards Jay emphasized the need for coordination between all the workgroups to ensure alignment and avoid duplication of efforts.

The next agenda item focused on future Status and Trends monitoring and how the potential future EPA funding might be utilized there as well. This is something the SC will also be discussing in this meeting today.

Don Yee then provided a summary of the results of the 2023 Interlaboratory Comparison Study. The purpose of the study was to assess the agreement among different labs conducting PFAS analysis in water. The three labs compared were SGS AXYS, Enthalpy, and Eurofins. Overall the labs demonstrated consistency, with results generally within ~30% of each other. Discussions then turned to upcoming intercomparison studies with particular focus on tissue testing and leveraging this year's S&T monitoring efforts.

Martin Trinh then shared the results of the 2021 Cu and CN rolling averages update. The results showed that the levels of copper and CN remained below trigger levels. Those results are posted and can be found on the website. We plan to have the 2023 rolling averages updated by the end of the year.

Jay gave an update on Communications starting with highlighting the upcoming 2024 Pulse and then moving on to discussing plans for the RMP Annual Meeting which will also be discussed here today. The meeting participants discussed potential speakers, structure of the sessions, and strategies for promoting the Meeting and ensuring effective communications with attendees with the goal of maximizing attendance and engagement.

4. Information: RMP Financial Update for 2024 Quarter 1 (00:17:45)

Beth Birmingham provided the regular financial update for Q1 of 2024. For 2024, 11% of funds have been expended on the year, with invoices being sent out soon. There is a surplus of $56. The 2023 budget has been 70% expended, with 99% of invoiced fees collected. Only two invoices remain. There was a surplus of $98k due to $118,250 in SEP funds supporting part of task 45 Sediment Delivery to Marshes in Central and North Bays. The 2022 budget has been 87% expended, with 100% of invoiced fees collected. There is a surplus of $18k that has been reduced from $138k in the previous quarter after funding for various projects was approved by the SC. For 2021, 87% of funds have been expended with 100% of invoiced fees collected. There is a surplus of $3.5K. For 2020, 94% of the budget has been expended and 100% of fees have been collected. For years 2019 and 2018, 95% and 98% of the budgets have been expended respectively and all fees collected. The RMP is ready to unencumber 2018. Beth paused to address any questions and received a request to explain why they kept books open for many years. She explained that ongoing projects spanning multiple years necessitated keeping the books open until all projects were completed and expenses paid, allowing for clean transitions of funds into reserves. Amy added that

contracts with subcontractors also influenced the decision to keep books open, as they preferred not to create new contracts every year.

The RMP requested that a total of $60,731 will be unencumbered from the 2018 budget and added to the undesignated funds. This amount consists of a $61,149 surplus from closed programmatic and S&T tasks and a $418 deficit from closed Special Studies Tasks. Beth reported no changes to the Undesignated Funds Balance since the November meeting. Beth noted the Q1 LAIF interest rates for 2024 have not been posted. She then reviewed additional funds managed, including undesignated, designated, and set-aside funds, highlighting the balance and allocation status. Jay elaborated on the funding process, explaining the ups and downs in the fund contributions due to the status and trend program's monitoring schedule. Tom discussed the accumulation of funds from mandatory minimum penalties for wastewater permit violations, which could augment the budget for special projects. To conclude the item, Beth shared that by the end of April 2024; there will be $179,289 in unallocated SEP funds, of which $19.5k remaining to be received.

Decision:

- Karin North motioned to approve the request for unencumbered for the 2018 budget. Amanda Roa seconded the motion. The motion was carried by all present members.

5. Information: Introducing Our New Watershed Modeler (00:32:55)

Jay introduced Matt Heberger as the new watershed modeler, replacing Tan Zi. Notably, Matt had previously served as the program manager for the Delta RMP and exhibits a fervent dedication to watershed modeling, akin to Alicia's passion for monitoring. Jay noted that they will make an excellent team. Matt shared that he is currently in Paris following the completion of his PhD but anticipated returning to Richmond in August. Matt provided an overview of his academic and professional background, starting with his degrees in agricultural and biological engineering and civil and environmental engineering, culminating in a recent PhD in Earth sciences from Sorbonne University in Paris. He elaborated on his MS thesis research focused on watershed loading models for bacteria in the Mystic River, Massachusetts, emphasizing the importance of predicting bacteria levels to preempt beach closures. Transitioning to his consulting experience at CDM Smith in Cambridge, Massachusetts, he detailed his work on hydrology and hydraulics projects, notably on the Merrimac River, addressing various water quality challenges. Subsequently, he shared his tenure at the Pacific

Institute in Oakland, where he delved into diverse water issues, including sea-level rise, groundwater, and desalination.

Matt's presentation then covered his global experiences, including his time at the Paris Observatory, where he engaged in earth observation using remote sensing data to study the water cycle. He provided a description of his PhD research, focusing on optimizing water cycle estimates globally using optimization methods and machine learning. Additionally, he discussed his volunteer work with nonprofits in Mali, West Africa, emphasizing his commitment to public health and education. Transitioning to his love for open science and open-source software, Matt shared his GitHub page and personal website, showcasing his global watershed delineation tool. Finally, he outlined his aspirations for contributing to the Bay RMP, emphasizing his expertise in hydrologic science, watershed modeling, and pollutant loading, along with his background in project management and facilitation.

Jay commended Matt's extensive experience and skills, particularly noting his patience, a valuable trait given his role in the Delta Regional Monitoring Program. Matt expressed his gratitude and eagerness to connect with everyone further.

6. Information: USEPA San Francisco Bay Program Office Funds (00:45:55)

Jay notified the SC that the EPA has introduced a list of 11 priority areas for funding through their new Program Office. This list, which will be updated annually, is still in draft form. However, Jay noted that the list is expected to remain largely unchanged when finalized. Luisa Valiela confirmed that the list is indeed still a draft and is anticipated to be finalized by the end of April, pending the completion of a new process and signature requirements. She noted that only minor wording changes are expected.

Jay emphasized the significance of these 11 funding categories, especially highlighting the inclusion of the RMP (Regional Monitoring Program) and NMS (Nutrient Management Strategy) as critical priorities. Additional notable categories include funding for PCB and PFAS management. Further discussion focused on the importance of the regional consensus that is developed in the RMP in setting priorities for these topics, facilitated by workgroups and RMP governance structure. The RMP can play a pivotal role in helping the EPA allocate funding efficiently.

Jay reviewed discussions from a January meeting where the SC recommended increasing the program's budget by 50% for the next fiscal year. This recommendation

is being actively implemented, with workgroups developing study ideas and planning for this budget increase.

Luisa then explained the immediate need to allocate current fiscal year funds, which must be allocated by the end of September. She mentioned that $5 to $7 million could be available for the RMP. Luisa also noted that the funding level is expected to continue at approximately $54 million annually for fiscal year 2025 and beyond, necessitating strategic planning to utilize these funds effectively.

To secure these funds, the RMP must first obtain an exception memo, justifying the RMP's exemption from the general EPA competitive solicitation process. This memo will outline the rationale and a general list of work areas. Jay will work with Tom and Luisa on finalizing this memo. Once the exception is approved, Step 2 will be the development of a detailed workplan with specific tasks and deliverables by the end of June. The goal is to have the agreement in place by the end of September (Step 3).

Jay also highlighted the importance of addressing environmental justice and climate adaptation in their funding requests, aligning with EPA's priorities. He reassured the SC that the program has sufficient matching funds to meet the required 25% match.

Jay proposed an initial request of $6 million for the next two fiscal years, $2 million in FY24 and $4 million in FY25. The next three years would each request $4 million, bringing the five-year total request to $18 million. Jay emphasized the need for careful planning to avoid overburdening existing staff.

Jay emphasized the importance of enhancing data management and public accessibility to RMP data. He acknowledged current challenges in data accessibility and expressed a commitment to improving this aspect as the RMP expands. Tom noted that the exception memo did not require too much specificity, leaving room for future flexibility. Tom also noted that the RMP could expand its data management program with future funds.

7. Information: Workgroup Planning Updates (01:26:30)

In this item, the RMP’s workgroup leads provided planning updates for their respective workgroups. Workgroup proposals will be prioritized at the June TRC meeting and approved by the SC in August. Jay noted the workgroups had organized the special study proposals into two tiers: Tier 1 for funding from the planned RMP special study pot and Tier 2 for alternate funding sources such as SEPs or the USEPA SF Bay Program Office funds.

Leading off for the Emerging Contaminants Workgroup, Becky Sutton of SFEI discussed Tier 1 proposals. Strategy funding would require $70K while stormwater CEC monitoring will cost $300K. Plastic additives in water would require $173K or $235K if sediment is added. Quaternary ammonium compounds (QACs) in water would cost $106K or $164K if sediment was added. This would be followup work to the draft report just released by Becky and Bill Arnold. Synthetic dyes in sediment, water, wastewater and stormwater is an early outgrowth of the workgroup's data mining exercise where it will look at targeted data and additional priorities. This would be an additional exploration for $171K. Non-target analysis (NTA) of Bay fish would be conducted for a second year for $76K and could be done with a new analytical partner. NTA of fibers in stormwater will look at plastic additives leached from textiles and fibers for $124K. A stormwater in vitro toxicity screening would test a new method developed by the EPA for $26K.

Becky proceeded to review the Tier 2 proposals for the ECWG. Augmented stormwater CECs monitoring aimed to extend previous work in monitoring contaminants of emerging concern (CECs) in stormwater, possibly with additional funding to enhance monitoring efforts for $150K. Becky proposed a PFAS nuclear magnetic resonance (NMR) analysis, utilizing advanced analytical techniques to comprehensively analyze per- and polyfluoroalkyl substances (PFAS) in various matrices such as wastewater, stormwater, and bay samples for $380K. A journal paper on tire wear emissions will collaborate with a European laboratory to assess tire wear based on chemical markers, potentially contributing to the understanding of tire-related pollutants in the environment for $15K. An analysis on tire rubber markers will conduct detailed analyses of tire particles using paralysis gas chromatography-mass spectrometry (GCMS), enhancing the accuracy of tire wear particle measurements in stormwater samples for $105K. Becky proposed a PFAS analysis add-on to stormwater depth monitoring pilot proposed incorporating PFAS analysis into an existing pilot study on stormwater microplastics, aiming to evaluate the impact of different depth sampling on PFAS evaluation that would be $55K. Finally, an analysis on PFAS wet deposition pathways project would involve community groups to collect samples and share data, focusing on assessing PFAS contamination through wet deposition pathways, with particular attention to the importance of rainfall data for exposure assessment. This effort would cost either $185K or $320K. Focusing on rainfall data importance for exposure assessment and would include involvement of community groups to gather samples and share data.

For the Sediment Workgroup, Scott Dusterhoff presented the Tier 1 Proposals, stressing that the dollar amounts were flexible. In Tier 1, Scott proposed three main project ideas in addition to $50K for strategy and coordination. Firstly, the Bay conceptual model, which was completed two years ago, would be updated. The

workgroup would consider whether to update it at the bay scale or sub-embayment scale. This would cost $50K. Secondly, the workgroup would develop a work plan for studies supporting hydrodynamic model calibration, focusing on assessing erodibility and sediment flocculation impacts on settling velocity for $75K. The group also proposed a pilot project for using satellite imagery to determine suspended sediment concentration, aiding in assessing sediment flux in the Bay for $125K. Tier 2 proposals included developing a shoreline change analysis for areas such as San Pablo Bay ($75K), tributary sediment load monitoring ($100K), monitoring flux at key bay cross-sections like the Richmond Bridge ($100K), and continuing flux and deposition monitoring on mudflats and marshes, potentially at new locations ($100K). Additionally, he suggested continuing monitoring at US Army Corps shallow stations and for bathymetric data collection (TBD).

For the Sources, Pathways, and Loadings Workgroup (SPLWG), Alicia Gilbreath presented the team's Tier 1 proposals. In Tier 1, proposals included a strategy and coordination budget aimed at enhancing internal and external coordination for monitoring and modeling needs ($65K). Alicia also presented a tidal area remote sampler project addressing ongoing needs and permit-related expenses ($10K). Lastly, there will be PCB and Mercury monitoring and modeling to support load and trend assessment, focusing on estimating model uncertainties and providing monitoring design recommendations for $167K. Tier 2 proposals included GIS improvements in watershed delineation and land use integration to support modeling, data interpretation and site selection decision-making ($60K-$100K). Another proposal involved full stormwater systems management and equipment upgrades to automate sampling processes and enhance data management for ($60K-$100K). Large storm event contingency funds planning and implementation would cost $175K, while discharge rating curve sampling would be $90K. Loads/trends monitoring at Mallard Island would cost $150-$200K and a trend analysis update for Guadalupe River would be around $60K.

For the Microplastics Workgroup, Diana Lin outlined the Tier 1 proposals, including $20K for strategy funding. The first proposal featured a stormwater pilot study that hoped to continue exploring sampling biases between single-depth and depth-integrated methods for an additional year ($100K). Additionally, the workgroup plans to leverage the 2025 Status and Trends water cruise monitoring to collect smaller microplastic water samples, enhancing previous data by capturing microplastics as small as 10 micrometers, crucial for evaluating toxicity and understanding particle size distribution in ambient water samples. This effort would cost $202K. Transitioning to Tier 2 proposals, Diana presented a study to analyze microplastics in sport fish, utilizing specimens collected during the 2024 status and trends sport fish monitoring ($130K).

Lastly, the tire rubber marker analysis would be conducted in conjunction with the ECWG ($105K).

Jay presented the proposals from the PCB Workgroup. The Tier 1 proposal only covers on strategy and coordination ($10K) as the group already has substantial funding secured for modeling work from Destination Clean Bay and other sources. Tier 2 introduced a proposal driven by the modeling team to gather empirical data supporting modeling efforts in San Leandro Bay, involving the deployment of sensor arrays to track suspended sediment and other parameters, aiming to enhance modeling accuracy. Finally, he shared a cross workgroup proposal on creating a fixed station watershed monitoring network that would span the SPLWG, ECWG, SedWG, and PCBWG.

Jay emphasized the need for coordination between all of the workgroups and other initiatives, particularly the Regional Monitoring Program (RMP), to ensure alignment and avoid duplication of efforts. Additionally, there was mention of potential future data needs dependent on factors like regulatory reviews and adaptation efforts, indicating a dynamic approach to research prioritization. Luisa expressed that a public facing dashboard would be helpful and inquired if this could be implemented on the website. The EPA expects to see investment in data analysis and management and that communicating through the website should be a priority for SFEI. Jay noted that SFEI is currently overhauling the Institute website with Jay working on mapping the last RMP revision to the new format.

8. Discussion: Program Management and Status and Trends 2025 (02:02:30)

Jay and Amy provided updates on RMP program management and S&T 2025 planning. Jay emphasized the need for extensive enhancements across several areas to accommodate the anticipated growth in workload. Internal and external coordination will require increased budgets for new hires and enhanced collaboration between workgroups, external partners, and labs. This expansion will ensure effective project management and coordination as the scope of the RMP widens.

Technical oversight will also require more hours dedicated to internal and external review of deliverables. This step is critical for maintaining the quality and accuracy of the RMP’s outputs. As the RMP grows, contract and financial management will also need additional funding to handle more contracts.

Governance processes must evolve to support the expanding staff's participation in SC, TRC, and workgroup meetings. The RMP needs to increase general WG funds to

facilitate proposal development, literature reviews, and internal coordination within WGs. Additionally, the budget for maintaining and editing the sample archive database must grow from its current $8K to accommodate the increased use of archived samples.

RMP funds must also be allocated for an equipment maintenance budget. This budget will cover the acquisition of new YSIs and the implementation of regularly scheduled calibrations. It will also support the maintenance costs of remote samplers and ISCOs, which need to be fired up and tested every six months. Other essential equipment such as peristaltic pumps, new vacuum pumps for lab and field use, safety harnesses, and CTD replacements will be included in this budget.

SFEI lab improvements are a crucial part of support of the RMP and NMS. These improvements will include expanding and upgrading freezer capacity to meet the increased storage needs of our growing sample volume.

Looking ahead to the S&T 2025 planning, the RMP has identified several key initiatives. The multi-year plan for 2025 includes resuming the selenium project, which had been paused in 2024 to reassess the best way forward. Additionally, non-target analysis in S&T, initially budgeted at $12,000, now requires a significantly larger budget for realistic execution. This method, which involves advanced techniques to identify various substances in water samples, holds great promise for enhancing the RMP's CEC monitoring capabilities.

There is a push for more extensive environmental justice work, aligning with EPA's emphasis on this area. In the RMP, this can involve additional fish monitoring and expanding the RMP's community fish collection efforts, particularly in regions like Hunters Point. The RMP also plans to continue wet weather sampling by increasing the number of stations and events sampled. Other potential expansions include more frequent selenium sampling, incorporating more sound-based stations, and enhancing sediment monitoring.

Finally, the RMP aims to improve its reporting and analysis capabilities, support manuscript writing, and upgrade systems for better sample tracking. This includes developing a sites database and modernizing field data collection methods through the use of tablets and phones, thereby reducing reliance on traditional pen and paper.

These strategic enhancements across various facets of program management and monitoring are essential to meet the growing demands and maintain the high standards of our work. As the RMP moves forward, careful planning and allocation of resources will be pivotal in achieving these objectives.

9. Discussion: Communications (02:27:00)

Jay opened discussion to brainstorm ideas for the upcoming RMP Pulse and Annual Meeting. Jay has been working with Becky and her team to begin writing profiles and summaries for the highest priority contaminants, with the process set to commence immediately. He presented an outline of the project highlighting changes from the 2013 edition and new elements to be included.

Jay emphasized the need to identify authors for a management article, particularly seeking collaboration between the Water Board and DTSC. Tom suggested that Maggie from the Water Board and representatives from DTSC could contribute, with an immediate call for potential authors to start drafting. Sidebars accompanying the management article include the tiered risk-based framework, sources to solutions for EPA and PFAS, DPR and pesticides, the state board's CEC strategy, and the essential use approach.

Moving to the Annual Meeting, the focus was on the agenda and key sessions. The highlight of the meeting would be a series of talks by RMP science advisors, focusing on RMP and beyond. These talks aim to leverage the expertise of the world-class advisors involved in the RMP workgroups. Jay sought approval to start lining up speakers, which is a crucial step at this stage.

Other presentations were considered, including general RMP highlights and the significant funding increase for the program. The meeting would maintain a strong focus on CECs, similar to the previous year, with at least two blocks dedicated to this topic. An article summarizing the RMP CEC strategy will also be highlighted at the Annual Meeting. The meeting will feature a block of advisor presentations from the Emerging Contaminants Work Group (ECWG), including speakers like Derek Muir, Bill Arnold discussing QACs in wastewater, and a potential third advisor. Karin recommended Ed Kolodziej, who could present on Next Gen. Rob Budd of DPR and Dan Villanueve, suggested by Becky, are other potential speakers, with Luisa noting the need for more female representation. The CECs discussion will extend to include a second block, covering the CEC Strategy, ethoxylated surfactants (with either Jennifer Dougherty or Diana) and PFAS sources to solutions, for which Jay recommends Kelly. Tom raised the question of whether we can present more than just a proposal, to which Karin suggested discussing the example of the phase-out of PBDEs and the similar transition to moving from detection to management for PFAS.

Additionally, the meeting will cover PCB modeling in the Bay and watershed modeling by Pedro, sediment, and nutrients with highlights from the Nutrient Management Strategy (NMS), SPL, and microplastics.

10. Discussion: Status of RMP Deliverables and Action Items (02:50:50)

Amy reviewed the deliverables and action items with the SC. Amy highlighted the completion of several deliverables, including the 2021 copper and cyanide rolling averages, distribution of participation letters to BACWA and WSPA, and payment of honoraria and gifts to science advisors. She emphasized the completion of S&T wet weather water sampling for the wet season. Despite a team member being on leave, the data services team managed to update the sample data archive database with all the archives and bird eggs collected in 2022. The final deliverable for 2021 Nutrients special study was a technical memo on semi-imposed light extinction estimates for biochemical modeling applications in San Francisco Bay. Amy noted the completion of the 2024 RMP QAPP update, which is now posted on the website, as it facilitated contract negotiations with Destination Clean Bay. The CEC modeling exploration report is also completed. Additionally, the stormwater CECs manuscript has been submitted.

Amy also addressed overdue deliverables, such as the MTC Bay Area land use update, the STLS regional model development, 2020 S&T Design report, and RWSM update and technical report.

Delayed deliverables include the STLS WY21 POC Reconnaissance Monitoring, which required an update of data for the Advanced Data Analysis. This project is waiting on input from BAMSC, Lester has been in contact with Lisa Sabin to discuss next steps. The North Bay Selenium in clams and water report has had all data through 2022/2023 run through DS. Work on the NTA Sediment Data Manuscript and Fact Sheet has slowed, prioritized behind CEC strategy revisions and 2025 ECWG proposal prep. Work on the PFAS in Archived Sport Fish Manuscript has slowed, prioritized behind CEC strategy revisions and 2025 ECWG proposal prep, and the QACs report, delayed until summer 2024.

Deliverables due before the next SC meeting include the Impact of Remediation Actions on San Leandro Bay Recovery from PCB Contamination technical report, which is currently under review with the PCBWG and aiming to be finalized in April. Wastewater partners needed more time on the The QACs in Bay wastewater SEP but the intention is to have the report ready for the ECWG meeting. Don and Data Services are still working on the reanalysis for the Final Margins report. This was prioritized behind the 2023 lab intercomparison results, Bird Egg PFAS QA for ECWG, and the ambient Bay numbers update for the BCDC. With help from Miguel on QA ancillary datasets, the 2021 QA Summary Report for S&T Activities should be completed by June. A draft of the North Bay Selenium in clam and water data report (2019-2020) has been sent for review by the Selenium workgroup, aiming for finalization in April. The

2020 S&T Design Report will be completed without review from Tom Grieb. The Sediment Deposition on SB Marsh (Whales Tail) report will be submitted soon. The Integrated Watershed monitoring and modeling strategy report as well as the PFAS in archived sport fish effort will also be completed before the August meeting.

Action Item:

- Schedule meeting to discuss event based monitoring (Amy Kleckner, May 1, 2024)

11. Discussion: Plan Agenda Items for Future Meetings (02:59:00)

The main items for the August SC meeting include voting on special study funding, planning the agenda for the MYP workshop, fee discussions and Annual Meeting talks. Given the agenda is already full, a technical update from SFEI was deemed optional. The charter will potentially have to be revised given Tom's retirement. Tom suggested an item on dredging community fees

12. Discussion: Plus/Delta (03:06:00)

The group commended Amy and SFEI for hosting the hybrid meeting and keeping on time. Karin particularly appreciated the staff introductions.

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.

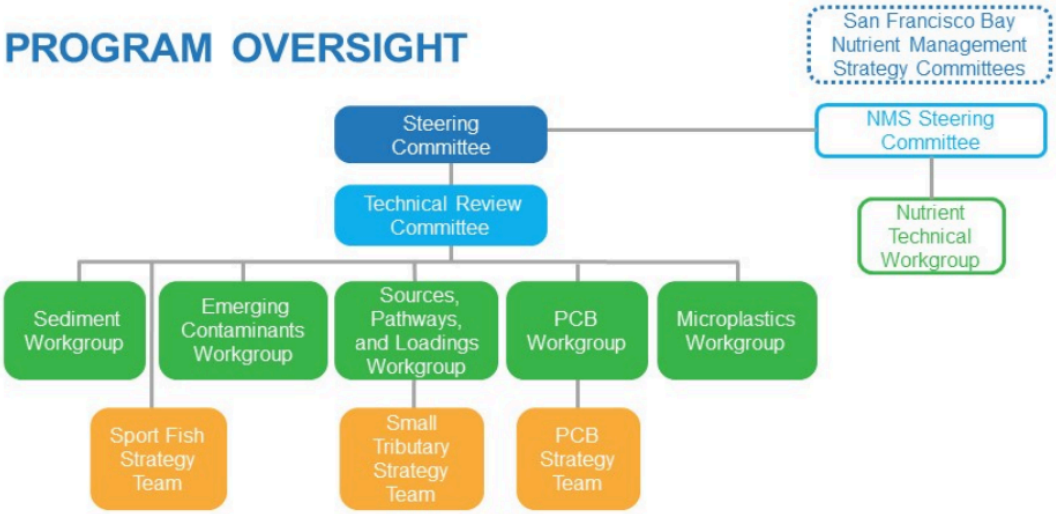
In order to fulfill the overarching goal of the RMP, the Program has to be forward-thinking and anticipate what decisions are on the horizon, so that when their time comes, the scientific knowledge needed to inform the decisions is at hand. Consequently, each of the workgroups and teams develops five-year 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

Figure 1. Collaboration and adaptation in the RMP is achieved through the engagement of stakeholders and scientists in frequent committee and workgroup meetings.



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—and 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.