Technical Review Committee

December 7, 2023
9:00 AM – 12:30 PM

HYBRID MEETING
In-Person
SFEI
First Floor Conference Room

Remote Access
https://us06web.zoom.us/j/88380356016
Meeting ID: 883 8035 6016

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DRAFT AGENDA

1.	**Introductions and Review Agenda**	9:00 (10 min) Bridgette DeShields
2.	**Decision: Approve Meeting Summary from September 19, 2023, and confirm/set dates for future meetings** Scheduled meetings: SC: January 22, 2024 April 15, 2024 TRC: March 26, 2024 Proposed meetings: Annual Meeting: October 16, 2024 TRC: (usually 3rd or 4th Wednesday of the month)	9:10 (10 min) Bridgette DeShields

	Materials: ● TRC Meeting Summary, see pages 05-15 Desired outcome: Approve meeting summary, set the date for future meetings.	
3.	**Information: MYP and SC Meeting Summaries from November 1, 2023** Materials: MYP and SC Meeting Summaries, see pages 16-30 Desired Outcome: ● Informed Committee	9:20 (15 min) Amy Kleckner
4.	**Discussion: EPA Program Office Update** EPA has developed a draft list of priorities for 2024 for their new Program Office and is soliciting input. Materials: Draft priority list document and slides, see pages 31-38 Desired outcome: ● Informed Committee ● Provide input to EPA on the list	9:35 (20 min) Luisa Valiela
5.	**Information: 2024 Workplan** An overview of the Detailed Workplan and budget for 2024. Materials: 2024 Workplan, see pages 39-65 Desired outcome: ● Informed Committee	9:55 (15 min) Amy Kleckner
6.	**Information: Watershed Modeling Update** An update on hiring to fill the open watershed modeling position, and plans and timelines for completing funded projects. Materials: None - slides presented at meeting Desired outcome:	10:10 (15 min) Jay Davis

	● Informed Committee	
7.	**Discussion: S&T Monitoring Update** Provide an update on recent S&T monitoring activities and plans for 2024 and beyond. Materials: None - slides presented at meeting Desired outcome: ● Informed Committee ● Obtain input on S&T implementation	10:25 (20 min) Amy Kleckner
8.	**Information: Event-based Monitoring** Summarize the discussion of this topic at the Steering Committee meeting and provide an update on plans for developing a plan for monitoring different types of events (HABs, fires, floods, spills). Materials: None - slides presented at meeting Desired outcome: ● Informed Committee	10:45 (20 min)
	Break - 10 min	11:05
9.	**Information: Data Services and Informatics Update** Annual update on informatics activities: ● Updates to CD3 ● Progress on current year datasets ● Database maintenance tasks completed ● Data expected for 2020 Materials: None Desired outcomes: ● Informed Committee	11:15 (30 min) Adam Wong
10.	**Discussion: Communications Update** Discuss the 2023 RMP Update and Annual Meeting, and the plan for the 2024 Pulse on CECs. Materials: None - Slides presented at meeting	11:45 (30 min) Jay Davis

	Desired outcome: ● Feedback on RMP Update and Annual Meeting. ● Obtain input on 2024 Pulse plan	
11.	**Information: Status of Deliverables and Action Items** Materials: Deliverables and Action Item tables and slides, see pages 66-78 Desired outcome: ● Informed committee ● Feedback on progress and due dates	12:15 (5 min) Amy Kleckner
12.	**Discussion: Plan Agenda Items for Future Meetings** Desired outcome: ● Identify future agenda items	12:20 (5 min) Jay Davis
13.	**Discussion: Plus/Delta**	12:25 (5 min) Bridgette DeShields
	Adjourn	12:30

Bay RMP Technical Review Committee Meeting

September 19, 2023

Meeting Summary

Attendees

TRC Member	Affiliation	Representing	Present
Alicia Chakrabarti	EBMUD	POTW	**Yes**
Mary Lou Esparza	Central Contra Costa Sanitary District	POTW	**No**
Tom Hall	EOA, Inc.	POTW	**Yes**
Heather Peterson	City and County of SF	CCSF	**Yes**
Samantha Engelage	City of Palo Alto	POTW	**Yes**
Bridgette DeShields*	Integral Consulting	Refineries	**Yes**
Chris Sommers	BAMSC (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**
Jamie Yin	US Army Corps of Engineers	USACE	**No**

Staff and Others

- Jay Davis – SFEI
- Amy Kleckner – SFEI
- Martin Trinh – SFEI
- Bryan Frueh - City of San Jose
- Gerardo Martinez – SFBRWQCB
- Paul Salop – Applied Marine Sciences

1. Introductions and Review Agenda

Bridgette DeShields opened the meeting with a round of introductions and a brief review of the day's agenda. The Committee recognized the contributions of Yun Shang and Heather Peterson to the TRC and RMP while welcoming Alicia Chakrabarti of EBMUD and Samantha Engelage from the city of Palo Alto to the TRC.

2. Decision: Approve Meeting Summary from June 20, 2023, and Confirm/Set Dates for Future Meetings

Bridgette DeShields asked the group for any final comments on the previous meeting's summary. Richard inquired on the status of the MTC land use layer, with Amy clarifying that Tony Hale of SFEI and Tom Mumley of the SFBRWQCB had been in communication with the MTC who have stated they are working on a new version but no published release date. The Sediment Margins report is also waiting on some reanalysis. Receiving no other comments, Bridgette confirmed the dates for upcoming meetings. The end of year TRC meeting was confirmed for December 7, 2023 and the following meeting was scheduled for March 26, 2023. The Committee confirmed the RMP Annual Meeting for October 12, 2023 and the Multi-Year Planning Meeting for November 1, 2023.

Action Item:

- Send out calendar invites for March 26, 2023 TRC meeting (Martin Trinh, September 30, 2023)

Decisions:

- Richard Looker motioned to approve the meeting summary. Ian Wren seconded the motion. The motion was carried by all present members.

3. Information: SC Meeting Summary from August 24, 2023

Amy Kleckner went over the notable items from the August Steering Committee meeting, beginning with the financial update from Jen. The bulk of the meeting was spent reviewing and approving the special study proposals, SEP list update, and allocated funding. One project was removed from the SEP list as it had already been funded. Kelly updated the SC on the PFAS WQIF proposal, with the Committee approving the use of RMP funds as match. Amy provided an update on the Status & Trends efforts for 2023. The sediment cruise was completed and Marco Sigala began sampling the margins and nearfield areas for prey fish. Next week, the RMP will begin the dry season water cruise after nearly a month-long delay due to boat issues. Don presented the Bay Margins sampling design, which has been approved and is where Marco is sampling this week and next. Don also shared the Interlab comparison plan,

which will be sampled for next week during the water cruise. Finally, the group did more brainstorming for the Annual Meeting, which will be continued later today.

4. Discussion: Workgroup Strategy Updates and Multi Year Plan Workshop Planning

Jay opened this agenda item by providing strategy updates on the RMP workgroups in preparation for the upcoming Multi-year Planning Workshop.

The Sources, Pathways, and Loadings Workgroup (SPLWG) had a meeting in April and is scheduled for another at the end of September. A pre-meeting is planned for mid-September. The group discussed the status of Management Questions (MQs) updates and agreed on revised MQs during the meeting. They also worked on updating the multi-year workplan concurrently with the Strategy update in September. Current and planned projects with overlaps were reviewed, and the management questions were updated accordingly.

In the Sediment Workgroup (SedWG), it was decided to divide the work into two parts, with sections 3-5 to be addressed first, followed by sections 1-2, likely late this year or early next year. Another tier of questions for sections 3-5 was introduced, and the development of the work plan was discussed, with an update scheduled for September, incorporating feedback from workgroup members.

The PCB Workgroup has an updated Strategy and MQs. They plan to meet in December for a modeling update and to receive an update from the Watershed Board (WB) on the Total Maximum Daily Load (TMDL) plan. The Committee also discussed updates on in-Bay modeling, with the team planning to showcase initial results for San Leandro Bay in December. Current projects with overlaps, such as the Integrated Watershed and Bay Modeling Strategy (IWBMS), were discussed, as were planned future projects involving the Emerging Contaminants (ECWG), Sediment (SedWG), and Nutrients (NMS).

The Microplastics Workgroup (MPWG) will release a draft strategy update in the fall, with the final version expected in February. The ECWG planned to release a full draft of their strategy in the fall, with the final document expected in February.

In preparation for the MYP, a small subcommittee would collaborate to create a working draft of updated regulatory drivers. The TRC discussed the Water Quality Improvement Fund (WQIF) with Chris expressing interest in discussing future funding levels. Luisa stressed the need to plan with the expectation that the funding (~$50 million per year) is expected to be an annual appropriation from Congress. There were

discussions regarding the competitive grant pot and directed funds for identified priorities.

Luisa planned to share the list of funding priorities with various organizations, including the Water Board, San Francisco Estuary Partnership, Restoration Authority, and the Wetland Regional Monitoring Program (WRMP). The competitive block of funds was estimated to be around $5 million. Luisa emphasized the need for collective vision to help direct and show readiness to proceed with any funding allocated by Congress.

In the context of funding uncertainty, Luisa indicated that SF Estuary Partnership, along with several other entities, is named as a partner to consult on the funding priorities to be ready for FY24. The worst-case scenario projected an allocation of $10 million for EPA, with a more likely scenario of $5 million for the competitive grant pot and $40 million for the priority list, earmarked for wetlands restoration, beneficial reuse, and other programs. The discussion also included considerations about the allocation of the proposed budget and possible changes in the regulatory drivers. Participants were encouraged to plan for an increase in budgetary allocations for key areas, such as nutrients, PCBs, and stormwater management, based on the expected increase in funding from the EPA San Francisco Bay Program.

Key discussion points also involved ongoing efforts to ensure a collective vision regarding the priority list for the allocation of the new funding. The attendees acknowledged the uncertainties surrounding the legislative processes and the need for continuous adaptations to potential changes. They emphasized the importance of preparing for different scenarios while remaining optimistic about the current funding projections.

The group also discussed the federal government's potential transition to continuing resolutions, and the rationale for forming or deactivating RMP workgroups, primarily the importance of having a sufficient body of work that requires scientific advice or peer review.

Action Item:

- Remind Tom to work on drafting updated regulatory drivers. (Amy Kleckner, October 15, 2023)
- Schedule small group to plan the MYP meeting agenda (Amy Kleckner, September 29, 2023): Chris S., Bridgettte, Adam, Jay, Tom, Amy, Adam to meet to finalize MYP workshop agenda.

5. Information: S&T Monitoring Update

In this agenda item, Amy provided an update on the Status & Trends (S&T) monitoring activities conducted during the year, particularly focused on the dry season. The monitoring team successfully completed Bay Sediment sampling, near-field prey fish and sediment collection, and margin sediment sampling. The marine mammal sampling is still in progress. The water cruise has been delayed due to boat engine issues. Paul Salop, of Applied Marine Services (AMS), confirmed the repair of the boat engine and the resumption of the planned water cruise.

The plan was set to commence the dry season water sampling, aligning it with the earlier wet season water sampling, aiming to capture any changes during the dry season. Despite delays, the team was committed to collecting near-field and deep Bay water samples, making efforts to accommodate the adjusted schedule.

Updates on sediment collection revealed that all sediment and prey fish sampling were completed. The team collected an impressive 229 containers of sediment over four days. The sediment and prey fish samples are being processed.

Notably, the marine mammal sampling yielded six harbor seals from San Francisco Bay, out of which three were individuals that did not survive rehabilitation. Samples were retrieved from the deceased seals for analysis, although the lab results were yet to be finalized. Challenges such as staff mishaps (Marine Mammal Center) with sample storage and concerns regarding sample integrity led to additional resampling.

The team also discussed the ongoing lab inter-comparison study involving different labs for PFAS, suspended sediment, copper, and hardness. The criteria for comparison included precision, communication, timeliness, and cost. The team planned to use the water samples collected from various stations for the comparison study. The results of the comparison are expected by the end of the year.

6. Discussion: Communications Update

Jay provided an update on the two priority communications updates for 2023, the 2023 RMP Annual Meeting and the 2023 RMP Update. Jay acknowledged Amy, Tom, and Becky for their efforts in organizing the general session, nutrient and sediment sessions, and PFAS session as well as the need to appoint session moderators. The RMP Update will include a featured project article by Becky on stormwater CECs.

The focus then shifted to arranging moderators for the different meeting blocks, with Tom volunteering Water Board staff for moderation duties. The value of having

Committee members serve as moderators was emphasized, and previous moderators were recognized for their contributions. Karen was proposed as a potential moderator for the opening block, and Chris volunteered for the last block.

The communication update moved on to the RMP Update, with the delay in the report due to scheduling conflicts and staff illness. The team aimed to have the reports ready for review, with a one-week turnaround time for feedback. Despite the possible delay in printing the reports, the team remained confident about releasing a digital version of the Update in time for the Annual Meeting.

Action Item:

- Reach out to Maggie Monahan about moderating Annual Meeting PFAS session (Jay Davis, September 24, 2023)

7. Information: Status of Deliverables and Action Items

Amy began her update on the status of deliverables and action items by highlighting completed projects, including the posting of cruise plans to the website under the S&T tab, the addition of stormwater and sediment flux data to the website, completion of the floating percentile method report, and the sediment dynamics assessment and certainty analysis.

Amy then transitioned to discussions about overdue tasks, including the MTC Bay Area land use update, which had been delayed due to lack of updated data. There was frustration expressed over the lack of response from MTC. There was a plan to reach out to Caitlin Sweeney for more information. Other topics discussed included the Selenium and North Bay clams and water effort, where there was a need for additional funding to complete the report, and the delay in the stormwater monitoring strategy for CEC due to technical challenges with the remote sampler. SFEI's remote sampler works well for PFAS but needs fine tuning for other contaminants. Pedro Avenallada is currently working on the CEC modeling exploration which will inform the monitoring strategy.

Amy covered delayed efforts, including the STLS WY21 POC Recon monitoring final report. The RMP has decided to opt for advanced data analysis to better rank the watersheds. Lester aims to complete this by the end of the year. Stanford is currently working on the draft report on PCBs in San Leandro Bay, also with an end of year deadline. The ethoxylated surfactants study with Duke has not begun analysis. The PCBWG has approved the revised timeline for the PCB in Bay contaminant modeling group. The CECs in Urban stormwater manuscript is also estimated to be completed by the end of 2023.

Before the next TRC meeting, the RMP aims to complete the Margins final report, North Bay selenium clam and water report, and the S&T design report. The RMP is attempting to fast track the PCB data from SGS AXYS for the PCB monitoring at the GE property and hopes to have that data soon. Amy also aims to update the 2023 QAPP.

Action Item:

- Share revised draft of margins report after reanalysis (Don Yee, December 12, 2023)

8. Discussion: Plan Agenda Items for Future Meetings

The Committee discussed items of interest for future meetings, including potential updates on informatics and review of intercalibration studies and plans. Jay plans to preview next year's Pulse with Amy presenting on next year's workplan and the outcome of the MYP workshop. Chris would like to hear about how SFEI plans to fill the Watershed modeling position and how timelines are being affected by the current absence. Jay has been reviewing candidates for full time roles as well as considering working with consultants. SFEI is exploring both options for the long-term. Jay will provide updates on workgroup progress. Finally, the Committee brought up the need to structure planning for unusual events (fires, HABs, floods) that has been discussed but the RMP is not ready to fully tackle yet. Amy concluded the item by discussing the possibility of SFEI remaining in their current building due to a reduction in rent being offered by the landlord.

9. Information: Preview of Annual Meeting Presentations

In preparation for the upcoming Annual Meeting, Diana Lin and Ezra Miller of SFEI shared their presentations on PFAS and tirewear particles respectively. These were draft presentations that they had used previously for the American Chemical Society, so committee members suggested adapting the content for a less technical audience.

Beginning with an overview of PFAS as a class of compounds, Diana discussed how the Regional Monitoring Program (RMP) collaborated with stakeholders, scientists, and government bodies to conduct a two-phase study on PFAS in Bay wastewater, leveraging technical oversight from the RMP.

Phase One involved careful monitoring at select facilities with diverse characteristics, informing the subsequent Phase Two investigation. Miguel Mendez had earlier presented Phase One results during the 2021 Annual Meeting. Diana then delved into the analytical methods, emphasizing the limitations in quantifying PFAS due

to the diverse range of compounds. Target analysis and total oxidizable precursor methods were used, with the latter allowing a more extensive quantification of PFAS.

Moving on to the results, Diana compared the target and top method analyses for various samples, including influent and effluent, highlighting the increased ability to quantify PFAS with the top method. The analysis indicated significant PFAS presence, particularly in influent samples. Notably, the concentration levels exhibited variation due to the proximity to detection limits. Biosolid results further supported the prevalence of PFAS in wastewater, potentially accumulating due to their partitioning.

Diana also focused on the significant contribution of residential discharges and industrial laundry facilities to PFAS loadings, estimating the proportion of these contributions based on flow rates and concentration levels. Notably, residential samples exhibited considerable variability in concentration levels, while industrial laundry facilities consistently showed high PFAS concentrations, surpassing influent levels by a significant margin.

Other industrial and commercial sources, including hospital discharges, were also scrutinized, revealing varying levels of PFAS. Fire suppression water, paperboard manufacturing, and car washes were identified as potential sources, warranting further investigation. Diana emphasized the need for more extensive and refined sampling to establish accurate estimations. Concluding the presentation, Diana highlighted the need for continued research and monitoring to comprehend the extent of PFAS contamination in various wastewater discharges. The comprehensive screening study shed light on the prevalence of PFAS, emphasizing the necessity for further investigation and potential mitigation measures to curb their adverse effects on the environment and public health.

The following discussion opened with Luisa seeking clarification on the real goals of this presentation. Diana clarified that while she found the top analysis approach useful, she had not fully considered advocating for a specific testing method yet. She emphasized the importance of continued monitoring and the exploration of new analytical methods.

The conversation then shifted to the complexity of the data presentation and the need for simplification to make it more accessible to a wider audience. Chris recommended focusing on the key findings and avoiding the detailed technical aspects to ensure clear communication. The committee stressed the significance of emphasizing the widespread presence of PFAS and its implications for regulatory responses.

Samantha Engelage from the City of Palo Alto raised a question about the comparison between industrial laundries and metal finishers in terms of PFOS discharges. Diana explained that while the metal finisher samples indicated lower concentrations, the industrial laundry facilities showed higher levels. Samantha suggested highlighting this difference in the summary to underscore the relevance of pre-treatment regulations for industrial laundries.

The group also discussed the presentation's tone regarding policy implications, considering the sensitivity of the subject for wastewater treatment plants. They advised Diana to present the data objectively without making specific policy recommendations, leaving any related discussions to the moderators or relevant authorities. Samantha also confirmed the inclusion of POTW names in the previous report, suggesting that Diana continue naming them in the presentation for consistency.

Chris Sommers emphasized the importance of concluding the presentation with a clear summary and key takeaways, focusing on the significant implications of the widespread presence of PFAS across various sources. The committee stressed the need for transparent and informative communication about the data's implications for future regulatory considerations.

Diana appreciated the feedback and mentioned her upcoming talk at a summit organized by the California Association of Sanitation Agencies (CASA), where she planned to present the same dataset a week before the annual meeting. The group encouraged her to use this opportunity to refine her presentation and gather additional insights.

Ezra began zir presentation on tire wear particles as a significant source of microplastics in California's stormwater. The comprehensive microplastic monitoring from a few years ago found that urban areas have high levels of microplastics, with about half of them being tire particles. However, the monitoring only considered particles larger than 125 microns due to method limitations, although the majority of tire particle volume consists of smaller particles. The presentation highlights the uncertainty regarding the effects of these smaller particles on water quality and the need for more comprehensive assessment.

Kelly Moran's tire wear emissions estimation effort is discussed, with two different methods employed to estimate annual emissions in the Bay Area and California. These estimates generally align, although one method suggests slightly lower emissions, likely due to data primarily sourced from smaller European cars. The transition to electric

vehicles is expected to increase these emissions further, although there is currently no direct data supporting this hypothesis.

The focus then shifted to the fate of tire particles in surface waters, with estimates indicating that a significant portion remains sequestered in the soil, and various assumptions leading to a rough estimation of hundreds of thousands of kilograms of tire particles reaching San Francisco Bay annually. Ezra emphasized the complexity of tire particles, which are not solely composed of rubber but also contain other materials from the road. The high surface area of tire particles and the chemicals they contain raise concerns about their potential impacts on water quality.

The discussion delves into the diverse array of chemicals found in tires, particularly focusing on 6PPD and 6PPD Quinone, which have been identified as major concerns. While 6PPD protects tire rubber from ozone, it can lead to the formation of 6PPD Quinone, which is acutely toxic to coho salmon, a species no longer found in the Bay Area. The presentation acknowledged the difficulty in linking the decline of coho salmon directly to 6PPD but emphasizes the sensitivity of related species, such as steelhead, to this compound.

Ezra highlighted further ongoing studies on stormwater, including a three-year pilot monitoring project that aims to assess the concentration of tire-derived contaminants during storm events and their dilution in the Bay. Initial results indicate that concentrations are highest in urban stormwater, decrease near stormwater outfalls, and are relatively low in the open bay during the dry season. However, concentrations rise during the rainy season, prompting concerns about potential impacts on sensitive species like coho salmon. Ezra acknowledged the challenges in predicting toxicity due to the variable nature of stormwater events and the potential interactions between different contaminants. The talk concluded with a call for further research to better understand the implications of tire-related contaminants on the Bay Area's aquatic ecosystems.

The following discussion emphasized the significance of understanding upstream impacts, even though the primary focus remained on the Bay itself. Committee members suggested a thorough comparative analysis between the actual presence of steelhead and the identified sampling locations, indicating the necessity of validating the data for a comprehensive understanding.

Furthermore, concerns were raised about a specific slide that suggested partial responsibility. Attendees stressed that the ecosystem's complexity involved multiple contributing factors, such as habitat issues and hydro modification, which might have a

substantial impact. Consequently, they advised Ezra to be cautious about attributing causality solely to the factors presented in the slide.

As the conversation progressed, participants suggested trimming down certain sections of the presentation to adhere to the allocated time slot, ensuring that the most critical and relevant information received the necessary focus. There was also an emphasis on broadening the conversation to encompass multiple affected species rather than solely focusing on coho. Attendees underscored the importance of highlighting other species impacted by the issues discussed in the presentation, emphasizing that this approach might make the content more impactful and relevant.

Action Item:

- Send edited presentations to interested committee members (Diana Lin, Ezra Miller, September 26, 2023)

10. Discussion: Plus/Delta

Overall, the group commended Jay and Amy on the efficient meeting. The TRC particularly appreciated the great presentations and the RMP's sustained efforts on S&T monitoring.

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

Bay RMP Multi-Year Planning Meeting
November 1, 2023

Meeting Summary

Attendees

Member	Affiliation	Representing	Present
Alicia Chakrabarti	EBMUD	POTW	**Yes**
Eric Dunlavey	City of San Jose	POTW	**Yes**
Amanda Roa	Delta Diablo	POTW	**Yes**
Karin North	City of Palo Alto	POTW	**Yes**
Tom Hall	EOA, Inc.	POTW	**Yes**
Xavier Fernandez	San Francisco Bay Water Board	Water Board	**Yes**
Tom Mumley*	SF Bay Regional WQCB	Water Board	**Yes**
Richard Looker	SF Bay Regional WQCB	Water Board	**Yes**
Gerardo Martinez	SF Bay Regional WQCB	Water Board	**Yes**
Bridgette DeShields	Integral Consulting	Refineries	**Yes**
Maureen Dunn	Chevron	Refineries	**Yes**
Adam Olivieri	BASMAA (EOA, Inc.)	Stormwater	**Yes**
Chris Sommers	EOA, Inc.	Stormwater	**Yes**
Ian Wren	Baykeeper	NGOs	**Yes**
John Coleman	Bay Planning Coalition	Dredgers	**Yes**

*Chair; alternates in gray and italicized

Staff and Others

- Jay Davis - SFEI
- Amy Kleckner – SFEI
- Warner Chabot – SFEI
- Rebecca Sutton - SFEI
- Martin Trinh - SFEI
- Scott Dusterhoff - SFEI
- Alicia Gilbreath - SFEI
- Diana Lin - SFEI
- Kelly Moran – SFEI
- Don Yee - SFEI

1. Introductions and Review Goals for the Meeting

Tom Mumley began the meeting by welcoming everyone to the Multi-Year Planning (MYP) Workshop. Following a brief introduction to the technology and hybrid meeting etiquette, Tom oversaw a round of introductions. He then reviewed the agenda items, including reviewing Special Study funding for 2024, workgroup direction, and implementation of the revised Status & Trends (S&T) program.

2. Discussion: Setting the Stage – Planning for 2024 and Beyond

Amy opened this agenda item by sharing the RMP budget for 2024, consisting of $4.16 million in core fees, $440K for the CEC monitoring supplement, SEP funds, and additional funding from the WQIF proposals. The Status and Trends updated design is well under way. After this upcoming year, the RMP will have completed the sampling portions of the pilot studies for wet season water and harbor seals. In Agenda Item 4, Amy will share more details of what changes have been made since the 2023 MYP and how those changes would affect future S&T budgets and what remains for special studies. Amy shared the annual gross expense vs net expense and the 10-year average for net expense after set-aside fund withdrawals or contributions. In the 2023 MYP, the predicted 10 year average for net S&T expenses was $1.45M. In this year's update, that average is now $1.5M (2020-2029). The RMP is anticipating the release of funds for the WQIF Destination Clean Bay grant by the end of this year, also hoping to hear soon about the PFAS Sources to Solutions WQIF grant. In addition to the competitive block of funds estimated at around $5M, the RMP is encouraged to plan for additional funds from the EPA SF Bay Program Fund that will be earmarked for studies in key areas such as nutrients, PCBs, and stormwater management.

Amy then highlighted the work planned for 2024. The first big lift of the year will be the storm water CECs monitoring and modeling, getting ready for the upcoming storms. Concurrent will be the OPES, bisphenol and other plastic additives in wastewater, microplastics storm water monitoring pilot, and tire and roadway contaminants in wet season Bay water. Other priorities include the nontarget analysis of Bay fish, sediment accretion in Bay restoration, sediment deposition in San Leandro Bay, and PCB and mercury watershed load monitoring and modeling. Additional lifts include the nutrient moored sensor network, PFAS synthesis and strategy, PFAs and Bay water using the TOP assay, the tidal area remote sampler, and the remote sampler purchase that Kelly will provide an update on. Workgroup strategies are helping to inform special studies planning and Jay will cover the progress of the workgroup strategy updates in more detail later in the agenda.

Amy concluded the item by updating the Committee on the RMP discussions at various stakeholder meetings. Future priorities discussed at the BACWA meeting included the need for baselines to support monitoring, particularly the effects of reduced wastewater and stormwater inputs into the Bay and the effects of reverse osmosis concentrate discharge to the Bay. Other identified needs include the South Bay standards-related selenium assessment, sea level rise

adaptation and climate-related changes in salinity, pH, temperature, and dissolved oxygen. Trash and microplastics, wetland restoration permits and regional monitoring, and tribal and subsistence beneficial uses are additional potential future drivers. Future priorities discussed at the BAMSC meeting included modeling watershed PCB and Hg loading more broadly and not just at priority margin units (PMUs), data on PCB inputs from North Bay watersheds, supplementing BMP effectiveness tracking across counties, and obtaining CECs monitoring data to determine “sources” to support regulators and legislation. Additional needs include linking nature-based solutions to green stormwater infrastructure for sea level rise adaptation and linking to waste-related regulations (foodware, compost). Meetings with refiners and dredgers will be happening in the coming weeks.

Action Item:

- Work with John Coleman to schedule meetings with dredgers (Amy Kleckner, January 1, 2024).

3. Discussion: Information Priorities for 2024-2026

For this item, Tom reviewed the RMP management driver table, which includes categories for high priority, other, and potential drivers. High priority management drivers include the ongoing 303(d) list and 305(b) report, TMDLs for PCBs and mercury, updates to the tiered risk-based framework for CECs, review of the sediment guidelines and testing criteria for the beneficial reuse of dredged sediment, and the determination of wastewater permit limits. The first three projects are all ongoing with calls for 303(d) data in 2026 for the 2030 round and PCB data by 2028. The table of other management drivers was the same from last year with the primary change being the review of 303(d) listings for sediment hotspots changed from 2024 to ongoing. Potential future drivers included microplastic consideration for the 2030 303(d) list discussed at the April SC meeting. Richard clarified that segments of the Bay will likely be put on a watchlist. “Specific CECs e.g. PFAS” was suggested to be added to the list of potential future drivers. Regarding tribal and subsistence uses, Jay highlighted non-RMP work that SFEI was doing with the Water Board, developing a consumption survey questionnaire for subsistence fishers.

Action Item:

- Update the RMP Management Decision Table (Amy Kleckner, January 1, 2024).
- Add back first line (BACWA highlighted in stakeholder meeting) from 2023 Potential future drivers table to updated table for 2024 MYP (Amy Kleckner, January 1, 2024).
- Add PFAS item to Potential future drivers table (Amy Kleckner, January 1, 2024).

4. Discussion: Status & Trends and Other Items

Amy provided a detailed review of changes to the S&T plan from the 2023 MYP. Notable adjustments included a decrease in the grand total for 2024, a reduction in set-aside funds used, and a decrease in the net S&T funding needed. The 2025 and 2026 forecasted grand totals saw a slight increase due to a shift in NTA funding. Additionally, the 2027-forecasted

grand total increased to more accurately reflect the bird egg budgets based on the 2022 budget actuals. The 2028 forecasted grand total was higher, assuming the continuation of wet season water sampling.

Specific changes from the 2023 MYP were highlighted, including a significant reduction in the NB Selenium budget for 2024 from $131k to $18k. Selenium sampling activities will be paused until 2025, and the reduced budget will be used towards the exploration of a different analytical partner for tissue samples, reporting, and a data and methods review. NTA and passive samplers for water will be delayed until 2025 and 2026. Tom inquired as to why the non-target analysis and passive sampler work had to be delayed, with Amy citing an inability to find analytical partners this year. The bivalves budget was removed ($21k).

Further adjustments included an increase in the bird eggs budget from $160k to $195k, reflecting a more accurate estimate based on the costs from the 2022 sampling and analysis. The sport fish budget was increased from $531k to $560k. Additional allocations were made, including $20k for shiner surfperch PMU monitoring and $9k for expanding the sport fish archiving plan. The harbor seals budget was reduced to match the approved proposal, decreasing from $300k to $127k. A model maintenance budget of $50k was added for 2024.

The meeting also identified key pieces for review, such as pilot studies, wet season water and harbor seals monitoring, North Bay selenium, and non-target analysis. Long-term funding needs were discussed, including model maintenance beyond 2024, and $200k per year for PCB and Hg monitoring and modeling. Equipment maintenance requirements and the need for sustained funding were highlighted, prompting questions about who would review priorities for maintenance.

Action Items:

- Revisit and discuss NTA and passive samplers “off-line” (xx)
- Revisit/discuss future model maintenance, equipment maintenance, and continuation of wet season, harbor seals, selenium funding before 2025 MYP Update (Amy Kleckner, September 2024)

5. Discussion: Multi-Year Plan and Strategy Updates for Workgroups

In this agenda item, Jay requested guidance from the committee members on priorities and funding levels for workgroups. The group was tasked with giving feedback on the draft Multi-Year Plan (MYP), which will be finalized at the January meeting. The primary emphasis was on planning for 2025. Tom proposed maintaining the same level of funding as the previous year, and a discussion followed regarding the Special Studies for 2025.

During the discussion, Jay noted that available funds for 2025 might be slightly lower, and there was a suggestion that PCB funding might not be needed in 2025 with all the WQIF funding available. Sediment and SPL budgets for 2025 were discussed and were estimated to be

around $300k. A graph representing the distribution of funds was presented, with Karin noting that with outside funds, the representation of PCB, SPL, and nutrients funds should be higher. The committee members suggested including other funding sources in future graphics, like factoring in WQIF for PCBs in 2025.

The discussion shifted to the total budget, emphasizing the need to rank and prioritize studies. Workgroup leads were encouraged to come with prior prioritization, and there was a proposal to give similar direction to workgroups for 2025 as in 2024. However, the committee members raised concerns that workgroups might take the direction too literally, potentially leading to a lack of flexibility when other funds become available. The group suggested expanding potential planning budgets for workgroups, but with some level of boundary. Chris advised requesting workgroups to expand potential planning budget to allow workgroups flexibility. Jay noted this would take up staff time but Tom pushed back that those who are willing to step up will be able to receive more money. There was a discussion about the allocation of funds, with Bridgette suggesting that a percentage could be given, while Ian proposed narrowing the scope of the budget. Tom noted an academic contacted him inquiring as to why the RMP no longer accepts proposals from external academics.

A discussion ensued on the concept of two tiers of proposals, which was supported by Tom as a lighter lift for workgroups. There was discussion about workgroup bandwidth, and the idea of providing guidelines for a streamlined two tier application was proposed. Xavier and Karin expressed agreement with providing some guidance, while Karin emphasized that some projects may need background information. Richard suggested providing guidelines for a streamlined tier 2 template for proposals, focusing on the approach section without including schedule or background information. The discussion touched on turnover within the TRC, with considerations to revisit the streamlined approach in the future. Jay committed to bringing a draft to the December TRC meeting.

The ECWG held two meetings and two subgroup meetings between 2022 and 2023 that included strategy discussions. Management Questions (MQs) have been revised and are open for further refinement based on ECWG feedback. The strategy revision progress involved the review of two chapters in April, with a full draft expected in January and the final document anticipated in April. Notably, stormwater monitoring, which overlaps with SPLWG, is an ongoing project. Planned future projects with overlap include stormwater monitoring and modeling (SPLWG, MPWG), in-Bay modeling (PCBWG), and tire material and contaminants monitoring (MPWG, SPLWG - 2026). Tom inquired about RMP staff capacity as WQIF could distract from core RMP CEC interests. Kelly clarified that lots of CECs work is going to partners. There is approximately $2 million in work from RMP and WQIF, with a proposed target of $700K for tier 1 work.

The SPLWG held its first meeting in April, with another anticipated for early December. Pre-meetings are planned for late November. Revised MQs have been agreed upon, and the strategy update, outlined in August, is in the drafting phase, expected to conclude in November. The Multi-Year Plan (MYP) update draft has been submitted for RMP review. Ongoing projects

with overlap include CEC stormwater groundwork (ECWG), IWBMS (PCBWG, ECWG, SedWG, MPWG). Planned future projects with overlap include CECs in stormwater M&M, WDM application, and MPs monitoring in stormwater.

The SedWG conducted strategy meetings on January 31 (Part 1: MQ3-5), February 8 (MQ 1-2), and March 23 (Part 2: MQ 3-5), with the next meeting scheduled for January 2024 (MQ1-2). Management Questions 3-5 have been expanded based on WG input, and MQs 1-2 will be revisited in early 2024. Workplan development is set to conclude in November 2023. The MYP update was completed in October 2023 based on the draft Workplan. Ongoing projects with overlap include the In-Bay model (PCBWG) and IWBMS (SPLWG). Planned future projects with overlap include the In-Bay model (PCBWG) and WDM applications (SPLWG).

The MPWG held strategy discussions in April and a subgroup meeting in July. Related efforts included the OPC-funded state macro- and microplastics strategy, a dryer microfiber study, and the Next Gen WQIF bioretention rain garden study. Revised MQs were finalized in April, and the strategy revision draft was shared in September, with the final document expected in February. Current projects with overlap include stormwater monitoring Year 1 (SPLWG, ECWG). Planned future projects with overlap involve stormwater monitoring Year 2 (SPLWG, ECWG), and coordination with OPC-funded statewide plastics monitoring efforts.

The PCBWG updated its strategy and MQs, with a meeting planned for December to discuss modeling and the TMDL plan. Ongoing projects with overlap include the In-Bay model (ECWG, SedWG, Nutrients) and IWBMS (SPLWG). Planned future projects with overlap also involve the In-Bay model (ECWG, SedWG, Nutrients). Tom does not believe the efforts supported by the WQIF will result in a robust whole Bay model, especially with BAMSC's interest in characterizing the North Bay. Karin noted that the RMP should specify that it is no longer collecting data for the PCB TMDL but continuing analysis.

The committee members noted the importance of using the MYP graphics and tables to communicate to stakeholders how effectively their dollars were utilized. Tom noted a key advantage of the RMP was its communications, with investments in communications returning more investment in the science.

Action Item:

- Bring discussion of revised two-tiered proposal process to the December TRC meeting (Jay Davis, December 7, 2023)

6. Discussion: Workgroup Scheduling and Agendas

Jay reviewed the priority workgroup agenda items and scheduling plans. This past year, the ECWG and SPLWG overlapped a meeting for CEC monitoring-related updates and special study discussion in early April. Although committee members appreciated the opportunity to take advantage of overlapping audiences, Jay noted members of the Emerging Contaminants

team felt the overlapping meetings prevented focus on some emerging contaminant topics. Other workgroup meetings will be spaced more evenly this year to optimize staff workflow. There will be a SPLWG meeting in late May focused on legacy contaminants. The PCBWG elected to hold two meetings per year to address modeling guidance needs, with a second meeting to be held in December. Priority agenda items for workgroups include management questions and strategy process updates, MYP development, reviewing 2025 proposals, reviewing relevant related proposals from other workgroups, and project updates.

7. Summary and Action Items

Amy reviewed the action items to be completed. For the MYP, key steps are reworking the workgroup tables and updating the funding charts. Jay will work on providing guidance for workgroups to follow the new-tiered project format. Committee members should provide comments on the new MYP by December 1st.

Action Items:

- Rework the MYP workgroup tables and updating the funding charts (Amy Kleckner, December 31, 2023)
- Providing guidance for workgroups on the new two-tiered project format (Jay Davis, January 31, 2023)

Adjourn

Bay RMP Steering Committee Meeting
November 1, 2023
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**
John Coleman	Bay Planning Coalition	Dredgers	**Y**
Xavier Fernandez	SF Bay Regional WQCB	Water Board	**Y**
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:

- Amy Kleckner, SFEI
- Jay Davis, SFEI
- Martin Trinh, SFEI
- Beth Ebiner, SFEI

1. Introductions and Review Goals for the Meeting

Tom Mumley began the meeting by giving an overview of the day's agenda and goals. Following the MYP workshop, the agenda items of interest for this meeting include discussion of event-based monitoring and funding, a Q3 financial update, and review of the 2024 detailed workplan and budget.

2. Decision: Approve Meeting Summary from August 24, 2023, and Confirm Dates for Future Meetings (00:02:30)

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 RMP Steering Committee (SC) meeting was confirmed for January 22, 2024, and the proposed date of April 15, 2024, was approved. There will be an RMP Technical Review Committee (TRC) meeting on December 7, 2023. Amy Kleckner informed the group that the 2024 Annual Meeting will be held October 16, 2024.

Action Items:

- Send out calendar invitations for the April 25, 2024, SC meeting (Martin Trinh, November 7, 2023).
- Send out calendar invitations to active SC and TRC members for October 16, 2024, Annual Meeting (Martin Trinh, December 7, 2023)
- Book October 16, 2024, for RMP Annual Meeting with David Brower Center (Amy Kleckner, November 7, 2024).

Decision:

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

3. Decision: Select Chair and Vice Chair and Review the Charter (00:07:00)

In this agenda item, Tom and Karin expressed their willingness to continue their involvement. However, Tom mentioned his plans to retire by summer 2024, particularly after achieving a nutrient watershed permit by May 2024. Karin expressed her willingness to chair post Tom's retirement. Xavier was identified as Tom's Water Board replacement.

Tom expressed his desire to continue participating but raised the question of in what role or capacity. The possibility of Tom continuing as the chair after retirement was discussed, contingent on modifying the charter. There was also a suggestion that retirees could be kept on as emeritus members. Tom conveyed his continued interest in being an advisor even after retirement. The item concluded with an understanding that there are ongoing considerations regarding leadership roles and potential modifications to the charter, highlighting the commitment of individuals like Tom and Karin to the continuation and success of the program.

The discussion extended to the consideration of a separate management structure for the Nutrient Management Strategy (NMS), and it was noted that this would also require revisions to the charter.

Decisions:

- John Coleman motioned to approve Tom and Karin as Chair and Vice Chair. Adam Olivieri seconded the motion. The motion was carried by all present members.

4. Information: TRC Meeting Summary (00:19:00)

Amy reviewed the September 19 TRC meeting. At that meeting, Jay gave an update on the workgroups' efforts to update their strategies. Within that agenda item, there was brief discussion of what future funding levels might be expected from WQIF and San Francisco Bay Program. Luisa had shared that in the future we might expect to see an estimated $5M for competitive grants and could assume up to an additional $40M for the "priority list".

Amy provided an update on the S&T monitoring activities for the year, including the (delayed) water cruise and near-field water sampling, harbor seal sample collection completion, and the interlab comparison studies on track to review the results by end of year. Jay provided an update on the RMP Annual Meeting and the 2023 RMP Update, both of which have now been completed and are available for viewing on the website. Amy gave an update on the Status of Deliverables and Action Items.

Future agenda items of interest were proposed such as updates on informatics, review of intercomparison studies and plans, SFEI's plans to fill the modeler position and how deliverables timelines are being affected, and planning for event-based monitoring. The meeting ended with previews of Annual Meeting presentations from Ezra and Diana. Final versions of those presentations from the Annual Meeting can be viewed on the website if anyone missed the meeting.

5. Information: RMP Financial Update for 2023 Quarter 3 (00:41:45)

In this agenda item, Beth Ebiner of SFEI delivered a comprehensive financial update for Quarter 3 of 2023. For the current year, 2023, 46% of the budget has been expended, with 78% of invoiced fees received, resulting in a surplus of $98k, thanks to SEP funds supporting part of Task 45 - Sediment Delivery to Marshes in C&N Bays. Looking at 2022, 79% of the budget has been expended, and all invoiced fees for the year have been collected, resulting in an $18k surplus. The 2021 budget shows 85% expended, with 99% of invoiced RMP fees collected, and a final invoice from San Francisco Marina anticipated to be paid in 2023 Q4. The financial status of previous years, including 2020, 2019, and 2018, indicated high percentages of budget expended and full fee collection, with one final invoice pending in 2018. Tom clarified that $180K

has been moved but not spent in undesignated funds, to be eventually transferred to the RMP budget.

Changes in the Local Agency Investment Fund (LAIF) and S&T Set Aside Funds were outlined, showcasing interest updates for Q1 and Q2 of LAIF of $34,081 and $38,160 (2.74% and 3.15% respectively). Q3 LAIF interest totals will be reported next quarter (3.59%). The S&T Set Aside Funds reflected withdrawals and contributions, with a projected balance of $1.039M by 2028.

Finally, Beth relayed a request for an early release of funds for the 2024 Task 030 stormwater project, specifically seeking $139,800 from the overall task budget of $217,000. This budget allocation was detailed to include labor costs amounting to $94,150. Subtask B, focusing on stormwater monitoring and data management, accounted for $71,820 of the labor expenses. Another component of the labor costs, amounting to $22,330, was designated for Subtask D, which pertains to project management. Additionally, the breakdown of direct costs revealed an amount of $8,650, while subcontracts were budgeted at $37,000.

Decisions:

- Eric Dunleavy motioned to approve the early release of funds for 2024 Task 030 stormwater project. Karin North seconded the motion. The motion was carried by all present members.

6. Decision: Draft Detailed Workplan and Budget for 2024 (00:51:30)

In the review of the 2024 budget and workplan, Amy presented the anticipated revenue and expenses for the upcoming year. The projected revenue for 2024 stands at $5,216,129. The breakdown of this total includes $3,956,642 in core fees, $339,488 in AMR, $100,000 in MRP, and $500,000 in S&T set-aside funds. The Core fees total assumes a dredger shortfall of $200k, additional funding from POTWs for Alternate Monitoring and Reporting, $100k from stormwater, a $500k withdrawal from the S&T set aside (this is lower than the planned $650k), $320k from the undesignated reserve; $180k for the remote sampler purchase and $140k for workgroup strategy allocations. Additionally, there is $320,000 from the undesignated reserve to support workgroup strategy efforts. On the expense side, the total is aligned with revenue, amounting to $5,216,074, leaving a balanced budget with a surplus of $55.

The detailed breakdown of the 2024 revenue reveals a significant portion from core fees and financial contributions from various sectors, including AMR, MRP, and S&T set-aside funds. The undesignated reserve's allocation aims to support workgroup strategy initiatives, ensuring comprehensive planning and execution. Program management includes increased for training new hires and for more staff interaction and coordination. Governance funding assumed a similar workgroup structure to 2023 and in-person/hybrid meetings with potential advisor travel. The Annual Reporting budget will increase with production of a Pulse in 2024. The

communications budget assumes more in-person conference attendance, associated travel costs, and general design work.

Amy highlighted key components and priorities of the 2024 workplan. The implementation costs were discussed, considering factors such as in-person attendance. The Status and Trends program budget for 2024 focuses on critical activities, including the USGS Moored Sensor Network for Suspended Sediment, monthly cruises for nutrients and phytoplankton, and monitoring in various environmental components such as water, cormorant eggs, sport fish, and harbor seals. Model maintenance is included in the S&T program budget due to its importance for ongoing modeling efforts. The special studies budget for 2024 amounts to $1,947,500.

Following the detailed presentation, the 2024 budget was approved, with Amanda moving for approval and Adam seconding the motion. This approval ensures the allocation of funds for the outlined programs and studies, supporting the RMP's commitment to robust and effective monitoring efforts in the upcoming year.

Decision:

- Amanda Roa motioned to approve the 2024 workplan and budget. Adam Olivieri seconded the motion. The motion was carried by all present members.

7. Information: Remote Sampler Purchase Update (00:22:30)

This item was a continuation of the discussions held during the August SC meeting. The Stormwater CECs Stakeholder-Science Advisory Team convened on September 21 and put forth recommendations. The Team suggested proceeding with the use of the SFEI Mayfly portable remote sampler and conducting pilot sampling with the current design in the present year. Simultaneously, efforts were proposed to enhance the sampler to address contamination concerns, specifically related to a few CECs chemicals that may originate from tubing. The plan outlined the intention to build up to 10 SFEI Mayfly samplers during the winter, utilizing separate funds for the improvement work. The decision to purchase remote samplers to support Water Year 2025 hinged on the outcomes of pilot deployments, improvements to the SFEI Mayfly, and considerations regarding the Stormwater CEC approach, particularly concerning the number of analytes per location.

To address potential CEC contamination, future considerations were discussed, including the possibility of having two different sets of SFEI Mayfly samplers—one for PFAS and another for other CECs. Additionally, the use of ISCO samplers in some situations was proposed due to practical limitations on the number of containers that can be attached to an SFEI Mayfly. Permanent ISCO installations were contemplated for a few locations. The current budget, amounting to $180,000, was acknowledged as unlikely to be sufficient for building permanent installations. No budget adjustments were recommended at the present time, with clarification that the budget had not yet been approved. The next update on this matter was anticipated in the following summer.

Kelly provided clarification on the rough cost per sampler, estimating parts to be between $2000 and $2500, while uncertainties persisted regarding labor, shipping, and additional expenses. Kelly explained that the desire for trends information and calibration data for modeling was driving the desire for permanent installations, additionally explaining that permits were required for these permanent structures.

8. Discussion: Event-based Monitoring and Funding (01:33:40)

The group continued the discussion from the morning MYP Workshop on event-based monitoring, focusing on funding and identifying the RMP's role in the Bay to support this work. Richard Looker of the TRC joined for this item.

The group defined the need for event-based monitoring and the specific events that would be targeted. Identified events included spills, typically handled by other agencies like NOAA, and the assessment of PAHs in mussels. Additionally, considerations were given to monitoring high flows and Harmful Algal Blooms (HABs), recognizing the importance of addressing these events for comprehensive monitoring. The historical context includes a past precedent of maintaining a $50,000 contingency fund annually, and planning for high-flow year loading studies at specific locations such as Mallard Island and Guadalupe River.

Building on the lessons learned from the NMS response to HABs, the need to establish a more structured approach was emphasized. The previous year's challenge in the NMS, where costs were incurred without available funds, underscored the necessity for a proactive strategy. Tom mentioned the need for securing boats for such monitoring activities, prompting a broader discussion on the process to address this need.

Potential approaches were considered, including the formation of a small Council of Wisdom (COW) or having staff present a preliminary proposal to the Technical Review Committee (TRC). The planning should encompass the ongoing efforts of the nutrient team. The general consensus was that the RMP needs to develop a matrix of event types and monitoring needs, with a priority given to developing plans for things that could happen sooner such as high flows and HABs. The group agreed that a COW should meet soon to begin developing the matrix and plans.

Action Items:

- Schedule a first COW meeting to include Richard and Dave to brainstorm types of events, level of effort, and ways to pull in other groups. (Jay Davis, December 31, 2023)

9. Discussion/Decision: Communications (01:15:20)

For this agenda item, Jay gave a brief review of various RMP communication products. Jay thanked all involved for their contributions to the 2023 Update and inquired with the committee about requests for physical copies.

Jay then gave a quick summary of attendee feedback following the 2023 Annual Meeting. 110 people attended the event in person at the David Brower Center, joined by 168 online participants on Zoom. Survey results indicated very favorable feedback, with the hybrid format and individual speakers being lauded in particular. There were some audio troubles for online participants, with the RMP resolving to stick to the Zoom meeting (instead of Zoom webinar) format going forward. The Center has been reserved for October 16, 2024 for the upcoming Annual Meeting.

Jay previewed the 2024 RMP Pulse, with the RMP staff recommendation to have CECs as the theme, similar to the 2013 Pulse. This edition will provide an updated go-to guide to CECs in the Bay. Further updates will be provided at the January meeting.

10. Discussion: Status of RMP Deliverables and Action Items (02:05:30)

In this agenda item, Amy reported the status of recently completed, overdue, and upcoming RMP deliverables and action items. Among the accomplishments were the Nearfield Margins sediment & Preyfish cruise report and the Water Cruise report. The team also successfully executed the PFAS and NTA in Marine Mammals sample collection, conducted the Annual Meeting, and published the RMP Update. Overdue items include the QA Summary Reports for 2021 and 2022 S&T, with pending data steps and awaiting Bird Egg data and PFAS archive data. Efforts to update the MTC Bay Area Land Use (SEP) were in progress, with Tony in contact with Caitlyn Sweeney SFEP and Kearey Smith at MTC working on a plan to move things forward.

Several projects faced delays, including the updated RWSM model (new timeline June 2024) and the nutrients light attenuation and moored sensors project due to prioritization of permit-related work and awaiting WQIF approval. The Ethoxylated Surfactants Final Report experienced a delay in analysis, now expected in spring 2024, with the final report slated for 12/31/24. Data release for the Sediment Delivery to Marshes project was postponed until April 2024. The CEC modeling exploration draft report is anticipated by the end of the year.

Items due before the next meeting include the NTA Sediment Data Manuscript and Fact Sheet, DMMO database enhancements, the 2023 QAPP Update, S&T Design Report, PFAS in Archived Sport fish manuscript, and CECs in Urban Stormwater manuscript, all with expected submission for publication by the end of the year. A significant discussion revolved around access to manuscripts, weighing the options of open source versus public access.

11. Discussion: Plan Agenda Items for Future Meetings (02:25:50)

Proposed agenda items for the January SC meeting include the approval of the changes made to the Multi Year Plan and approval of the Pulse Outline.

12. Plus/Delta

The group unanimously agreed that the meeting was highly productive, especially after the MYP Workshop. Participants noted Tom's impeccable consensus decision record and commended the RMP on the Annual Meeting and RMP update.

Adjourn

DRAFT
EPA REGION 9 SAN FRANCISCO BAY PROGRAM OFFICE
FY24 ANNUAL PRIORITY LIST

- In December of 2022, the Fiscal Year 2023 National Defense Authorization Act (NDAA) was signed into law and authorized the establishment of San Francisco Bay Program Office, specifically with this language:

(1) Establishment

The Administrator shall establish in the Environmental Protection Agency a San Francisco Bay Program Office. The Office shall be located at the headquarters of Region 9 of the Environmental Protection Agency.

- The authorizing language in the NDAA set out certain expectations for the Program Office including an annual priority list to direct funding towards:

The annual priority list shall include the following:

(A) Projects, activities, and studies, including restoration projects and habitat improvement for fish, waterfowl, and wildlife, that advance the goals and objectives of the San Francisco Bay Plan, for-

(i) water quality improvement, including the reduction of marine litter;
(ii) wetland, riverine, and estuary restoration and protection;
(iii) nearshore and endangered species recovery; and
(iv) adaptation to climate change.

And consult with and consider the recommendations of-

(A) the Estuary Partnership;
(B) the State of California and affected local governments in the San Francisco Bay estuary watershed;
(C) the San Francisco Bay Restoration Authority; and
(D) other relevant stakeholder involved with the protection and restoration of the San Francisco Bay estuary.

- EPA has developed this list to reflect mutual priorities identified in the CCMP, the Water Board's Basin Plan, the Restoration Authority's stated objectives, and Implementation Plan of the San Francisco Bay Joint Venture.

Priority Projects, Activities and Studies Needed to Restore San Francisco Bay and Build Its Climate Resilience

Project/Activity/Study	**Link to CCMP**
Wetlands Regional Monitoring Program	Action 8: Implementing a Wetlands Regional Monitoring Program Action 10: Protect, restore, and enhance tidal marsh habitat
Beneficial Reuse of Dredged Material Support	Action 6: Manage sediment and soil on a regional scale and advance beneficial use.
Nutrient Management Strategy	Action 20: Advance nutrient management in the Estuary.
Subtidal eelgrass and oyster reef restoration	Action 4: Implement climate adaptation projects that prioritize natural and nature-based strategies. Action 9: Protect, restore, and enhance intertidal and subtidal habitats.
BRRIT	Action 3: Overcome challenges to accelerate implementation of climate adaptation projects that prioritize natural and nature-based strategies.

	Action 9: Protect, restore, and enhance intertidal and subtidal habitats.
Large scale tidal wetlands restoration	Action 4: Implement climate adaptation projects that prioritize natural and nature-based strategies. Action 7: Decrease carbon emissions and subsidence in the Delta and increase carbon sequestration on natural and agricultural lands. Action 12: Maximize habitat benefits of managed ponds and other non-tidal wetlands and waters.
In-Bay Monitoring of Pollutants, including trash, and Algal Species under the Regional Monitoring Program	Action 20: Advance nutrient management in the Estuary. Action 21: Address emerging contaminants in the Estuary's waters.
Large scale shoreline resilience, multi-benefit projects	Action 1: Plan for increased climate resilience that incorporates natural resource protection. Action 4: Implement climate adaptation projects that prioritize natural and nature-based strategies.
Large scale implementation of urban green stormwater infrastructure	Action 19: Manage stormwater with low impact development and green stormwater infrastructure. Action 23: Reduce trash and marine debris in the Estuary
Special studies/projects for addressing PFAS in SF Bay	Action 21: Address emerging contaminants in the Estuary’s waters. Action 22: Reduce human health risks due to legacy contaminants and contaminants in fish.
Special studies/projects for addressing PCBs under TMDL implementation plan	Action 22: Reduce human health risks due to legacy contaminants and contaminants in fish.

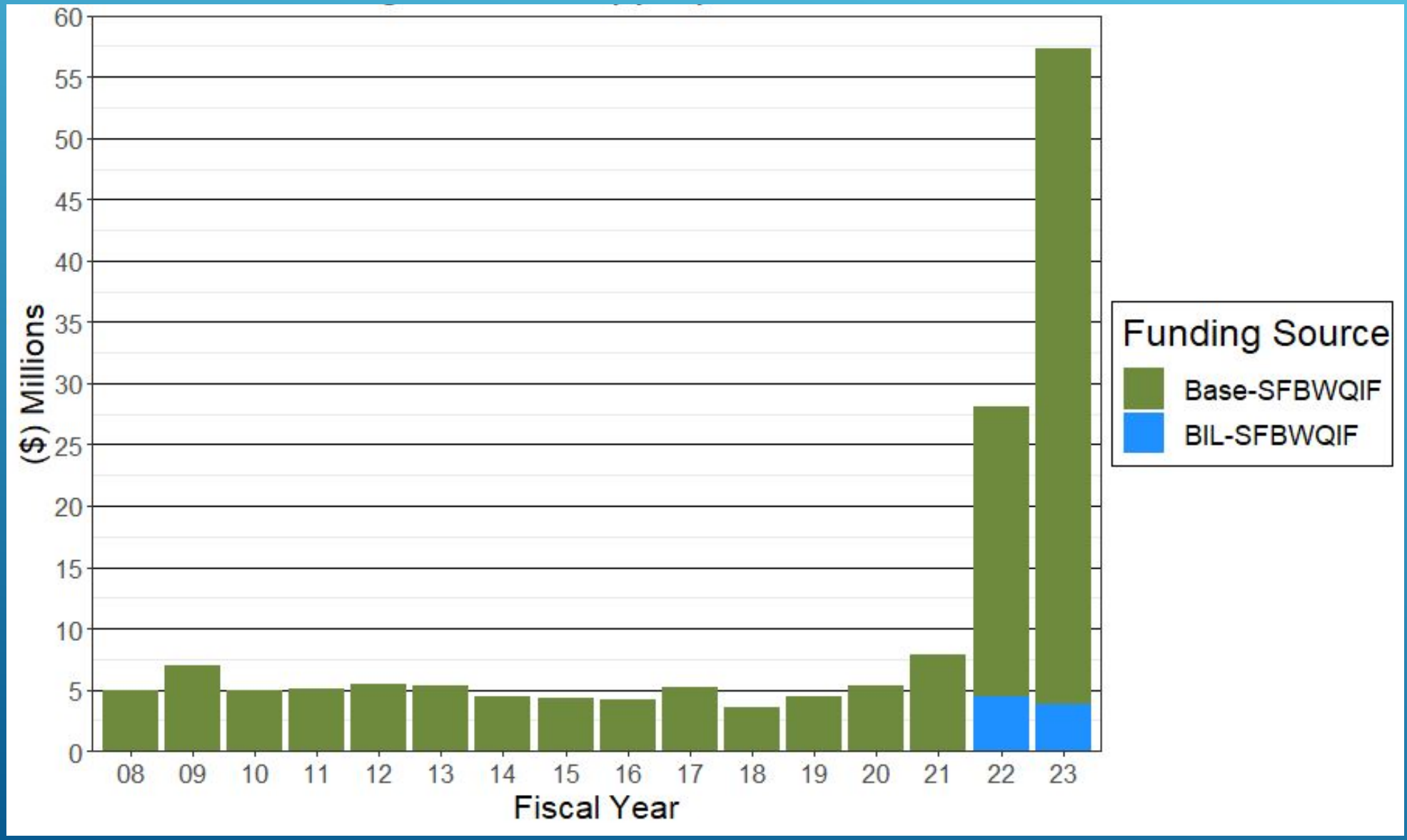
SAN FRANCISCO BAY PROGRAM OFFICE
Fiscal Year 2024 Draft Annual Priority List
US EPA Region 9

- TRC Meeting
- December 7, 2023
- Luisa Valiela, valiela.luisa@epa.gov

Timeline Leading to Priority List

- National Defense Authorization Act (NDAA) passed Dec. 2022
- NDAA is legislation that included authorization for a new San Francisco Bay Program Office at EPA R9
  - Legislative language also included direction to EPA to create an Annual Priority List which identifies needed projects and studies
  - In creating the list, EPA should consider recommendations from:
    - SFEP, SF Water Board, SFBRA, other stakeholders

Congressional Appropriations to Date



Subtidal eelgrass and oyster reef restoration

Wetlands Regional Monitoring Program

Beneficial Reuse of Dredged Material Support

In-Bay Monitoring of Pollutants, including trash, and algal species under the Regional Monitoring Program

Large scale shoreline resilience, multi-benefit projects including horizontal levees and wastewater treatment/reuse

EPA Region 9
San Francisco Bay Program Office
FY24 Draft Annual Priority List

Nutrient Management Strategy

Special studies/projects for addressing PFAS in SF Bay

Large scale tidal wetlands restoration

Special studies/projects for addressing PCBs under TMDL implementation plan

Large scale implementation of urban green stormwater infrastructure

BRRIT (Bay Restoration Regulatory Integration Team)

What We are Asking of You

- Feedback on the draft Annual Priority List
- Any suggestions for other venues/stakeholders to present list to this year or in future years
- Recommendations for regular updates on funding allocations to priorities

Next Steps

- Present at other stakeholder meetings
- Finalize list in Winter/Spring 2024
- Summer 2024 begin putting in place grants to recipients that address priorities

RMP
REGIONAL MONITORING
PROGRAM FOR WATER QUALITY
IN SAN FRANCISCO BAY

sfei.org/rmp

Regional Monitoring Program for Water Quality in San Francisco Bay

2024 Detailed Workplan and Budget

Draft October 2023

SFEI | AQUATIC SCIENCE CENTER
SAN FRANCISCO ESTUARY INSTITUTE & THE AQUATIC SCIENCE CENTER
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Summary

In 2024, the Regional Monitoring Program for Water Quality in San Francisco Bay (RMP) is entering its 32nd year of collecting data and communicating information to support water quality management decisions. This Detailed Workplan and Budget describes the activities that will be completed in 2024, the proposed funding levels, and the deliverables for each task.

The *planned* revenue from RMP fees for 2024 is $4,156k, with additional supplemental fees of $339k from municipal wastewater and $100k from municipal stormwater bringing the total revenue to $4,596k. The *expected* revenue is $5,216k as shown in Table 1 and Figures 1-2, which is reduced by $200k to account for the lower volume of dredged sediment being disposed of in the Bay, per the Long-Term Management Strategy (LTMS) plan. The $200k figure is a placeholder and the dredger contribution will be updated when we receive the final in-Bay dredge disposal volumes for calendar year 2023 (typically in March of the following year). The majority of the expenses in 2024 (71%) will be for Status and Trends monitoring and special studies (Tasks 6-7). The cost for running the RMP (Tasks 1-5) is $115k higher in 2024 than 2023 and funding allocations have been shifted slightly within each subtask.

Table 1: Bay RMP 2024 Budget by Task.

	Grand Total
1. Program Management	$369,500
2. Governance	$415,000
3. QA and Data Services	$280,000
4. Annual Reporting	$222,000
5. Communications	$214,000
6. S&T Monitoring	$1,947,500
7. Special Studies	$1,768,074
8. S&T Reserves	$0
9. Unallocated	$55
Grand Total for Expenses	**$5,216,074**
Revenue from Fees	$3,956,641
Supplemental POTW Payments for AMR Program (FY24)	$339,488
Supplemental Stormwater Payments for CEC Monitoring	$100,000
Contribution from Set-Aside Account	$500,000
Undesignated Funds	$320,000
Grand Total for Revenue	**$5,216,129**

Figure 1: Bay RMP 2024 Revenue and Expenses.

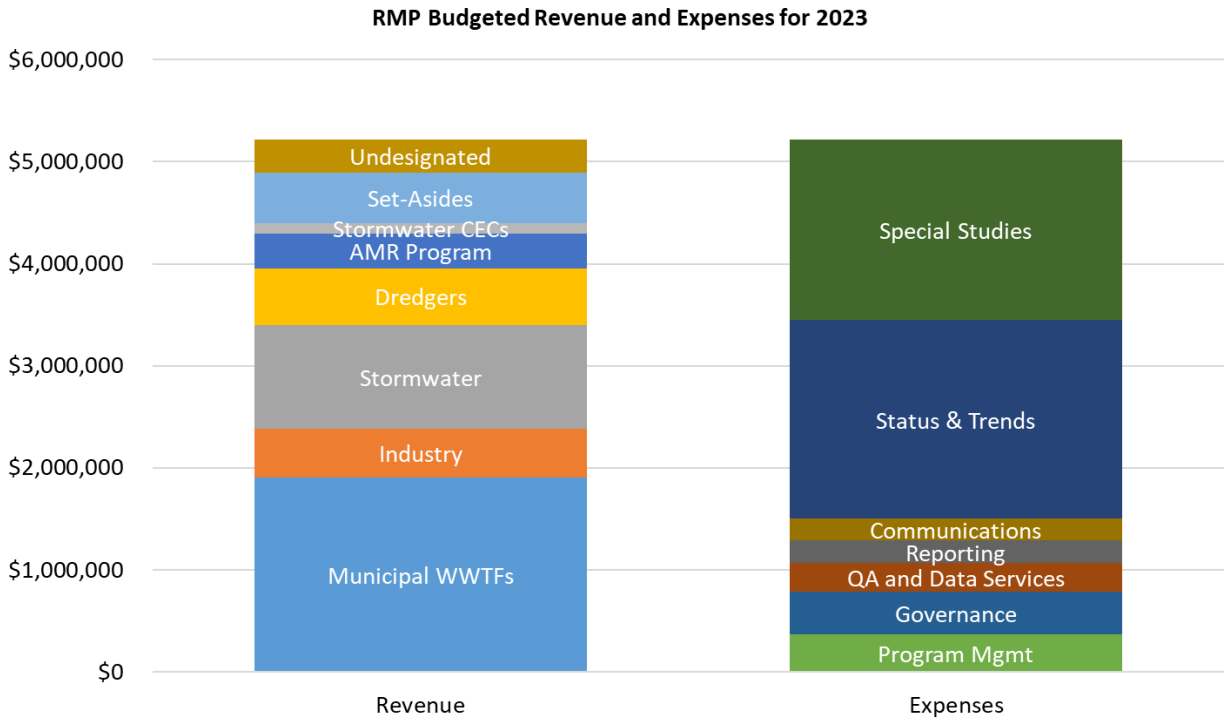
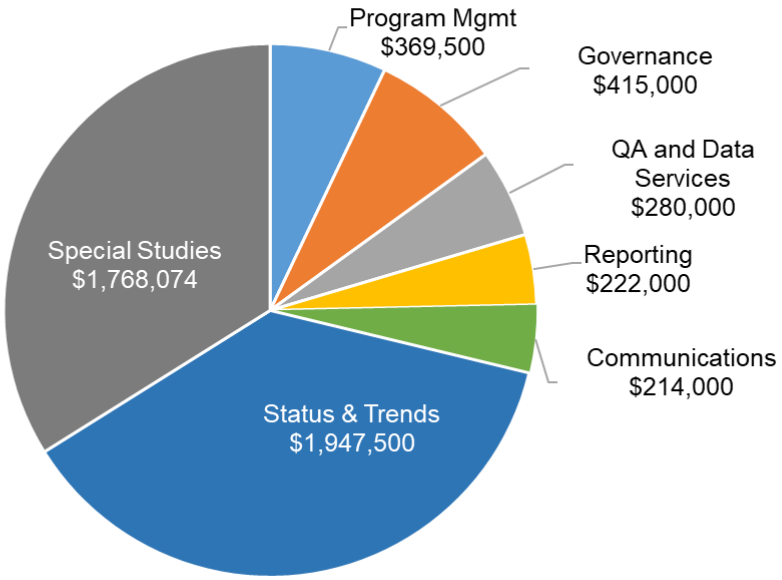


Figure 2: Bay RMP 2024 Budget by Task.



2024 Revenue

The total expected revenue for the RMP in 2024 is $5,216,129. The breakdown of this revenue between participant fees, interest income, contributions from the designated set-asides funds, and Undesignated Funds is shown in Table 2.

a. Participant Fee Revenue

The target fee revenue for the RMP in 2024 is $4,156,642. The manner in which the fees are divided up between Program Participants is shown in Figure 3. Fees were increased by 3% relative to the 2023 budget as approved by the Steering Committee on October 20, 2021.

b. Amended Monitoring & Reporting Order for RMP CEC studies (BACWA)

For FY2024, the RMP will receive approximately $339,488 of supplemental funding from the municipal wastewater agencies under the Amended Alternate Monitoring and Reporting (AMR) Program. The intended use of these funds is emerging contaminants studies.

c. Municipal Regional Stormwater Permit CEC monitoring (BAMS)

For FY2024, the RMP will receive $100,000 of supplemental funding from the municipal stormwater agencies as outlined in the Municipal Regional Stormwater Permit 3.0. The intended use of these funds is emerging contaminants studies.

d. Interest Revenue

RMP funds earn interest from the Local Agency Investment Fund. Similar to 2023, this interest will not be included in the budget. Instead, the interest will accumulate in the Undesignated Funds account. Accounting for interest as income during the year was confusing to staff and risky because the income was not guaranteed. This money will be available for the Steering Committee to use at its discretion but it will first be saved as Undesignated Funds. The potential for using interest revenue to fund a contribution to the Status and Trends Set-Aside account is discussed later in this document.

e. Designated Reserve Funds
    i. *Dredger Reserve Fund*

Dredging activity and in-Bay disposal of dredged material is variable in time. In years where there is a lot of activity, any dredger fees that are greater than the target fees are stored in the Dredger Reserve Fund. These funds are held in reserve and can only be used to pay for shortfalls in dredger fees in future years. The balance of the Dredger Reserve Fund is negative because dredger fees in 2018 through 2023 were lower than target fees. The 2024 budget assumes that dredger fees will fall $200k below the target of $756,509 due to a reduced amount of sediment being dredged and disposed of in the Bay. This is an approximation based on in-Bay disposal volumes in 2019 and 2021. Revenue (and expense) in the budget may need

to be revised based on actual fees from in-Bay disposal. The 2024 dredger fees, and whether there is a shortfall beyond the planned $200k, will be adjusted in early 2024.

ii. Set-Aside Funds

The RMP uses designated funds (called "Set-Asides") to smooth out the year-to-year expenses of the Status and Trends program. Rather than having a spike in expenses when multiple activities overlap in a single year, the Steering Committee designates some funds to be set aside in light years and withdrawn in years with a lot of monitoring. In 2024, the Status and Trends monitoring costs are higher than average so $500k will be withdrawn from the S&T Designated Reserve. This withdrawal is discussed more in the section on Status and Trends expenses.

f. Undesignated Funds

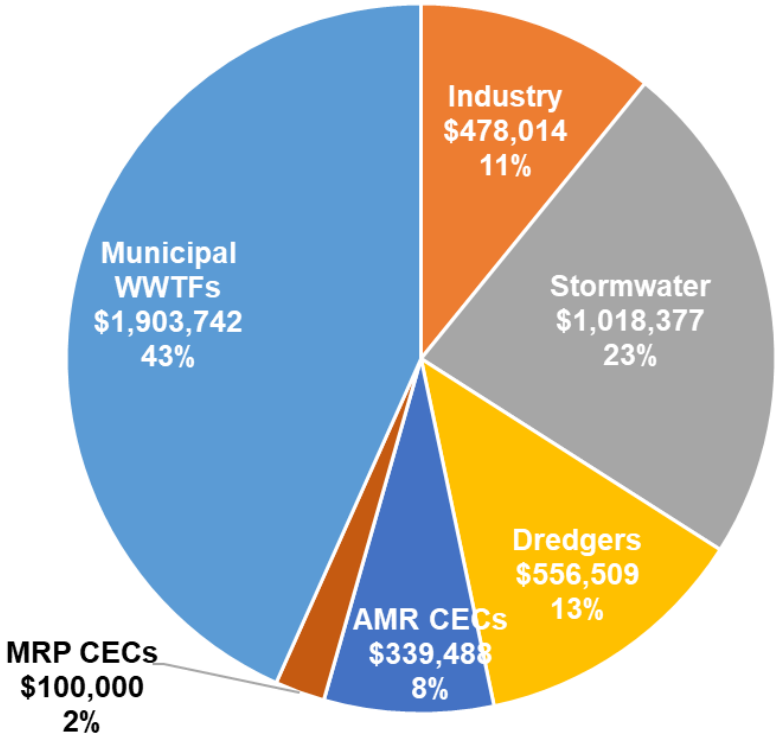
The RMP maintains a balance of Undesignated Funds for contingencies. Higher than anticipated revenues and elimination or reduction of lower priority elements sometimes leads to accumulation of funds that can be used for high priority topics at the discretion of the Steering Committee. In August 2023, $180k was approved by the Steering Committee to be moved from Undesignated Funds to fund the SPLWG Remote Sampler Purchase. The funds will be used for the purchase of remote samplers for RMP stormwater work to support CECs monitoring in Bay Area watersheds and urban runoff monitoring in tidal zones. Sampler purchase/construction will be done under the oversight of the Stakeholder and Science Advisory Team as well as the TRC and SC. The current balance of Undesignated Funds (after removal of the $180k) is $910k.

Table 2: 2024 RMP Revenue.

Revenue Category	**Subcategory**	**Amount**
Participant Fees	Municipal wastewater	$1,903,742
Participant Fees	Industrial wastewater	$478,014
Participant Fees	Stormwater	$1,018,377
Participant Fees	Dredgers*	$556,509
Supplemental POTW Payments for AMR Program (FY23)	Municipal wastewater	$339,488
Supplemental Stormwater Payments for CEC Monitoring (FY23)	Municipal Stormwater	$100,000
Interest Income		$0
Designated Reserve Funds	Set-Aside Funds for S&T Monitoring	$500,000
Designated Reserve Funds	Dredger Reserve Funds	$0
Undesignated Funds		$320,000
TOTAL REVENUE		**$5,216,129**

*This value does not represent the full 18% dredger contribution but rather the expected contribution from the USACE and non-USACE dredgers for in-Bay placement ($200k less than the full contribution).

Figure 3: Bay RMP 2024 Fee Allocations for Program Participants.



2024 Programmatic Tasks

RMP expenses fall into three broad categories: programmatic expenses, Status and Trends monitoring, and special studies. This section details the budgets for programmatic expenses for 2024.

The programmatic budget covers the following tasks:

- Program management
- Governance
- Quality Assurance (QA) and Data Services
- Annual reporting
- Communications

The total cost to implement these tasks in 2024 is $1,500k. This budget is $115k higher than the 2023 budget. The cost increases are summarized in Table 3. The budgets for Program Management, Governance, QA and Data Services, and Communication were all increased for 2024 to account for staff salary increases. The Annual Reporting task budget increased from 2023. The Pulse Of The Bay will be produced in 2024, which costs more than the RMP Update.

Table 3: RMP 2024 Programmatic Budget Compared to the 2023 Budget.

	2023 Budget	2024 Budget	Difference
1. Program Management	$351,100	$369,500	$18,400
2. Governance	$396,800	$415,000	$18,200
3. QA and Data Services	$270,000	$280,000	$10,000
4. Annual Reporting	$165,000	$222,000	$57,000
5. Communications	$202,500	$214,000	$11,500
Total	$1,385,400	$1,500,500	$115,100

1. Program Management

Program management subtasks include program planning, contract and financial management, technical oversight, internal and external coordination, and administration. The total expense for these tasks is $369.5k, which is $18.4k more than the 2023 budget (Table 4). Costs for the subtasks were modified based on previous years budgets and an increase in Internal Coordination. Approximately one-third of the cost for this category is fiduciary oversight of program expenses and contractors. These financial management funds also support staff time to manage funds and contracts for Supplemental Environmental Projects (SEPs) that are carried out by the RMP.

The major deliverables that will be completed under subtasks 1a and 1b include the Multi-Year Plan and Detailed Annual Workplan, quarterly financial updates to the Steering Committee, quarterly tracking of deliverables and action items, and contract management. Funds for technical oversight allow for senior staff to provide an internal review of the many reports, presentations, posters, workplans, memos, and other communications coming out of the RMP. The funds for external coordination cover participation in meetings with external partners to coordinate programs and leverage RMP funds (e.g., coordinating work on the Pulse and other reports, coordination with SCCWRP, and serving as liaison to the Wetland RMP).

2. Governance

Governance subtasks include convening, coordinating, and facilitating Steering Committee, Technical Review Committee, and Workgroup meetings. Tasks and deliverables include preparing agendas and agenda packages, participating in meetings, writing meeting summaries, following up on action items, reviewing minutes from past meetings, reviewing special study proposals, and coordinating with committee chairs, advisors, and key stakeholders. This budget item also includes honoraria and travel for external advisors. The total budget for these tasks is $415k which is 4% more than the 2023 budget (Table 4). The cost of workgroup meetings ($306k) accounts for nearly 74% of this task. The budget for staff time to prepare materials and proposals and attend workgroup meetings is $246k; the budget for honoraria and travel for external science advisors is $60k. The Emerging Contaminants and Sources, Pathways, and Loadings Workgroups will continue to meet for two days. Budgets for every workgroup were increased to accommodate an increasing amount of inter-workgroup coordination.

3. QA and Data Services

Quality assurance and data management are critical foundations for the scientific investigations of the RMP. The total cost for these tasks is $280k, $10k more than 2023. The major quality assurance tasks for 2024 are keeping the Quality Assurance Project Plan up to date and preparing QA summaries for datasets. In addition to processing new data, the RMP needs to maintain the millions of records generated since it began in 1993. Database maintenance includes incorporating updates and corrections to data, including re-analyzed results and updates implemented by CEDEN/SWAMP. RMP staff also maintain and enhance

web-based data access and visualization tools, such as CD3, and an automated system to handle data submittals from the laboratories.

DMMO Database Support will continue in 2024. Special study funding in 2018 was used to migrate the DMMO database and website to the SFEI server. RMP funding ensures an updated and secure platform for the database. Benefits to the RMP include better access to sediment testing records in the DMMO database and more efficient invoicing methods for dredger fees. Ongoing funding for this project is included as part of the QA and Data Services task. The funding requested in 2024 is $54k and will be used to update data templates, data uploads, and database structure. DMMO agencies are also identifying staff that can help with these efforts so the burden does not fall solely on the RMP.

4. Annual Reporting

The total cost for these tasks is $222k. This budget is $57k more than it was in 2023. A *Pulse of the Bay* will be produced in 2024 and released at the Annual Meeting in October. The *Pulse of the Bay* is more expensive to produce than *RMP Update*. The *Pulse of the Bay* will contain articles on a theme chosen by the Steering Committee plus updated indicators of water quality in the Bay.

Tasks related to the Annual Meeting include developing the meeting agenda, coordinating speaker participation, managing logistics, advertising the meeting, preparing presentations, and staffing the meeting. The 2024 budget for the Annual Meeting is $90k, $5k more than 2023 to account for increasing costs associated with hosting the meeting.

5. Communications

Communications tasks include implementing the RMP Communications Strategy, approved by the Steering Committee in July 2014. The total cost for these tasks in 2024 is $214k, $14k more than the 2023 budget. The 2024 budget is higher because RMP staff are increasingly being asked to communicate RMP results to an increasing number of agencies and media outlets. In addition, funds were added to the Outreach Products subtask to provide support for graphic design staff who help produce our reports and factsheets. Deliverables include the distribution of RMP information to stakeholders, natural resource managers, and the public through multiple media channels (e.g., website, publications, email newsletters, fact sheets, social media).

Stakeholder engagement is critically important to addressing the information needs of RMP participants. Tasks include preparing for and attending RMP stakeholder meetings (e.g., BACWA, BAMS, BPC, LTMS, WSPA, and RB2), as well as communicating directly with stakeholder representatives.

Other communications tasks include responding to inquiries for RMP data and reports, and producing summary information on important topics in convenient formats. Participation in workshops and conferences for SWAMP, SETAC, ACS, and other professional organizations

allows sharing of RMP information, gathering of information from other investigators on the latest advances in monitoring and understanding, and identification of opportunities for collaboration with and funding from other organizations. Presentations at local meetings and to local audiences are also important for collaboration and information dissemination to scientific partners. Funding for this task also supports maintenance of the RMP website.

Table 4: Bay RMP 2024 Programmatic Budget by Subtask.

Task	Subtask	Direct Cost	Labor	2024 Total
1. Program Management	A. Budget and Workplan Development		$49,000	$49,000
	B. Contract and Financial Management		$74,000	$74,000
	C. Technical Oversight		$76,500	$76,500
	D. Internal Coordination		$122,000	$122,000
	E. External Coordination	$3,500	$36,500	$40,000
	F. Administration	$2,800	$5,200	$8,000
2. Governance	A. SC meetings	$1,500	$53,000	$54,500
	B. TRC meetings	$1,500	$53,000	$54,500
	C. WG meetings	$3,000	$61,000	$64,000
	D. External Science Advisors	$60,000		$60,000
	E. Emerging Contaminants WG		$55,000	$55,000
	F. Microplastics WG		$14,000	$14,000
	G. PCB WG		$23,000	$23,000
	H. Sediment WG		$42,500	$42,500
	I. Sources, Pathways, Loadings WG		$47,500	$47,500
3. QA and Data Services	A. Quality Assurance System		$40,000	$40,000
	B. Online Data Access: CD3		$75,000	$75,000

	C. Database Maintenance		$65,000	$65,000
	D. Updates to SOPs and Templates		$46,000	$46,000
	E. DMMO Database Support		$54,000	$54,000
4. Annual Reporting	A. RMP Pulse Report	$20,000	$112,000	$132,000
	B. Annual Meeting	$20,000	$70,000	$90,000
5. Communications	A. Communications Plan Implementation	$15,000	$38,000	$53,000
	B. Stakeholder Engagement		$30,000	$30,000
	C. Responses to Information Requests		$23,500	$23,500
	D. Outreach Products	$1,000	$18,000	$19,000
	E. Presentations at Conferences and Meetings	$16,000	$53,000	$69,000
	G. RMP Website Maintenance		$19,500	$19,500
Grand Total		$144,300	$1,356,200	$1,500,500

2024 Status and Trends Monitoring and Reserve Funds

In 2020, the Steering Committee and Technical Review Committee began reviewing the Status and Trends (S&T) Program to identify how the program could be altered to accommodate the inclusion of CECs. This review resulted in recommended changes to the sampling matrices, frequency, and analytes included in the S&T Program. The sampling frequency for each matrix is shown in Figure 4. 2024 monitoring will include year 2 of a pilot study to monitor toxic contaminants in harbor seals.

Figure 4: RMP Status and Trends Monitoring Schedule

In 2024, based on the revised S&T design, wet weather water sampling, bird eggs, and sport fish collections are scheduled to occur. In addition, the RMP provides annual support to the USGS for suspended sediment and nutrient monitoring. This support will continue in 2024. We are also including $82k for laboratory intercomparison studies. The most likely intercomparison studies will include comparison of selenium analysis methods, and ongoing comparison of CEC analytical methods for water. The total cost for S&T monitoring in 2024 will be $1,947k. Funds will be deducted ($500k) from the S&T set-aside account to offset the high cost of the S&T activities in 2024.

More information about each of the S&T tasks is provided in the line item budget (Table 5) and the sections below.

USGS Sacramento Support: Continuous Monitoring of Suspended Sediment ($400k)

This work is led by Dr. Paul Work of the USGS California Water Science Center. The USGS maintains four suspended-sediment stations in the Estuary with RMP funding (Richmond Bridge, Alcatraz Island, Pier 17, and Dumbarton Bridge). This funding leverages suspended sediment monitoring at two other stations (Mallard Island and Benicia Bridge) and salinity at seven stations that are funded by other partners. Funding for these activities is provided by the U.S. Army Corps of Engineers directly to the USGS. The contribution in 2024 is $400k and will support ongoing suspended sediment monitoring in the Bay.

USGS Menlo Park Support: Monthly Basic Water Quality ($273k)

This work is led by Dr. Brian Bergamaschi of the USGS California Water Science Center. Monthly water sampling is conducted to evaluate the spatial and temporal trends of water quality parameters at fixed stations throughout the Bay-Delta system. Measurements include salinity, temperature, dissolved oxygen, suspended sediment, and phytoplankton biomass. This information is needed to follow the seasonal and inter-annual changes in water quality and estuarine habitat, which may influence biological communities and the distribution and reactivity of trace contaminants.

The RMP pays a fraction of the total cost of these cruises. The RMP, Nutrient Management Strategy, and USGS California Water Science Center recently expanded an existing agreement that now includes the monthly Bay cruises. A multi-year agreement was implemented in FY2022.

Wet Weather Water Sampling ($135k)

The Status and Trends schedule includes wet weather water sampling at targeted sites near stormwater inputs into the Bay, as well as ambient Bay stations. Water samples will be collected following two storms from targeted locations, including stations in Lower South Bay, and sent to laboratories for analyses of bisphenols, organophosphate esters, and PFAS for S&T and tire contaminants in the Bay for a two year special study (WYs 2023-2024). Samples will also be collected from ambient Bay stations during the Bay-wide nutrient cruises that occur closest to the storm event.

Dry Season Water Sampling ($27k)

In 2024, four Bay stations and four near-field stations will be sampled once in the dry season as verification of the expected presence or absence of contaminants from the stormwater and wastewater loading pathways. Dry season sampling will occur at stations that overlap with the wet season sampling so that concentrations can be compared and used to model the dominant processes in the wet and dry seasons. Water samples will be collected and sent to laboratories for analyses of bisphenols, organophosphate esters, and PFAS for S&T and tire contaminants in the Bay for a two year special study (WYs 2023-2024). Samples will be collected from ambient Bay stations during a Bay-wide nutrient cruise.

North Bay Selenium in Water, Clams, and Sturgeon ($18k)

Sampling for selenium will be paused in 2024 for a review of the data collected through 2022. In addition, funds will be used to find analytical partners able to analyze small tissue sample masses associated with non lethal sampling techniques used for sampling sturgeon muscle tissue. Sampling is expected to resume in 2025.

2024 Bird Eggs ($195k)

The Status and Trends schedule calls for bird egg monitoring every three years. The last bird egg samples were scheduled for collection in 2021, however sampling was conducted in 2022 instead of the planned sampling in 2021 due to challenges related to the pandemic and to wait for the results of the S&T review process. Three cormorant colonies that have been sampled since the late 1990s (including non-RMP and RMP studies) are targeted for continued sampling: Suisun Bay (near Wheeler Island), San Pablo Bay (Richmond Bridge), and South Bay/Lower South Bay. The nesting colonies in Suisun Bay and South Bay/Lower South Bay are in flux so locations have changed slightly over the years to accommodate for changing locations and access. In 2022, eggs were collected at Rich Island in Suisun Bay (1.5 miles east of Wheeler Island), Richmond Bridge, and pond N3A/N4A (9 miles north of pond A9/A10). Egg tissue will be analyzed for mercury, selenium, PCBs, PCDD/Fs, PFAS, and legacy pesticides. The total cost for the field collection and laboratory analyses will be $165k. The cost for quality assurance and data management will be $30k.

2024 Sport Fish ($560k)

The Status and Trends schedule calls for sport fish sampling every five years. Fish will be collected from 11 target locations in the Bay and sent to laboratories for analyses of mercury, selenium, PCBs, PCDD/Fs, PBDEs, PFAS, and legacy pesticides. Subcontracts for collection/logistics and laboratories ($420k) make up the majority of the cost. The cost to QA and manage the data from this sampling effort will be $55k.

Laboratory Intercomparison Studies ($82k)

Laboratory intercomparison studies increase confidence in analytical methods and results, act as an insurance policy for unforeseeable changes in analysis procedures and analytical contractors, and provide many other benefits. Potential intercalibration studies for 2024 include method comparisons for selenium and interlab comparisons for CEC samples.

Sample Archive ($56k)

The RMP stores archives of sediment, bivalve, bird egg, and sport fish samples, as well as other miscellaneous samples in archives for potential future analyses. Short-term archives (< 10 years) are stored at Schaefer's Meat and Storage in Oakland. Long-term archives are stored at the National Institute of Standards and Technology (NIST) in Charleston, South Carolina. Costs in 2024 will cover continued storage fees for the archives as well as labor to manage the archives and the archive database. The cost includes subcontractor support from AMS to add samples to the archives and support ongoing organization and purging of samples. This task also includes time for the Data Services team to update and improve the archived sample tracking system.

Field Sampling Report and Support ($25k)

At the end of the field season, RMP staff will update the Sampling and Analysis plans for each S&T activity completed. They will also compile all of the Field Sampling Reports produced by our partners, which document where samples were collected and any complications during field sampling. Clear documentation of field sampling effort is part of the overall quality assurance system for the Program.

Watershed Dynamic Model Maintenance ($50k)

Funds to maintain the Watershed Dynamic Model (WDM) were suggested to be added to S&T in 2023. The maintenance tasks will be proposed by April 2024 and submitted to the Steering Committee for approval after consultation with the SPLWG. A log of model improvements and modifications will be updated by the end of 2024. Model simulations of updated time series will be uploaded to SFEI's data portal.

Table 5: Bay RMP 2024 Status and Trends Budget by Subtask.

Task	Subtask	Direct Cost	Subcontract	Labor	2024 Total
6. S&T Monitoring	A. USGS Sacramento Support		$400,000		$400,000
	B. USGS Menlo Park Support		$273,000		$273,000
	C. Dry Season Water Sampling		$13,000	$9,000	$22,000
	D. Dry Season Water Sampling Data Mgmt			$5,000	$5,000
	E. Wet Season Water Sampling		$40,000	$80,000	$120,000
	F. Wet Season Water Sampling Data Mgmt			$15,000	$15,000
	G. Bird Egg Sampling		$125,000	$40,000	$165,000
	H. Bird Egg Sampling Data Mgmt			$30,000	$30,000
	I. S&T Laboratory Intercomparison Studies	$10,000	$40,000	$32,000	$82,000
	J. Sample Archive	$48,000	$0	$8,000	$56,000
	K. S&T Field Sampling Report & Support			$25,000	$25,000
	L. Sport Fish Sampling	$5,000	$420,000	$80,000	$505,000
	M. Sport Fish Sampling Data Mgmt			$55,000	$55,000
	N. North Bay Se Monitoring			$15,000	$15,000
	O. North Bay Se Data Mgmt			$3,000	$3,000

	P. Harbor Seals Sampling	$1,500	$94,000	$21,000	$116,500
	Q. Harbor Seals Sampling Data Mgmt			$10,000	$10,000
	R. Model Maintenance			$50,000	$50,000
	TOTAL	$64,500	$1,405,000	$478,000	$1,947,500

2024 Special Studies

The total costs for special studies in 2024 will be $1,768k and there is a budget of $1,628k. Figure 5 shows how these costs are distributed across the seven focus areas. Workgroup strategy funds were overlooked during the special studies 2024 budget process in summer 2023. Additional funding for the $140k overage will be covered by funds from the Undesignated Reserve. Additional details on each of the studies are provided in the line item budget (Table 6).

Figure 5: RMP Special Studies Funding for 2024 by Focus Area.

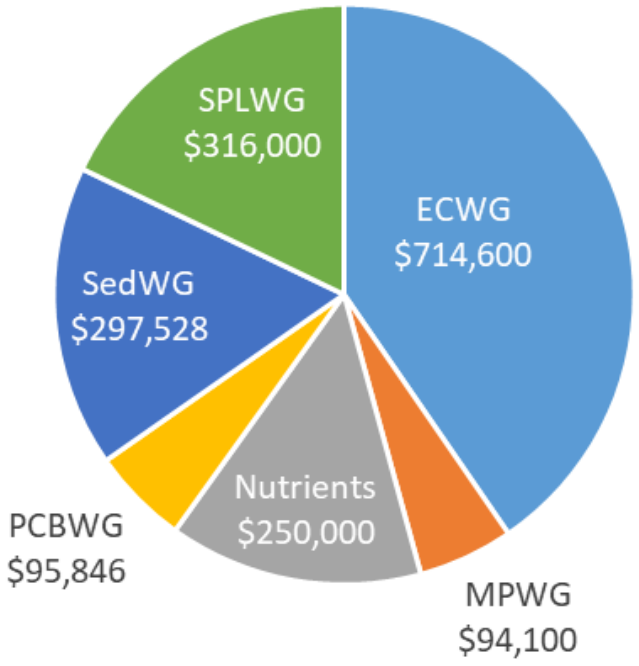


Table 6: Bay RMP 2024 Special Studies Budget by Subtask.

Workgroup	Task	Direct Costs	Labor	Subcontracts	Total
Strategy	CECs Strategy		$62,000		$62,000
Strategy	Tires Strategy		$10,000		$10,000
Strategy	Microplastic Strategy		$16,000		$16,000
Strategy	Sediment Workplan		$15,000		$15,000
Strategy	SPLWG Strategy		$37,000		$37,000
ECWG	Stormwater CECs Monitoring and Modeling 2024	$2,000	$298,000		$300,000
ECWG	Tire and roadway contaminants in wet season Bay water Year 3	$4,750	$35,250	$10,000	$50,000
ECWG	OPEs, Bisphemols, and Other Plastic Additives in Wastewater	$7,000	$53,400	$35,000	$95,400
ECWG	PFAS Synthesis and Strategy	$1,000	$106,000		$107,000
ECWG	PFAS in Bay Water using the TOP Assay		$47,300	$19,900	$67,200
ECWG	Nontargeted analysis of SF Bay Fish Year 1	$5,000	$8,000	$10,000	$23,000
Nutrients	Moored sensor high-frequency observation network		$250,000		$250,000
MPWG	Microplastics Stormwater Monitoring Pilot (Yr 1)	$6,200	$58,900	$13,000	$78,100
SedWG	Spatial Variability of Sediment Accretion in SFB Restorations			$203,528	$203,528

SedWG	Continuous Suspended Sediment and Wave Monitoring in South and Lower South San Francisco Bay - Yr 3	$805	$62,863	$15,332	$79,000
SPLWG	Integrated Monitoring & Modeling for PCBs and Hg	$8,650	$171,350	$37,000	$217,000
SPLWG	Tidal Area Remote Sampler Pilot - Year 2	$5,891	$56,109		$62,000
PCBWG	Monitoring of Sediment Deposition in SLB PMU		$95,846		$95,846
	Total	$41,296	$1,383,018	$343,760	$1,768,074

Studies highlighted in red are funded or partially funded with the $339k of Supplemental POTW Payments for the AMR Program (FY24).

Appendix A. Special Study descriptions for 2024 projects.

Workgroup	Study Name	Budget	Summary	Deliverables
Emerging Contaminants	Stormwater Contaminants of Emerging Concern (CECs) Monitoring and Modeling 2024	$300,000 (RMP) $100,000 (WQIF)	This project will begin implementing the RMP stormwater CECs integrated modeling and monitoring program. This proposal is a placeholder for completing and implementing the integrated modeling and monitoring program in wet season 2023/2024 (October 2023-September 2024) that will be defined by the Stormwater CECs Approach. It includes scopes and budgets for four specific tasks for which we request early release of funds to initiate implementation in summer 2023. It briefly outlines remaining tasks, which will be developed in concert with the completion of the Approach. These tasks will be developed under the oversight of	Task 1: scopes and budgets presented for SST review and SC approval. Task 2: summaries from SST meetings, the two RMP presentations, and the conference presentation. Task 3 will be integrated into the Stormwater

			the SST in parallel with the Approach and brought to the TRC and SC for approval.	CECs Approach draft report to be completed in fall 2023 and final report to be completed by spring 2024.
Emerging Contaminants	Tire and Roadway Contaminants in Wet Season Bay Water Year 3	$50,000	6PPD-quinone and other toxicologically relevant contaminants derived from tires have been observed in Bay Area stormwater and in wet season Bay water samples from 2021 and 2022. As part of its Status and Trends (S&T) program, the RMP is undertaking a pilot monitoring effort to quantify a number of contaminants in Bay water samples collected following storm events to provide information on the impact of stormwater discharges on Bay contaminant concentrations. This proposed study, the third and final year in a multi-year monitoring effort, would leverage the pilot S&T effort to evaluate more fully the concentrations of tire and roadway contaminants in Bay water during the wet season. Results will indicate whether these stormwater-derived contaminants reach concentrations of concern within receiving waters, filling a data gap relevant to the RMP's tiered risk-based framework for emerging contaminants. Results will be shared with the California Department of Toxic Substances Control's Safer Consumer Products Program, which seeks data to support its evaluation of tire chemical ingredients.	Update sampling plan, field sampling, lab analysis, QA/QC, data management, data upload, presentation at ECWG 2025, draft and final report

Emerging Contaminants	OPEs, Bisphenols, and Other Plastic Additives in Wastewater	$95,400	Plastic additives are an extensive group of chemicals used in the production of plastics for a variety of consumer, commercial, and industrial applications. Many of the chemical classes that comprise plastic additives, especially organophosphate esters (OPEs) and bisphenols, are ubiquitous in the environment. In addition, many of these compounds are known to be toxic and exhibit a variety of effects on humans and animals. The RMP has previously found OPEs and bisphenols in wastewater, stormwater, and ambient Bay water. The RMP currently classifies both as a Moderate Concern within the RMP tiered risk-based framework for emerging contaminants. To build on these previous efforts, we propose a study to assess the concentrations of OPEs, bisphenols, and other plastic additives in Bay Area wastewater effluent. Analysis of OPEs is a particularly high priority to allow for an assessment of the relative importance of stormwater versus wastewater pathways to the Bay. Leveraging a study of OPEs to include other plastic additives is a cost-effective way to gain more information on a broader list of widely used and potentially toxic compounds.	Develop sampling plan, field sampling, lab analysis, QA/QC, data management, draft report, final report, presentation at ECWG 2026
Emerging Contaminants	PFAS Synthesis & Strategy	$107,000	This proposed synthesis and strategy revision would provide an updated synthesis of PFAS monitoring data in the Bay, identification of priority information gaps needed to inform monitoring and management, development of a conceptual model framework identifying source categories associated with pathways for PFAS to reach the Bay, and an updated strategy for RMP monitoring of PFAS.	A report (draft due March 2025, final due July 2025) that includes synthesis summary tables, interpretation of results in context of literature review and conceptual model, and recommended monitoring strategy. Project updates will also

				be presented at the 2024 and 2025 April ECWG meetings.
Emerging Contaminants	PFAS in Bay Water using the TOP Assay	$67,200	Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are fluorine-rich, chemically stable compounds widely used in consumer, commercial, and industrial applications, and are ubiquitous in the environment. Two of the most studied PFAS, perfluorooctanoic sulfonate (PFOS) and perfluorooctanoic acid (PFOA), are considered highly toxic, and other members of the class are predicted to have similar toxicity. The RMP has found PFAS in biota, water, and sediment as well as stormwater and wastewater. The RMP classifies PFAS as a Moderate Concern in the tiered risk-based framework due to concentrations in Bay biota linked to potential risks. A recently completed RMP analysis of PFAS in Bay water supported the continued prioritization of Bay monitoring for this class. However, most of the studies to date have focused on targeted methods analyzing up to 40 individual PFAS. The use of the total oxidizable precursors (TOP) assay provides a means to indirectly quantify a broad suite of PFAS precursors that break down to detectable compounds. This method has been used in recent Bay Area wastewater studies to demonstrate the presence of significant concentrations of unknown PFAS in this pathway. We propose a study to assess the levels of PFAS precursors in Bay water to supplement existing Status and Trends (S&T) monitoring of target PFAS and better characterize the presence of this class.	Develop sampling plan, field sampling (2023 dry season), lab analysis (2023 dry season), QA/QC, data management, preliminary findings presented to ECWG 2024, field sampling (2024 wet season), lab analysis (2024 wet season), QA/QC, data management, draft report, final report.

Emerging Contaminants	Non-targeted Analysis of San Francisco Bay Fish Year 1	$23,000 (Year 1 only)	Contaminants in sport fish may have both human health and ecological implications. The RMP has been monitoring selected contaminants in sport fish for many years but has never done any non-targeted analysis of this matrix. This two-year study would leverage 2024 Status and Trends sport fish monitoring to collect sport fish samples for non-targeted analysis. This type of analysis will provide a means to identify unanticipated contaminants that may merit follow-up targeted monitoring and compare San Francisco Bay fish contaminant profiles with those of fish from other locations such as the Great Lakes. Anticipated study outcomes would include priorities and recommendations for future investigations of newly identified CECs of potential concern observed in sport fish.	Develop sampling plan, sample collection, lab analysis, data analysis, presentations to ECWG & TRC, draft and final manuscripts/ RMP technical report.
Microplastics	Microplastics in Stormwater Pilot	$78,100	To provide a better characterization of microplastics in stormwater and inform estimates on the magnitude of loads, and to support the State effort to develop standardized stormwater sampling methods, the proposed field study will start addressing these concerns by taking simultaneous point (single-depth) and depth integrated samples at two field sites during one storm each and comparing the microplastics content of these samples using advanced laboratory techniques that characterize tire wear and other fine particles.	Develop conceptual model and refine study design, site selection and field reconnaissance, sample collection, lab analysis, draft and final technical report.
Nutrients	Moored sensor high-frequenc y observation network	$250,000	Bay-wide cruises have been critical to our understanding of the system. The Bay is spatially and temporally heterogeneous, however, and monthly measurements miss changes in water quality that are driven by short time scale processes, including tidal forcing, wind, and biological cycles. The eight sensors in the moored, high-frequency observation network in South Bay collect water quality data every 15 minutes and contribute to our	Sensor maintenance; data management

			understanding of Bay processes that affect nutrient and chlorophyll dynamics.	
Sediment	Spatial variability of sediment accretion in San Francisco Bay restorations	$203,528	One of the key sediment management questions for San Francisco Bay is whether available sediment is sufficient to attain suitable elevations for marsh vegetation establishment and to keep pace with sea-level rise. Although large-scale restoration has been taking place in San Francisco Bay for decades, measurements of decadal-scale rates of accretion within areas where tidal exchange has been restored are limited. We propose to investigate accretion rates for a range of marsh restoration sites and estimate the volume of sediment in those sites. Our overall objectives are to 1) investigate the amount of accretion that has occurred within marsh restorations, 2) investigate the sediment characteristics in restorations, 3) estimate the mass and volume of sediment retained in these restorations; and 4) produce data sets for testing numerical models of sediment transport between the Bay and marsh restorations at 5 restoration marsh sites. Final site selection will be done in coordination with the RMP Sediment Workgroup and the WRMP and will depend on factors such as site accessibility and suitability for the study. Results will be useful for prioritizing marsh restoration sites, understanding bay-wide sediment budgets, and understanding sediment accretion in restorations region-wide, and their resilience to sea-level rise.	Data releases (September 2025); Draft report (March 2026); Presentation to the RMP (Spring or Fall 2026); Presentation to Bay Delta Science or State of the Estuary Conference (2026)

Sediment	Continuous Suspended Sediment Concentration and Wave Monitoring in South and Lower South San Francisco Bay - Year 3	$79,000	This proposed project would support continued data collection and calibration refinement for an additional seven months in 2024, which is needed to develop robust turbidity-SSC relationships. Once completed, these site-specific calibrations will expand continuous SSC monitoring to shallow areas of the SB and LSB, which play an important yet understudied role in Bay sediment dynamics. The collection of high frequency wave data will further inform sediment dynamics on the shoal, which are strongly influenced by wind waves. This project will support the maintenance of instruments and collection of SSC samples from the recently established SB shoal turbidity station directly offshore from Eden Landing, and collection of SSC samples at seven pre-existing turbidity stations, several of which have been collecting turbidity data since 2015.	15 minute SSC time series data release (summer 2024), Report detailing data collection and turbidity to SSC calculations (fall 2024), Presentation to the RMP Sed WG (spring 2025), Publicly available wave height and period data from one station South Bay (summer 2024).
Sources Pathways and Loadings	Integrated Monitoring and Modeling to Support PCBs and Mercury Watershed Loads Uncertainties Assessment and Monitoring Design	$217,000	Continue integrated monitoring and modeling efforts on PCBs and Hg by conducting stormwater monitoring to support loads estimation, estimating model uncertainty, evaluating model sensitivities to parameters and data gaps, and providing PCBs and Hg monitoring design recommendations. There are two phases proposed. Addresses all five Management Questions (MQs).	WY 2024 samples collected, lab analysis, QA, & data management, draft Phase 1 report, final Phase 1 report, draft phase 2 report, final phase 2 report.
Sources Pathways and Loadings	Tidal Area Remote Sampler Pilot - Year 2	$62,000	Deploy the SFEI Mayfly - a remote sampler that addresses the challenges of sampling in tidal areas - at eight sites to capture water samples for PCB and Hg analysis. Will solidify our experience in field deployment of these samplers and an SOP will be developed to transfer to the municipalities. Primarily addresses MQ1.	Pilot test during rainy season, presentation to the SPLWG, data upload to CEDEN, draft report, final report.

PCB	Monitoring of Sediment Deposition in San Leandro Bay Intertidal Areas	$95,846	Horizon markers, temporary surface elevation tables, and sediment traps to characterize sedimentation processes near loading tributaries and in more ambient areas. Initial data from this effort is needed to support validation of a sediment transport and fate model for SLB planned for completion in Q2 of 2024	Technical report

RMP
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Status of RMP Deliverables and Action Items (5 minutes)

Deliverables - completed!

- Sediment Monitoring and Modeling Workplan - SFEI Contribution No. 1100
- WY S&T West Season Water SAP - SFEI Contribution No. 1154
- RMP Update/Meeting with WSPA
- 2024 Annual Workplan and Budget
- Draft 2024 MYP Update

Deliverables – Overdue…

- MTC Bay Area Land Use Update (SEP)
- STLS Regional Model Development
- Stormwater Monitoring Strategy for CEC's
- Final Margins Report
- 2020 S&T Design Report

Deliverables – delayed

- Selenium in Sturgeon muscle tissue analysis
- Bird eggs
- RWSM updated model
- Nutrients light attenuation and moored sensors
- Ethoxylated Surfactants Final Report
- Sediment Delivery to Marshes - data releases

Deliverables – due before next TRC meeting

- North Bay Selenium Clam and Water Report
- 2023 QAPP Update
- 2021 QA Summary
- Microplastics Strategy Update
- NTA Sediment Data Manuscript and Fact Sheet
- PFAS in Archived Sport Fish Manuscript
- CECs in Urban Stormwater

Bay RMP Deliverables Stoplight Report_new

	Focus Area	Project	Task	Deliverable	Assigned To	Due Date	Old Due Date	Days overdue	Due Date Extended (external delay)	Due Date Extended (internal delay)	# of extensions	Status	Comments
1	142758	RMP SEP	20. MTC Bay Area Land Use Update	Collect and transform data relevant to RMP Stakeholders	Tony Hale	04/30/23	03/31/21	975			3		10/13/23 - SFEI met with MTC. MTC will be releasing the dataset with our (SFEI) enhancements/fixes per Kearey dataset would be published to data.ca.gov soon "a few weeks" 9/29/23 - Tony has added Tom M. and Amy K. to email communications with MTC. Still no specific release date.
2		Bay RMP (2023)	Special Study: STLS Regional Model Development	Model data collation and preparation	Jay Davis	08/30/23							10/25/23 - Tan's departure delayed deliverables associated with this project. Revised timeline in development.
3		Bay RMP (2022)	Special Study: Stormwater monitoring strategy for CEC's	Final strategy document	Kelly Moran	09/01/23							9/6/23 - Tan's departure delayed deliverables that went into the development of this strategy document. Requires insights from ongoing modeling and data science special studies. Pending additional remote sampler design to improve functionality for other CECs. Remote sampler had some technical challenges and we are looking to our advisors for consultation on priorities and next steps. Revised timeline depends on hiring process.
4		Bay RMP (2020)	6. Status and Trends Monitoring	Final Margins report	Don Yee	10/15/23	12/31/21	700			6		9/6/23 - Re-analyses on some ancillary vs target analytes to be done. Limited staff capacity to do the statistical reanalysis requested. 8/16/23 - Sent to Richard L. and Luisa V. for feedback.
5		Bay RMP (2023)	Special Study: STLS Regional Model Development	Control measures impact estimation	Jay Davis	10/30/23							10/25/23 - Tan's departure delayed deliverables associated with this project. Revised timeline in development.
6		Bay RMP (2023)	5. Communications	RMP Update to BPC	Amy Kleckner	10/31/23							11/30/23 - Email request sent on 11/4. No response. 10/24/23 - Email request to meet sent on 9/26. No response.
7		Bay RMP	**2020 S&T Design Report**	Final Report	Melissa Foley	11/01/23	06/20/23	164			?		10/11/23 - Internal SFEI review comments due by 10/18. 7/18/23 - Waiting on comments from Tom Grieb. Moving forward incorporating comments from others. Revised timeline to completion is 9/30/23.
8		Bay RMP (2023)	PFAS in Archived Sport Fish	Task 6. Final report	Miguel Mendez	12/30/23							10/24/23 - Draft manuscript expected by early Nov. Submission for publication by the end of the year. Deliverable will be satisfied thru manuscript for SEP 29.
9		Bay RMP (2023)	Special Study: STLS Regional Model Development	Final modeling report and data sharing portal	Jay Davis	12/30/23							10/25/23 - Tan's departure delayed deliverables associated with this project. Revised timeline in development.
10		RMP SEP	15. North Bay Selenium Clam and Water Data Management and Reporting	Report	Jay Davis	12/31/23	12/01/21	730			5		10/24/23 - Internal SFEI review underway. Estimate completion by end of year. 8/16/23 - Jay is reviewing draft report from Melissa. Estimated completion by end of September.
11	Emerging Contaminants	RMP SEP	19. Quaternary Ammonium Compounds (QACs) in Bay Area Wastewater	QA/QC and data management	Diana Lin	12/31/23	12/31/21				2		10/24/23 - Sample collection completed, all samples have been shipped to UM for analysis. Bill Arnold received an NSF grant that allows for two additional years of monitoring (pro bono). Preliminary data for samples collected to date will be presented at the 2022 ECWG meeting., Bill Arnold will present preliminary data at ECWG
12		RMP SEP	24. Regional Watershed Spreadsheet Model	Updated model and Final Technical Report	Alicia Gilbreath	12/31/23							Jan. 2023 - Waiting for land use update SEP issue date 6/5/2021.
13		RMP SEP	29. PFAS in Archived Sport Fish Communications Supplement	Manuscript	Miguel Mendez	12/31/23					1		10/24/23 - Draft manuscript expected by early Nov. Submission for publication by the end of the year. 9/7/23 - Draft manuscript estimated to be out for review in mid October. Poster presentation at SETAC 4/30-5/4
14		RMP SEP	30. Analysis and Reporting of NTA Sediment Data	Manuscript	Ezra Miller	12/31/23					1		Continuation of 3018-036.
15		RMP SEP	30. Analysis and Reporting of NTA Sediment Data	Fact Sheet	Ezra Miller	12/31/23							
16	Selenium Strategy	Bay RMP (2019)	Selenium in Muscle Plugs	Collect and analyze muscle plug samples	Amy Kleckner	12/31/23	03/31/20	1340			3		11/30/23 - samples collected in Mar/Apr of 2023. Looking for a new analytical partner for Se tissue analysis. Freezer failure on 11/21, samples potentially compromised. 8/16/23 - Sampling occurred in March & April 2023. A total of 12 fish were sampled. Working on a plan to analyze plugs at CCSF labs. Estimated to complete by end of 2023. Old notes - Data management and reporting was not funded. https://www.sfei.org/sites/default/files/events/SeWG%20-%2003%20-%20Sturgeon%20Muscle%20Plug.pdf
17		Bay RMP (2020)	41. Selenium in North Bay clams and water	Technical Report	Melissa Foley	12/31/23	06/30/21	884			7		10/11/23 - Internal SFEI review comments due 10/18. 9/6/23 - Draft still in review. 7/18/23 - Jay has a draft. A 2019-2022 report will need additional funding (2024?) to complete. Want to include USGS data but still waiting on USGS to post the data, w/ no timeline for that.
18		Bay RMP (2021)	3. QA and Data Services	QA Summary Report for 2021 S&T Activities	Don Yee	12/31/23	09/30/22	427			6		10/24/23 - Many 2021 datasets are still pending various steps in the QA process. AXYS Bps & OPEs just added to review list, chl-a CN still in completeness check, POC in formatting. 9/6/23 - Data has been delivered from AXYS, waiting on DS to confirm which data sets have been received.
19		Bay RMP (2021)	F. 2021 Bird Egg Data Mgmt	Processing and upload bird egg data	Adam Wong	12/31/23	10/31/22	396			2		11/30/23 - Samples shipped to USGS, FedEx delays caused samples to arrive at USGS completely thawed. USGS will ship to the analytical partners in Dec. Dry ice shortage causing delay. 10/23/23 - USGS received draft permit from APHIS. Checking in with AXYS to make sure it has everything needed to get samples shipped back to USGS. Subsamples will then be shipped to other labs.
20		Bay RMP (2021)	Special Study: CEC in Urban Stormwater Year 3	Task 5. Final manuscript	Rebecca Sutton	12/31/23	07/01/23	153			2		10/24/23 - Draft manuscript to the RMP for review estimated by 11/30, then final draft for journal submission by 12/31. 4/18/2023 - Preliminary data interpretation led one analytical partner to reanalyze samples. All data have been received, most has completed QA review, and manuscript preparations are underway.
21		Bay RMP (2021)	21. Impact of Remediation Actions on San Leandro Bay Recovery from PCB Contamination	Task 5: Final technical report	Diana Lin	12/31/23	12/31/22	335			2		10/24/23 - Undergoing interal review, next to be reviewed the PCBWG. 8/16/23 - Partners at Stanford still working on the draft. Estimate completion by end of 2023.

	Focus Area	Project	Task	Deliverable	Assigned To	Due Date	Old Due Date	Days overdue	Due Date Extended (external delay)	Due Date Extended (internal delay)	# of extensions	Status	Comments
22		Bay RMP (2021)	DMMO Database	DMMO Database Enhancements	Cristina Grosso	12/31/23	12/31/21	700			4		9/11/23 - Subcontractor Exa Data is still working on finalizing the new data templates, enhancements to the DMMO database will be delayed. Next meeting is scheduled for 9/28, can provide a better estimated completion date for this task after our meeting with Exa Data. However, should be able to complete the work by 12/31/23.
23		Bay RMP (2022)	Special Study: CEC in Urban Stormwater Year 4	Management summary	Rebecca Sutton	12/31/23	09/30/23	62			1		9/6/23 - Draft manuscript is expected in October. Final manuscript expected to be submitted for publication by the end of the year.
24		Bay RMP (2022)	Special Study: Tire-related contaminants in Bay water (wet season)	Final stormwater manuscript	Rebecca Sutton	12/31/23	09/30/23	62			1		10/24/23 - Draft manuscript to the RMP for review by 11/30, then a final draft for journal submission by 12/31. 9/6/23 - Draft manuscript is expected in October. Final manuscript expected to be submitted for publication by the end of the year.
25		Bay RMP (2022)	Special Study: DMMO Database Enhancements	Make testing results accessible on the DMMO website	Cristina Grosso	12/31/23	12/31/22	335			2		9/11/23 - Don't foresee any issues with completing these tasks on budget and schedule. However, the DMMO Project Team has asked us to prioritize the data template testing and database enhancement work first. 5/29/23 - Need to complete enhancements task first. Delayed.
26		Bay RMP (2022)	Special Study: STLS WY21 POC Recon Monitoring	Final report	Alicia Gilbreath	12/31/23	06/30/23	154					7/18/23 - In Dec 2021 it was decided to forgo the report and instead update data for the ADA. Lester is working on this and estimates completion by end of 2023.
27		Bay RMP (2022)	Special Study: STLS Regional Model Development	Final modeling report and data sharing portal	Jay Davis	12/31/23							10/25/23 - Tan's departure delayed deliverables associated with this project. Revised timeline in development.
28		Bay RMP (2023)	1. Program Management	RMP Participation Letters for BACWA and WSPA Agencies	Amy Kleckner	12/31/23							
29		Bay RMP (2023)	1. Program Management	Honoraria Payments to Science Advisors	Amy Kleckner	12/31/23							
30		Bay RMP (2023)	3. QA and Data Services	QAPP Update	Don Yee	12/31/23	04/30/23	215			4		11/30/23 - Sent to labs for review. 10/24/23 - Working with Becky and Adam on details of additions for new analytes. Revised timeline to completion 10/31. 9/6/23 - Draft in progress, waiting on updates on target MDLs. 8/16/23 - Late request to add PFAS TOP, estimated to be completed by 9/15/23.
31		Bay RMP (2023)	3. QA and Data Services	Online Data Access CD3	Cristina Grosso	12/31/23							
32		Bay RMP (2023)	3. QA and Data Services	DMMO Database Support	Cristina Grosso	12/31/23							
33		Bay RMP (2023)	5. Communications	Q4 RMP eUpdate	Amy Kleckner	12/31/23							
34		Bay RMP (2023)	5. Communications	Updates to RMP website - Q4	Martin Trinh	12/31/23							
35		Bay RMP (2023)	A. USGS Sacramento Support	Continuous suspended sediment monitoring at 5 stations	Amy Kleckner	12/31/23							
36		Bay RMP (2023)	B. USGS Menlo Park Support-Contract	Monthly measurements of basic water quality at 38 stations	Amy Kleckner	12/31/23							
37		Bay RMP (2023)	J. Sample Archive	(1) Update documentation and template (2) General upkeep and maintenance for tools and data (3) Set up User Accounts and Help Desk (4) Manage internal and external data requests	michaelw@sfei.org	12/31/23							
38		Bay RMP (2023)	J. Sample Archive	Short-term RMP sample archive purging	Martin Trinh	12/31/23							
39		Bay RMP (2023)	Special Study: Ground work CEC Stormwater	Final Brief Report as a presentation to SST and an appendix to Stormwater CEC approach	Kelly Moran	12/31/23							
40		Bay RMP (2023)	K. S&T Field Sampling Report & Support	Garage & lab manager	Martin Trinh	01/01/24							
41		Bay RMP (2023)	5. Communications	RMP Update to LTMS	Amy Kleckner	01/04/24							11/30/23 - Meeting tentatively scheduled for 1/4/24. 10/24/23 - Email request to meet sent on 9/26. No response.
42		Bay RMP (2024)	2. Governance	January SC Meeting	Amy Kleckner	01/22/24							
43		Bay RMP (2024)	1. Program Management	Update Deltek Program Plans for Open RMP Years	Beth Ebiner	01/24/24							
44		Bay RMP (2024)	1. Program Management	SC Meeting Stoplight Report	Amy Kleckner	01/24/24							
45		Bay RMP (2023)	Ethoxylated surfactants in ambient water, margin sediment, wastewater, Part 2 (year 2of 2)	Task 3. Complete laboratory analysis of samples	Diana Lin	01/30/24							5/29/23 - Duke University will be conducting analysis.
46		Bay RMP (2023)	22. Nutrients moored sensors	Sensors deployed, downloaded, maintained, and calibrated	Dave Senn	01/30/24							
47		Bay RMP (2023)	1. Program Management	Q4 RMP Financial Report	Jennifer Hunt	01/31/24							
48		Bay RMP (2023)	D. 2023 Dry season Bay Water Cruise Data Mgmt	Process and upload dry season Bay water cruise data	Adam Wong	01/31/24							
49		Bay RMP (2024)	G. 2024 Bird Egg Sampling	Complete contracts	Amy Kleckner	01/31/24							
50		Bay RMP (2024)	38. NTA of SF Bay Fish, Yr 1	Complete Sampling and Analysis Plan	Rebecca Sutton	01/31/24							
51		Bay RMP (2021)	Selenium in Clams	Task 4. Draft Report	Amy Kleckner	02/28/24	12/31/22	335			1		10/24/23 - Waiting for DS to complete QA. delayed to allow for 2022 collections before working on the report

	Focus Area	Project	Task	Deliverable	Assigned To	Due Date	Old Due Date	Days overdue	Due Date Extended (external delay)	Due Date Extended (internal delay)	# of extensions	Status	Comments
52		Bay RMP (2022)	Special Study: CEC modeling exploration	Report	Pedro Avellaneda	02/28/24	12/31/22	335					10/11/23 - Internal document under review. Draft report should be completed by the end of the year. 9/6/23 - Draft is still under internal review. 7/18/23 - Becky partway through review. Kelly and Lester need to review and Pedro needs to edit. Important for Stormwater CEC strategy.
53		Bay RMP (2023)	H. Nearfield and margins sediment & prey fish data mgmt.	Process and upload sampling data	Adam Wong	02/28/24							
54		Bay RMP (2023)	M. Ambient Bay sediment data mgmt.	Process and upload sampling data	Adam Wong	02/28/24							
55		Bay RMP (2024)	G. 2024 Bird Egg Sampling	Sampling and Analysis Plan	Amy Kleckner	02/28/24							
56			I. S&T Laboratory Intercomparison Studies	Presentation to the TRC on findings from IC studies.	Don Yee	03/01/24							
57		Bay RMP (2024)	2. Governance	March TRC Meeting	Amy Kleckner	03/11/24							
58		Bay RMP (2023)	Special Study: Suspended Sediment in LSB-Year 2	Publically available 15-minute SSC time series from eight stations in South Bay and Lower South Bay	Melissa Foley	03/30/24							
59		Bay RMP (2022)	3. QA and Data Services	QA Summary Report for 2022 S&T Activities	Don Yee	03/31/24	09/30/23	62			1		10/24/23 - Waiting on bird egg data and PFAS archive data.
60		Bay RMP (2024)	5. Communications	Q1 RMP eUpdate	Amy Kleckner	03/31/24							
61		Bay RMP (2024)	5. Communications	Updates to RMP and NMS websites - Q1	Martin Trinh	03/31/24							
62		Bay RMP (2024)	J. 2024 Sample Archive	Short-term RMP sample archive purging	Martin Trinh	03/31/24							
63		Bay RMP (2024)	N. NB Se Monitoring	All 2022/23 Se samples analyzed	Amy Kleckner	03/31/24							
64		RMP SEP	25. Sediment Deposition on South Bay Marsh (Whales Tail)	Final Report	Melissa Foley	04/01/24							10/23/23 - Work is being done by Lacy and Thorne (USGS) Draft report estimated to be completed by Feb 2023.
65		Bay RMP (2023)	Special Study: Sediment Delivery to Marshes in C&N Bays: project expansion	Data release: Bay shallows and marsh-top SSC data (PCMSC)	Melissa Foley	04/15/24					1		Jessie Lacy and Karen Thorne (USGS) conducting this work
66		Bay RMP (2023)	Special Study: Sediment Delivery to Marshes in C&N Bays: project expansion	Data release: deposition, accretion, and vegetation characteristics (WERC)	Melissa Foley	04/15/24					1		Jessie Lacy and Karen Thorne (USGS) conducting this work
67		Bay RMP (2024)	1. Program Management	2024 Q1 RMP Financial Report	Beth Ebiner	04/15/24							
68		Bay RMP (2024)	1. Program Management	Update Deltek Program Plans for Open RMP Years	Beth Ebiner	04/25/24							
69		Bay RMP (2024)	1. Program Management	SC Meeting Stoplight Report	Amy Kleckner	04/25/24							
70		Bay RMP (2024)	2. Governance	April SC Meeting	Amy Kleckner	04/28/24							
71		Bay RMP (2021)	Selenium in Clams	Task 5. Final Report	Amy Kleckner	04/30/24	02/28/23	276			1		delayed to allow for 2022 collections before working on the report
72		Bay RMP (2023)	Ethoxylated surfactants in ambient water, margin sediment, wastewater, Part 2 (year 2of 2)	Task 4. QA/QC and data management	Diana Lin	04/30/24							
73		Bay RMP (2023)	Nontargeted Data Mining	Task 3. Presentation to ECWG on additional targets	Rebecca Sutton	04/30/24							
74		Bay RMP (2023)	Special Study: Suspended Sediment in LSB-Year 2	Report detailing data collection, turbidity-to-SSC calibrations, and limited, descriptive interpretation	Melissa Foley	04/30/24							
75		Bay RMP (2024)	3. QA and Data Services	2024 QAPP Update	Don Yee	04/30/24							
76		Bay RMP (2024)	R. WDM Model Maintenance	Proposed maintenance tasks list and budget sent to COW and SC for approval	Pedro Avellaneda	04/30/24							
77		Bay RMP (2024)	51. PFAS in Bay Water using the TOP Assay	Presentation of preliminary findings at ECWG	Rebecca Sutton	04/30/24							
78		Bay RMP (2024)	51. PFAS in Bay Water using the TOP Assay	Collect wet season samples	Rebecca Sutton	04/30/24							
79		Bay RMP (2024)	30. Integrated Monitoring & Modeling for PCBs and Hg Phase 1	WY2024 samples collected	Alicia Gilbreath	04/30/24							
80		Bay RMP (2024)	31. Tidal Area Remote Sampler Pilot - Yr 2	Pilot testing during rainy season	Don Yee	04/30/24							
81		Bay RMP (2022)	Special Study: PCB In-Bay contaminant modeling (SLB)	Draft Report	Jay Davis	05/01/24	05/01/22	579					8/16/23 - Draft report to be completed by May 2024. Revised timeline approved by the PCBWG in June 2023. 5/29/23 - A revised deliverable timeline will be developed under the guidance of the PCBWG at the spring meeting on 6/6/23. Work in 2022 focused on developing a proposal and workplan for in-Bay modeling as part of the WQIF project. Actual modeling work has begun in Q1 of 2023.
82		Bay RMP (2022)	Special Study: PCB In-Bay contaminant modeling (SLB)	Final report	Jay Davis	05/01/24							8/16/23 - Draft report to be completed by May 2024. Revised timeline approved by the PCBWG in June 2023.

	Focus Area	Project	Task	Deliverable	Assigned To	Due Date	Old Due Date	Days overdue	Due Date Extended (external delay)	Due Date Extended (internal delay)	# of extensions	Status	Comments
83		Bay RMP (2024)	E. WY24 Wet season water sampling	Collect samples	Jennifer Dougherty	05/01/24							
84		Bay RMP (2024)	L. 2024 Sport Fish Monitoring	Complete Sampling and Analysis Plan	Jay Davis	05/01/24							
85		Bay RMP (2024)	37. Tire and Roadway Contaminants in Wet Season Bay Water, Yr 3	WY24 samples collected	Rebecca Sutton	05/01/24							
86		Bay RMP (2023)	Special Study: Sediment Delivery to Marshes in C&N Bays: project expansion	Final Presentation to RMP Sediment Workgroup	Melissa Foley	05/30/24					1		Jessie Lacy and Karen Thorne (USGS) conducting this work
87		Bay RMP (2024)	30. Integrated Monitoring & Modeling for PCBs and Hg Phase 1	Presentation to SPLWG	Alicia Gilbreath	05/30/24							
88		Bay RMP (2024)	31. Tidal Area Remote Sampler Pilot - Yr 2	Update presentation at SPLWG on the results to date	Don Yee	05/30/24							
89	Emerging Contaminants	RMP SEP	19. Quaternary Ammonium Compounds (QACs) in Bay Area Wastewater	Present data at ECWG	Diana Lin	05/31/24	05/31/22				1		Additional funding from NSF increased the scope of the project. The ECWG agreed to the suggested revised due dates for the deliverables so they can include the additional data.
90		Bay RMP (2024)	2. Governance	ECWG Meeting	Rebecca Sutton	05/31/24							
91		Bay RMP (2024)	2. Governance	Microplastics WG Meeting	Diana Lin	05/31/24							
92		Bay RMP (2024)	2. Governance	SPLWG Meeting	Alicia Gilbreath	05/31/24							
93		Bay RMP (2024)	2. Governance	Sediment WG Meeting	Scott Dusterhoff	05/31/24							
94		Bay RMP (2024)	R. WDM Model Maintenance	Present proposed update to the SPLWG	Pedro Avellaneda	05/31/24							
95		Bay RMP (2024)	50. Stormwater CECs Monitoring & Modeling 2024	Presentation to ECWG/SPLWG	Rebecca Sutton	05/31/24							
96		RMP SEP	23. Integrated Watershed Bay Modeling Strategy and Pilot Implementation	Report	Lester McKee	06/01/24	12/31/23	-30					8/16/23 - Draft report to be completed by June 2024. Lester McKee will replace Tan Zi as lead author. Revised timeline discussed with Tom Mumley.
97		Bay RMP (2021)	Special Study: Nutrients Light Attenuation and moored sensors	Task 2: Technical memo evaluating the potential utility of remote-sensed products for estimating surface turbidity and light attenuation.	Dave Senn	06/01/24	12/31/22	335			3		10/24/23 - Work is underway, timing has been delayed as the need to prioritize permit related work over the last few months. Still waiting on WQIF funding approval. New estimated timeline to completion is 6/2024. 5/29/23 - Funding from a new WQIF grant (est. start date 7/2023) will support generating RS turbidity/Kd data. those data will then be analyzed as part of this project. We propose shifting the technical memo due date to 12/2023 as it lines up well with the anticipated workflows of both projects.
98		Bay RMP (2024)	L. 2024 Sport Fish Monitoring	Complete contracts	Beth Ebiner	06/01/24							
99		Bay RMP (2024)	2. Governance	PCB WG Meeting	Jay Davis	06/03/24							
100		Bay RMP (2024)	2. Governance	June TRC Meeting	Amy Kleckner	06/23/24							
101		Bay RMP (2021)	26. Integrated watershed modeling and monitoring implementation strategy	Complete integrated watershed modeling and monitoring implementation strategy - Final report	Lester McKee	06/30/24	09/01/21	821			5		8/16/23 - Draft report to be completed by June 2024. Lester McKee will replace Tan Zi as lead author. Revised timeline discussed with Tom Mumley.
102		Bay RMP (2024)	5. Communications	Q2 RMP eUpdate	Amy Kleckner	06/30/24							
103		Bay RMP (2024)	5. Communications	Updates to RMP website - Q2	Martin Trinh	06/30/24							
104		Bay RMP (2024)	G. 2024 Bird Egg Sampling	Successful collection of samples.	Amy Kleckner	06/30/24							Josh Ackerman USGS PI
105		Bay RMP (2024)	I. 2024 S&T Lab Intercomp Studies	Complete Study Design	Don Yee	06/30/24							
106		Bay RMP (2024)	K. 2024 S&T Field Sampling Report & Support	Post wet field season garage clean up	Martin Trinh	06/30/24							
107		Bay RMP (2024)	K. 2024 S&T Field Sampling Report & Support	Annual Lab Clean Up	Martin Trinh	06/30/24							
108		Bay RMP (2024)	40. OPEs, BP, and Other Plastic Additives in Wastewater	Complete Sampling and Analysis Plan	Rebecca Sutton	06/30/24							
109		Bay RMP (2024)	1. Program Management	2024 Q2 RMP Financial Report	Beth Ebiner	07/24/24							
110		Bay RMP (2024)	1. Program Management	Update Deltek Program Plans for Open RMP Years	Beth Ebiner	07/25/24							
111		Bay RMP (2024)	1. Program Management	SC Meeting Stoplight Report	Amy Kleckner	07/25/24							
112		Bay RMP (2024)	2. Governance	July SC Meeting	Amy Kleckner	07/25/24							
113		Bay RMP (2023)	Nontargeted Data Mining	Task 4. Spreadsheet of compiled data mining results	Rebecca Sutton	07/30/24							
114		Bay RMP (2024)	**A. USGS Sacramento Support**	Contract - Continuous suspended sediment monitoring at 5 stations	Amy Kleckner	07/31/24							
115		Bay RMP (2022)	Special Study: PCBs in sediment and fish SS/RC	Technical Report	Jay Davis	08/01/24							10/31/23 - We have received the sediment data from AXYS, but per Adam "there's programming work goin on to resubmit the fish data."

	Focus Area	Project	Task	Deliverable	Assigned To	Due Date	Old Due Date	Days overdue	Due Date Extended (external delay)	Due Date Extended (internal delay)	# of extensions	Status	Comments
116		Bay RMP (2024)	C. 2024 Dry season water sampling	Complete contracts	Jennifer Dougherty	08/01/24							
117		Bay RMP (2024)	C. 2024 Dry season water sampling	Complete Sampling and Analysis Plan	Jennifer Dougherty	08/28/24							
118		Bay RMP (2023)	Special Study: PCBs in sediment and fish SS/RC (Year 2)	Final Technical Report	Jay Davis	08/30/24							10/31/23 - We have received the sediment data from AXYS, but per Adam "there's programming work goin on to resubmit the fish data."
119	Emerging Contaminants	RMP SEP	19. Quaternary Ammonium Compounds (QACs) in Bay Area Wastewater	Technical Memo	Diana Lin	08/31/24	08/31/22				2		Additional funding from NSF increased the scope of the project. The ECWG agreed to the suggested revised due dates for the deliverables so they can include the additional data.
120		Bay RMP (2024)	4. Annual Reporting	RMP Pulse Draft	Jay Davis	08/31/24							
121		Bay RMP (2024)	5. Communications	RMP Update to BACWA	Amy Kleckner	08/31/24							
122		Bay RMP (2024)	5. Communications	RMP Update to BPC	Amy Kleckner	08/31/24							
123		Bay RMP (2024)	**B. USGS Menlo Park Support**	Contract - Monthly measurements of basic water quality at 38 stations	Amy Kleckner	08/31/24							
124		Bay RMP (2024)	I. 2024 S&T Lab Intercomp Studies	Complete contracts	Beth Ebiner	08/31/24							
125		Bay RMP (2024)	50. Stormwater CECs Monitoring & Modeling 2024	Presentation to SC/TRC	Rebecca Sutton	08/31/24							
126		Bay RMP (2024)	24. Microplastics Stormwater Monitoring Pilot	Complete Sampling and Analysis Plan	Diana Lin	08/31/24							
127		Bay RMP (2022)	Special Study: Sediment delivery to marshes in C&N Bay	Report	Melissa Foley	09/01/24	12/01/23	0					Jessie Lacy and Karen Thorne (USGS) doing the work
128		Bay RMP (2024)	4. Annual Reporting	2024 Annual Meeting Agenda	Jay Davis	09/01/24							
129		Bay RMP (2024)	L. 2024 Sport Fish Monitoring	Successful collection of samples	Jay Davis	09/01/24							
130		Bay RMP (2024)	38. NTA of SF Bay Fish, Yr 1	Collect Samples	Rebecca Sutton	09/01/24							
131		Bay RMP (2023)	Special Study: Sediment Delivery to Marshes in C&N Bays: project expansion	Report (draft paper) investigating the relationships between SSC in the shallows, SSC at long-term channel stations, and sediment accretion on marshes	Melissa Foley	09/15/24					1		Jessie Lacy and Karen Thorne (USGS) conducting this work
132		Bay RMP (2024)	4. Annual Reporting	RMP Pulse Final and send to printer	Jay Davis	09/20/24							
133		Bay RMP (2024)	2. Governance	September TRC Meeting	Amy Kleckner	09/22/24							
134		Bay RMP (2023)	3. QA and Data Services	QA Summary Report for 2023 S&T Activities	Don Yee	09/30/24							
135		Bay RMP (2023)	Special Study: STLS WY21 POC Recon Monitoring	Laboratory analysis, QA, & Data Management	Alicia Gilbreath	09/30/24							
136		Bay RMP (2024)	5. Communications	Q3 RMP eUpdate	Amy Kleckner	09/30/24							
137		Bay RMP (2024)	5. Communications	RMP Update to BAMSC	Amy Kleckner	09/30/24							
138		Bay RMP (2024)	5. Communications	RMP Update to LTMS	Amy Kleckner	09/30/24							
139		Bay RMP (2024)	5. Communications	RMP Update to WSPA	Amy Kleckner	09/30/24							
140		Bay RMP (2024)	5. Communications	RMP Update at RB2 Meeting	Amy Kleckner	09/30/24							
141		Bay RMP (2024)	5. Communications	Updates to RMP website - Q3	Martin Trinh	09/30/24							
142		Bay RMP (2024)	C. 2024 Dry season water sampling	Collect samples	Jennifer Dougherty	09/30/24							
143		Bay RMP (2024)	N. NB Se Monitoring	Sampling and analysis proposal for 2025 S&T Monitoring presented to TRC	Amy Kleckner	09/30/24							
144		Bay RMP (2024)	40. OPEs, BP, and Other Plastic Additives in Wastewater	Collect Samples	Rebecca Sutton	09/30/24							
145		Bay RMP (2024)	30. Integrated Monitoring & Modeling for PCBs and Hg Phase 1	Lab analysis, QA, & data mgmt.	Alicia Gilbreath	09/30/24							
146		RMP SEP	32. Temporal variability in sediment delivery to a North and Central SF Bay Salt Marsh	Data made publicly available	Melissa Foley	10/01/24							
147		Bay RMP (2024)	4. Annual Reporting	Annual Meeting	Amy Kleckner	10/16/24							
148		Bay RMP (2024)	2. Governance	October SC Meeting	Amy Kleckner	10/20/24							
149		Bay RMP (2024)	1. Program Management	Update Deltek Program Plans for Open RMP Years	Beth Ebiner	10/24/24							

	Focus Area	Project	Task	Deliverable	Assigned To	Due Date	Old Due Date	Days overdue	Due Date Extended (external delay)	Due Date Extended (internal delay)	# of extensions	Status	Comments
150		Bay RMP (2023)	37. Tire and roadway contaminants in wet season Bay water (year 2 of 2)	Task 4. QA/QC, data management, and data upload	Rebecca Sutton	10/30/24							
151		Bay RMP (2023)	F. 2023 Wet season water data mgmt.	Process and upload wet season water sampling data	Adam Wong	10/31/24							
152		Bay RMP (2024)	**F. WY24 Wet season water data mgmt.**	Process and upload wet season water sampling data	Adam Wong	10/31/24							
153		Bay RMP (2024)	K. 2024 S&T Field Sampling Report & Support	Post dry field season garage clean up	Martin Trinh	10/31/24							
154		Bay RMP (2024)	1. Program Management	2025 Multi-Year Plan	Amy Kleckner	11/01/24							
155		Bay RMP (2024)	1. Program Management	2025 Detailed Workplan and Budget	Amy Kleckner	11/01/24							
156		Bay RMP (2024)	1. Program Management	2024 Q3 RMP Financial Report	Beth Ebiner	11/01/24							
157		Bay RMP (2024)	1. Program Management	SC Meeting Stoplight Report	Amy Kleckner	11/01/24							
158		Bay RMP (2024)	**M. 2024 Sport Fish data mgmt.**	Process and upload sampling data	Adam Wong	11/01/24							
159		Bay RMP (2024)	42. Continuous SSC and Wave Monitoring in SB and LSB, Yr. 3	Report	Scott Dusterhoff	11/01/24							
160		Bay RMP (2023)	Ethoxylated surfactants in ambient water, margin sediment, wastewater, Part 2 (year 2of 2)	Task 6. Final report	Diana Lin	11/30/24							
161		Bay RMP (2024)	2. Governance	December TRC Meeting	Amy Kleckner	12/09/24							
162		Bay RMP (2023)	Special Study: STLS WY21 POC Recon Monitoring	Wet season water samples collected and sent to the labs for analysis	Alicia Gilbreath	12/30/24							
163		Bay RMP (2023)	Special Study: Sediment Delivery to Marshes in C&N Bays: project expansion	Presentation to Bay Delta Science or State of the Estuary Conference	Melissa Foley	12/30/24							Jessie Lacy and Karen Thorne (USGS) conducting this work
164		Bay RMP (2024)	P. PFAS and NTA in Marine Mammals (Yr 2)	Sample collection	Rebecca Sutton	12/30/24							
165		Bay RMP (2022)	Special Study: Ethoxylated surfactants in ambient water, margin sediment, wastewater. Part 2	Final Report	Diana Lin	12/31/24	08/31/23	92			2		10/24/23 - Revised timeline. Draft report in development. Delay from analytical laboratory to analyze remaining sediment and wastewater samples, expected final laboratory results by end of spring 2024. Final report expected 12/31/24. 7/18/23 - Jennifer D. collecting samples this week. Waiting for updated dataset from DS to begin report. Plan is to start drafting report as soon as data is received from DS but Duke U. has still not analyzed sediment and second round of wastewater. A draft may be completed by end of the year, but final report not expected until later.
166		Bay RMP (2023)	Special Study: Sediment Flux Richmond Bridge	Data release	Scott Dusterhoff	12/31/24	05/11/23	204			1		9/15/23 - Per David Hart at USGS: work will not move forward in WY24, but do expect it to happen in WY25 as part of a larger project with the possibility of increased funding from other groups.
167		Bay RMP (2024)	1. Program Management	RMP Participation Letters for BACWA and WSPA Agencies	Amy Kleckner	12/31/24							
168		Bay RMP (2024)	1. Program Management	Honoraria Payments to Science Advisors	Amy Kleckner	12/31/24							
169		Bay RMP (2024)	3. QA and Data Services	Online Data Access CD3	Cristina Grosso	12/31/24							
170		Bay RMP (2024)	3. QA and Data Services	Database Maintenance	Adam Wong	12/31/24							
171		Bay RMP (2024)	3. QA and Data Services	Updates to SOPs and Templates	Adam Wong	12/31/24							
172		Bay RMP (2024)	3. QA and Data Services	DMMO Database Support	Cristina Grosso	12/31/24							
173		Bay RMP (2024)	5. Communications	Q4 RMP eUpdate	Amy Kleckner	12/31/24							
174		Bay RMP (2024)	5. Communications	Updates to RMP website - Q4	Martin Trinh	12/31/24							
175		Bay RMP (2024)	**H. 2024 Bird Egg Data Mgmt**	Processing and upload bird egg data	Adam Wong	12/31/24							
176		Bay RMP (2024)	J. 2024 Sample Archive	Update RMP Archives database	michaelw@sfei.org	12/31/24							
177		Bay RMP (2024)	K. 2024 S&T Field Sampling Report & Support	Field Reports Reviewed and posted to website	Amy Kleckner	12/31/24							
178		Bay RMP (2024)	L. 2024 Sport Fish Monitoring	Sport Fish Report	Jay Davis	12/31/24							
179		Bay RMP (2024)	R. WDM Model Maintenance	Update model development log	Pedro Avellaneda	12/31/24							
180		Bay RMP (2024)	31. Tidal Area Remote Sampler Pilot - Yr 2	Data upload to CEDEN	Don Yee	12/31/24							
181		Bay RMP (2024)	1. Program Management	2024 Q4 RMP Financial Report	Beth Ebiner	01/31/25							
182		Bay RMP (2024)	**D. 2024 Dry season water Data Mgmt**	Process and upload dry season water sample data	Adam Wong	01/31/25							
183		Bay RMP (2024)	40. OPEs, BP, and Other Plastic Additives in Wastewater	Final Report	Rebecca Sutton	01/31/25							

	Focus Area	Project	Task	Deliverable	Assigned To	Due Date	Old Due Date	Days overdue	Due Date Extended (external delay)	Due Date Extended (internal delay)	# of extensions	Status	Comments
184		Bay RMP (2024)	31. Tidal Area Remote Sampler Pilot - Yr 2	Draft Report	Don Yee	01/31/25							
185		Bay RMP (2023)	Special Study: STLS WY21 POC Recon Monitoring	Interpretation & reporting for BAMSC	Alicia Gilbreath	02/28/25							
186		Bay RMP (2024)	**Q. Marine Mammals data mgmt.**	Process and upload sampling data	Adam Wong	02/28/25							
187		Bay RMP (2024)	51. PFAS in Bay Water using the TOP Assay	Final Report	Rebecca Sutton	02/28/25							
188		Bay RMP (2024)	21. Monitoring of Sediment Deposition in SLB Intertidal Areas	Draft Report	Don Yee	02/28/25							
189		Bay RMP (2024)	I. 2024 S&T Lab Intercomp Studies	Presentation to the TRC on findings from IC studies.	Don Yee	03/01/25							
190		Bay RMP (2024)	3. QA and Data Services	QA Summary Report for 2024 S&T Activities	Don Yee	03/31/25							
191		Bay RMP (2024)	31. Tidal Area Remote Sampler Pilot - Yr 2	Final Report	Don Yee	03/31/25							
192		RMP SEP	32. Temporal variability in sediment delivery to a North and Central SF Bay Salt Marsh	Final Report	Melissa Foley	04/01/25							
193		RMP SEP	26. PFAS & Chlorinated Paraffins in Bay Sediment	Report	Rebecca Sutton	04/04/25							
194		Bay RMP (2024)	37. Tire and Roadway Contaminants in Wet Season Bay Water, Yr 3	Presentation at ECWG	Rebecca Sutton	04/30/25							
195		Bay RMP (2024)	39. PFAS Synthesis & Strategy	Final Report	Rebecca Sutton	04/30/25							
196		Bay RMP (2024)	21. Monitoring of Sediment Deposition in SLB Intertidal Areas	Final Report and data upload	Don Yee	04/30/25							
197		RMP SEP	27. High speed mapping of water quality parameters on the eastern shoal of South San Francisco Bay	Data release	Ariella Chelsky	06/30/25							
198		RMP SEP	27. High speed mapping of water quality parameters on the eastern shoal of South San Francisco Bay	Technical Report	Ariella Chelsky	06/30/25							
199		Bay RMP (2023)	PFAS and NTA in Marine Mammals (year 1 of 2)	Task 5. Draft manuscript(s)	Rebecca Sutton	06/30/25							
200		Bay RMP (2023)	Special Study: STLS WY21 POC Recon Monitoring	Final report	Alicia Gilbreath	06/30/25							
201		Bay RMP (2024)	P. PFAS and NTA in Marine Mammals (Yr 2)	S&T study design recommendations (technical memo), presentation to TRC.	Rebecca Sutton	06/30/25							
202		Bay RMP (2024)	40. OPEs, BP, and Other Plastic Additives in Wastewater	QA/QC and Data Management	Rebecca Sutton	06/30/25							
203		RMP SEP	28. SF Bay Sediment Transport and Fate Modeling	Technical Report	Dave Senn	09/05/25							
204		Bay RMP (2023)	37. Tire and roadway contaminants in wet season Bay water (year 2 of 2)	Task 7. Final short report	Rebecca Sutton	09/30/25							
205		Bay RMP (2023)	PFAS and NTA in Marine Mammals (year 1 of 2)	Task 6. Final manuscript(s)	Rebecca Sutton	09/30/25							
206		Bay RMP (2024)	44. Spatial variability of sediment accretion in SFB restorations	Data release: soil properties, digital elevation models, and RTK GPS data	Scott Dusterhoff	09/30/25							
207		Bay RMP (2024)	44. Spatial variability of sediment accretion in SFB restorations	Report	Scott Dusterhoff	03/31/26							
208		Bay RMP (2024)	40. OPEs, BP, and Other Plastic Additives in Wastewater	Presentation at ECWG	Rebecca Sutton	04/30/26							
209		Bay RMP (2024)	38. NTA of SF Bay Fish, Yr 1	Presentation to ECWG and TRC	Rebecca Sutton	04/30/26							
210		RMP SEP	31. Investigating HABs in SF Bay	Data made publicly available	Dave Senn	06/30/26							
211		RMP SEP	31. Investigating HABs in SF Bay	Technical Report	Dave Senn	06/30/26							
212		Bay RMP (2024)	38. NTA of SF Bay Fish, Yr 1	Final Manuscript	Rebecca Sutton	09/30/26							
213		Bay RMP (2024)	44. Spatial variability of sediment accretion in SFB restorations	Presentation to RMP	Scott Dusterhoff	09/30/26							

Bay RMP Action Items Stoplight Report_New

	Primary	Deliverable	Assigned To	Due Date	Old Due Date	Days overdue	# of extensions	Due Date Extended (external delay)	Due Date Extended (internal delay)	Status	Comments	Meeting Date
1	Action Items from 06/20/23	Post updated SEP list to RMP website	Martin Trinh	09/30/23	09/04/23	88	1				10/25/23 - Prioritized behind new SFEI website template updates. 9/6/23 - will include in Q3 website updates. Extend due date until 9/30.	06/20/23
2	SC Action Items from 11/02/2022	Discuss event-based monitoring planning at the December 2023 TRC meeting and January 2024 meeting	Jay Davis	01/26/24								11/02/22
3	Action Items 9/19/23	Share revised draft of margins report after reanalysis	Don Yee	12/31/23								**09/19/23**
4	November 2022 Meeting											11/02/22
5	**June 2023 TRC**											**06/20/23**
6	**September 2023 TRC**											**09/19/23**