

RMP Steering Committee Meeting

April 15, 2024
9:00 AM – 12:30 PM

HYBRID MEETING

In-person: First floor conference room at SFEI
Remote Access: <https://us06web.zoom.us/j/92590225613>
 Meeting ID: 925 9022 5613
 Dial by your location
 +1 669 900 6833 US (San Jose)

AGENDA

1.	<p>Introductions and Review Goals for the Meeting</p>	<p>9:00 (10 min)</p> <p>Tom Mumley</p>
2.	<p>Decision: Approve Meeting Summary from SC Meeting on January 22, 2024; Confirm Dates for Future Meetings</p> <p>Scheduled SC meetings: August 12, 2024, November 4, 2024 (+ MYP Workshop)</p> <p>Scheduled TRC meetings: June 13, September 24, December 12, 2024.</p> <p>2024 Annual Meeting: October 16</p> <p>Materials: SC Meeting Summary, pages 5-17</p> <p>Desired outcomes:</p> <ul style="list-style-type: none"> ● Approve meeting summary ● Confirm future SC meeting and Annual Meeting dates 	<p>9:10 (10 min)</p> <p>Tom Mumley</p>
3.	<p>Information: TRC Meeting Summary from March 26, 2024</p> <p>Topics discussed at the most recent TRC meeting included:</p> <ul style="list-style-type: none"> ● <p>Materials: TRC Meeting Summary, pages 18-34</p> <p>Desired Outcome:</p> <ul style="list-style-type: none"> ● Informed committee 	<p>9:20 (10 min)</p> <p>Amy Kleckner</p>

<p>4.</p>	<p>Information: RMP Financial Update for 2024 Quarter 1</p> <p>The RMP Financial Update summarizes the balance of budgeted and reserved RMP funds as well as its cash position. Update on Use of Matching Funds for Destination Clean Bay WQIF Project</p> <p>Materials:</p> <ul style="list-style-type: none"> ● Financial Update Memo, pages 35-62 ● Slides presented at the meeting <p>Desired outcomes:</p> <ul style="list-style-type: none"> ● Informed Committee 	<p>9:30 (20 min)</p> <p>Beth Birmingham</p> <p>Amy Kleckner</p>
<p>5.</p>	<p>Information: Introducing Our New Watershed Modeler</p> <p>Meet SFEI's new addition to the modeling team, Dr. Matthew Heberger</p> <p>Materials: None</p> <p>Desired outcome:</p> <ul style="list-style-type: none"> ● Informed Committee 	<p>9:50 (15 min)</p> <p>Jay Davis</p> <p>Matt Heberger</p>
<p>6.</p>	<p>Information: USEPA San Francisco Bay Program Office Funds</p> <p>The RMP may be eligible to receive USEPA Program Office funds for the current fiscal year. In order to do so, USEPA would need to determine that funding the RMP can be an exception to their usual competitive bidding requirements. An update on the process will be provided.</p> <p>Materials: None</p> <p>Desired outcome:</p> <ul style="list-style-type: none"> ● Informed Committee 	<p>10:05 (20 min)</p> <p>Jay Davis</p>
	<p>Break</p>	<p>10:25 (15 min)</p>
<p>7.</p>	<p>Information: Workgroup Planning Update</p> <p>Overview of Tier 1 and Tier 2 Special Study proposals in development, including studies that could be funded with increased funding from USEPA's San Francisco Bay Program Office. Review workgroup strategy funds needs for 2025.</p> <ul style="list-style-type: none"> ● March 21 - SedWG #1 ● April 16 - ECWG #1 ● April 17 - ECWG/SPLWG ● April 30 - MPWG ● May 16 - SedWG#2 ● May 20 - SPLWG#2 ● Late May? - PCBWG 	<p>10:40 (30 min)</p> <p>Jay Davis</p> <p>Amy Kleckner</p>

	<p>Materials: Slides presented at meeting</p> <p>Desired outcome:</p> <ul style="list-style-type: none"> • Informed Committee • Guidance for Workgroups • Approve WG strategy funds allocations for 2025 	
8.	<p>Discussion: Program Management and Status and Trends 2025 Planning Update</p> <p>Discuss preliminary ideas on how potential increased funding from USEPA's San Francisco Bay Program Office will best be used to expand program management tasks and S&T monitoring, and a timeline for further discussions.</p> <p>Materials: Slides presented at meeting</p> <p>Desired outcome:</p> <ul style="list-style-type: none"> • Informed Committee • Input on prioritization of ideas for using EPA funds towards tasks 1-6 	<p>11:10 (30 min)</p> <p>Amy Kleckner Jay Davis</p>
9.	<p>Discussion: Communications</p> <p>Brainstorm on speakers for the RMP Annual Meeting. Discuss the 2024 Pulse.</p> <p>Materials: Slides presented at the meeting</p> <p>Desired outcomes:</p> <ul style="list-style-type: none"> • Ideas for speakers • Update on Pulse 	<p>11:40 (30 min)</p> <p>Jay Davis</p>
10.	<p>Information: Status of RMP Deliverables and Action Items</p> <p>Materials: Action Items & Deliverables reports and summary slides pages 63-74</p> <p>Desired outcomes:</p> <ul style="list-style-type: none"> • Informed committee • Feedback on progress and due dates 	<p>12:10 (10 min)</p> <p>Amy Kleckner</p>
11.	<p>Discussion: Plan Agenda Items for Future Meetings</p> <p>Desired outcome:</p> <ul style="list-style-type: none"> • Identify future agenda items, including science updates 	<p>12:20 (5 min)</p> <p>Tom Mumley</p>
12.	<p>Discussion: Plus/Delta</p>	<p>12:25 (5 min)</p> <p>Tom Mumley</p>
	<p>Adjourn Lunch provided</p>	<p>12:30</p>

Recently Completed RMP Reports/Products

Avellaneda, P. M.; Zi, T. 2024. **Modeling Stormwater Loads of Contaminants of Emerging Concern: Literature Review and Recommendations**. SFEI Contribution No. 1131. San Francisco Estuary Institute: Richmond, CA.
<https://www.sfei.org/documents/modeling-stormwater-loads-contaminants-emerging-concern-literature-review-and>

Foley, M. M.; Davis, J. A.; Buzby, N. 2024. **Selenium Concentrations in Water and Clams in North San Francisco Bay, 2019-2020**. SFEI Contribution No. 1116. San Francisco Estuary Institute: Richmond, CA.

Holleman, R.; King, A.; Karimpour, F.; Mugunthan, P.; Roberts, D.; Senn, D. 2024. **Development of Semi-Empirical Light Extinction Estimates for Biogeochemical Modeling Applications in San Francisco Bay**. SFEI Contribution No. 1177. San Francisco Estuary Institute: Richmond, CA.
<https://www.sfei.org/documents/development-semi-empirical-light-extinction-estimates-biogeochemical-modeling-applications>

Kleckner, A.; Davis, J. 2023. **2024 Detailed Workplan and Budget**.
<https://www.sfei.org/documents/2024-detailed-workplan-and-budget>

Kleckner, A.; Davis, J. 2024. **Multi Year Plan 2024**. SFEI Contribution No. 1167. San Francisco Estuary Institute: Richmond, CA.
<https://www.sfei.org/documents/multi-year-plan-2024>

Mayer P. M., Moran K. D., Miller E. L., Brander S. M., Harper S. , Garcia-Jaramillo M., Carrasco-Navarro V., Ho V. T., Burgess R. M., Thornton Hampton L. M., Granek E. F., McCauley M., McIntyre J. K., Kolodziej E. P., Hu X. , Williams A. J. , Beckingham B. A., Jackson M. E., Sanders-Smith R. D., Fender C. L., King G. A., Bollman M., Kaushal S. S., Cunningham B. E., Hutton S. J., Lang J., Goss H. V., Siddiqui S., Sutton R. , Lin D., Mendez M. . 2024. **Where the rubber meets the road: Emerging environmental impacts of tire wear particles and their chemical cocktails**, Science of The Total Environment, Volume 927, 171153, ISSN 0048-9697,
<https://doi.org/10.1016/j.scitotenv.2024.171153>.
<https://www.sciencedirect.com/science/article/pii/S0048969724012920>

Yee, D.; Wong, A.; Weaver, M. 2024. **2024 Quality Assurance Program Plan for The Regional Monitoring Program for Water Quality in San Francisco Bay**. SFEI Contribution No. 1169. San Francisco Estuary Institute: Richmond, CA.
<https://www.sfei.org/documents/2024-quality-assurance-program-plan-regional-monitoring-program-water-quality-san>

Bay RMP Steering Committee Meeting

January 22, 2024

San Francisco Estuary Institute

Meeting Summary

Attendees

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

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

Staff and Others:

- Jay Davis, SFEI
- Amy Kleckner, SFEI
- Martin Trinh, SFEI
- Beth Birmingham, SFEI
- Rebecca Sutton, SFEI
- Diana Lin, SFEI
- Kelly Moran, SFEI
- Luisa Valiela, EPA
- Alicia Chakrabarti, EBMUD
- Xavier Fernandez, SF Bay Regional WQCB

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

Following introductions from Steering Committee (SC) members, Tom Mumley briefly reviewed the meeting agenda. Key agenda items include financial updates, project status updates, workgroup strategy updates, an update on the EPA Program Office, and approval of the 2024 Multi-Year Plan and 2024 budget. Tom noted the importance of attendance from John Coleman and the USACE at the upcoming meetings.

2. Decision: Approve Meeting Summaries from MYP Workshop and SC Meeting on November 1, 2023; Confirm Dates for Future Meetings (00:04:39)

Tom Mumley asked the group for any final comments on the previous meeting's summary. Amanda Roa noticed there was a typo on page 2 of the Steering Committee summary. Receiving no other comments, he continued to confirm the dates for upcoming meetings. The SC meeting was confirmed for April 15, 2024, and the proposed dates of August 12, 2024 and November 4, 2024 were tentatively approved. The Technical Review Committee (TRC) will meet on March 26, 2024 and June 13, 2024. The RMP Annual Meeting has been confirmed for October 16, 2024.

Action Items:

- Send out calendar invitations for the August 12, 2024 SC meeting (Martin Trinh, February 1, 2024)
- Follow up with John Coleman (BPC) and Tessa Beach (USACE) re: attendance at the next SC meeting (Amy Kleckner, April 15, 2024)

Decision:

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

3. Information: TRC Meeting Summary (00:11:30)

The December 7th TRC meeting started off with the usual agenda items. Luisa presented an update on the EPA Program Office, which will also be covered later today in agenda item #10. The discussion mainly focused on the categories or buckets in the draft priority list and how to incorporate climate resiliency and equity into the existing priorities. Luisa shared that these new funds would mostly not be competitive grants and that the funds could be available later in 2024 so readiness is key. The conversation concluded with a discussion about the potential establishment of a PFAS workgroup, which Jay will speak to later.

Amy noted that at the TRC meeting, Chris Sommers raised concern about the increased workload this would bring to the RMP and cautioned the RMP to consider its ability to expand staff capacity to meet this demand. Becky Sutton's initial reaction to the formation of a dedicated PFAS workgroup was hesitant as PFAS is already so integrated into the Emerging Contaminants workgroup. There is already a big PFAS project being funded by the EPA. The group decided that there was no need for a dedicated PFAS workgroup now, but this could be reconsidered in the future if EPA continues to keep a big funding bucket just for PFAS work. Jay noted that preparing for future EPA funds will continue to be a priority topic for the SC today. Tom shared that he had previously had reservations about forming the Microplastic Workgroup but was eventually convinced by burgeoning statewide legislation and funding.

The next agenda item was to review the 2024 workplan with the TRC, and then Jay provided an update on the RMP's watershed modeling. At the time, SFEI was nearing the conclusion of the hiring of a new watershed modeler. That has now happened and Matt Heberger will be starting next month. He will be introduced formally at the next TRC and SC meetings. Additionally, exploring external consultant assistance in alleviating the backlog in projects that have been delayed was also discussed.

Next, Amy provided an update on S&T monitoring activities, starting with an update on the 2023 efforts. Results from the labs are continuing to trickle in. SFEI had a freezer failure over the Thanksgiving holiday weekend that resulted in the 2023 S&T sturgeon tissue samples for Se analysis being compromised. After some discussion, the TRC decided SFEI should no longer analyze those samples. SFEI still has them. Amy had a conversation with Robin Stewart last week and she concurred that the samples more than likely volatilized Se when they thawed out. Tom questioned if the RMP had insurance on these samples and its other samples. Amy shared plans to purchase new freezers and ensure freezer integrity by having temperature alerts and door latches. Jay reiterated how seriously SFEI is taking this with \$10K-100K of samples of samples in house.

As for 2024 S&T efforts, the RMP is hoping to collect our second and final set of water samples this week for the wet season near-field effort. The sport fish and bird egg monitoring efforts are actively in the planning and contracting stages. The marine mammal pilot is continuing as planned.

Jay led a discussion on event-based monitoring. A meeting will be scheduled with a small group including Dave, Richard, Amy, and Jay to start developing plans and matrices for event based monitoring.

Adam Wong, SFEI's Data Services manager, provided an informatics update, starting with datasets that were finalized in 2023. Those included Se in North Bay water and clams, PFAS in archived sport fish, stormwater CECs, ethoxylated surfactants, and North Bay margins samples. Adam noted that some finalized data are not yet public due to ongoing work on manuscripts and reports. He addressed challenges in completing the QA review process especially for multi-year datasets but highlighted Miguel Mendez being brought in to assist with some of the QA/QC as a positive development and his hopes that this will help expedite some QA of the more routine data sets. He also touched on lab timeliness resulting in slower reporting. Adam discussed budget allocations for data management and noted that the team is reserving some funds from 2023 for implementing CEDEN 2.0 which has been delayed but expected to happen in 2024. The Steering Committee weighed in, with Karin North requesting an organization chart to familiarize the SC with the Data Management team. The SC thought this would be a good addition to the website. Tom requested an informatics update from the Data Management team at the next SC meeting as he would like to better understand the challenges they were facing. Amy clarified that some of the delays in releasing data to the public were due to ongoing manuscript preparations.

In the communications update, Jay thanked all for their contributions to the 2023 RMP Update, and we now have hard copies to distribute. Jay also shared a summary of attendee feedback from the Annual meeting, most of which was very positive. The discussion then shifted to planning for the 2024 Pulse with a focus on CECs. The group discussed updating the management section from 2013 and that the updated tiered riskbased framework should be a centerpiece of the 2024 Pulse. Attendees were encouraged to provide additional feedback and the item concluded with a general consensus that the planning was on track.

Amy presented the update on the status of Deliverables and Action Items. Future agenda items requested were updates on the new watershed modeler, interlab comparison results from 2023, and decisions about the possibility of a PFAS workgroup.

Action Item:

- Prepare an org chart of SFEI employees that are key players in the RMP for the MYP meeting (Amy Kleckner, August 1, 2024)

4. Information: RMP Financial Update for 2023 Quarter 4 (00:43:00)

Beth Ebner provided the financial update for Q4 of 2023. For 2023, 59% of funds have been expended on the year with 92% of invoiced RMP fees collected. SFEI will do another round of follow up for RMP invoice fees. There is a surplus of \$98k due to \$118,250 in SEP funds supporting part of task 45 Sediment Delivery to Marshes in C&N Bays. For 2022, 82% of funds have been expended on the year with 100% of invoiced RMP fees collected. There is a surplus of \$18k that has been reduced from \$138k in the previous quarter after funding for various projects was approved by the SC. For 2021, 80% of funds have been expended with 99% of invoiced fees collected. The final \$5,504 San Francisco Marina invoice to be paid in Jan 2024. For 2020, 94% of the budget has been expended and 100% of fees have been collected. For 2019, 95% of fees have been expended and all fees collected. For 2018, there is an outstanding Duke invoice outstanding, and the RMP in the process of a QC check to confirm that all associated deliverables have been received. We anticipate being able to unencumber the year next quarter. There are no requests for unencumberances this quarter. The undesignated funds balance has been increasing over the last few quarters and has not changed since the last meeting. The 2023 Q3 total interest at 3.59% was \$55,146. SFEI has not received the interest total for Q4 yet, but the rate has been reported at 4%. The S&T Set Aside fund has not changed since last quarter but will be updated for the next SC meeting. Beth introduced a funding request to complete the Integrated Watershed Modeling and Monitoring Strategy Special Study. The team requires \$10,800 to complete the project. Jay will discuss the request in further detail during agenda item 6.

Action Item:

- Include/highlight any unallocated MMP funds for the April meeting (Beth Birmingham, April 15, 2024)

5. Information: Review the Status of Incomplete Projects from 2023 and Prior Years (00:53:00)

Amy Kleckner of SFEI provided a review of the status of incomplete projects from 2019 to 2023. Amy noted that incomplete projects also included those that were delayed or overdue. At the December TRC meeting, the TRC decided to forgo the analysis of the sturgeon muscle plug samples collected in 2023 for the 2019 Selenium in sturgeon muscle plug project. The freezer failure in Nov 2023 compromised the samples. The last effort was conducted in 2017. The follow-up had been delayed due to

COVID and complications with CDFW. SFEI has results from 2015, 2016, and 2017. Amy clarified that North Bay Se sampling is on hold this year. Costs to collect sturgeon samples will be higher than when the RMP piggybacked on CDFW and the RMP will take the year to review the data from previous years and reevaluate how best to continue this effort going forward. Future Se tissue analysis will be conducted by USGS. Amy noted the RMP could run the 2023 thawed/compromised samples later if desired - they were not disposed of.

Incomplete projects from 2020 include a report on the North Bay margins sediment sampling. The draft report resulted in a request for re-analyses on some ancillary vs. target analytes. Data Services has been asked to prioritize this timeline. 98% of the budget has been used and it is expected to conclude in March 2024. The Selenium in North Bay clams and water 2019-2020 report draft is currently in review with an expected completion date of March 2024 and has used 100% of its budget.

Incomplete projects from 2021 include the S&T program review report that will be completed in 2024. The draft is currently under review, waiting on comments from Tom Grieb. 63% of the budget has been used. The QA Summary for 2021 S&T Activities report is waiting on ancillary data to be QA'd by Data Services. Miguel Mendez of SFEI has been recruited to help with this effort and it is expected to be completed by March 2024. The draft report on the Impact of Remediation Actions on San Leandro Bay Recovery from PCB Contamination has completed internal review with Stanford leading revisions and is expected after PCBWG review in February, with a final report in April. The Integrated Watershed Modeling and Monitoring Implementation Strategy report is in progress and expected to be completed in April 2024. The CECs in Urban Stormwater manuscript and management summary is waiting on revisions from one partner and will be distributed for external review by the end of January. The management summary will be delivered after manuscript submission. The Nutrients Light Attenuation and moored sensors technical memo is expected to be completed in summer 2024. Enhancements to the DMMO database are being made, with templates being expected by the end of January. One of the Data Services team will be out on leave for 1.5 months so completion is expected at the end of the summer.

For 2022, the QA Summary for 2022 S&T Activities is awaiting the analysis of bird egg samples and is expected to be completed by Summer 2024. The Stormwater Monitoring Strategy for CECs has been delayed as it requires insights from ongoing modeling and data science special studies that have been delayed due to Tan's departure. The timeline for the Ethoxylated Surfactants in Ambient Water, Margin Sediment, and Wastewater report has been revised due to delays from the analytical laboratory to analyze remaining sediment and wastewater samples with final laboratory

results expected by the end of spring 2024. The May 2024 completion date for the PCB In-Bay Contaminant Modeling (SLB) was approved by the PCBWG in June 2023. The DMMO Database enhancements have been delayed to December 2024 as it waits on the 2021 enhancements. Lester is working on the Advanced Data Analysis update for the STLS WY21 POC Recon Monitoring. The WB and BAMSC are interested in providing input but time is needed to coordinate that effort which should wrap up by March 2024. A draft has been sent out for external review of the CEC Modeling Exploration Report, comments are requested by January 31, 2024. Finally, for 2022, Jessie Lacey and Karen Thorne at USGS are working on the report on Sediment Delivery to Marshes in Central and North Bay and are expected to complete the report in September 2024.

For 2023, the spreadsheet of results for the Nontargeted Data Mining project is in process and we anticipate including a summary of core findings in the CECs strategy document. It should conclude in the summer of 2024. The PFAS in Archived Sport Fish Draft manuscript is being finalized for submission in March 2024. Samples are still being collected for the STLS WY21 POC Recon Monitoring project. The timeline for the STLS Regional Model Development report is currently under revision. Reports on Suspended Sediment in Lower South Bay and Sediment Delivery to Marshes in Central and North Bays are in progress and expected to conclude in Spring and Fall of 2024 respectively. The Sediment Flux to Richmond Bridge data release has been delayed to WY2025 as part of a larger project with the possibility of increased funding from other groups per David Hart of USGS. The PCBs in Sediment and Fish SS/RC report is in progress and expected to conclude in Fall 2024 with fish data coming in slowly from AXYS.

For incomplete SEP projects, the North Bay Selenium Clam and Water draft report is in review and the data release is complete. Additional funding from NSF increased the scope of the QACs in Bay Area Wastewater report. The ECWG agreed to the suggested revised due dates of August 2024 for the deliverables so that the additional data can be included. The MTC Bay Area Land Use Update is still waiting for MTC to release data. Lester McKee has replaced Tan Zi as the lead author for the Integrated Watershed-Bay Modeling Strategy but the draft report is in progress and is expected to be completed in Summer 2024. The Regional Watershed Spreadsheet Model update is waiting on the land use update (Winter 2023). Jessie Lacy and Karen Thorne have presented the Sediment Deposition on South Bay Marsh (Whales Tail) draft report to the USGS to review which should be completed in January. Reports on PFAS and Chlorinated Paraffins in Bay Sediment and High Speed Mapping of Water Quality Parameters on the Eastern Shoal of SSFB are ongoing and expected to be completed in Spring and Summer of 2025 respectively. The technical report for the San Francisco Bay Sediment Transport and Fate Modeling is ongoing and is expected to complete in Fall 2025.

Revisions are being made to the PFAS in Archived Sport Fish manuscript and is expected to be completed in April 2024. The Analysis and Reporting of NTA Sediment Data Manuscript & Fact Sheet is also in preparation for April 2024. The Data Release and Technical Report for Investigating HABs in San Francisco Bay is ongoing and expected to be completed in Summer 2026. Finally, the Temporal Variability in Sediment Delivery to a North and Central San Francisco Bay Salt Marsh data release and final report are ongoing and expected to be completed by Spring 2025.

The Committee expressed approval of the timelines presented. Tom expressed doubt that the DMMO database will be updated. He questioned the value of these updates to the RMP and inquired as to why the RMP was funding this. In the future, the Committee advised Amy to not include projects that are not completed but on target to finish on schedule. The total budget (and changes) can be included, along with if there are any funding sources feeding into the project other than the RMP funds. Ongoing projects can be in an abbreviated list at the end.

Action Items:

- Develop a timeline/plan for 2025 Se to present to the TRC and SC (Amy Kleckner, March 15, 2024)
- Offline conversation to include Tom, Tony, Luisa and Caitlyn S., re: next steps in moving along MTC land use data layer update. (Amy Kleckner, March 15, 2024)
- Talk to Cristina Grosso re: DMMO database enhancements (Amy Kleckner, April 1, 2024)

6. Decision: Funding Request to Complete Integrated Watershed Modeling and Monitoring Strategy Special Study (02:01:40)

Jay Davis introduced the Integrated Watershed Modeling and Monitoring Strategy special study. This project was originally funded in 2021 at \$50K and led by Lester McKee. The RMP is making a request of \$10.8K in additional funds to get this report out for review and finalized. This work is feeding into the Stormwater CECs monitoring approach, developing a modeling plan along the way.

Jay showed the proposed timeline and budget from 2021, following with the revised timeline and budget, with a draft strategy internal review in February 2024, with a workgroup review later. A final strategy will be published in April 2024, followed by stakeholder outreach and presentations. The additional funds required for this total \$10,800.

This is not technically a request for funding because the funding request had already been approved. Amy realized that she had included the \$180k from the undesignated reserve for the remote sampler as revenue in the 2024 budget but forgot to include it as an expense. When the 2024 budget was drafted there was a large surplus. Amy then corrected for the assumed surplus by reducing the S&T reserve fund withdrawal from the forecasted \$650k to \$500k and added the model maintenance project to S&T. This caused the \$180k for the remote samplers to be inadvertently budgeted to S&T. Amy suggested that the most straightforward way to correct this error would be to increase the S&T reserve withdrawal for 2024. Instead of \$500k as it is showing now, the S&T set aside fund withdrawal would be increased to \$680k for 2024.

Decision:

- Eric Dunlavey motioned to approve the request for extra funds for the Integrated Watershed Modeling and Monitoring Strategy special study. Amanda Roa seconded the motion. The motion was carried by all present members.

Action Items:

- Alert Beth to increase the funding for this project using unallocated reserve funds or surplus from that year (Amy Kleckner, February 22, 2024)
- Update MYP and AWP to include the increased withdrawal from the S&T Set Aside. (Amy Kleckner, February 15, 2024)

7. Decision: Approve Final Multi Year Plan and Annual Workplan and Budget for 2024 (02:17:05)

Amy requested approval of the 2024 Multi-Year Plan. A draft had been shared last November and feedback from the SC and TRC has been received and incorporated. Latest revisions to the MYP include David Senn's edits to the Nutrient text page and incorporating comments received via email. Proposed revisions and edits for the MYP include updates to the S&T tables and figures to more accurately reflect the set aside funds used in 2024. Proposed revisions and edits for the Annual Workplan include updated revenues to more accurately reflect the set aside funds used in the 2024 workplan and updated expenses to include the remote sampler.

Decision:

- Karin North motioned to approve the final Multi-Year Plan and Annual Workplan and Budget for 2024 with the suggested revisions. Eric Dunlavey seconded the motion. The motion was carried by all present members.

8. Information/Decision: Review Current SEP Proposals List (02:19:15)

Jay began this item by asking the Committee to reaffirm the current SEP list, explaining to the Committee that it is useful for Tom to ensure the list is current and updated. The list is current as it stands.

Decision:

- Karin North motioned to approve the current SEP Proposal List. Adam Olivieri seconded the motion. The motion was carried by all present members.

9. Break

10. Discussion: EPA Program Office Update (02:24:30) (03:32:45)

Luisa Valiela presented the annual program priority list for the expanded San Francisco Bay Program, included as part of the National Defense Authorization Act. The Act served as a funding mechanism, leading to the establishment of an authorized program called the San Francisco Bay Program. This moves the program from a strictly competitive grant program to a funding office like the ones established in the Great Lakes and Chesapeake Bay. Language in the legislation 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 the SFEP, SF Water Board, SFBRA, and other stakeholders. Luisa outlined the difference between appropriation and authorization of the program bill. Luisa highlighted the significant increase in funding, from approximately \$5 million per year to the new authorized level of \$54 million. Luisa presented the draft priority list, emphasizing that these were not ranked priorities but rather program areas intended to reflect collaborative efforts for Estuary restoration. Feedback was sought on the proposed priorities, with adjustments already made based on previous input, such as specifying "habitat, eelgrass, and oyster reef restoration" under the "Subtitle A" category. Luisa welcomed ongoing feedback and suggestions for additional venues or stakeholders to engage with, recognizing the importance of refining the list collaboratively. Luisa concluded with an overview of the timeline for finalizing the list, targeting the end of winter or early spring, and highlighted the need for quick action to allocate funds incrementally under continuing resolutions. This will allow grants to be committed to recipients addressing these priorities in Summer 2024. The challenges of moving away from a competitive grant program and

developing new funding mechanisms were acknowledged, with a focus on figuring out the logistics with the help of the department, headquarters, and legal experts.

However, uncertainties regarding the final federal budget and temporary funding agreements pose challenges, including needing an exception to avoid another competition. Luisa noted the only way to avoid running a competition is to request an exception or exemption. Discussion also delved into the match requirement (75% EPA 25% Organization, which is a reduction in the match expectation) and the implications of multi-year funding for various projects, raising questions about readiness to handle potential funding influxes. Luisa clarified that funds need to be spent by Q2 of the next fiscal year.

The discussion resumed later with a focus on preparing for potential funding increases and ensuring effective allocation of resources. Jay emphasized the need for strategic planning and institutional readiness to manage increased funding effectively, with suggestions for further discussion and planning at upcoming workgroup meetings. Karin and Jay deliberated on the feasibility of scaling up quickly in response to potential increases in funding, highlighting the need for careful planning and coordination. Workgroups will be tasked with thinking how to make the best use of this potential influx of funds. Overall, the discussion underscored the complexities of managing funding changes and the importance of proactive planning and collaboration to maximize the impact of available resources.

11. Information: Science Update - In-Bay Modeling of Sediment and Contaminants (02:44:45)

The Science Update on In-Bay Modeling of Sediment and Contaminants, led by Craig Jones and Sam McWilliams, provided key insights into the progress and objectives of the project. The PCB Workgroup's multi-year workplan, with a significant funding boost from the EPA and a SEP, focuses on informing the PCB TMDL process. The modeling team, comprising Integral Consulting and SFEI, discussed their aim to develop a whole-Bay model for PCBs, sediment, and CECs. A draft report on in-Bay modeling is now under review. Sam McWilliams from Integral provided a progress overview, detailing refinements made to the watershed dynamic model to evaluate sediment loads into nine distinct subregions of the San Leandro Bay watershed. He highlighted the refinement of the model to a three-meter resolution for San Leandro Bay, focusing on sediment parameters and model evaluation.

Sam provided an overview of sediment transport modeling, which was the central focus of the work. Craig Jones emphasized the significance of using modeling as a tool

to address management questions, particularly concerning the recovery rate of segments and contaminated sites within the Bay. He underscored the importance of accurate boundary conditions and ongoing collaborative efforts to determine the most suitable methods for defining them. The team aims to use the modeling as a sandbox to explore management decisions, focusing on long-term sediment bed concentrations and the potential impact of management actions on PCB accumulation in the food chain.

Craig also highlighted ongoing work with the Sediment Workgroup to analyze sediment sources and loadings into the Bay, acknowledging the input from experts like Earl Hayter (science advisor for the PCBWG). The presentation moved on to modeling objectives, stressing the importance of developing models aligned with management goals and avoiding unnecessary complexity. The strategic approach aims to inform future monitoring strategies and integrate modeling as one tool among others to address management questions effectively.

Sam then delved into the progress overview, detailing refinements made to the watershed dynamic model to evaluate sediment loads into nine distinct subregions of the San Leandro Bay watershed. These refinements included improvements in grid resolution to capture intertidal regions and marshes more accurately. The model incorporates data on sediment loads from various input points, focusing on silt fractions associated with PCBs due to their dominance in PCB transport.

Sam focused on the northern and northeastern sections of San Leandro Bay, highlighting the distribution of sediment and its correlation with factors like PCB concentration and sediment input from different sources. Sam acknowledged the need for further quantitative analysis but emphasized the ongoing efforts to understand sediment deposition patterns. The presentation illustrated how sediment from different sources, such as San Leandro Creek and Peralta Creek, is distributed throughout San Leandro Bay, impacting areas like Arrowhead Marsh and the airport channel. Craig stated that the model did not account for background sediment at the moment, but will be included later. Jay noted the area by the airport was thought to be an isolated backwater, but may not be the reference area it was originally assumed to be.

Sam discussed using sediment data to estimate PCB transport, suggesting a method to weight tributary inputs based on PCB concentration. He also highlighted temporal trends in sediment deposition, showing how deposition patterns evolve over time and with different input events. Furthermore, the findings have implications for management decisions, including understanding recovery rates after removing sediment sources and sensitivity testing on sediment parameters. Sam addressed questions regarding the

model's ability to handle sediment layers and differentiation between sediment types, indicating ongoing efforts to incorporate such complexities into the model.

Discussion points included sediment deposition patterns, distribution comparisons, and next steps. Xavier asked how this would affect dredgers and sampling requirements for dredging, while Tom raised concerns about funding and project feasibility.

12. Break

13. Discussion: Communications (04:04:45)

Jay announced that there are copies of the RMP Update available. The discussion then shifted to the 2024 Pulse, where CECs (Contaminants of Emerging Concern) will be highlighted, similar to the 2013 edition. Work will begin on an updated guide to CECs in the Bay in early 2024, with additional text added to address Jay's suggestions for improvements. The TRC suggested the inclusion of a sidebar on challenges, followed by risk profiles. Tom volunteered someone at the Water Board to provide some input on the draft. Moreover, there is consideration for dedicating more than one session of the Annual Meeting to CECs, potentially tying it in with Pulse discussions.

14. Discussion: Status of RMP Deliverables and Action Items (04:16:30)

Amy briefly reviewed the status of RMP deliverables and action items, which can be found in further detail in Agenda Item 5.

15. Discussion: Plan Agenda Items for Future Meetings (04:22:00)

Jay and Amy will work with Tom and Karin to plan agenda items for the upcoming SC meeting on April 15, 2024. Items on the Data Services Report, Watershed Modeler update, new Selenium plan, updated S&T plan, and potential EPA funding will be on the docket. Amy noted the April meeting could be shorter if possible, as the Emerging Contaminant Workgroup Meetings will be held on April 16 & 17.

16. Discussion: Plus/Delta (04:24:00)

The group commended the science work being done as well as Amy's work updating the MYP and Annual Workplan. The SC is looking forward to the workgroup season.

ADJOURN



Bay RMP Technical Review Committee Meeting

March 26, 2024

Meeting Summary

Attendees

TRC Member	Affiliation	Representing	Present
Alicia Chakrabarti	EBMUD	POTW	Y
Mary Lou Esparza	Central Contra Costa Sanitary District	POTW	N
Tom Hall	EOA, Inc.	POTW	Y
Heather Peterson	City and County of SF	CCSF	Y
Samantha Engelage	City of Palo Alto	POTW	Y
Bridgette DeShields*	Integral Consulting	Refineries	Y
Chris Sommers	BAMSC (EOA, Inc.)	Stormwater	Y
Shannon Alford	Port of San Francisco	Dredgers	N
Richard Looker	SF Bay Regional WQCB	Water Board	N
Luisa Valiela	US EPA	US EPA-IX	Y
Ian Wren	Baykeeper	NGOs	N
Jamie Rose Sibley Yin	US Army Corps of Engineers	USACE	N

Staff and Others

- Jay Davis – SFEI
- Amy Kleckner – SFEI
- Martin Trinh – SFEI
- Don Yee – SFEI
- Becky Sutton – SFEI
- Alicia Gilbreath – SFEI
- Kelly Moran – SFEI
- Diana Lin – SFEI
- Scott Dusterhoff – SFEI
- Dave Senn – SFEI
- Melissa Foley – SFEI
- Matthew Heberger – SFEI
- Lester McKee – SFEI
- Jen Trudeau – SFEI
- Adam Wong – SFEI
- Warner Chabot - SFEI
- Gerardo Martinez – SFBRWQCB
- Xavier Fernandez - SFBRWQCB
- Bryan Frueh – City of San Jose
- Jade Ishii – USACE

1. Introductions and Review Agenda (00:05:00)

Bridgette DeShields opened the meeting with a round of introductions and a brief review of the day's agenda. The TRC welcomed Jade Ishii who was attending in place of Jamie Rose Sibley Yin, USACE representative. Key agenda items include updates on the RMP's wet season sampling, S&T monitoring, introducing SFEI's new watershed modeler, and workgroup updates.

2. Decision: Approve Meeting Summary from January 22, 2024, Review/Confirm/Set Dates for Future Meetings (00:07:30)

Bridgette asked the group for any final comments on the previous meeting's summary. Receiving no comments, Bridgette confirmed the dates for upcoming meetings. The Committee confirmed the next TRC meeting for June 13, 2024 and scheduled the following meetings for September 24, 2024 and December 12, 2024. Amy Kleckner confirmed the RMP Annual Meeting for October 16, 2024. The Multi Year Planning Meeting will be held on November 4, 2024.

Action Item:

- Send out calendar invites for September 24, 2024 and December 12, 2024 TRC meetings (Martin Trinh, April 1, 2024)

Decisions:

- Chris Sommers motioned to approve the meeting summary. Luisa Valiela seconded the motion. The motion was carried by all present members.

3. Information: SC Meeting Summary from January 22, 2024 (00:12:30)

Amy Kleckner presented a summary of the last Steering Committee meeting:

After introductions and the approval of the previous meeting summary, Beth Birmingham provided an RMP financial update for Q4 of 2023.

Amy summarized the incomplete projects from 2023 and earlier. For 2020, there are two incomplete projects: the North Bay margins report and the Se in NB clams and water report; both of which are in finalization and expected in the next couple of weeks. 2021 has seven incomplete projects, two of which are now completed CECs in Urban Stormwater manuscript has been submitted and the Nutrients Light Attenuation and

moored sensors technical memo. The rest are expected to be completed in 2024. 2022 has eight incomplete projects, most of which are nearing completion this year. 2023 has several projects that are incomplete but expected to complete on time and two projects, Sediment Flux at Richmond Bridge and the STLS Regional Model Development both of which are delayed and new timelines for completion are still in development.

The SC approved an additional \$10,800 to complete the Integrated Watershed Monitoring and Modeling Strategy special study. The SC approved finalization of the MYP with some minor edits. An adjustment was made to the S&T Set Aside withdrawal amount to account for a bookkeeping error made in the first draft. The SC approved the SEP Proposals list as is.

Luisa presented information on the EPA Program Office Update, similar to the presentation the TRC received in December. The discussion focused on preparing for potential funding increases and ensuring effective allocation of resources.

Craig Jones and Sam McWilliams provided an update on the progress and objectives of the In-Bay Modeling of Sediment and Contaminants project. Sam provided an overview of sediment transport modeling, the presentation then went on to modeling objectives and the importance of developing models aligned with management goals while avoiding unnecessary complexity. Sam detailed refinements made to the watershed dynamic model to evaluate sediment loads into nine distinct subregions of the San leandro Bay watershed. The refinements included improvements in grid resolution and focusing on silt fractions associated with PCBs. Sam then discussed using sediment data to estimate PCB transport. Other discussion points included sediment deposition patterns, distribution comparisons, and next steps.

Jay led the communications discussion which focused on the 2024 Pulse and the plan to model it as an update to the 2013 edition. There was also mention of dedicating more than one session of the Annual Meeting to CECs to tie it into the 2024 Pulse.

Finally, Amy reviewed the status of RMP deliverables and action items. Suggested agenda items for the April 15 meeting included a data services report, introduction of the new watershed modeler, new Se plan, updated S&T plans, and potential plans for future EPA funding.

4. Information: Wet Season Sampling Update (00:18:30)

Alicia Gilbreath from SFEI provided an update on stormwater sampling efforts for the current wet season. She provided details on the rainfall received so far this season, indicating that it had been moderate to good in various regions, with some areas slightly below normal. She mentioned an upcoming storm and preparations for deploying remote samplers and manual sampling.

Alicia emphasized the growth and diversification of project goals in recent years, including expanded pollutant monitoring, piloting of remote samplers in previously inaccessible areas, bio retention monitoring, and near-field sampling. She highlighted the addition of new staff, including two new full time staff who have taken on more leadership roles in project activities as well as assistance from Watershed Project interns.

Regarding current projects, Alicia reported progress on manual sampling and deploying remote samplers at multiple locations and sampling events conducted. Alicia emphasized the importance of manual sampling due to its flexibility and ability to closely monitor field conditions, but stressed the burgeoning role of remote samplers. SFEI will continue to sample stormwater manually, but these remote samplers stand to become a very transformational part of SFEI's stormwater monitoring toolkit. Once developed, they offer the capability of sampling many more sites per storm and the cost per site (from prep to post-storm processing and shipping) will be about half that of manual sampling. Alicia reported significant progress in site reconnaissance and database development for stormwater sampling in the Bay Area. They identified approximately 75 flow-gauged locations and conducted site visits during the previous summer, determining that over 50 of them were suitable for SFEI Mayfly deployment. However, obtaining permits for deployment posed a significant challenge, requiring considerable effort. Despite this, the team has successfully deployed samplers at seven locations this year, with permits secured for an additional four sites and ongoing efforts to obtain permits for five more locations.

Alicia discussed challenges related to obtaining permits for stormwater sampling efforts. She noted that while some municipalities readily issued permits, others posed substantial hurdles. The process was described as time-consuming and, in some cases, costly, with permit fees reaching up to \$600 per site. Alicia emphasized the variability in permit issuance, noting that approximately one-third of municipalities readily approved permits, while others required extensive time and effort to secure approvals. Additionally, she mentioned the impact of staff turnover within municipalities on the permit process, which further complicated efforts to navigate permit requirements consistently.

Alicia shared insights into the lessons learned from remote sampler deployments, including gaining experience, design improvements, and limitations such as sampler tubing contamination. Alicia discussed challenges related to tubing contamination in the sampling process. She explained that certain analytes were prone to contamination from soft tubing used with peristaltic pumps. Despite efforts to mitigate contamination, such as exploring alternative tubing materials, Alicia acknowledged ongoing concerns regarding the accuracy and reliability of sampled data. This issue raised questions about the suitability of current sampling methods and highlighted the need for continued research and development to address tubing contamination effectively.

Alicia noted that the small number of containers used in sampling leads to a limited number of analytes being assessed, as laboratories are hesitant to split samples for Contaminants of Emerging Concern (CECs). This limitation underscores the importance of considering alternative sampling methods alongside Mayfly and ISCO. Despite their efficacy, these methods are hindered by soft tubing contamination, affecting only a few compounds, albeit crucial ones for San Francisco Bay. SPLWG advisors recommended continuing with Mayfly/ISCO while exploring other options. Notably, the samplers, with their current tubing, perform well for PFAS and the Kolodziej lab tire/road chemicals suite. The team also discussed tweaks and improvements made this year, including an automated baseflow level adjustment and a lower drag configuration for hanging installations. Additionally, limitations due to sampling head height were addressed, with a maximum height of three meters due to decreased pumping rates beyond that. Furthermore, although the current system is limited to three bottles due to drilling constraints and practical considerations, the Mayfly system has the capacity for up to five independent collections.

Alicia also addressed the topic of vacuum samplers, outlining both their potential benefits and associated challenges. She emphasized the advantages of vacuum samplers in facilitating high-flow sampling rates, which could enhance the collection of stormwater samples with greater efficiency compared to traditional methods. However, Alicia also highlighted several concerns raised during the discussion regarding the practical implementation of vacuum samplers.

One notable concern involved the need for standardization and calibration protocols to ensure the accuracy and reliability of data collected using vacuum samplers. Participants expressed the importance of establishing consistent procedures for calibrating equipment across different sampling sites to minimize variability and ensure data comparability. Additionally, there were discussions about the potential influence of environmental factors, such as temperature and humidity, on the performance of

vacuum samplers, highlighting the need for further research to understand and address these potential sources of variability.

Furthermore, Alicia mentioned discussions around the logistical challenges associated with deploying vacuum samplers in diverse field conditions, including urban and industrial environments. Issues such as accessibility to sampling sites, power requirements, and equipment maintenance were identified as important considerations for effectively implementing vacuum sampling strategies. Overall, while vacuum samplers offered promising opportunities for improving stormwater sampling practices, the TRC acknowledged the importance of addressing these technical and logistical challenges to maximize their utility and reliability in environmental monitoring efforts.

The discussion expanded to include reflections on data usage and accuracy, particularly concerning the deployment of monitoring equipment and its implications for data interpretation. Alicia underscored the importance of understanding data limitations and ensuring clarity in data utilization.

5. Discussion: S&T Monitoring Update (00:50:00)

Amy provided an update on the S&T monitoring planned for 2024, including water, bird eggs, sportfish, and marine mammals. She began by discussing with a focus on dry season samples for comparison during the wet season, marking the final year of the monitoring pilot. Bird egg collection began in March, with marine mammal sampling in its second year.

Wet weather water sampling was conducted in both the near field and deep Bay. There were two storm events during the wet season and once during the dry season. This includes setting up four near-field stations and four deep Bay stations to capture variations in water quality. The target analytes for analysis included PFAS, TOP, bisphenols, OPEs, and stormwater CECs. Samples from Storm 1 were obtained from near-field stations on 12/21/23 and from deep Bay stations on 1/11/24. Similarly, Storm 2 samples were collected from near-field stations on 1/23/24 and from deep Bay stations on 2/1/24. All collected samples have been shipped to the labs for analysis, with plans to collect dry season samples during the upcoming summer.

For bird egg sampling, changes were made to streamline the process and minimize shipping delays. The sampling focus is solely on Double-crested Cormorants, with samples to be collected by USGS-WERC staff, with the contract nearing finalization. Analysis will include Hg and Se by MLML, while PFAS, PCBs, PBDEs, and legacy pesticides will be analyzed by SGS-AXYS. A notable change from 2022 is that MLML will handle homogenization, sub-sampling, compositing, and sample distribution,

scheduled for April 2025. Moss Landing will handle homogenization and subsampling to reduce the number of times eggs needed to be shipped. Results from the analyses are expected to be reported to SFEI by Summer 2025.

The Sport Fish Strategy Team convened on December 18 to outline their approach. Key species targeted for sampling include striped bass, shiner surfperch, white croaker, and halibut, with no focus on white sturgeon this year. Fish collection will be conducted by ICF. Analysis will include Hg and Se by MLML, while PFAS, PCBs, PBDEs, and legacy pesticides will be analyzed by SGS-AXYS. This round of sampling will see expanded PFAS monitoring, inclusion of PCB PMU sampling, and non-target analysis. Additionally, there will be expanded archiving for CECs and microplastics. Collaboration with the SWAMP Realignment initiative is also underway. ICF will handle sampling, with a focus on PFAS monitoring and coordination with the SWAMP Realignment.

In 2024, the second year of a two-year special study on marine mammals is underway, aiming to sample 10 harbor seals and 10 harbor porpoises, prioritizing animals recovered within the Bay. PFAS analysis of liver and serum will be conducted by SGS AXYS, while non-target analysis (NTA) of liver and blubber will be handled by the Crimmins lab (AEACS, Clarkson Univ.) and NTA of blubber by the Hoh lab (SDSU). The Marine Mammal Center is tasked with sample collection. The deliverable, a recommendation on the S&T study design, is expected by June 2025. In 2023, samples from three harbor seals' liver and blubber and serum from six harbor seals were collected, with no samples obtained from harbor porpoises. Collaborators are considering alternative options if sample numbers remain below target, potentially analyzing archived samples.

In addition, a study on selenium impacts on aquatic life was discussed, involving sampling water and sturgeon tissue near a refinery discharge point in Carquinez Strait. To investigate potential impacts of Martinez Refining Company (MRC) discharging selenium above its wasteload allocation, the Water Board has required MRC to monitor possible effects of selenium on Sacramento splittail and white sturgeon. In March and April 2024, sturgeon muscle tissue samples will be collected from at least 8 adults using non-lethal sampling techniques. In November and December 2024, splittail filet samples will be gathered from a minimum of 12 adults, along with egg-ovary tissue samples from at least 6 fish. Additionally, starting from March 27, 2024, monthly water samples will be collected within 500 feet of Discharge Point 001. USGS will analyze fish tissue samples for total selenium in Summer 2024. Brooks Applied Labs will analyze the water samples for selenite (Se(IV)), selenate (Se(VI)), and total selenium after every 6 sampling events. Collected data will be compared to the muscle tissue and water column TMDL targets in Basin Plan Table 7.2.4-1, while splittail egg-ovary data will be evaluated with

literature values. Amy noted the USGS's lab relocation to Mountain View, with plans to analyze tissue samples for selenium. The sampling permit for sturgeon collection was noted to expire in December 2025, highlighting the need for timely analysis.

Further discussions revolved around community engagement efforts, challenges in integrating engagement with sampling activities, and potential expansions of S&T monitoring of other species or regions. The importance of community involvement and trust-building through data collection was emphasized.

6. Information: Introducing Our New Watershed Modeler (01:18:20)

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

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

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

7. Information: Workgroup Planning Update (01:29:45)

To begin this item, Jay provided an update on the potential significant funding from the EPA and the process involved in securing it. Jay overviewed the proposal development process, emphasizing the need to intensify the annual planning cycle to align with the new funding opportunity. Multiple proposals were discussed, encompassing various buckets of work, including RMP, NMS, WRMP, PCBs, PFAS, and WQIF projects. It was noted that some projects may overlap and contribute to multiple buckets, underscoring the interconnectedness of the work.

Jay noted that the EPA has over \$20 million available for FY24, with an additional \$54 million expected in subsequent years. The Regional Monitoring Program (RMP) might receive some of the FY24 funds, which need to be committed by June and awarded by September, requiring an approved exception memo and workplan from the RMP. The Steering Committee (SC) should approve a funding amount at the upcoming April SC meeting, emphasizing the importance of including environmental justice and climate adaptation. RMP should target a first-year grant of \$5-7 million, with a match requirement of 25%. The SC guidance to Workgroups and staff is to aim for a 50% funding increase in 2025 and eventually a 100% increase over the next few years.

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

Becky proceeded to review the Tier 2 proposals for the ECWG. Augmented stormwater CECs monitoring aimed to extend previous work in monitoring contaminants

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

For the Sediment Workgroup, Scott Dusterhoff presented the Tier 1 Proposals, stressing that the dollar amounts were flexible. In Tier 1, Scott proposed three main project ideas in addition to \$50K for strategy and coordination. Firstly, the Bay conceptual model, which was completed two years ago, would be updated. The workgroup would consider whether to update it at the bay scale or sub-embayment scale. This would cost \$50K. Secondly, the workgroup would develop a work plan for studies supporting hydrodynamic model calibration, focusing on assessing erodibility and sediment flocculation impacts on settling velocity for \$75K. The group also proposed a pilot project for using satellite imagery to determine suspended sediment concentration, aiding in assessing sediment flux in the Bay for \$125K. Tier 2 proposals included developing a shoreline change analysis for areas such as St. Pablo Bay (\$75K), monitoring flux at key bay cross-sections like the Golden Gate or other key Bay cross sections (\$100K), and continuing flux and deposition monitoring on mudflats and marshes, potentially at new locations (\$100K). Additionally, he suggested continuing monitoring at US Army Corps shallow stations and for bathymetric data collection (\$100K).

For the Sources, Pathways, and Loadings Workgroup (SPLWG), Alicia Gilbreath presented the teams Tier 1 proposals. In Tier 1, proposals included a strategy and coordination budget aimed at enhancing internal and external coordination for

monitoring and modeling needs (\$65K). Alicia also presented a tidal area remote sampler project addressing ongoing needs and permit-related expenses (\$10K). Lastly, there will be PCB and Mercury monitoring and modeling to support load and trend assessment, focusing on estimating model uncertainties and providing monitoring design recommendations for \$167K. Tier 2 proposals included GIS improvements in watershed delineation and land use integration to support modeling, data interpretation and site selection decision-making (\$60K-\$100K). Another proposal involved full stormwater systems management and equipment upgrades to automate sampling processes and enhance data management for (\$60K-\$100K).

For the Microplastics Workgroup, Diana Lin outlined the Tier 1 proposals, including \$20K for strategy funding. The first proposal featured a stormwater pilot study that hoped to continue exploring sampling biases between single-depth and depth-integrated methods for an additional year (\$94K). The next proposal would update tireware particle analysis to complement microplastic analysis using FTIR spectroscopy, addressing the need for comprehensive particle assessment. Additionally, the workgroup plans to leverage the 2025 Status and Trends water cruise monitoring to collect smaller microplastic water samples, enhancing previous data by capturing microplastics as small as 10 micrometers, crucial for evaluating toxicity and understanding particle size distribution in ambient water samples. This effort would cost \$182K. Transitioning to Tier 2 proposals, Diana presented a study to analyze microplastics in sport fish, utilizing specimens collected during the status and trends for fish monitoring (\$130K). Lastly, the tire rubber marker analysis would be conducted in conjunction with the ECWG (\$105K).

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

Jay emphasized the need for coordination between all of the workgroups and other initiatives, particularly the Regional Monitoring Program (RMP), to ensure alignment and avoid duplication of efforts. Additionally, there was mention of potential future data needs dependent on factors like regulatory reviews and adaptation efforts, indicating a dynamic approach to research prioritization. Beyond PCB-specific proposals, there was a broader consideration for conceptual designs and targeted monitoring efforts aimed at

understanding runoff management and identifying areas of environmental impact across the Bay Area.

8. Discussion: Status & Trends and Program Management Planning Update (02:32:50)

Amy provided a detailed review of the Status and Trends Plan for 2025, which outlined various initiatives and their corresponding budgets. The plan included allocations for USGS Moored Sensors (\$400k), Nutrient Cruises (\$283k), Toxic Contaminants in Dry Season Water (\$265k), CTR & Organics (\$88k), NTA (\$12k), Passives (\$51k), Archives (\$85k), Reporting (\$14k), and Lab Intercomparison Studies (\$30k), totaling \$1,228,000. Amy noted that North Bay Selenium monitoring was not included in the plan for 2025 but was planned for 2026; however, given the decision to pause sampling in 2024, consideration was given to adjusting the plan to include selenium monitoring in 2025.

Amy discussed utilizing USEPA Bay Program Funds for Status & Trends Monitoring, including addressing the insufficient budget for NTA in 2025-6, supporting sport fish for SWAMP Realignment-related work, community fish collection, additional sampling locations like Hunters Point, continuation of S&T pilot studies such as wet season water sampling, increasing sampling stations to cover more regions of the Bay, increasing storm event sampling, and considering harbor seals and selenium monitoring.

Amy also highlighted the need for internal and external coordination, technical oversight, contract and financial management, and governance to support the expansion of projects and partnerships. She proposed efforts to increase coordination between workgroups, external partners, and technical oversight for project deliverables. Additionally, she suggested allocating more funds for proposal development, literature review, QA, and data services to ensure efficient management and timely processing of datasets.

A new idea was introduced to establish an equipment maintenance budget using RMP funds to purchase and maintain field and lab equipment, including YSI and regularly scheduled calibrations, remote sampler and ISCO maintenance costs, peristaltic pumps, safety harnesses, CTD replacement, and lab improvements. The initiatives aim to strengthen the program's capabilities, enhance data quality, and support the growing needs of the Status and Trends program.

9. Discussion: 2023 Interlaboratory Comparison Study Results and QA Update (03:03:36)

Don Yee of SFEI provided a detailed discussion on the 2023 interlaboratory comparison study. The purpose of the study was to assess the agreement among different labs conducting PFAS analysis in water. These labs included SGS AXYS, serving as the primary S&T contract lab, Eurofins, which has been utilized in some SFEI studies, and Enthalpy. Each lab was provided with samples for analysis, ensuring comprehensive coverage of the study parameters.

Water samples from two sites, one near field station and one in Bay S&T station, were chosen for the comparison. Each lab was provided with sufficient volumes of sample for analysis, including duplicates and matrix spikes. Different methods of analysis were discussed, with preference given to non-spike options for more realistic results. A Bay sample (LSB089Ww) and triplicate samples from the near field Palo Alto station were provided to the primary analytical lab, AXYS, for thorough analysis. Two of the near field samples were analyzed as lab duplicates by AXYS, while the third nearfield sample served as a matrix spike.

Furthermore, a Bay sample and near field triplicate samples were also provided to other labs for analysis. Eurofins analyzed the extra nearfield samples as a lab duplicate and matrix spike, while Enthalpy conducted additional analyses as matrix spike and matrix spike duplicate. Overall, the labs demonstrated consistency, with results generally within ~30% of each other, particularly for PFxSs and PFxAs, which were the only compounds detected.

Further discussion revolved around upcoming intercomparison studies, particularly focusing on tissue testing. The feasibility of conducting such studies, especially with fish samples, was explored. Concerns were raised about mass limitations for certain species like sturgeon and the need for adequate sample collection for multiple labs. Appropriate species will be selected for testing and Don will coordinate with labs capable of conducting the analyses. Additionally, Don addressed issues related to contamination in fish samples with efforts underway to improve field blank collection methods and identify the sources of contamination.

Finally, there was deliberation on selecting labs for future intercomparison studies, with a focus on those capable of analyzing PFAS and PCBs. Budgetary considerations were discussed, along with the importance of selecting labs based on their capabilities and track record. Plans were made to collaborate closely on selecting suitable species for

testing and coordinating with labs to ensure standardized procedures and reliable results. In summary, the intercomparison studies highlighted the comparable performance of the participating labs, with no lab demonstrating obvious superiority within the set. The results obtained were deemed sufficient for qualitative comparisons, although larger sample sets would be preferred for quantitative applications and potential lab switches. Ongoing efforts focused on quality assurance and collaboration aimed to further enhance the reliability and accuracy of analytical results.

Don also presented on the 2023 Copper and Hardness Intercomparison study, where the primary lab, Brooks Applied, analyzed samples from all sites for dissolved and particulate copper and calculated hardness. However, the results of this study were still pending. Additionally, CCSF provided split samples from historical stations for comparison, with results appearing in a similar range as past data.

Future intercomparison studies in 2024 will most likely focus on tissue.

10. Information: 2021 Copper and Cyanide Rolling Averages Data Update (03:31:00)

Martin Trinh of SFEI shared results of the 2021 Copper and Cyanide rolling averages. The rolling averages for both copper and cyanide were updated based on the latest data. These rolling averages included data from the past three years, specifically 2017, 2019, and 2020.

Samples were collected from various locations, including the South and Lower South Bay, the Central Bay, and Suisun and San Pablo Bay. Overall, it was observed that the levels of copper and cyanide remained below trigger levels, indicating satisfactory water quality. However, there were slight increases in the rolling averages for cyanide, particularly in the South and Lower South Bay areas due to one large signal in each subembayment from 2019.

The TRC discussed significance of these trends, with considerations for potential legislative implications and the effectiveness of source control measures. There was a focus on understanding the impact of legislation on water quality and the need for evidence-based policy decisions. They discussed the availability of the updated data and the timeline for future data releases. Martin stated that the 2023 data was undergoing quality assurance processes and would be available soon.

Further questions were raised regarding detection limits and the possibility of utilizing alternative methods to achieve lower detection limits in bay water analysis.

However, it was acknowledged that finding such methods might be challenging given current technological limitations.

11. Discussion: Communications Update (03:53:10)

Jay began the agenda item by highlighting the work on the upcoming 2024 Pulse. Jay announced that there are copies of the RMP Update available. The discussion then shifted to the 2024 Pulse, where CECs (Contaminants of Emerging Concern) will be highlighted, similar to the 2013 edition. Work will begin on an updated guide to CECs in the Bay in early 2024, with additional text added to address Jay's suggestions for improvements. The TRC suggested the inclusion of a sidebar on challenges, followed by risk profiles. Tom volunteered someone at the Water Board to provide some input on the draft. Both the Water Board and DTSC will have featured articles in the Pulse and there will be sidebars on the tiered risk-based framework, EPA and PFAS: Sources to Solutions, DPR and pesticides, State Board CEC Strategy, and Essential Use Approach.

Jay moved on to discuss the planning for the upcoming 2024 RMP Annual Meeting. The TRC discussed potential keynote speakers and presenters for different sessions, recognizing the importance of securing engaging and knowledgeable speakers who could address relevant topics effectively. Ideas were shared regarding experts in the field, including those with experience in watershed modeling, water quality perspectives, and environmental advocacy.

The agenda for the Annual Meeting will be crafted to cover a range of topics relevant to the organization's objectives and current environmental challenges. The TRC considered sessions on various subjects such as sediment studies, stormwater updates, PFAS contamination, and wastewater management. The TRC considered dedicating more than one session of the Annual Meeting to CECs, potentially tying it in with Pulse discussions. The aim will be to provide attendees with a comprehensive overview of ongoing research, initiatives, and issues.

The TRC also touched upon the structure of the sessions, considering the optimal flow of topics and the inclusion of panel discussions or interactive elements to engage the audience. Chris proposed potentially featuring presentations by advisors followed by staff presentations. In addition to content planning, logistical aspects of the Annual Meeting were also addressed. Discussions included considerations such as the format of the event (in-person or virtual), scheduling, budgeting, and accommodating speakers' availability. The meeting organizers also reflected on past events to identify lessons learned and areas for improvement in terms of logistics and execution.

Finally, the meeting participants discussed strategies for promoting the Annual Meeting and ensuring effective communication with attendees. This included considerations for marketing materials, registration processes, and leveraging various communication channels to reach the target audience. The aim was to maximize attendance and engagement while ensuring that relevant stakeholders were informed about the event.

12. Information: Status of Deliverables and Action Items (02:52:30)

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

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

Delayed deliverables include the STLS WY21 POC Reconnaissance Monitoring, which required an update of data for the Advanced Data Analysis. This project is waiting on input from BAMSC, Lester has been in contact with Lisa Sabin to discuss next steps. The North Bay Selenium in clams and water report has had all data through 2022/2023 run through DS. The USGS data release for 2010-2016 is coming soon, with Shaun Baseman working to finalize this. Work on the NTA Sediment Data Manuscript and Fact Sheet has slowed, prioritized behind CEC strategy revisions and 2025 ECWG proposal prep. Work on the PFAS in Archived Sport Fish Manuscript has slowed, prioritized behind CEC strategy revisions and 2025 ECWG proposal prep, and the QACs report, delayed until summer 2024.

Deliverables due before the next TRC meeting include the Impact of Remediation Actions on San Leandro Bay Recovery from PCB Contamination technical report, which is currently under review with the PCBWG and aiming to be finalized in April. Wastewater partners needed more time on the The QACs in Bay wastewater SEP but the intention is to have the report ready for the ECWG meeting. Don and Data Services are still working on the reanalysis for the Final Margins report. This was prioritized behind the 2023 lab intercomparison results, Bird Egg PFAS QA for ECWG, and the ambient Bay numbers update for the BCDC. With help from Miguel on QA ancillary datasets, the 2021 QA Summary Report for S&T Activities should be completed by June. A draft of the North Bay Selenium in clam and water data report (2019-2020) has been sent for review by the Selenium workgroup, aiming for finalization in April. The 2020 S&T Design Report will be completed without review from Tom Grieb. Finally, the Sediment Deposition on SB Marsh (Whales Tail) report will be submitted this month.

13. Discussion: Plan Agenda Items for Future Meetings (04:27:50)

The group was aware the June meeting would focus mostly on special study prioritization. The Annual Meeting and RMP Pulse will be discussed.

14. Discussion: Plus/Delta

Overall, the group commended Jay and Amy on the efficient meeting. The TRC particularly appreciated the RMP's sustained efforts on S&T monitoring. In-person attendees appreciated Bridgette's cake and noted how productive the meetings were in person.



DATE: April 9, 2024

TO: RMP Steering Committee

FROM: Beth Ebiner and Amy Kleckner

RE: RMP Financial Update – Period Ending 03/31/2024

The purpose of this memorandum is to provide an update of budgets and expenses for all open RMP budget years and the balances of reserve and designated funds. All of the information presented is for job to date labor and expense billing through March 31, 2024, hereafter referred to as the “current period.”

RMP 2024 Budget

2024 fees have not yet been invoiced. Notes:

1. The full 2024 revenue is \$5,396,130 which includes
 - a. \$400,000 pass through from USACE to USGS
 - b. \$680,000 from set aside funds (per approval from SC on 01/22/24)
 - c. \$320,000 from undesignated reserve (for strategy funds & remote sampler purchase)
2. In RMP 2024, we are passing \$523,000 in revenue directly through to the NMS to support NMS projects;
3. The full 2024 planned expenses are \$5,396,074 (including the \$400k in item 1 above and \$523k in item 2 above);
4. RMP 2024 has an overall surplus of \$56.

The expected fees are the sum of core fees (\$3,956,642) and supplemental fees paid by wastewater agencies (\$339,488) under Water Board Order R2-2016-0018 and updated Order R2-2021-0028 (hereafter referred to as Alternative Monitoring and Reporting funds or AMR funds) and \$100,000 in stormwater fees per the Municipal Regional Permit.

As of March 31, 2024, we are 11% expended on the total budget.

RMP 2023 Budget

\$3,854,528 of the \$3,899,799 (99%) in 2023 invoiced fees have been collected. Notes:

1. The full 2023 revenue is \$4,622,374 which includes
 - a. \$400,000 which is a pass through from USACE to USGS
 - b. \$300,000 from set aside funds
 - c. \$57,200 from undesignated reserve
2. In RMP 2023, we are passing \$515,000 in revenue directly through to the NMS to support NMS projects;
3. The full 2023 planned expenses are \$4,524,350 (including the \$400k in item 1 above and \$515k in item 2 above);

4. RMP 2023 has an overall surplus of \$98,024.
5. The total amount invoiced does not include the \$400,000 that will go from USACE to USGS directly;
6. The total amount invoiced includes the \$98,872 invoiced to Caltrans in January 2024;
7. Table 6 showing the outstanding Accounts Receivable for 2023.

The expected fees are the sum of core fees (\$3,835,574) and supplemental fees paid by wastewater agencies (\$329,600) under Water Board Order R2-2016-0018 and updated Order R2-2021-0028 (hereafter referred to as Alternative Monitoring and Reporting funds or AMR funds) and \$100,000 in stormwater fees per the Municipal Regional Permit.

As of March 31, 2024, we are 70% expended on the total budget.

RMP 2022 Budget

\$3,645,669 of the \$3,645,669 (100%) in 2022 invoiced fees have been collected. Notes:

1. The full 2022 revenue is \$4,038,513 and includes \$400,00 which is a pass through from USACE to USGS.
2. In RMP 2022, we are passing \$508,000 in revenue directly through to the NMS to support NMS projects;
3. The full 2022 planned expenses are \$3,670,800 (including the \$400k in item 1 above and \$508k in item 2 above);
4. The total amount invoiced does not include the \$400,000 that will go from USACE to USGS directly;
5. RMP 2022 has an overall surplus of \$17,713. Note that the previous surplus amount was \$137,713. At the November 2022 Steering Committee meeting, the SC authorized usage of \$108,000 of surplus funds to support multiple tasks: 1) \$35k for the Emerging Contaminants Workgroup Strategy update, 2) \$27k for the Microplastics Workgroup Strategy update, 3) \$10.5k for the Sources, Pathways, and Loading Workgroup Strategy update 3) \$35.5k for the Regional Watershed Dynamic Model. In addition, the Steering Committee also authorized up to \$72,000 for additional stormwater sampling during Water Year 2023. As of 3/31/2023, \$12,000 of the \$72,000 has been allocated for additional stormwater monitoring.

The expected fees are the sum of core fees (\$3,718,033) and supplemental fees paid by wastewater agencies (\$320,480) under Water Board Order R2-2016-0018 and updated Order R2-2021-0028 (hereafter referred to as Alternative Monitoring and Reporting funds or AMR funds).

As of March 31, 2024, we are 87% expended on the total budget.

RMP 2021 Budget

Revenue

\$3,675,092 of the \$3,675,093 (100%) in 2021 invoiced fees have been collected. Notes:

1. The full 2021 revenue is \$4,101,908 and includes \$400,00 which is a pass through from USACE to USGS and \$26,815 from undesignated funds. \$50,000 of RMP 2021 revenue was transferred (deducted from the revenue) from RMP 2021 to Set-Aside Funds for S&T Monitoring and an additional \$74,516 was transferred (deducted from the revenue) to the undesignated reserve. Therefore, operating revenue is \$3,977,392;
2. The full 2021 planned expenses are \$3,973,715 (including the \$400k in item 1 above);
3. During Q1 2022, the dredger invoice amount was determined. This amount was \$5,391 higher than planned. The full revenue amount has been updated in item 1 above.
4. The total amount invoiced does not include the \$400,000 that will go from USACE to USGS directly;

5. Due to the higher than planned dredger revenue, RMP 2021 has an overall net surplus of \$3,677 (was previously a deficit of \$1,800).

The expected fees are the sum of core fees (\$3,795,792) and supplemental AMR funds paid by wastewater agencies (\$279,301).

As of March 31, 2024, we are 87% expended on the total budget.

RMP 2020 Budget

Revenue

\$3,873,721 of the \$3,873,721 (100%) in 2020 invoiced fees have been collected. Notes:

1. The full 2020 revenue is \$3,716,846 which includes \$88,129 from set aside funds for RMP Program Review, \$30,000 from undesignated reserve, and deducts \$275,000 which was transferred to Set-Aside Funds for S&T Monitoring;
2. The total amount invoiced does include the \$400,000 that will go from USACE to USGS directly;
3. The total amount invoiced includes the \$93,196 for Caltrans;
4. The total RMP 2020 local dredger revenues have been calculated at \$82,814, which is lower than the original estimate of \$209,489; and
5. RMP 2020 budgets were adjusted to reflect the lower dredger revenue (reduced multiple budgets by a total of \$53,800) and there remains an overall revenue shortfall of \$18,328.

The expected fees are the sum of core fees (\$3,594,416) and supplemental AMR funds paid by wastewater agencies (\$279,301).

As of March 31, 2024, we are 94% expended on the total budget.

The RMP budget is now planned at \$3,735,174 which results in a deficit of \$18,328. We have closed all of tasks 1-5 and the balance remaining in these tasks is \$203k. After accounting for the \$18k deficit, there's a remaining balance of \$185k in tasks 1-5. We will hold these funds in the RMP 2020 account until we unencumber the entire year.

RMP 2019 Budget

Revenue

\$3,459,851 of the \$3,460,087 (99%) in 2019 fees have been collected. SFEI has written off the expected revenue from Marina Dredge Neighbors in the amount of \$200. After accounting for this write off, all 2019 funds have been received. Notes:

1. The full 2019 revenue is \$3,879,760 (including \$169,672 from undesignated reserve funds and \$400,000 that will go from USACE to USGS directly);
2. The total amount invoiced does not include the \$250,000 that went from the USACE to the USGS directly.

The expected fees are the sum of core fees (\$3,430,787) and supplemental AMR fees paid by wastewater agencies (\$279,301). There is reduced dredger revenue of \$262,334 (\$150,000 in reduced revenue from USACE and \$112,334 reduced revenue from local dredgers). Due to this lower than expected revenue, the planned 2019 RMP expenses exceeded revenue by \$36,108. At the August 2019 Steering Committee meeting, a decision was

made to move \$16,762 from Undesignated Reserve Funds to RMP 2019 and to reduce the RMP 2019 unallocated budget from \$19,346 to \$0. These two changes balanced the RMP 2019 budget.

Expenses

As of March 31, 2024, we are 95% expended on the total budget. To date, we are over budget on some tasks by about \$58.7k (\$39.7k on workgroup meetings, \$10k on the water cruise, and \$9k on the Selenium North Bay clam study (these overages were previously approved by the RMP SC). Through 12/31/2023, we have a positive balance of about \$115.2k on tasks-1-5 (program management tasks). This \$115.2k balance will be needed to cover previous Steering Committee approved overages. We aim to complete remaining tasks on budget and will wait until we are near 100% complete on projects to unencumber funds.

Unencumbrances this Quarter

- There is no request to unencumber at this meeting.

RMP 2018 Budget

Revenue

\$3,596,060 of the \$3,596,060 (100%) in 2018 fees have been collected. The expected fees are the sum of core fees (\$3,326,493) and AMR fees paid by wastewater agencies (\$269,575).

Expenses

As of March 31, 2024, we are 98% expended on the total budget. All remaining expenses from the year have been paid.

Unencumbrances this Quarter

We request that a total of \$60,731 will be unencumbered from the 2018 Budget and added to the Undesignated Funds. This amount consists of the following components:

- \$61,149 Surplus from closed Programmatic and S&T Tasks
- -\$418 Deficit from closed Special Studies Tasks

RESERVE FUNDS

Dedicated Set-Aside Funds

The RMP has several dedicated set-aside funds. The purpose of these funds is to spread out the cost of large projects across multiple budget years. The current balance of all set-aside funds is **\$397,975**. The current balance of each set-aside fund is shown in Table 2. In the first quarter of 2022, \$350,000 was transferred to the S&T set aside funds from RMP 2022. At the start of CY2023, \$300,000 was withdrawn from this account and moved to RMP year 2023. At the start of CY2024, \$680,000 was withdrawn from this account and moved to RMP year 2024. The historical and projected balance of the S&T Set-Aside Fund is shown in Figure 3.

Dedicated Dredger Reserve Fund

The balance of the Dredger Reserve Fund was reset to zero on January 1, 2018, when new dredger fees took effect. In 2018, there was a \$62,665 credit to the Fund for dredger fees associated with the 6-month “stub year” that was created when the new fee schedule was developed^[1]. There was also a debit of \$109,060 because the local dredger fee payments were below their target for the year. In 2019, 2020, 2021, and 2022 there was a dredger revenue reduction due to dredged materials below targets of \$262,334, \$209,498, \$196,757, and \$192,844 respectively. Therefore, the balance of the Dredger Reserve is currently **-\$907,828**. Table 3 tracks the running balance of the Dredger Reserve Fund.

Undesignated Funds

The RMP has a policy to maintain a Reserve of Undesignated Funds of at least \$400,000 (this was increased from \$200,000 at the October 2018 Steering Committee meeting) to allow for response to unanticipated funding needs or revenue shortfalls.

Going forward, all RMP earned interest will be deposited directly into Undesignated Funds and will be reported each quarter.

Any remaining Undesignated Funds are available for spending at the discretion of the Steering Committee. Figure 2 shows how the balance of Undesignated Funds has changed over time. The balance of Undesignated Funds through the current period is **\$875,453**. Table 4 shows the withdrawals and deposits in the Undesignated Funds during the last two budget years. Q1 2023 LAIF interest was \$34,081 (2.74% interest), Q2 2023 LAIF interest was \$38,160 (3.15% interest), Q3 LAIF interest was \$55,146 (3.59% interest), and Q4 LAIF interest was \$61,057 (4%). The following amounts have been authorized by the Steering Committee to be transferred from the reserve during the past year:

- \$8,200 (Feb 2023 additional funding to complete task 3023-43)
- \$11,000 (Feb 2023 additional funding to complete SEP project 3300-21E)
- \$38,000 (Apr 2023 additional funding to complete 3023 006 G for fish / sediment)
- \$180,000 (Aug 2023 for the purchase of RMP 2024 remote sampler equipment)
- \$140,000 (Nov 2023 for WG Strategy funds not accounted for in RMP 2024 Special Studies planning)
- \$10,815 (Jan 2024 additional funding to complete task 3021-026)

Supplemental Environmental Project (SEP) Funds

The total amount of RMP SEP funds received through the current period is \$3,896,070, which includes \$11,650 of additional funding for project oversight that supported previously completed and closed projects (no change since last reporting period). There are \$118,250 of unallocated SEP (MMP) settlement funds that were previously received and are available.

As of the end of the current reporting period, \$3,086,754 was spent on current and previous SEP projects, which includes 32 projects to date. The current balance of SEP funds is **\$809,316** (includes the unallocated funds that have been received and not yet committed to a project). Table 5a summarizes the budget status for current, active SEP projects through this reporting period. Descriptions of the active and approved projects are listed in Table 5b.

FOR STEERING COMMITTEE APPROVAL

- No items for approval.

Figures and Tables

Budget Final and Actuals JTD

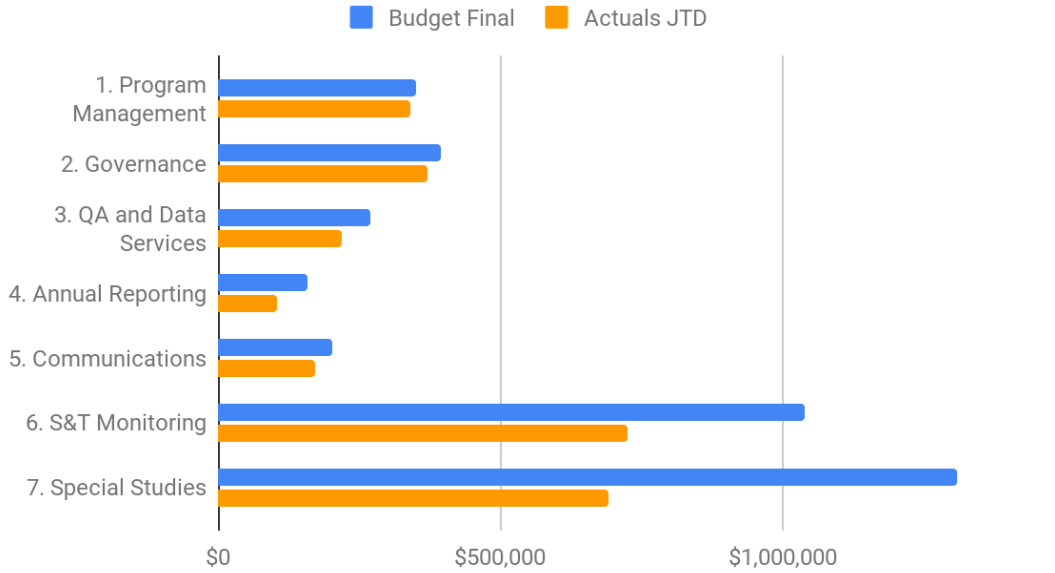


Figure 1a Bay RMP 2023 Budget. Budget and expenses through the current period by category.

Budget Final and Actuals JTD

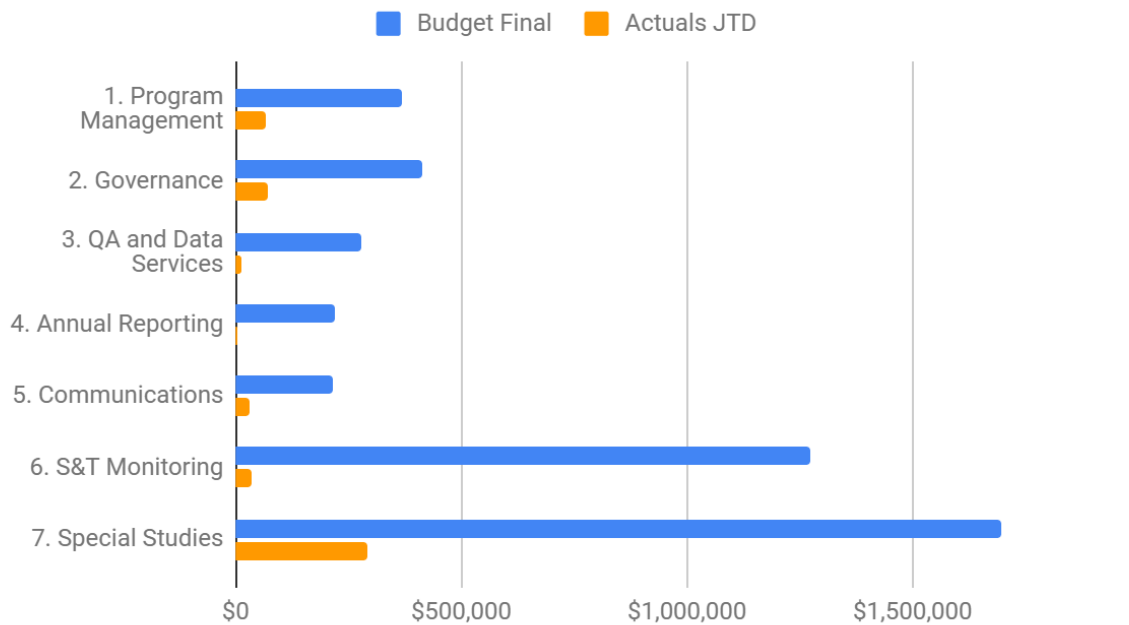


Figure 1b Bay RMP 2024 Budget. Budget and expenses through the current period by category.

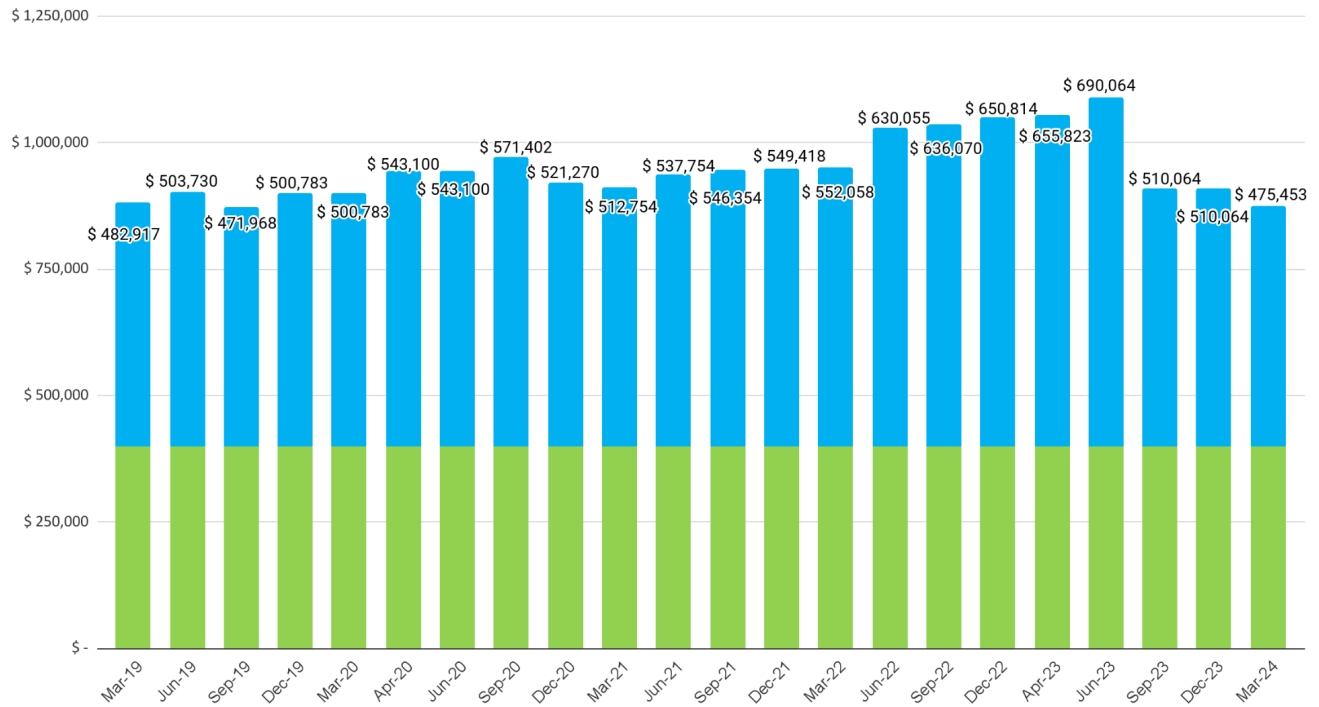


Figure 2: Bay RMP Undesignated Funds Balance over the past three years. The height of the bar shows the total balance of the Undesignated Funds. The bar is color coded to indicate the RMP policy that \$400,000 of the Undesignated Funds should not be spent. Note that prior to December 2018, the RMP policy for restricted Undesignated Funds was \$200,000. The increase to \$400,000 was approved at the October 2018 Steering Committee meeting.

S&T Monitoring Dedicated Set-Aside Funds and S&T Budget

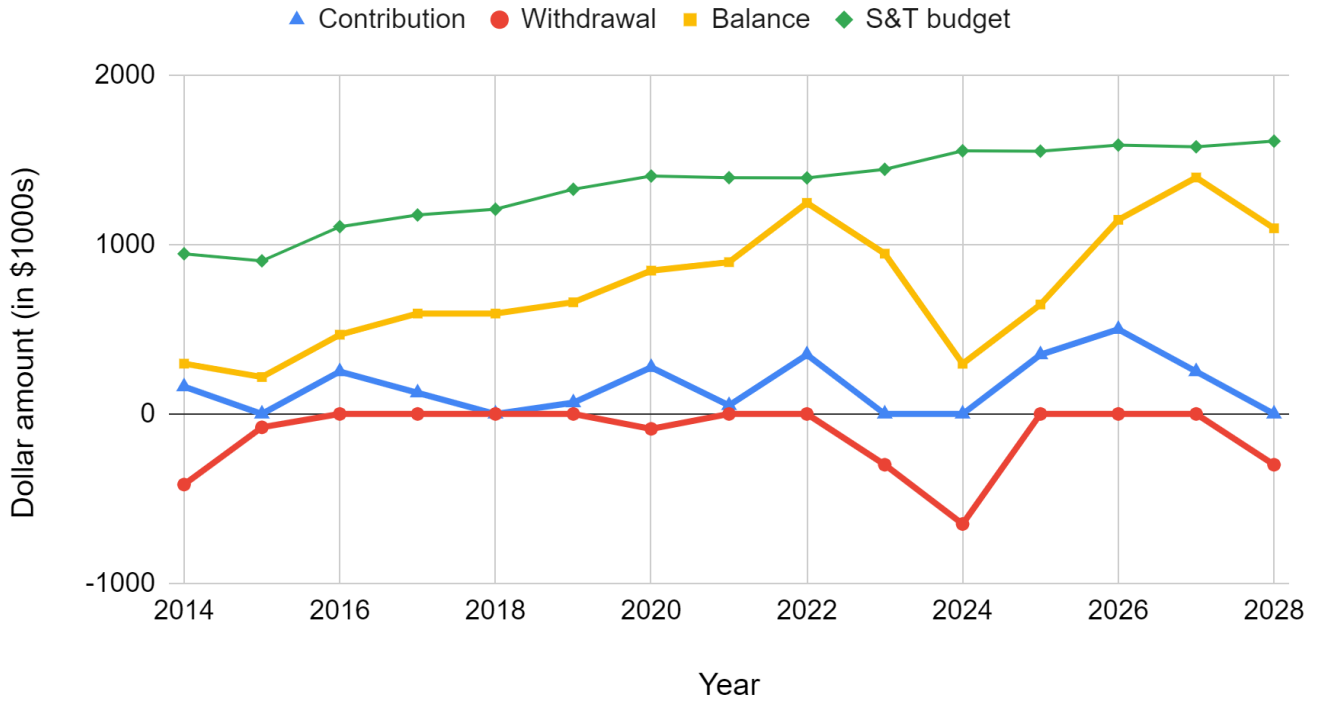


Figure 3. Contributions to and withdrawals from the S&T Set-Aside Fund from 2014 to 2022, anticipated contributions and withdrawals from 2023 to 2028, S&T actual budget for 2014 to 2021, and S&T projected budget for 2023 to 2028.

Table 1a: Bay RMP 2024 Budget: Budget and expenses for active tasks through the current period by line item.

Task	Subtask	Subtask Name	Budget	Expenses JTD	% Complete
Task Number: 001 Program Management	A	Budget and Workplan Development	\$49,000	\$11,109	23%
	B	Contract and Financial Management	\$74,000	\$6,276	8%
	C	Technical Oversight	\$76,500	\$15,460	20%
	D	Internal Coordination	\$122,000	\$27,256	22%
	E	External Coordination	\$40,000	\$8,628	22%
	F	Administration	\$8,000	\$415	5%
Task Number: 002 Governance	A	SC meetings	\$54,500	\$9,920	18%
	B	TRC meetings	\$54,500	\$11,649	21%
	C	General WG meetings (MF, EA, Admin only)	\$64,000	\$7,541	12%
	E	Emerging Contaminants WG	\$55,000	\$15,574	28%
	F	Microplastic WG	\$14,000	\$1,299	9%
	G	SPLWG	\$47,500	\$7,752	16%
	H	Sediment WG	\$42,500	\$13,913	33%
	I	PCB WG	\$23,000	\$4,318	19%
Task Number: 003 QA and Data Services	A	Quality Assurance System	\$40,000	\$2,922	7%
	B	Online Data Access: CD3	\$75,000	\$0	0%
	C	Database Maintenance	\$65,000	\$0	0%
	D	Updates to SOPs and Templates	\$46,000	\$8,648	19%
	E	DMMO Database Support	\$54,000	\$0	0%
Task Number: 004 Annual	A	Pulse Report	\$132,000	\$1,773	1%

Task	Subtask	Subtask Name	Budget	Expenses JTD	% Complete
Reporting					
	B	Annual Meeting	\$90,000	\$356	0%
Task Number: 005 Communications	A	Communications Plan Implementation	\$53,000	\$10,681	20%
	B	Stakeholder Engagement	\$30,000	\$4,576	15%
	C	Responses to Information Requests	\$23,500	\$4,265	18%
	D	Outreach Products	\$19,000	\$1,458	8%
	E	Presentations at Conferences and Meeting	\$69,000	\$4,759	7%
	G	RMP Website Maintenance	\$19,500	\$3,275	17%
Task Number: 006 S&T Monitoring	A	USGS Sacramento Support	\$0	\$0	#DIV/0!
	B	USGS Menlo Park Support	\$0	\$0	#DIV/0!
	C	Dry season water sampling	\$22,000	\$2,964	13%
	E	Wet season water sampling	\$120,000	\$11,216	9%
	G	Bird egg sampling	\$165,000	\$1,962	1%
	H	Bird egg sampling data mgmt	\$30,000	\$0	0%
	I	S&T Laboratory Intercomparison Studies	\$82,000	\$684	1%
	J	Sample archive	\$56,000	\$8,032	14%
	K	S&T Field Sampling Report & Support	\$25,000	\$636	3%
	L	Sport fish sampling	\$505,000	\$9,153	2%
	M	Sport fish sampling data	\$55,000	\$0	0%

Task	Subtask	Subtask Name	Budget	Expenses JTD	% Complete
		mgmt			
	N	North Bay Se monitoring	\$15,000	\$0	0%
	O	North Bay Se monitoring data mgmt	\$3,000	\$0	0%
	P	Harbor Seals sampling	\$116,500	\$0	0%
	Q	Harbor Seals sampling data mgmt	\$10,000	\$0	0%
	R	Model maintenance	\$50,000	\$0	0%
Task Number: 021 Special Study: PCBWG Mon of Sed in SLB		Special Study: PCBWG Mon of Sed in SLB	\$95,846	\$21,363	22%
Task Number: 023 Special Study: Microplastic Strategy		Special Study: Microplastic Strategy	\$16,000	\$89	1%
Task Number: 024 Special Study: Microplastic SW Mon Pilot		Special Study: Microplastic SW Mon Pilot	\$78,100	\$1,323	2%
Task Number: 027 Special Study: SPLWG Strategy		Special Study: SPLWG Strategy	\$37,000	\$0	0%
Task Number: 030 Special Study: Int Mon & Mod PCBs & Hg	A	Uncertainty Analysis	\$62,000	\$0	0%
	B	Stormwater monitoring and data mgmt	\$84,000	\$41,452	49%
	C	Reporting	\$18,000	\$0	0%
	D	Project Management	\$16,000	\$3,460	22%
Task Number: 031 Special Study: SPL Tidal Area Remote Sam	A	Field Work	\$25,920	\$7,122	27%
	B	Reporting	\$23,480	\$0	0%
	C	Data Management	\$12,600	\$0	0%
Task Number: 033 Special Study: EC Strategy Support		Special Study: EC Strategy Support	\$62,000	\$15,593	25%

Task	Subtask	Subtask Name	Budget	Expenses JTD	% Complete
Task Number: 035 Special Study: CEC: Tires Strategy		Special Study: CEC: Tires Strategy	\$10,000	\$0	0%
Task Number: 037 Special Study: Tire-related Contaminants	A	Study Design	\$4,250	\$0	0%
	B	Sample Collection	\$8,250	\$0	0%
	C	Data Management	\$5,000	\$0	0%
	D	Analysis & Reporting	\$32,500	\$0	0%
Task Number: 038 Special Study: NTA of SF Bay Fish		Special Study: NTA of SF Bay Fish	\$23,000	\$150	1%
Task Number: 039 Special Study: PFAS Synthesis and Strate		Special Study: PFAS Synthesis and Strate	\$107,000	\$827	1%
Task Number: 040 Special Study: Plastic Add in Wastewater	A	Study Design	\$2,800	\$2,799	100%
	B	Sample Collection	\$12,600	\$0	0%
	C	Data Management	\$10,000	\$0	0%
	D	Analysis and Reporting	\$70,000	\$0	0%
Task Number: 042 Special Study: Suspended Sediment in LSB		Special Study: Suspended Sediment in LSB	\$79,000	\$4,858	6%
Task Number: 043 Special Study: Sediment WG Workplan		Special Study: Sediment WG Workplan	\$15,000	\$0	0%
Task Number: 044 Special Study: Spat var of sed SFB resto		Special Study: Spat var of sed SFB resto	\$203,528	\$0	0%
Task Number: 050 Special Study: Stormwater CECs Monitorin	B	Stakeholder & Science Advisor Engagement	\$42,500	\$2,293	5%
	C	CECs Model Development	\$55,000	\$18,540	34%

Task	Subtask	Subtask Name	Budget	Expenses JTD	% Complete
		Groundwork			
	D	Integrated Scientific Systems Dev	\$34,000	\$18,037	53%
	E	Pilot - PFAS	\$93,300	\$37,252	40%
	F	Remote Sampler improvements	\$65,200	\$23,568	36%
Task Number: 051 Special Study: PFAS in Bay: TOP	A	Study Design	\$4,847	\$5,105	105%
	B	Data Management	\$12,200	\$0	0%
	C	Analysis and Reporting	\$50,153	\$4,407	9%
Task Number: 052 Remote Sampler Purchase		Remote Sampler Purchase	\$180,000	\$72,493	40%

Table 1b: Bay RMP 2023 Budget: Budget and expenses for active tasks through the current period by line item.

Task	Subtask	Subtask Name	Budget	Expenses JTD	% Complete
Task Number: 001 Program Management	D	Internal Coordination	\$115,000	\$110,282	96%
	F	Administration	\$7,500	\$586	8%
Task Number: 002 Governance	B	TRC meetings	\$51,000	\$49,991	98%
	C	General WG meetings (MF, E)	\$62,232	\$58,879	95%
	D	External Science Advisors	\$60,000	\$33,561	56%
Task Number: 003 QA and Data Services	B	Online Data Access: CD3	\$73,200	\$36,401	50%
	C	Database Maintenance	\$62,000	\$58,508	94%

Task	Subtask	Subtask Name	Budget	Expenses JTD	% Complete
	E	DMMO Database Support	\$52,800	\$42,865	81%
Task Number: 004 Annual Reporting	A	Pulse Report	\$80,000	\$38,182	48%
	B	Annual Meeting	\$79,466	\$67,065	84%
Task Number: 005 Communications	B	Stakeholder Engagement	\$28,000	\$23,088	82%
	C	Responses to Information Requests	\$22,500	\$18,870	84%
	D	Outreach Products	\$17,000	\$17,362	102%
	E	Presentations at Conferences and Meeting	\$65,000	\$58,639	90%
Task Number: 006 S&T Monitoring	C	Dry season Bay water cruise	\$217,000	\$152,074	70%
	D	Dry season Bay water cruise data mgmt	\$33,197	\$33,222	100%
	F	Wet season water data mgmt	\$21,803	\$21,803	100%
	G	Nearfield and margins sediment & prey fi	\$313,000	\$220,560	70%
	H	Nearfield and margins sed & prey fish da	\$50,000	\$12,638	25%
	I	S&T Laboratory Intercomparison Studies	\$60,000	\$20,865	35%
	J	Sample archive	\$80,000	\$71,109	89%
	K	S&T Field Sampling Report & Support	\$20,000	\$13,673	68%
	L	Ambient Bay sediment	\$170,000	\$116,658	69%
	M	Ambient Bay sediment data mgmt	\$30,000	\$20,318	68%
Task Number: 021 Special		Special Study: PCBs in	\$75,000	\$46,348	62%

Task	Subtask	Subtask Name	Budget	Expenses JTD	% Complete
Study: PCBs in sediment and fish		sediment and fish			
Task Number: 023 Special Study: Microplastic Strategy		Special Study: Microplastic Strategy	\$13,000	\$5,223	40%
Task Number: 027 Special Study: STLS Strat. Supp. & Coord		Special Study: STLS Strat. Supp. & Coord	\$35,000	\$30,461	87%
Task Number: 029 Special Study: STLS Regional Model Devel		Special Study: STLS Regional Model Devel	\$130,000	\$103,305	79%
Task Number: 031 Special Study: SPL Tidal Area Remote Sam	C	Reporting	\$9,000	\$0	0%
Task Number: 032 Special Study: SPLWG Strategy		Special Study: SPLWG Strategy	\$30,000	\$19,881	66%
Task Number: 034 Nontargeted data mining	A	Study Design	\$7,000	\$5,794	83%
	B	Analysis	\$30,000	\$4,789	16%
	C	Reporting	\$8,000	\$1,400	17%
Task Number: 036 CEC: Groundwork for CEC stormwater	C	Location Database	\$46,300	\$38,791	84%
	D	Data Analysis of SW Pilot Project	\$53,000	\$28,920	55%
Task Number: 037 Special Study: Tire-related Contaminants	A	Study Des & Smple Collection	\$30,000	\$265	1%
	B	Data Mgmt	\$5,000	\$0	0%
	C	Data Analysis & Report	\$5,000	\$0	0%
Task Number: 038 Spec Stud: EC Ethoxyl Surfact in Water	A	Wastewater Sample Collection	\$8,000	\$10,161	127%
	B	Data Services	\$2,700	\$832	31%
	C	Analysis and Reporting	\$19,300	\$313	2%

Task	Subtask	Subtask Name	Budget	Expenses JTD	% Complete
Task Number: 039 Spec Stud: SPL SW CECs Strategy Year 2	A	Draft Approach	\$24,000	\$0	0%
	B	Report	\$31,000	\$0	0%
Task Number: 040 Special Study: PFAS and NTA in marine ma	B	Data Management	\$4,000	\$0	0%
	C	Analysis and Reporting	\$97,000	\$745	1%
Task Number: 042 Special Study: Suspended Sediment in LSB		Special Study: Suspended Sediment in LSB	\$52,000	\$30,210	58%
Task Number: 044 Special Study: Sediment Flux Richmond Br		Special Study: Sediment Flux Richmond Br	\$70,000	\$0	0%
Task Number: 045 Special Study: Sediment Delivery to Mars		Special Study: Sediment Delivery to Mars	\$135,000	\$4,102	3%
Task Number: 046 PFAS in fish	A	Analysis and Reporting	\$32,500	\$32,436	100%

Table 1c: Bay RMP 2022 Budget: Budget and expenses for active tasks through the current period by line item.

Task	Subtask	Subtask Name	Budget	Expenses JTD	% Complete
Task Number: 006 S&T Monitoring	C	Winter StormWater	\$107,000	\$102,854	96%
	D	Winter StormWater Data Mgmt	\$20,000	\$19,138	96%
	H	Dry season Bay water cruises	\$25,000	\$20,298	81%
	I	S&T Laboratory Intercomparison Studies	\$22,000	\$7,894	36%

Task	Subtask	Subtask Name	Budget	Expenses JTD	% Complete
	K	S&T Field Sampling Report & Support	\$10,000	\$7,395	74%
Task Number: 023 Special Study: Microplastic Strategy		Special Study: Microplastic Strategy	\$37,000	\$33,429	90%
Task Number: 027 Special Study: STLS Strat. Supp. & Coord		Special Study: STLS Strat. Supp. & Coord	\$45,500	\$45,783	101%
Task Number: 029 Special Study: STLS Reg. Model Devpmt.		Special Study: STLS Reg. Model Devpmt.	\$125,500	\$112,772	90%
Task Number: 030 Small Tributaries Pollutants of Concern	E	Labs and Subs	\$55,000	\$54,522	99%
Task Number: 032 AQUA-GAPS passive sampler		AQUA-GAPS passive sampler	\$10,000	\$0	0%
Task Number: 034 Special Study: EC in Urban Stormwater	A	Stormwater Sampling	\$33,000	\$4,909	15%
	C	Analysis and Reporting	\$62,000	\$54,950	89%
Task Number: 035 CEC modeling exploration		CEC modeling exploration	\$25,000	\$24,850	99%
Task Number: 037 Spec Stud: EC Tire-related contam in Bay	A	Study Des & Smple Collection	\$27,993	\$22,424	80%
	B	Data Mgmt	\$12,007	\$13,226	110%
	C	Data Analysis & Report	\$10,000	\$8,435	84%
Task Number: 038 Spec Stud: EC Ethoxyl Surfact in Water	A	Project Management	\$2,509	\$2,218	88%
	B	Data Services	\$3,500	\$0	0%
	C	Analysis and Reporting	\$12,100	\$3,419	28%
	D	Laboratory analysis	\$11,891	\$9,337	79%
Task Number: 039 Spec Stud: SPL SW monitor strat for CECs		Spec Stud: SPL SW monitor strat for CECs	\$50,000	\$23,229	46%
Task Number: 044 Special Study: Upload Data to DMMO		Special Study: Upload Data to DMMO	\$20,000	\$183	1%

Task	Subtask	Subtask Name	Budget	Expenses JTD	% Complete
Task Number: 045 Special Study: Sediment Temp variabili		Special Study: Sediment Temp variabili	\$155,000	\$155,125	100%

Table 1d: Bay RMP 2021 Budget: Budget and expenses for active tasks through the current period by line item.

Task	Subtask	Subtask Name	Budget	Expenses JTD	% Complete
Task Number: 006 S&T Monitoring	E	Bird Egg Sampling	\$226,000	\$90,225	40%
	F	2021 Bird Egg Data Mgmt	\$30,000	\$12,012	40%
	I	S&T Laboratory Intercomparison Studies	\$28,000	\$13,423	48%
Task Number: 021 Special Study: PCB Remediation Monitorin	C	Labs	\$39,034	\$29,111	75%
	D	Reporting	\$12,830	\$8,047	63%
Task Number: 026 Special Study: STLS Integrated Conceptua		Special Study: STLS Integrated Conceptua	\$60,455	\$50,042	83%
Task Number: 035 Special Study: Toxicology Strategy		Special Study: Toxicology Strategy	\$60,000	\$58,911	98%
Task Number: 046 Special Study: DMMO Database Enhancement		Special Study: DMMO Database Enhancement	\$40,000	\$9,628	24%
Task Number: 048 S&T RMP Prog Rev		S&T RMP Prog Rev	\$220,000	\$142,731	65%

Table 1e: Bay RMP 2020 Budget: Budget and expenses for active tasks through the current period by line item.

Task	Subtask	Subtask Name	Budget	Expenses JTD	% Complete
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Task Number: 006 S&T Monitoring	E	2020 N Bay Margins Sediment Mon FieldWk	\$220,600	\$215,849	98%
	I	S&T Laboratory Intercomparison Studies	\$37,000	\$28,953	78%
	K	S&T Field Sampling Report & Support	\$23,000	\$10,646	46%

Table 1f: Bay RMP 2019 Budget: Budget and expenses for active tasks through the current period by line item.

<i>Task</i>	<i>Subtask</i>	<i>Subtask Name</i>	Budget	Expenses JTD	% Complete
Task Number: 035 Special Study: EC Ethoxylated Surf. Stud	A	Sample Collection and Reporting	\$98,300	\$79,492	81%
	B	Data Management	\$24,700	\$22,655	92%

Table 1g: Bay RMP 2018 Budget: All tasks are now inactive. The year is ready to be unencumbered.

Table 2: Bay RMP Dedicated Set-Aside Funds. Balances as of the current period.

Reserve Type	Purpose	Balance
Dedicated Set-Aside Fund	Monitoring Contingency	\$50,000
Dedicated Set-Aside Fund	S&T Monitoring	\$347,975
	TOTAL	\$397,975

Table 3: Bay RMP Dedicated Dredger Reserve Fund. Yearly surplus (deficit) and total surplus (deficit) as of the current period. Note that the previous running surplus/deficit was reset to \$0 in 2018.

Year	Yearly Surplus/Deficit	Balance
Starting Balance from "Stub Year"		\$62,665 (received) \$62,665 (total)
2018	-\$109,060	-\$46,395
2019	-\$262,334	-\$308,729
2020	-\$209,498	-\$518,227
2021	-\$196,757	-\$714,984
2022	-\$192,844	-\$907,828

Table 4: Bay RMP Undesignated Funds. Withdrawals and deposits during the last two budget years and total balance as of the current period.

Budget Year	Deposit or Withdrawal	Reserve Type	Authorization	Date of Authorization	Amount	Comment
2022	Deposit	Undesignated Funds	Program Manager	3/31/2022	\$3,481	Q1 2022 LAIF interest

Budget Year	Deposit or Withdrawal	Reserve Type	Authorization	Date of Authorization	Amount	Comment
2022	Deposit	Undesignated Funds	Program Manager	6/30/2022	\$6,015	Q2 2022 LAIF interest
2022	Deposit	Undesignated Funds	Program Manager	9/30/2022	\$14,744	Q3 2022 LAIF interest
2023	Withdrawal	Undesignated Funds	Steering Committee	2/23/2023	-\$8,200	\$8,200 withdrawal from undesignated funds approved by SC on 2/23/23 allocated for 3023-43
2023	Withdrawal	Undesignated Funds	Steering Committee	2/23/2023	-\$11,000	\$11,000 withdrawal from undesignated funds approved by Tom/SC on 3/21/23 to be allocated to RMP project task 3023.00-047 to support the completion of the SEP project 3300-21E
2022	Deposit	Undesignated Funds	Program Manager	12/31/2022	\$24,209	Q4 2022 LAIF interest
2023	Withdrawal	Undesignated Funds	Steering Committee	4/26/2023	-\$38,000	\$38k withdrawal from undesignated funds approved by SC for 3023 006 G for fish/sed
2023	Deposit	Undesignated Funds	Program Manager	3/31/2023	\$34,081	Q1 2023 LAIF interest
2023	Deposit	Undesignated Funds	Program Manager	3/31/2023	\$38,160	Q2 2023 LAIF interest

Budget Year	Deposit or Withdrawal	Reserve Type	Authorization	Date of Authorization	Amount	Comment
2023	Withdrawal	Undesignated Funds	Steering Committee	8/31/2023	-\$180,000	SC approved \$180k move from undesignated reserve to 3024.00 031 for purchase of remote sampler equipment.
2023	Deposit	Undesignated Funds	Program Manager	9/30/2023	\$55,146	Q3 2023 LAIF interest
2023	Withdrawal	Undesignated Funds	Steering Committee	11/1/2023	-\$140,000	SC approved 2024 WG Strategy funds not accounted for in Special Studies planning process
2024	Deposit	Undesignated Funds	Program Manager	1/31/2024	\$61,058	Q4 2023 LAIF interest
2024	Withdrawal	Undesignated Funds	Steering Committee	1/22/2024	-\$10,815	SC approved withdrawal of additional funding to complete task 3021-026

Table 5a: Bay RMP Supplemental Environmental Project (SEP) Settlement Funds budget status for open, current projects or projects that ended within the last quarter. Listed are the amount of funds received and allocated to specific projects, the amount spent through the end of this reporting period, and the amount of unallocated funds available for this reporting period. The RMP maintains records of each settlement payment in their accounting system.

Active RMP SEP Projects	Amount Funded	Amount Spent	SEP Project Balance
Task 015: North Bay Selenium Clam and Water Data Management and Reporting	\$40,000	\$39,957	\$43
Task 019: ECWG Special Study 2020 Q_Ammonium Compounds	\$58,200	\$46,931	\$11,269

Active RMP SEP Projects	Amount Funded	Amount Spent	SEP Project Balance
Survey			
Task 023: Integrated Watershed-Bay Modeling Strategy and Pilot Implementation	\$200,000	\$94,418	\$105,582
Task 024: Regional Watershed Spreadsheet Model Update	\$23,300	\$1,820	\$21,480
Task 026: Characterizing Per- and Polyfluoroalkyl Substances (PFAS) and Chlorinated Paraffins in San Francisco Bay Sediment	\$106,150	\$62,075	\$44,075
Task 027: High speed mapping of water quality parameters on the eastern shoal of South San Francisco Bay	\$184,470	\$160,614	\$23,856
Task 028: San Francisco Bay Sediment Transport and Fate Modeling	\$408,000	\$121,530	\$286,470
Task 030: Non-targeted Analysis (NTA) Sediment Data Manuscript	\$37,600	\$32,794	\$4,806
Task 031: Investigating harmful algal blooms in San Francisco Bay: priority data, model development/application, and synthesis	\$252,300	\$41,856	\$210,444
Task 032: Temporal Variability in Sediment Delivery to a North & Central SF Bay Salt Marsh	\$118,250	\$118,250	\$0
Unallocated	\$80,289	\$0	\$80,289
Total for above active projects and unallocated funds	\$1,529,559	\$720,243	\$809,316
Total for all SEP Projects	\$3,896,070	\$3,086,754	\$809,316

Table 5b: Active Bay RMP Supplemental Environmental Project Descriptions

Study Name	Budget	Description	Status
Task 015 North Bay Selenium Clam and Water Data Management and Reporting	\$40,000	The goal of the study is to provide data quality assurance, data management, and preparation of a data report for clam and water selenium monitoring conducted by the Regional Monitoring Program for Water Quality in San Francisco Bay (RMP) in North San Francisco Bay. This monitoring is being conducted by the RMP in support of the North Bay Selenium TMDL. This study will cover clam and water selenium data generated by RMP monitoring in 2019 and 2020.	Approved

Study Name	Budget	Description	Status
Task 019 ECWG Special Study 2020 Quaternary Ammonium Compounds Survey	\$58,200	<p>Quaternary ammonium compounds (QACs) are surfactants widely used in a variety of consumer products, particularly as antimicrobials. The current COVID-19 pandemic is thought to have increased use of products containing QACs, which is expected to continue into the near future. QACs have been detected in San Francisco Bay sediment, and are considered Possible Concern within the RMP tiered risk-based framework for emerging contaminants in the Bay.</p> <p>This ECWG special study will determine the concentrations of at least 22 QACs in Bay Area wastewater influent and effluent and begin to assess the temporal trends related to COVID-19.</p>	<p>Approved</p> <p>Started 7/2020</p>
Task 023: Integrated Watershed-Bay Modeling Strategy and Pilot Implementation	\$200,000	<p>This project will produce and implement a strategy that integrates, links, and advances modeling tools to evaluate transport and loading of pollutants and sediment to San Francisco Bay from its tributary watersheds and other sources and pathways, and to evaluate the fate and transport of the resulting exposure of the pollutants in the Bay. Currently available models include watershed and Bay dynamic simulation models, watershed spreadsheet models, food web models, and mass balance conceptual box models of the Bay and Bay margins. Integrated use of these modeling tools and monitoring data will provide improved understanding of the linkages between ecosystem components and will better answer management questions to inform preventive and corrective actions for pollutants of concern, including contaminants of emerging concern, and management of sediment sources and supply needed for sea level rise resilience and adaptation, and habitat protection and restoration.</p>	<p>Approved</p> <p>Started 6/2021</p>
Task 024: Regional Watershed Spreadsheet Model Update	\$23,300	<p>The Regional Watershed Spreadsheet Model (RWSM) was developed to estimate average annual regional and sub-regional scale pollutant loads to San Francisco Bay from stormwater runoff. It is part of a class of deterministic empirical models based on the volume-concentration method. In the Bay Area, it has so far been used for providing first approximations of regional (Baywide) and sub-regional (e.g., individual county, Bay segment, or priority margin unit) estimates of PCBs, mercury, copper, nutrients, and microplastics.</p> <p>The model will be recalibrated for flow using a new calibration period (1991-2020) and updated land use data to be published by the Metropolitan Transportation Commission in March 2021. The recalibrated flow model will be used to improve the model calibration and load estimates for mercury and one or more other pollutants.</p>	<p>Approved</p> <p>Started 6/2021</p>

Study Name	Budget	Description	Status
Task 026: Characterizing Per- and Polyfluoroalkyl Substances (PFAS) and Chlorinated Paraffins in San Francisco Bay Sediment	\$106,150	This study will assess PFAS concentrations in San Francisco Bay sediment samples to improve our understanding of the occurrence and risks associated with PFAS in the Bay. Sediment samples collected throughout the Bay in 2018 and archived for the Status and Trends (S&T) Program will be analyzed, as well as a subset of samples expected to be collected in 2023 to provide information on current status. PFAS will be analyzed via targeted methods using tandem liquid chromatography/mass spectrometry (LC-MS/MS), and may also include analysis via the total oxidizable precursors (TOP) assay, which allows characterization of the overall presence of precursors rather than individual PFAS.	Approved Started 4/2022
Task 027: High speed mapping of water quality parameters on the eastern shoal of South San Francisco Bay	\$184,470	<p>This study will conduct high speed mapping of water quality parameters covering the eastern shoals of South San Francisco Bay (monthly) over 4 months. The mapping surveys will include information about water quality, nutrients, phytoplankton, and near-field remote sensing of high spatial resolution on the shoals and into the channels.</p> <p>The results will provide a quantitative understanding of phytoplankton and nutrient dynamics on the shoals and how they link to nutrient cycling processes in the channels of San Francisco Bay.</p>	Approved Started 7/2022
Task 28: San Francisco Bay Sediment Transport and Fate Modeling	\$408,000	<p>This project will produce a foundational quantitative model of sediment transport and fate in San Francisco Bay that can be used to address management questions for polychlorinated biphenyls (PCBs), nutrients, and sediment.</p> <p>The study will have four major elements:</p> <ol style="list-style-type: none"> 1. Compilation of existing information on (a) sediment loadings and boundary conditions and (b) sediment properties and parameters in San Francisco Bay; 2. Diagnostic analysis of sediment transport and fate model development; 3. Application of the model to answer management questions for PCBs, nutrients, and sediment supply; and 4. Coordination among the scientists working on the multiple facets of this effort and the stakeholders (including Regional Water Board staff) providing guidance via San Francisco Bay Regional Monitoring Program and Nutrient Management Strategy workgroups. 	Approved Started 9/2022

Study Name	Budget	Description	Status
Task 030: Non-targeted Analysis (NTA) Sediment Data Manuscript	\$37,600	This SEP funding supports the development of a manuscript that would report on non-targeted techniques to examine both nonpolar and polar contaminants in Bay sediment using data reported from a 2018 RMP study lead by Lee Ferguson at Duke and Eunha Hoh at San Diego State University. SFEI staff will use the data provided by the 2018 study to further assess the distribution patterns, pathway influences, potential compound sources, and available toxicity information to inform prioritization. In addition SFEI will develop a 2-page fact sheet to describe the results and their implications modeled after past RMP fact sheets for non-targeted analysis.	Approved Started 1/2023
Task 031: Investigating harmful algal blooms in San Francisco Bay: priority data, model development/application, and synthesis	\$252,300	In August 2022, SFB experienced its first severe harmful algae bloom (HAB) event, with a large-scale bloom of the organism <i>Heterosigma akashiwo</i> resulting in unprecedented water quality impacts in South Bay and other regions, including widespread fish mortality. The recent SFB monitoring program investments allowed a team of regional scientists (SFEI, USGS, UCSC) to quickly mobilize and intensively track the HAB event, yielding valuable datasets (field surveys; in situ measurements using water quality moorings; remote sensing) and samples (preserved/archived) that are essential for understanding the factors that initiated and shaped this HAB event. In this study, SEP funds will be used to support a range of activities related to understanding the August 2022 HAB event, including: analysis of physical forcing data (sunlight, wind, tides); analysis of water quality datasets from ship-based, mooring, and remote-sensed measurements (nutrients; phytoplankton abundance; dissolved oxygen; suspended sediments; etc.) to characterize how conditions varied spatially and temporally over the course of the event; analysis of archived samples collected during or in the lead-up to the event for molecular/DNA related parameters (e.g., sequencing to characterize phytoplankton, grazers, bacteria, viruses); application of numerical models to quantitatively explore coupled transport/transformation hypotheses; and numerical simulations to explore how potential management actions (e.g., nutrient load reductions to SFB) could lower the risk of similar events in the future.	Approved Started 7/2023
Task 032: Temporal Variability in Sediment Delivery to a North & Central SF Bay Salt Marsh	\$118,250	This study will investigate the influence of tides, waves, and water levels on sediment delivery and deposition on two tidal marshes in North and Central San Francisco Bay. The project will include measurements of suspended sediment concentration (SSC) and suspended sediment flux in the shallows adjacent to the marshes, SSC at long-term tidal creek stations, deposition and accretion on the marshes, and the variation in deposition with elevation and vegetation density and type. Data will be collected in 2023 and analyzed and reported by fall 2024. Study results will inform shoreline and tidal marsh sea level rise resilience and adaptation management strategies.	Approved Started 7/2023 Closed this period

Table 6: Steering Committee RMP Budget Summary as of 3/31/2024

Budget and Current Expenses							
Year	Budget	Expended	Balance	Previously Unencumbered	Unencumbered this Period	Balance minus Unencumbered (Remainder)	% Remaining
	\$	\$	\$	\$	\$	\$	%
SEP	\$3,896,070	\$3,086,754	\$809,316	0	0	\$809,316	21%
2024	\$4,473,074	\$510,986	\$3,962,088	0	0	\$3,962,088	89%
2023	\$3,727,600	\$2,627,156	\$1,100,444	0	0	\$1,100,444	30%
2022	\$2,762,800	\$2,398,132	\$364,668	0	0	\$364,668	13%
2021	\$3,564,216	\$3,116,497	\$458,534	0	0	\$458,534	13%
2020	\$3,735,174	\$3,497,131	\$238,043	0	0	\$238,043	6%
2019	\$3,819,850	\$3,640,705	\$179,145	0	0	\$179,145	5%
2018	\$3,818,427	\$3,757,695	\$60,732	0	0	\$60,732	2%
Grand Total	\$29,808,026	\$22,635,056	\$7,172,970	0	0	\$7,172,970	24%

Year	Accounts Receivables & Remaining Interest:	Amount	Notes
2023	3023.19 SF Airport - Municipal	\$16,789	Processing payment April 2024
2023	3023.29 St. Helena - Municipal	\$8,715	Forwarded to corrected contact March 2024



RMP

REGIONAL MONITORING
PROGRAM FOR WATER QUALITY
IN SAN FRANCISCO BAY

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Status of RMP Deliverables and Action Items (10 minutes)

Deliverables - completed!

- 😊 S&T WY24 wet season water sampling
- 😊 Technical Memo: Development of Semi-Empirical Light Extinction Estimates for Biogeochemical Modeling Applications in SFB. SFEI Cont. #1177
- 😊 2024 RMP QAPP Update SFEI Cont. #1169
- 😊 CEC Modeling Exploration Report SFEI Cont. #1131
- 😊 Stormwater CECs manuscript submitted!
- 😊 NB Se clam and water data report (2019-2020) SFEI Cont. # 1116
- 😊 SS: Suspended Sed in LSB - Year 2; 15 min SSC time series data from 8 stations.
- 😊 Ambient Sediment Thresholds Update

Deliverables – Overdue...

- MTC Bay area land use update (SEP)
- STLS regional model development
- 2020 S&T design report
- RWSM update and technical report

Deliverables – delayed

- STLS WY21 POC Recon. Monit. - Update data for the Advanced Data Analysis (ADA)
- NB Se in clams and water report (2021-2023)
- NTA Sediment Data Manuscript and Fact Sheet
- PFAS in Archived Sport Fish Manuscript
- Action Item: Schedule Council of Wisdom meeting to discuss event based monitoring.

Deliverables – due before next SC meeting (8/12)

- Impact of Remediation Actions on San Leandro Bay Recovery from PCB Contamination technical report
- Final Margins Report
- 2021 QA Summary Report for S&T Activities
- 2020 S&T Design Report
- Sediment Deposition on SB Marsh (Whales Tail) report
- Integrated Watershed monitoring and modeling strategy report
- PFAS in Archived Sportfish

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	1106	🚩	🚩	3	🔴	3/18/24 - Tony has asked Melissa and Pete to develop a cost estimate for SFEI to update and maintain the data layer on a 2 year interval. 10/13/23 - SFEI met with MTC. MTC will be releasing the dataset with our (SFEI) enhancements/fixes per Kearney 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	Matt Heberger	08/30/23			🚩	🚩		🔴	3/18/24 - Matt H. is being onboarded to assume this work. 10/25/23 - Tan's departure delayed deliverables associated with this project. Revised timeline in development.
3	Bay RMP (2023)	Special Study: STLS Regional Model Development	Control measures impact estimation	Matt Heberger	10/30/23			🚩	🚩		🔴	3/18/24 - Matt H. is being onboarded to assume this work. 10/25/23 - Tan's departure delayed deliverables associated with this project. Revised timeline in development.
4	Bay RMP	2020 S&T Design Report	Final Report	Melissa Foley	11/01/23	06/20/23	295	🚩	🚩	?	🔴	3/29/24 - In finalization. 3/18/24 - Waiting on Jays final review before finalization. 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.
5	Bay RMP (2023)	Special Study: STLS Regional Model Development	Final modeling report and data sharing portal	Matt Heberger	12/30/23			🚩	🚩		🔴	3/18/24 - Matt H. is being onboarded to assume this work. 10/25/23 - Tan's departure delayed deliverables associated with this project. Revised timeline in development.
6	RMP SEP	24. Regional Watershed Spreadsheet Model	Updated model and Final Technical Report	Alicia Gilbreath	12/31/23			🚩	🚩		🔴	3/18/24 - Still waiting on land use update. Jan. 2023 - Waiting for land use update SEP issue date 6/5/2021.
7	RMP SEP	25. Sediment Deposition on South Bay Marsh (Whales Tail)	Final Report	Melissa Foley	04/15/24	04/01/24	9	🚩	🚩		🟡	3/18/24 - Submission is planned for this month. 10/23/23 - Work is being done by Lacy and Thorne (USGS) Draft report estimated to be completed by Feb 2024.
8	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
9	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
10	RMP SEP	15. North Bay Selenium Clam and Water Data Management and Reporting	Report	Jay Davis	04/24/24	12/01/21	861	🚩	🚩	7	🟡	4/10/24 - Report finalized, needs to be sent to the water board. 3/18/24 - Draft has been sent to SeWG for review, comments due 3/22. 1/8/2024 - Draft under review 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	Bay RMP (2022)	Special Study: STLS WY21 POC Recon Monitoring	Update data for the Advanced Data Analysis (ADA)	Alicia Gilbreath	04/30/24	06/30/23	285	🚩	🚩	3	🟡	3/18/24 - Waiting on response/ input from BAMSC. 1/9/24 - Lester to follow up with Lisa Sabin to discuss next steps. 12/5/23 - WB and BAMSC are interested in providing input but need more time to coordinate. 7/18/23 - In Dec 2021 it was decided to forgo the report and instead update data for the ADA.
12	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	04/30/24	01/30/24	71	🚩	🚩		🟡	4/2/24 - Unlikely that Duke will deliver results by end of April. Diana L. to follow up with Lee F. 1/11/24 - Per 2023 discussions with Lee F. (Duke) the new deadline for lab analysis has been defined as April 2024. 5/29/23 - Duke University will be conducting analysis.
13	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			🚩	🚩		🟡	4/2/24 - Unlikely that Duke will deliver results by end of April. Diana L. to follow up with Lee F.
14	Bay RMP (2024)	G. 2024 Bird Egg Sampling	Complete contracts	Amy Kleckner	04/30/24	01/31/24	70	🚩	🚩	2	🟡	3/28/24 - USGS contract finalized, SGS and MLML contracts to be completed in April 2024 for work in April 2025. 3/18/24 - Nearly complete, delayed as we work out details to improve past issues with processing and shipping.
15	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			🚩	🚩		🟡	Include Lester for these deliverables. Products are minimal 1-2 pages.
16	Bay RMP (2022)	Special Study: PCB In-Bay contaminant modeling (SLB)	Draft Report	Jay Davis	05/01/24	05/01/22	710	🚩	🚩		🟡	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.
17	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.
18	Bay RMP (2024)	G. 2024 Bird Egg Sampling	Sampling and Analysis Plan	Amy Kleckner	05/01/24	02/28/24	42	🚩	🚩	1	🟡	3/18/24 - Waiting on finalization of shipping and processing plans.
19	Bay RMP (2024)	L. 2024 Sport Fish Monitoring	Complete Sampling and Analysis Plan	Jay Davis	05/01/24			🚩	🚩		🟡	3/30/24 - In development.
20	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	05/10/24	04/30/24	-20	🚩	🚩	1	🟡	4/2/24 - Lilia is the lead on this project. Plan to submit the report on 5/10.

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21	Bay RMP (2021)	21. Impact of Remediation Actions on San Leandro Bay Recovery from PCB Contamination	Task 5: Final technical report	Diana Lin	05/15/24	12/31/22	466	🚩	🚩	4	🟡	4/2/24 - Waiting on comments from Frank Gobas, early May is new estimated timeline for deliverable. 3/18/24 - Currently under review with PCBWG, comments requested by 3/23, aiming for finalization by 4/15. 1/11/24 - Internal review is complete, Stanford is leading the revisions. PCBWG to review in Feb and aiming for final report in Mar. 2024. 10/24/23 - Undergoing internal review, next to be reviewed the PCBWG. 8/16/23 - Partners at Stanford still working on the draft. Estimate completion by end of 2023.
22	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	🟡	4/10/24 - Plan to present to the SedWG on 5/16/24. Jessie Lacy and Karen Thorne (USGS) conducting this work
23	Bay RMP (2024)	30. Integrated Monitoring & Modeling for PCBs and Hg Phase 1	Presentation to SPLWG	Alicia Gilbreath	05/30/24			🚩	🚩		🟡	3/28/24 - Will be included in the science presentations at the 5/14/24 SPLWG mtg.
24	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			🚩	🚩		🟡	3/30/24 - On the agenda for the 5/20 SPLWG meeting. Jen D. to present?
25	Emerging Contaminants	RMP SEP	19. Quaternary Ammonium Compounds (QACs) in Bay Area Wastewater	Diana Lin	05/31/24	05/31/22		🚩	🚩	1	🟡	4/2/24 - Report in review by ECWG. 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.
26	Bay RMP (2021)	F. 2021 Bird Egg Data Mgmt	Processing and upload bird egg data	Adam Wong	05/31/24	10/31/22	527	🚩	🚩	3	🟡	3/18/24 - In DS queue for formatting and QA review. 1/9/24 - All samples have been delivered to the labs. AXYS: PFAS data has been reported, PCBs and PBDEs expected end of Jan., pesticides? Hg and Se results from MLML are with SFEI DS. 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.
27	Bay RMP (2024)	2. Governance	ECWG Meeting	Rebecca Sutton	05/31/24			🚩	🚩		🟡	3/28/24 - Scheduled for 4/16-4/17.
28	Bay RMP (2024)	2. Governance	Microplastics WG Meeting	Diana Lin	05/31/24			🚩	🚩		🟡	3/28/24 - Scheduled for 4/30.
29	Bay RMP (2024)	2. Governance	SPLWG Meeting	Alicia Gilbreath	05/31/24			🚩	🚩		🟡	
30	Bay RMP (2024)	2. Governance	Sediment WG Meeting	Scott Dusterhoff	05/31/24			🚩	🚩		🟡	
31	Bay RMP (2024)	R. WDM Model Maintenance	Present proposed update to the SPLWG	Pedro Avellaneda	05/31/24			🚩	🚩		🟡	
32	RMP SEP	23. Integrated Watershed Bay Modeling Strategy and Pilot Implementation	Report	Lester McKee	06/01/24	12/31/23	101	🚩	🚩		🟡	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.
33	RMP SEP	29. PFAS in Archived Sport Fish Communications Supplement	Manuscript	Miguel Mendez	06/01/24	12/31/23		🚩	🚩	2	🟡	3/18/24 - Prioritized behind work on ECWG strategy and proposals and QACs report. Submission delayed until summer 2024. 1/8/24 - Draft under review 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
34	Bay RMP (2020)	6. Status and Trends Monitoring	Final Margins report	Don Yee	06/01/24	12/31/21	831	🚩	🚩	7	🟡	3/18/24 - DS continuing work on reanalysis. Due date delayed. 1/11/24 - Data services will prioritize the reanalysis. 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.
35	Bay RMP (2021)	3. QA and Data Services	QA Summary Report for 2021 S&T Activities	Don Yee	06/01/24	09/30/22	558	🚩	🚩	8	🟡	3/18/24 - Miguel is working thru ancillary data QA. 1/9/24 - Waiting on ancillary data to be QA'd by DS. 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.
36	Bay RMP (2022)	3. QA and Data Services	QA Summary Report for 2022 S&T Activities	Don Yee	06/01/24	09/30/23	193	🚩	🚩	2	🟡	3/18/24 - Bird egg data from AXYS still coming in. 10/24/23 - Waiting on bird egg data and PFAS archive data.
37	Bay RMP (2023)	D. 2023 Dry season Bay Water Cruise Data Mgmt	Process and upload dry season Bay water cruise data	Adam Wong	06/01/24	01/31/24	70	🚩	🚩	1	🟡	3/18/24 - In DS queue for formatting and QA review.
38	Bay RMP (2023)	H. Nearfield and margins sediment & prey fish data mgmt.	Process and upload sampling data	Adam Wong	06/01/24	02/28/24	42	🚩	🚩	1	🟡	3/18/24 - In DS queue for formatting and QA review.
39	Bay RMP (2023)	M. Ambient Bay sediment data mgmt.	Process and upload sampling data	Adam Wong	06/01/24	02/28/24	42	🚩	🚩	1	🟡	3/18/24 - In DS queue for formatting and QA review.
40	Bay RMP (2023)	PFAS in Archived Sport Fish	Task 6. Final report	Miguel Mendez	06/01/24	12/30/23	102	🚩	🚩	2	🟡	3/18/24 - Prioritized behind work on ECWG strategy and proposals and QACs report. Submission delayed until summer 2024. 1/8/24 - Draft under review 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.
41	Bay RMP (2024)	J. 2024 Sample Archive	Short-term RMP sample archive purging	Martin Trinh	06/01/24			🚩	🚩	1	🟡	
42	Bay RMP (2024)	L. 2024 Sport Fish Monitoring	Complete contracts	Beth Ebner	06/01/24			🚩	🚩		🟡	
43	Bay RMP (2024)	38. NTA of SF Bay Fish, Yr 1	Complete Sampling and Analysis Plan	Rebecca Sutton	06/01/24	01/31/24	70	🚩	🚩	1	🟡	3/18/24 - Waiting on Sport Fish SAP.
44	Bay RMP (2024)	2. Governance	PCB WG Meeting	Jay Davis	06/03/24			🚩	🚩		🟡	
45	Bay RMP (2024)	2. Governance	June TRC Meeting	Amy Kleckner	06/23/24			🚩	🚩		🟡	

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46	Bay RMP (2021)	Selenium in Clams	Task 4. Draft Report	Amy Kleckner	06/30/24	12/31/22	466	🚩	🚩	2	🟡	3/18/24 - Estimated completion in summer 2024, USGS data release coming soon. 10/24/23 - Waiting for DS to complete QA, delayed to allow for 2022 collections before working on the report
47	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	952	🚩	🚩	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.
48	Bay RMP (2024)	5. Communications	Q2 RMP eUpdate	Amy Kleckner	06/30/24			🚩	🚩		🟡	
49	Bay RMP (2024)	5. Communications	Updates to RMP website - Q2	Martin Trinh	06/30/24			🚩	🚩		🟡	
50	Bay RMP (2024)	G. 2024 Bird Egg Sampling	Successful collection of samples.	Amy Kleckner	06/30/24			🚩	🚩		🟡	Josh Ackerman USGS PI
51	Bay RMP (2024)	I. 2024 S&T Lab Intercomp Studies	Complete Study Design	Don Yee	06/30/24			🚩	🚩		🟡	
52	Bay RMP (2024)	K. 2024 S&T Field Sampling Report & Support	Post wet field season garage clean up	Martin Trinh	06/30/24			🚩	🚩		🟡	
53	Bay RMP (2024)	K. 2024 S&T Field Sampling Report & Support	Annual Lab Clean Up	Martin Trinh	06/30/24			🚩	🚩		🟡	
54	Bay RMP (2024)	40. OPEs, BP, and Other Plastic Additives in Wastewater	Complete Sampling and Analysis Plan	Rebecca Sutton	06/30/24			🚩	🚩		🟡	
55	Bay RMP (2024)	1. Program Management	2024 Q2 RMP Financial Report	Beth Ebner	07/24/24			🚩	🚩		🟢	
56	Bay RMP (2024)	1. Program Management	Update Deltek Program Plans for Open RMP Years	Beth Ebner	07/25/24			🚩	🚩		🟢	
57	Bay RMP (2024)	1. Program Management	SC Meeting Stoplight Report	Amy Kleckner	07/25/24			🚩	🚩		🟢	
58	Bay RMP (2024)	2. Governance	July SC Meeting	Amy Kleckner	07/25/24			🚩	🚩		🟢	
59	Bay RMP (2023)	Nontargeted Data Mining	Task 4. Spreadsheet of compiled data mining results	Rebecca Sutton	07/30/24			🚩	🚩		🟢	
60	Bay RMP (2024)	A. USGS Sacramento Support	Contract - Continuous suspended sediment monitoring at 5 stations	Amy Kleckner	07/31/24			🚩	🚩		🟢	
61	Bay RMP (2024)	B. USGS Menlo Park Support	Contract - Monthly measurements of basic water quality at 38 stations	Amy Kleckner	07/31/24			🚩	🚩		🟢	
62	RMP SEP	30. Analysis and Reporting of NTA Sediment Data	Manuscript	Ezra Miller	08/01/24	12/31/23		🚩	🚩	2	🟢	3/18/24 - Work on this has slowed, prioritized behind CEC strategy revisions. 1/8/24 - In prep and distributing to analytical partners for review. Continuation of 3018-036.
63	RMP SEP	30. Analysis and Reporting of NTA Sediment Data	Fact Sheet	Ezra Miller	08/01/24	12/31/23		🚩	🚩	2	🟢	3/18/24 - Work on this has slowed, prioritized behind CEC strategy revisions. 1/8/24 - In prep and distributing to analytical partners for review.
64	Bay RMP (2022)	Special Study: CEC in Urban Stormwater Year 4	Management summary	Rebecca Sutton	08/01/24	09/30/23	193	🚩	🚩	2	🟢	4/10/24 - Delayed until summer, after ECWG etc. 3/18/24 - Manuscript submitted on 3/5. 1/9/24 - Expect after manuscript is submitted, manuscript draft expected to be distributed for external review by end of Jan. 9/6/23 - Draft manuscript is expected in October. Final manuscript expected to be submitted for publication by the end of the year.
65	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 go in on to resubmit the fish data."
66	Bay RMP (2024)	C. 2024 Dry season water sampling	Complete contracts	Jennifer Dougherty	08/01/24			🚩	🚩		🟢	
67	Bay RMP (2024)	C. 2024 Dry season water sampling	Complete Sampling and Analysis Plan	Jennifer Dougherty	08/28/24			🚩	🚩		🟢	
68	Bay RMP (2021)	Selenium in Clams	Task 5. Final Report	Amy Kleckner	08/30/24	02/28/23	407	🚩	🚩	2	🟢	3/18/24 - Estimated completion in summer 2024, USGS data release coming soon, delayed to allow for 2022 collections before working on the report
69	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 go in on to resubmit the fish data."
70	Emerging Contaminants	RMP SEP	19. Quaternary Ammonium Compounds (QACs) in Bay Area Wastewater	Technical Memo	Diana Lin	08/31/24	08/31/22		🚩	2	🟢	4/2/24 - Report in review by ECWG. 1/8/24 - Draft report received from Anna (UMN?), coordinating data delivery with DS. 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.
71	Bay RMP (2021)	DMMO Database	DMMO Database Enhancements	Cristina Grosso	08/31/24	12/31/21	831	🚩	🚩	4	🟢	1/11/24 - Still waiting on final templates from Exa, expect to get them by end of Jan, Given Michael will be on leave for 1.5 months completion now expected end of summer 2024 12/5/23 - Exa templates are in final review stages.
72	Bay RMP (2024)	4. Annual Reporting	RMP Pulse Draft	Jay Davis	08/31/24			🚩	🚩		🟢	
73	Bay RMP (2024)	5. Communications	RMP Update to BACWA	Amy Kleckner	08/31/24			🚩	🚩		🟢	
74	Bay RMP (2024)	5. Communications	RMP Update to BPC	Amy Kleckner	08/31/24			🚩	🚩		🟢	
75	Bay RMP (2024)	I. 2024 S&T Lab Intercomp Studies	Complete contracts	Beth Ebner	08/31/24			🚩	🚩		🟢	
76	Bay RMP (2024)	50. Stormwater CECS Monitoring & Modeling 2024	Presentation to SC/TRC	Rebecca Sutton	08/31/24			🚩	🚩		🟢	

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77	Bay RMP (2024)	24. Microplastics Stormwater Monitoring Pilot	Complete Sampling and Analysis Plan	Diana Lin	08/31/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
78	Bay RMP (2022)	Special Study: Sediment delivery to marshes in C&N Bay	Report	Melissa Foley	09/01/24	12/01/23	131	<input type="checkbox"/>	<input type="checkbox"/>		●	Jessie Lacy and Karen Thorne (USGS) doing the work
79	Bay RMP (2024)	4. Annual Reporting	2024 Annual Meeting Agenda	Jay Davis	09/01/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
80	Bay RMP (2024)	L. 2024 Sport Fish Monitoring	Successful collection of samples	Jay Davis	09/01/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
81	Bay RMP (2024)	38. NTA of SF Bay Fish, Yr 1	Collect Samples	Rebecca Sutton	09/01/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
82	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			<input type="checkbox"/>	<input type="checkbox"/>	1	●	Jessie Lacy and Karen Thorne (USGS) conducting this work
83	Bay RMP (2024)	4. Annual Reporting	RMP Pulse Final and send to printer	Jay Davis	09/20/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
84	Bay RMP (2024)	2. Governance	September TRC Meeting	Amy Kleckner	09/22/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
85	Bay RMP (2023)	3. QA and Data Services	QA Summary Report for 2023 S&T Activities	Don Yee	09/30/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
86	Bay RMP (2023)	Special Study: STLS WY21 POC Recon Monitoring	Laboratory analysis, QA, & Data Management	Alicia Gilbreath	09/30/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
87	Bay RMP (2024)	5. Communications	Q3 RMP eUpdate	Amy Kleckner	09/30/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
88	Bay RMP (2024)	5. Communications	RMP Update to BAMSC	Amy Kleckner	09/30/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
89	Bay RMP (2024)	5. Communications	RMP Update to LTMS	Amy Kleckner	09/30/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
90	Bay RMP (2024)	5. Communications	RMP Update to WSPA	Amy Kleckner	09/30/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
91	Bay RMP (2024)	5. Communications	RMP Update at RB2 Meeting	Amy Kleckner	09/30/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
92	Bay RMP (2024)	5. Communications	Updates to RMP website - Q3	Martin Trinh	09/30/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
93	Bay RMP (2024)	C. 2024 Dry season water sampling	Collect samples	Jennifer Dougherty	09/30/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
94	Bay RMP (2024)	N. NB Se Monitoring	Sampling and analysis proposal for 2025 S&T Monitoring presented to TRC	Amy Kleckner	09/30/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
95	Bay RMP (2024)	40. OPEs, BP, and Other Plastic Additives in Wastewater	Collect Samples	Rebecca Sutton	09/30/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
96	Bay RMP (2024)	30. Integrated Monitoring & Modeling for PCBs and Hg Phase 1	Lab analysis, QA, & data mgmt.	Alicia Gilbreath	09/30/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
97	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			<input type="checkbox"/>	<input type="checkbox"/>		●	
98	Bay RMP (2023)	Nontargeted Data Mining	Task 3. Presentation to ECWG on additional targets	Rebecca Sutton	10/01/24	04/30/24	-20	<input type="checkbox"/>	<input type="checkbox"/>	1	●	4/10/24 - Delayed. Eun Ha just delivered the last data set, will be rolled into the CEC strategy revision.
99	Bay RMP (2024)	4. Annual Reporting	Annual Meeting	Amy Kleckner	10/16/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
100	Bay RMP (2024)	2. Governance	October SC Meeting	Amy Kleckner	10/20/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
101	Bay RMP (2024)	1. Program Management	Update Deltek Program Plans for Open RMP Years	Beth Ebner	10/24/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
102	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			<input type="checkbox"/>	<input type="checkbox"/>		●	
103	Bay RMP (2023)	F. 2023 Wet season water data mgmt.	Process and upload wet season water sampling data	Adam Wong	10/31/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
104	Bay RMP (2024)	F. WY24 Wet season water data mgmt.	Process and upload wet season water sampling data	Adam Wong	10/31/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
105	Bay RMP (2024)	K. 2024 S&T Field Sampling Report & Support	Post dry field season garage clean up	Martin Trinh	10/31/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
106	Bay RMP (2024)	1. Program Management	2025 Multi-Year Plan	Amy Kleckner	11/01/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
107	Bay RMP (2024)	1. Program Management	2025 Detailed Workplan and Budget	Amy Kleckner	11/01/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
108	Bay RMP (2024)	1. Program Management	2024 Q3 RMP Financial Report	Beth Ebner	11/01/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
109	Bay RMP (2024)	1. Program Management	SC Meeting Stoplight Report	Amy Kleckner	11/01/24			<input type="checkbox"/>	<input type="checkbox"/>		●	
110	Bay RMP (2024)	M. 2024 Sport Fish data mgmt.	Process and upload sampling data	Adam Wong	11/01/24			<input type="checkbox"/>	<input type="checkbox"/>		●	

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
111	Bay RMP (2024)	42. Continuous SSC and Wave Monitoring in SB and LSB, Yr. 3	Report	Scott Dusterhoff	11/01/24			☐	☐		●	
112	Bay RMP (2023)	Ethoxylated surfactants in ambient water, margin sediment, wastewater, Part 2 (year 2 of 2)	Task 6. Final report	Diana Lin	11/30/24			☐	☐		●	
113	Bay RMP (2024)	2. Governance	December TRC Meeting	Amy Kleckner	12/09/24			☐	☐		●	
114	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			☐	☐		●	
115	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
116	Bay RMP (2024)	P. PFAS and NTA in Marine Mammals (Yr 2)	Sample collection	Rebecca Sutton	12/30/24			☐	☐		●	
117	Bay RMP (2022)	Special Study: Stormwater monitoring strategy for CEC's	Final strategy (approach) document	Kelly Moran	12/31/24	09/01/23	222	☐	■	1	●	4/2/24 - New timeline is estimated to finish by end of 2024. 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.
118	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	223	■	■	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.
119	Bay RMP (2022)	Special Study: DMMO Database Enhancements	Make testing results accessible on the DMMO website	Cristina Grosso	12/31/24	12/31/22	466	■	■	3	●	1/11/24 - Need to complete task 3021-046 first, timeline updated. 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.
120	Bay RMP (2023)	Special Study: Sediment Flux Richmond Bridge	Data release	Scott Dusterhoff	12/31/24	05/11/23	335	■	☐	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.
121	Bay RMP (2023)	Special Study: Ground work CEC Stormwater/Stormwater monitoring for CECs strategy	Final Brief Report as a presentation to SST and an appendix to Stormwater CEC approach	Kelly Moran	12/31/24	12/31/23	101	☐	■		●	4/3/24 - Presentation to the SST was completed in 9/2023, appendix will be completed on same timeline as the approach doc. 1/9/24 - Delayed until completion of the Stormwater CECs approach final strategy document (SS 2022).
122	Bay RMP (2024)	1. Program Management	RMP Participation Letters for BACWA and WSPA Agencies	Amy Kleckner	12/31/24			☐	☐		●	
123	Bay RMP (2024)	1. Program Management	Honoraria Payments to Science Advisors	Amy Kleckner	12/31/24			☐	☐		●	
124	Bay RMP (2024)	3. QA and Data Services	Online Data Access CD3	Cristina Grosso	12/31/24			☐	☐		●	
125	Bay RMP (2024)	3. QA and Data Services	Database Maintenance	Adam Wong	12/31/24			☐	☐		●	
126	Bay RMP (2024)	3. QA and Data Services	Updates to SOPs and Templates	Adam Wong	12/31/24			☐	☐		●	
127	Bay RMP (2024)	3. QA and Data Services	DMMO Database Support	Cristina Grosso	12/31/24			☐	☐		●	
128	Bay RMP (2024)	5. Communications	Q4 RMP eUpdate	Amy Kleckner	12/31/24			☐	☐		●	
129	Bay RMP (2024)	5. Communications	Updates to RMP website - Q4	Martin Trinh	12/31/24			☐	☐		●	
130	Bay RMP (2024)	H. 2024 Bird Egg Data Mgmt	Processing and upload bird egg data	Adam Wong	12/31/24			☐	☐		●	
131	Bay RMP (2024)	J. 2024 Sample Archive	Update RMP Archives database	michaelw@sfei.org	12/31/24			☐	☐		●	
132	Bay RMP (2024)	K. 2024 S&T Field Sampling Report & Support	Field Reports Reviewed and posted to website	Amy Kleckner	12/31/24			☐	☐		●	
133	Bay RMP (2024)	L. 2024 Sport Fish Monitoring	Sport Fish Report	Jay Davis	12/31/24			☐	☐		●	
134	Bay RMP (2024)	R. WDM Model Maintenance	Update model development log	Pedro Avellaneda	12/31/24			☐	☐		●	
135	Bay RMP (2024)	31. Tidal Area Remote Sampler Pilot - Yr 2	Data upload to CEDEN	Don Yee	12/31/24			☐	☐		●	
136	Bay RMP (2024)	1. Program Management	2024 Q4 RMP Financial Report	Beth Ebner	01/31/25			☐	☐		●	
137	Bay RMP (2024)	D. 2024 Dry season water Data Mgmt	Process and upload dry season water sample data	Adam Wong	01/31/25			☐	☐		●	
138	Bay RMP (2024)	40. OPEs, BP, and Other Plastic Additives in Wastewater	Final Report	Rebecca Sutton	01/31/25			☐	☐		●	
139	Bay RMP (2024)	31. Tidal Area Remote Sampler Pilot - Yr 2	Draft Report	Don Yee	01/31/25			☐	☐		●	
140	Bay RMP (2023)	Special Study: STLS WY21 POC Recon Monitoring	Interpretation & reporting for BAMSC	Alicia Gilbreath	02/28/25			☐	☐		●	
141	Bay RMP (2024)	Q. Marine Mammals data mgmt.	Process and upload sampling data	Adam Wong	02/28/25			☐	☐		●	

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
142	Bay RMP (2024)	51. PFAS in Bay Water using the TOP Assay	Final Report	Rebecca Sutton	02/28/25			<input type="checkbox"/>	<input type="checkbox"/>		●	
143	Bay RMP (2024)	21. Monitoring of Sediment Deposition in SLB Intertidal Areas	Draft Report	Don Yee	02/28/25			<input type="checkbox"/>	<input type="checkbox"/>		●	
144	Bay RMP (2024)	1. 2024 S&T Lab Intercomp Studies	Presentation to the TRC on findings from IC studies.	Don Yee	03/01/25			<input type="checkbox"/>	<input type="checkbox"/>		●	
145	Bay RMP (2024)	3. QA and Data Services	QA Summary Report for 2024 S&T Activities	Don Yee	03/31/25			<input type="checkbox"/>	<input type="checkbox"/>		●	
146	Bay RMP (2024)	31. Tidal Area Remote Sampler Pilot - Yr 2	Final Report	Don Yee	03/31/25			<input type="checkbox"/>	<input type="checkbox"/>		●	
147	RMP SEP	32. Temporal variability in sediment delivery to a North and Central SF Bay Salt Marsh	Final Report	Melissa Foley	04/01/25			<input type="checkbox"/>	<input type="checkbox"/>		●	
148	RMP SEP	26. PFAS & Chlorinated Paraffins in Bay Sediment	Report	Rebecca Sutton	04/04/25			<input type="checkbox"/>	<input type="checkbox"/>		●	
149	Bay RMP (2024)	37. Tire and Roadway Contaminants in Wet Season Bay Water, Yr 3	Presentation at ECWG	Rebecca Sutton	04/30/25			<input type="checkbox"/>	<input type="checkbox"/>		●	
150	Bay RMP (2024)	39. PFAS Synthesis & Strategy	Final Report	Rebecca Sutton	04/30/25			<input type="checkbox"/>	<input type="checkbox"/>		●	
151	Bay RMP (2024)	21. Monitoring of Sediment Deposition in SLB Intertidal Areas	Final Report and data upload	Don Yee	04/30/25			<input type="checkbox"/>	<input type="checkbox"/>		●	
152	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			<input type="checkbox"/>	<input type="checkbox"/>		●	
153	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			<input type="checkbox"/>	<input type="checkbox"/>		●	
154	Bay RMP (2023)	PFAS and NTA in Marine Mammals (year 1 of 2)	Task 5. Draft manuscript(s)	Rebecca Sutton	06/30/25			<input type="checkbox"/>	<input type="checkbox"/>		●	
155	Bay RMP (2023)	Special Study: STLS WY21 POC Recon Monitoring	Final report	Alicia Gilbreath	06/30/25			<input type="checkbox"/>	<input type="checkbox"/>		●	
156	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			<input type="checkbox"/>	<input type="checkbox"/>		●	
157	Bay RMP (2024)	40. OPEs, BP, and Other Plastic Additives in Wastewater	QA/QC and Data Management	Rebecca Sutton	06/30/25			<input type="checkbox"/>	<input type="checkbox"/>		●	
158	RMP SEP	28. SF Bay Sediment Transport and Fate Modeling	Technical Report	Dave Senn	09/05/25			<input type="checkbox"/>	<input type="checkbox"/>		●	
159	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			<input type="checkbox"/>	<input type="checkbox"/>		●	
160	Bay RMP (2023)	PFAS and NTA in Marine Mammals (year 1 of 2)	Task 6. Final manuscript(s)	Rebecca Sutton	09/30/25			<input type="checkbox"/>	<input type="checkbox"/>		●	
161	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			<input type="checkbox"/>	<input type="checkbox"/>		●	
162	Bay RMP (2024)	44. Spatial variability of sediment accretion in SFB restorations	Report	Scott Dusterhoff	03/31/26			<input type="checkbox"/>	<input type="checkbox"/>		●	
163	Bay RMP (2024)	40. OPEs, BP, and Other Plastic Additives in Wastewater	Presentation at ECWG	Rebecca Sutton	04/30/26			<input type="checkbox"/>	<input type="checkbox"/>		●	
164	Bay RMP (2024)	38. NTA of SF Bay Fish, Yr 1	Presentation to ECWG and TRC	Rebecca Sutton	04/30/26			<input type="checkbox"/>	<input type="checkbox"/>		●	
165	RMP SEP	31. Investigating HABs in SF Bay	Data made publicly available	Dave Senn	06/30/26			<input type="checkbox"/>	<input type="checkbox"/>		●	
166	RMP SEP	31. Investigating HABs in SF Bay	Technical Report	Dave Senn	06/30/26			<input type="checkbox"/>	<input type="checkbox"/>		●	
167	Bay RMP (2024)	38. NTA of SF Bay Fish, Yr 1	Final Manuscript	Rebecca Sutton	09/30/26			<input type="checkbox"/>	<input type="checkbox"/>		●	
168	Bay RMP (2024)	44. Spatial variability of sediment accretion in SFB restorations	Presentation to RMP	Scott Dusterhoff	09/30/26			<input type="checkbox"/>	<input type="checkbox"/>		●	

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	SC Action Items 11/1/23	Schedule a first COW meeting (to include Richard L. and Dave S.) to brainstorm types of events, level of effort, and ways to pull in other groups.	Jay Davis	04/30/24	12/31/23		1				4/10/24 - Amy to schedule after 4/15.	11/01/23
2	SC Action Items from 01/22/24	Develop a timeline/plan for 2025 Se sampling to present to the TRC and SC	Amy Kleckner	06/01/24								01/22/24
3	Action Items from 06/20/23	Post updated SEP list to RMP website	Martin Trinh	06/30/24	09/04/23	219	2				1/11/24 - Will be added after a key resources and documents tab is added to special studies page in the new design. 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
4	Action Items 9/19/23	Share revised draft of margins report after reanalysis	Don Yee	06/01/24	12/31/23	101	1				3/18/24 - DS continuing work on reanalyses. Due date extended.	09/19/23
5	Action Items 12/7/23	Schedule Council of Wisdom meeting with Richard, Dave, Amy & Jay to discuss Event Based monitoring plans	Jay Davis	04/30/24	12/31/23	101	2					12/07/23
6	MYP Action Items 11/1/23	Revisit and discuss NTA and Passive Samplers for S&T 2025/2026	Jay Davis	08/31/24							4/1/24 - Becky is developing a more realistic budget for this effort.	11/01/23
7	MYP Action Items 11/1/23	Revisit/discuss future model maintenance, equipment maintenance, continuation of S&T pilot studies, and selenium funding before 2025 MYP update	Amy Kleckner	08/31/24							3/28/24 - Kayli is developing a proposed budget for this.	11/01/23
8	SC Action Items from 01/22/24	Prepare an org chart of SFEI employees that are key players in the RMP for the MYP meeting	Amy Kleckner	08/01/24								01/22/24
9	November MYP/SC											11/01/23
10	January SC Mtg											01/22/24
11	June 2023 TRC											06/20/23
12	September 2023 TRC											09/19/23
13	December 2023 TRC											12/07/23
14	March 2024 TRC											03/26/24