



Technical Review Committee

March 29, 2023
9:00 AM – 2:00 PM

HYBRID MEETING

In-Person

SFEI

Second Floor "Bay" Conference Room

Remote Access

<https://zoom.us/j/91581187150>

Meeting ID: 915 8118 7150

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AGENDA

1.	Introductions and Review Agenda Welcome new TRC rep for the Army Corps: Jamie Yin	9:00 (10 min) Bridgette DeShields
2.	Decision: Approve Meeting Summary from December 8, 2022, Review/Confirm/Set Dates for Future Meetings, and Confirm TRC Chair Scheduled meetings: Steering Committee - April 26, 2023 August 10, 2023 Technical Review Committee - June 20, 2023 September 20 or 27, 2023 ? Annual Meeting - October 12, 2023	9:10 (15 min) Bridgette DeShields

	<p>Materials:</p> <ul style="list-style-type: none"> • TRC Meeting Summary, see pages 7-15 <p>Desired outcomes:</p> <ul style="list-style-type: none"> • Approve meeting summary • Set additional meeting dates 	
3.	<p>Information: SC Meeting Summary from January 25, 2023</p> <p>Materials: SC Meeting Summary, see pages 16-28</p> <p>Desired outcome:</p> <ul style="list-style-type: none"> • Informed Committee 	<p>9:25 (10 min)</p> <p>Jay Davis</p>
4.	<p>Information: Water Board Presentation of Updated 303(d) List</p> <p>Materials: 2024 California Integrated Report Webpage</p> <p>Desired outcome:</p> <ul style="list-style-type: none"> • Informed Committee 	<p>9:35 (15 min)</p> <p>Xavier Fernandez</p>
5.	<p>Discussion: Wet Season Sampling Update</p> <p>This has been an epic year for rainfall and our stormwater team has been busy sampling on several projects.</p> <p>Materials: None - Powerpoint presented at the meeting</p> <p>Desired outcomes:</p> <ul style="list-style-type: none"> • Informed Committee 	<p>9:50 (20 min)</p> <p>Alicia Gilbreath</p>

6.	<p>Discussion: S&T Monitoring Update and Design</p> <p>Update on implementation of the new S&T design, including response to recent storm events, and plans for upcoming sampling (including dry season water, open Bay sediment, margins sediment, and marine mammals). Update on challenges on securing a vessel for the open Bay sediment sampling. Update on the S&T design revision report. Summary and discussion of the near-field prey fish and sediment sampling plans.</p> <p>Materials: None - Powerpoint presented at the meeting</p> <p>Desired outcomes:</p> <ul style="list-style-type: none"> • Informed Committee • Input on S&T implementation • Approval of near-field prey fish and sediment sampling plan 	<p>10:10 (45 min)</p> <p>Amy Kleckner, Jay Davis</p>
7.	<p>Break</p>	<p>10:55 (10 min)</p>
8.	<p>Discussion: Bay Margins Sediment Survey - North Bay Report and Future Design</p> <p>A preliminary discussion of results was held at the last TRC meeting. The draft report is now available. An update on the conclusions of the study will set the stage for a discussion of the design for future margins sampling (beginning this summer). Comments on the draft report are requested by April 12.</p> <p>Materials: Draft report included in agenda package email</p> <p>Desired outcome:</p> <ul style="list-style-type: none"> • Discussion of comments on the draft report • Decision on design of upcoming margins sampling 	<p>11:05 (45 min)</p> <p>Don Yee</p>

9.	<p>Discussion: Floating Percentile Method Report</p> <p>A draft report evaluating the floating percentile method for deriving dredged sediment screening guidelines was distributed by Don Yee via email on March 2.</p> <p>Materials: Draft report already distributed via email</p> <p>Desired outcome:</p> <ul style="list-style-type: none"> • Discuss comments on the report 	<p>11:50 (20 min)</p> <p>Don Yee</p>
10.	Lunch	<p>12:10 (20 min)</p>
11.	<p>Discussion: Interlaboratory Comparison Studies for 2023</p> <p>Discuss interlab comparison studies to support the revised Status and Trends design.</p> <p>Materials:</p> <ul style="list-style-type: none"> • None - Powerpoint presented at the meeting <p>Desired outcome:</p> <ul style="list-style-type: none"> • Obtain input on planned interlab comparison studies 	<p>12:30 (20 min)</p> <p>Don Yee</p>
12.	<p>Information: Progress on Workgroup Strategy Updates</p> <p>Update the Committee on the status of updating workgroup strategies and coordination among them, leading to a major update of the Multi-Year Plan for 2024.</p> <p>Materials: Slides presented at the meeting</p> <p>Desired Outcome:</p> <ul style="list-style-type: none"> • Informed Committee 	<p>12:50 (20 min)</p> <p>Jay Davis</p>

13.	Discussion: Communications Update Brainstorm on speakers for the RMP Annual Meeting and a featured project for the RMP Update. Discuss communication product types for the RMP. Materials: Slides presented at the meeting Desired outcomes: <ul style="list-style-type: none"> • Ideas for speakers and a featured project • Identify priority communication product types 	1:10 (30 min) Jay Davis
14.	Information: Status of Deliverables and Action Items Materials: Deliverables and Action Item tables, pages 29-37 Desired outcome: <ul style="list-style-type: none"> • Informed committee 	1:40 (5 min) Amy Kleckner
15.	Discussion: Plan Agenda Items for Future Meetings Desired outcome: <ul style="list-style-type: none"> • Identify future agenda items 	1:45 (5 min) Jay Davis
16.	Discussion: Plus/Delta	1:50 (5 min) Bridgette DeShields
	Adjourn	1:55

Recently Completed RMP Reports/Products

Foley, M. 2022. 2023 Detailed Workplan and Budget. SFEI Contribution No. 1117. San Francisco Estuary Institute: Richmond, California.

Foley, M.; Davis, J.; Yee, D. 2023. Multi-Year Plan 2023. SFEI Contribution No. 1096. San Francisco Estuary Institute: Richmond, California.

Lin, D.; Hamilton, C.; Hobbs, J.; Miller, E.; Sutton, R. 2023. Triclosan and Methyl Triclosan in Prey Fish in a Wastewater-influenced Estuary. Environmental Toxicology and Chemistry . SFEI Contribution No. 1112.

Zi, T.; Braud, A.; McKee, L. J.; Foley, M. 2022. San Francisco Bay Watershed Dynamic Model (WDM) Progress Report, Phase 2. SFEI Contribution No. 1091. San Francisco Estuary Institute: Richmond, California



Bay RMP Technical Review Committee Meeting

December 8, 2022

Meeting Summary

Attendees (all participants remotely attending)

TRC Member	Affiliation	Representing	Present
Yuyun Shang	EBMUD	POTW	No
Mary Lou Esparza	Central Contra Costa Sanitary District	POTW	Yes
Tom Hall	EOA, Inc.	POTW	Yes
Heather Peterson	City and County of SF	CCSF	No
Anne Hansen Balis	City of San Jose	POTW	Yes
Bridgette DeShields*	Integral Consulting	Refineries	Yes
Chris Sommers	BASMAA (EOA, Inc.)	Stormwater	Yes
Shannon Alford	Port of San Francisco	Dredgers	No
Richard Looker	SF Bay Regional WQCB	Water Board	Yes
Luisa Valiela	US EPA	US EPA-IX	Yes
Ian Wren	Baykeeper	NGOs	Yes
Tessa Beach	US Army Corps of Engineers	USACE	No

Staff and Others

- Jay Davis - SFEI
- Melissa Foley - SFEI
- Warner Chabot - SFEI
- Miguel Mendez - SFEI
- Bryan Frueh - City of San Jose
- John Coleman -
- Don Yee - SFEI
- Martin Trinh - SFEI

1. Introductions and Review Agenda

Bridgette opened the meeting with a round of introductions and previewed the upcoming agenda. Of note are discussion of the draft final report on the Bay margins study, a science update on the algal bloom, and an update on the Status and Trends (S&T) redesign. Jay Davis stated that with the dynamic nature of the new S&T, discussion on the S&T will become a standing item at TRC meetings this year. Melissa Foley noted this will be her last Technical Review Committee (TRC) meeting as she transitions from the RMP manager role to the SFEI Resilient Landscapes team.

2. Decision: Approve Meeting Summary from September 21, 2022, and Confirm/Set Dates for Future Meetings

Bridgette DeShields asked the group for any final comments on the previous meeting's summary. Receiving no comments, Bridgette confirmed the dates for upcoming meetings. The next TRC meeting was confirmed for March 29, 2023. The TRC scheduled the following meeting to be held on June 20, 2023. Melissa confirmed that the 2023 RMP Annual Meeting will be held on Thursday, October 12, 2023 at the David Brower Center.

Action Item:

- Send out calendar invites for June 20, 2023 TRC meeting (Martin Trinh, December 15, 2022)

Decision:

- Richard Looker motioned to approve the meeting summary. Mary Lou Esparza seconded the motion. The motion was carried by all present members.

3. Information: Update on Search for New RMP Manager and Other Staff

SFEI staff members provided updates on the hiring processes for a few open positions. Jay informed the TRC that he had narrowed down the RMP manager position to three candidates. It is shaping up to be a difficult decision but he hopes to begin the process of extending an offer letter soon. Luisa inquired if there were any difficulties in the search process or with any other logistics. Jay clarified that all of the finalists were local and had extensive knowledge of the area. Melissa provided an update on the watershed modeler position. SFEI is putting together an offer letter for the preferred candidate at the moment. The Emerging Contaminants team has just opened a position for an Associate Environmental Scientist (Master's) or Environmental Scientist (PhD). A job posting and description were made available at SETAC, with over 65 applicants in the initial wave. The search is still open for this position. Luisa inquired if SFEI would

consider hiring if more funding was available, with SFEI members giving a resounding yes. On an unrelated note, Luisa informed the TRC that the WQIF awards will be announced in mid-December.

4. Information: MYP and SC Meeting Summary from October 20, 2021

Jay reviewed the October MYP and SC meetings, noting that this year's MYP meeting was a higher-level overview, rather than the normal more in-depth review of the budget and workgroup special studies. Key decisions and action items from the MYP discussion included the addition of tribal and subsistence beneficial uses as a Potential Future Driver, discussion of the revised S&T design and the need for ongoing review of CECs and pilot studies, and discussion of an updated process for continuing refinements to S&T [subcommittee (former the Council of Wisdom) to ECWG advisors to TRC to SC]. Workgroup strategy meetings are expected to yield major updates to the MYP for 2024, informed by subgroup meetings which will be regularly updated to the TRC and SC. Workgroup plans were reviewed for 2024 as well.

For the SC meeting, Tom Mumley and Karin North were reconfirmed as Chair and Vice-Chair respectively. Minor revisions to the RMP Charter and additional funds for coordination and the land use layer update for the Watershed Dynamic model, as well as funds to support strategy work for the Emerging Contaminants (EC), Microplastics, and Sources, Pathways, and Loadings (SPL) Workgroups were all approved. The 2023 detailed workplan was also approved. Discussions were held on preparing for event-based monitoring. Martin Trinh provided an update on the work done on the RMP website. The highlights of the 2022 Workplan and communications topics, such as the Annual Meeting, Update, Pulse, and Estuary News were also discussed.

5. Discussion: Bay Margins Sediment Survey – North Bay and Overall Summary

Don Yee of SFEI reviewed the 2020 North Bay Margins Sediment results. The North Bay study was the last in the series of margins pilot studies, with Central Bay completed in 2015 and South Bay in 2017. The objectives of the study were to assess contaminant concentrations in the margins and determine whether those levels are of concern and if they are different from concentrations measured in the open Bay. The South Bay margins constitute a much larger proportion of area relative to the North Bay which is in turn larger than the Central Bay. The North Bay margins were expected to be influenced by the heavily industrial land use (e.g., refineries) and Delta inputs, including mercury from historic gold mining in the Sierra. Don explained that a probabilistic design that

gave an equal weighting of the number of stations to area for San Pablo Bay, Carquinez Strait, and Suisun Bay was used to distribute the 40 stations. The margins were a mix of connected and discrete areas, with varied distances to the deepest areas. There were 40 samples in this round, with some add-on studies such as QACs. The target analytes for the study were PCBs, Hg, methyl Hg, and other metals. TN, TOC, and grain size were analyzed by ALS and supported by Eurofins. Archive samples were collected for additional work in the future. Summing 40 PCBs, highest concentrations were found in the Southern sites, especially near Chevron. Luisa inquired as to why Bay concentrations were relatively large, with Don noting the USGS had observed similarly in the past. Bridgette inquired about any correlations to grain size with Don noting that in the context of the rest of the Bay, North Bay concentrations were relatively low. Jay inquired as to why stations were concentrated in the north of Suisun Bay compared to the more industrial sites in the south. Don explained this could be due to the deepwater channel that runs there, resulting in narrow margins.

For Hg, concentrations were generally similar between the Bay and the margins, while PCBs were higher in the open Bay compared to the margins. Chris recommended looking at medians to compare, with Jay noting that 75th percentiles for margins and open Bay were much different in the Central Bay. Chris inquired if hotspot areas are significantly greater driving concentrations compared to ambient water as the Board is also curious about clean up of hotspots in older industrial (superfund) sites that might have brownfield components. PMU work is helping to contextualize this. Jay noted that the graphs support the notion that hot areas are driving concentrations. The drop in concentrations between the Central Bay and North Bay could be due to the Central Bay being a source.

Comparing the North and South Bays, Chris noted that Marin and Sonoma are not historical sources, similar to use in the South Bay, but Contra Costa has had a history of being a source. Heather Peterson also clarified that the North Bay is flushed more than the South Bay, allowing dilution and transport.

Raw mercury levels were lower in the margins than the Bay through much of the range of distributions although the difference is less pronounced after normalization of fines. Methylmercury was also higher in the ambient Bay than the margins although not significantly so. For all analytes, Bay concentrations are higher than in the margins despite the percentage of fine grain sizes being similar between habitats.

In conclusion, the North Bay margins exhibited lower concentrations than Central Bay margins, due to fewer sources and loadings. Dilution patterns also may be attributable to clean Delta loads. North Bay margins concentrations were also lower

than those in the South Bay due to faster hydrodynamic turnover. The North Bay margins concentrations were lower than ambient concentrations in the North Bay as Hg came from the Deltas and Central Bay along with PCBs from the Central Bay. Richard recommended exploring why individual contaminants might be higher in the North Bay, as opposed to comparing to the entire Bay. He noted the current narrative was not about individual contamination but more about mixing as these levels seem like a general phenomenon, not a pollutant-specific story. Melissa clarified that the North Bay margins were assumed to be similar to the deep Bay or even dirtier, in which case sediment thresholds would be conservative. However, these data suggest that this is not the case in the North Bay, with additional sampling being potentially helpful.

Don noted that this study is a good start but suggested that the North Bay could still have unknown hotspots. Chris stated that SFEI should not only be focused on central tendencies and could benefit from learning more about these areas, suggesting that this could be a special study, rather than a S&T topic. Luisa objected to being hung up over past assumptions and warned the group not to go down rabbit holes checking assumptions. Don clarified that this cursory glance is not enough to definitely state there are no hotspots. Jay and Bridgette supported continued sampling, with Melissa confirming for Luisa that PCB data will be collected this water year. In the future, margins sampling will include fixed targeted sites, with some repeat sites to evaluate trends, particularly at the nearfield at known and expected sources. Jay recommended revisiting this discussion about future margins sampling at the next TRC meeting. This will follow the release of a draft report on the margins work to the TRC in mid-January.

6. Discussion: S&T Monitoring Update

In this item, Melissa gave an update on the S&T monitoring occurring in the past year as well as in the upcoming year. Wet season sampling has included one storm in WY 2022, with one storm sampled in WY 2023. This wet season will continue until April. In the summer of 2023, a dry season effort will be conducted with the help of Applied Marine Science (AMS). Nearfield prey fish and sediment will be sampled in August 2023 with Bay sediment sampled from July through September of 2023 with the help of AMS. Marine mammals will be piloted in the upcoming year as a special study.

Elaborating on this year's wet weather water sampling, Melissa informed the TRC that the early November storm had been sampled but the first December storm had been passed on as the storm was considerably smaller and there was no potential to get paired ambient Bay samples on the USGS Peterson (due to the Peterson being in repair). Melissa inquired the group if, with another storm on the horizon, the RMP should collect near field samples only. Jay added some framing, that given the last few years, passing on storms is difficult, but thinking about design and what is lost if there

are no paired open Bay samples. Without open Bay, opportunities to investigate spatial comparisons are lost. Additionally, wet season data will not be able to be compared to the dry season. However, the near field samples allow for higher probability of detections of CECs in the Bay and are useful for developing time series of semi-quantifiable trends. Chris inquired if the data will primarily be analyzed on an event by event basis or assessed across events. Luisa suggested that opportunities are rare and if the Peterson is never fixed, then the RMP would regret passing on this opportunity. The group agreed that the data will be useful, even if not paired. Chris and Richard encouraged the group to consider how data will be assessed in the future, especially over time.

Dry season water sampling will be conducted in July and August of 2023, focusing on CECs along with some legacy contaminants at 22 stations (6 historic).

The nearfield prey fish and sediment pilot will focus on topsmelt and silverside and has been budgeted for 12 stations for fish and sediment. Areas with overlap with nearfield wet season water and sport fish sampling will be emphasized. There will be 10 stations for prey fish and 12 stations for sediment in those priority areas. There are two airport stations of interest for prey fish that are less well connected to overall S&T design; Melissa asked the Committee if they were worth sampling. Miguel explained there was a PFAS connection to the airports, as an ingredient of fire fighting foams used at airports. SFO is also close to a wastewater treatment plant with this site near the outfall. A concurrent analysis of PFAS and chlorinated paraffins in archived sediment, which are both of interest, will also benefit from sampling at this site. Chris expanded on his experience with the Oakland airport and noted the large impervious areas where firefighting foams could have discharged at multiple points. Luisa also mentioned the EPA's sampling of SFO in 2014 and recommended contacting the airport people to notify them of the sampling. If these sites are not sampled, the TRC recommended saving the money and only sampling at the original 10 sites. The TRC is on board with sampling here as it will fill data gaps, with Ian recommending telling the airport people that this is an attempt to monitor the effectiveness of regulation. However, budget constraints must be considered. Chris agreed to help connect Miguel with staff at the airports.

Melissa expanded on the 2023 margins sediment efforts centered on CECs and ancillary analytes in the Central, South, and Lower South Bay. 24 stations were budgeted, with areas weighted (9 CB, 9 SB, 6 LSB). There is interest in resampling near Chevron. Currently, there are no fixed stations established in the margins pilot, with staff suggesting two fixed stations per subembayment, two repeat stations (2nd and 4th event), and the rest as random stations. Don explained to Richard that targeted stations

could be linked to conceptual models. Further discussion on the margins, Bay Sediment, and Marine Mammals will occur at the March meeting.

7. Discussion: Interlaboratory Comparison Studies

Due to lack of time, the discussion on interlaboratory comparison studies was tabled to the March TRC meeting. Don is still developing the workplan and welcomes offline input during this process.

8. Discussion: Algae Bloom Follow-up

Following the break, Dave Senn of SFEI presented a high-level overview of the recent harmful algae bloom event that occurred in August. An unexpected and major monitoring effort was supported by a number of collaborators, including the USGS Biogeochemistry team, SFEI, and Baykeeper who were the first to alert other parties as well as the public. In late July, the organism *Heterosigma akashiwo* was first observed around the Alameda/Oakland deep channel. This organism has known toxicity to fish and was previously placed on the San Francisco Bay-Nutrient Management Strategy's (NMS) harmful algae "watch-list". In early August, the NMS was able to track the bloom via remote sensing to the Central Bay off of Alameda. By August 20th, the bloom had expanded through the South Bay with Chl-a levels varying from 50 to > 100 ug/L (20x typical values), with its center of mass in the South Bay. Previous blooms usually only lasted for a few days over a small portion of the Bay, but this event was much more long-lasting and pervasive. The bloom abruptly terminated over the course of three days from August 28-31, with levels declining to less than 5 ug/L. Fish mortality rates declined in the South, Central, and San Pablo Bays.

Heterosigma akashiwo was first found in Richardson Bay in 2002, using microscopy methods. The primary method from 1993 to 2013, microscopy was then retired in favor of imaging which has been in use since 2015. Discrepancies in observed concentrations between these time periods may be a function of methodology. Since the switch to this method, *Heterosigma akashiwo* has been detected at low levels in the Bay around 45% of the time. Dave noted that 12 out of 14 of priority HABs are flagellates. He then reviewed the monitoring and data exploration associated with this event. There were five water quality moorings, with three more sites added in 2022. Seven high speed mapping surveys were conducted along with four cruises with the USGS. Remote sensing was essential to informing numerical models.

Key questions to be addressed in the future are what factors led to this event, what is the likelihood of something similar occurring again in the near term (1-2 years), and

what longer-term management options would be effective at preventing or mitigating impacts if another event were to occur.

Opening the discussion, Luisa noted that although nutrients were a primary contributor to this event, messaging could also be centered on climate change. Luisa also mentioned that other reports cited that the largest fish kills were in the Central Bay in Lake Merritt. Dave noted that there were some discrepancies in the reports of fish kills, with no certain reports on the number of fish kills. The timing of the fish kills preceding DO drop-offs suggests a toxic component to the bloom. Tom Hall suggested monitoring enhancements such as imaging flow cytobots to detect harmful species more promptly. Richard took this opportunity to connect this discussion to the SC discussion on needing procedures for future event-based monitoring. He suggested Dave and other colleagues could get these discussion started by mapping out an event-based approach for future HABS, considering if there should be a surveillance program that could provide timely alerts. Dave agreed that near term recurrence risk would be assessed, with particular attention to the likelihood of low suspended sediment concentration (SSC) especially in dry vs. wet years. As for the suggested surveillance program, Dave questioned what could be done with the information. If the data is only useful for informing the public but not mitigating any effects, Dave questioned if this system would be worth the investment. Additionally, this raises the question of who is responsible for keeping up with HAB events in the future.

9. Discussion: Communications Update

For this agenda item, Jay gave a brief review of various RMP communication products. Jay thanked all involved for their contributions to the 2022 Pulse and announced that physical copies will be shipping soon. There were some issues with the early batches, but they should be resolved soon. Keeping up with the theme of the 50th Anniversary of the Clean Water Act, Jay contributed to an op-ed published the San Francisco Chronicle reflecting on the Act. This content has also been the basis of recent presentations to the San Mateo County CCAG and Contra Costa Clean Water Program Management Committee.

Jay then gave a quick summary of attendee feedback following the 2022 Annual Meeting. 85 people attended the event in person at the David Brower Center, joined by 245 online participants on Zoom. Survey results indicated favorable reception, with the hybrid format and individual speakers being lauded in particular. The Center has been reserved for October 12, 2023 for the upcoming Annual Meeting. Jay informed the group that the Estuary News will be sunsetting, with its final issue coming in March 2023. Ariel Rubissow Okamoto has expressed interest in a final RMP article related to the issue theme of restoration.

Jay concluded the item by reviewing the communications strategy developed by the Steering Committee in 2014. He noted that many communications elements have changed over the years, particularly noting how the Annual Meeting's new hybrid format has allowed for a wider audience. Richard and Luisa advocated for the distribution of a poll to TRC and SC members to prioritize elements and methods of communication. John suggested moving the Estuary News online or approximating it by sending updates to the RMP newsletter.

10. Information: Status of Deliverables and Action Items

Jay provided an update on the status of RMP deliverables and action items. Just completed items included the bisphenols in water and sediment report, PCB bioaccumulation thresholds in dredged sediment report, and non-targeted fire monitoring summary for managers (and journal article). The non-targeted analysis in sediment has been delayed as Lee Ferguson is no longer able to provide a report; Rebecca Sutton will take on that responsibility going forward. The selenium data report for 2019-2020 will be completed by the end of the year. Deliverables due before the next meeting include the South Bay settling velocity report, Benicia Bridge sediment flux report, regional watershed dynamic model for sediment, interim updated land-use layer, sediment conceptual model, floating percentile sediment guidelines, and PFAS in Bay water final report. Delayed deliverables include the bird egg effort as SGS AXYS sorts through import permit issues, San Leandro Bay PCB report (lab delays), and the stormwater monitoring approach as the groundwork project has been prioritized. The sunscreen in wastewater report has also been delayed as Diana Lin has assumed responsibility for that report from Stanford. It will be completed in spring 2023.

11. Discussion: Plan Agenda Items for Future Meetings

Jay previewed topics of interest to discuss at future meetings. Richard could preview the 303(d) decisions if data are available by March. The S&T update and workgroup strategy development updates will remain standing agenda items throughout the upcoming year. The margins final report and next steps for monitoring will also be featured at the next TRC meeting.

12. Discussion: Plus/Delta

Despite the meeting's lack of eggnog and holiday chocolates, the group especially commended the science presentations from SFEI. Luisa commented that she enjoyed the day's agenda and would be happy to continue many of the discussions had further online afterwards. The group expressed their appreciation for Melissa and the work she has done as RMP manager

Bay RMP Steering Committee Meeting

January 25, 2023

San Francisco Estuary Institute

Meeting Summary

Attendees

SC Member	Affiliation	Representing	Present
Eric Dunlavey	City of San Jose	POTW-Large	Y
Amanda Roa	Delta Diablo	POTW-Small	Y
Karin North**	City of Palo Alto	POTW-Medium	Y
Adam Olivieri	BAMSC / EOA, Inc.	Stormwater	Y
John Coleman	Bay Planning Coalition	Dredgers	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
- Jen Hunt, SFEI
- Rebecca Sutton, SFEI
- Diana Lin, SFEI
- Luisa Valiela, EPA
- Gerardo Martinez, SF Bay Regional WQCB
- Xavier Fernandez, SF Bay Regional WQCB

1. Introductions and Review Goals for the Meeting

Jay Davis began the meeting by introducing the new RMP manager, Amy Kleckner. Amy provided background on her previous work with the USGS and the Tiburon Center. Additionally, Gerardo Martinez of the SF Bay Regional Water Board will be taking over for Carrie Austin working on Hg TMDLs under Richard Looker. Following introductions from Steering Committee (SC) members, Tom Mumley briefly reviewed the meeting's agenda. Key agenda items include financial updates, project status updates, workgroup strategy updates, the success of the WQIF proposal, and approval of the 2023 Multi-Year Plan and 2023 budget.

2. Decision: Approve Meeting Summary from MYP Workshop and SC Meeting on November 2, 2022, and Confirm Dates for Future Meetings

Tom Mumley asked the group for any final comments on the previous meeting's summary. Receiving no comments, he continued to confirm the dates for upcoming meetings. The SC meeting was confirmed for April 26, 2023, and the proposed date of August 10, 2023, was tentatively approved. The Technical Review Committee (TRC) will meet on March 29, 2023 and June 20, 2023.

The RMP Annual Meeting has been confirmed for October 12, 2023. Melissa Foley previously confirmed the David Brower Center was available and that SFEI has a hold on that date.

Action Item:

- Send out calendar invitations for the August 10, 2023 SC meeting (Martin Trinh, February 1, 2023)

Decision:

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

3. Information: TRC Meeting Summary

Jay Davis provided an overview of the previous Technical Review Committee meeting. Don Yee of SFEI relayed the results of the Bay Margins survey. The North Bay work was recently completed and data analysis is currently underway. This completed the whole margins series with general findings of lower contaminant concentrations in the North Bay than other subembayments. Once normalized for TOC, margins concentrations were observed to be lower than open Bay concentrations. Internal

review has concluded and a draft report will be delivered to the SC and TRC in February.

Jay outlined the update to the Status & Trends (S&T) monitoring plans. The S&T update will be dynamic as the RMP pilots a new design that emphasizes wet weather sampling. Jay mentioned earlier storms that required TRC input on decisions dealing with sampling feasibility related to complications with equipment availability and data value. Jay reiterated that the RMP would be working closely with the TRC as the S&T design is implemented.

Dave Senn of the Nutrient Management Strategy (NMS) presented on the work done on the recent harmful algal bloom (HAB) and plans for additional analysis. Events such as this prompted the TRC to discuss the desire to develop protocols for event-based monitoring such as fires and floods. Richard Looker suggested that the algae bloom response could provide a foundation for developing these protocols. These discussions will take place following the completion of the MYP update.

4. Information: RMP Financial Update for 2022 Quarter 4

Jen Hunt provided the regular financial update for Q4 of 2022. For 2022, 62% of funds have been expended on the year with 94% of invoiced RMP fees collected. There is a surplus of \$42k that has been reduced from \$138k in the previous quarter after funding for various projects was approved by the SC. Many subtasks within Tasks 1-5 have been closed. For 2021, 80% of funds have been expended with 99% of invoiced fees collected. For 2020, 92% of the budget has been expended and 100% of fees have been collected. For years 2019 and 2018, both years have had 99% of the budget expended and all fees collected. Jen reported earnings of \$14.7k (1.51% rate) from the Q3 LAIF. Jen showed the summary of unbudgeted funds and noted the set-aside funds had been steady in recent quarters. There were no requests for encumbrances this quarter. Requests for funds will occur in later agenda items.

5. Information: Review the Status of Incomplete Projects from 2022 and Prior Years

Amy Kleckner of SFEI provided a review of the status of incomplete projects from 2018 to 2022. The final remaining project from 2018 is the non-targeted analysis of sediment that has been delayed in large part to instrument issues and shifting priorities of academic partners. This project has revised its deliverables and will require additional funding to meet its new projected deadline of December 2023. The proposed fact sheet/technical report and associated budget will be discussed further in a later agenda

item. The collection, analysis, and report on selenium in sturgeon muscle plugs originally planned for 2019 has been delayed as collections were not conducted in 2019, 2020, 2021, and 2022. Collections planned for March and April of 2023 should allow for completion by the end of summer 2023.

Incomplete projects from 2020 include a report on PCB monitoring with passive samplers in Steinberger Slough and Redwood Creek and a report on the North Bay margins sediment sampling. A draft manuscript has been shared with the PCB workgroup and is expected to be finalized later this spring after revisions in response to comments from Frank Gobas. The North Bay margins report has an internal draft under review at the moment and is expected to be completed by the end of January. The bathymetric change DEM and report has completed its data release and the report is under review by the USGS, with an estimated completion timeline of December 2023.

Incomplete projects from 2021 include the S&T design review report that is currently being revised after external comments were received. It is expected to be completed by this spring. The update to the DMMO database is in progress and an extension has been requested to allow time to discuss the DMMO Database priorities with the DMMO Database Project Team. SFEI has subcontracted with Exa to revise the data templates. This work is currently in progress. The DMMO Database Project Team met earlier to review the draft templates. SFEI is working on revising the upload scripts and modifying the database to accommodate the streamlined data template structure and is estimated to conclude by this summer. The toxicology thresholds for CECs report is currently in the data analysis phase and a draft will be provided in April for the Emerging Contaminants (EC) Workgroup. Field work has been completed for PCB remediation monitoring in San Leandro Bay, although a delay in lab reporting results has delayed completion of the report to July 2023. The floating percentile methodology draft report has been completed and will produce a final report by April 2023. Finally, for 2021, the integrated modeling and modeling strategy report is currently being written, with an internal draft estimated to be completed by late February.

For incomplete RMP projects from 2022, data are currently being analyzed for the CECs in urban stormwater. All data have been received and staff are actively working with UW partners to interpret data and prepare a manuscript. An update will be provided at the upcoming ECWG meeting. Model development for the in-Bay contaminant model is currently ongoing with an expected completion of 2027. The Watershed Dynamic Model is also in development with an estimated final timeline of Spring 2024. The CEC modeling exploration draft report is in progress, expecting to finalize by the end of this summer. Samples are being collected for the tire related contaminants project, although this is intended to be a multi-year project. For

ethoxylated surfactants, Lee Ferguson of Duke University has been updating analytical methods so samples are still being analyzed. The report for this effort is expected to be completed in 2024. Data are still being collected by the USGS for the sediment delivery to marshes in Central and North Bay report with an expected completion of 2024.

Incomplete SEP projects include the stormwater flow and sediment to the Bay report and data release for which samples are currently being collected. This effort is expected to be completed by winter of 2023. Data analysis has been completed for the North Bay selenium project, with a report in progress. Melissa Foley is still helping out with this effort and Luisa will pass this report on to Diane Fleck of the EPA. A draft report for the sunscreens in water effort is currently in review and is expected to be finalized in June. The reports for settling velocity of suspended sediment in south SF Bay and sediment flux at Benicia Bridge are complete and are currently being reviewed by the USGS. Samples have been collected for quaternary ammonium compound analysis, which is part of a larger NSF effort. SFEI has completed its input for the Bay land use update and is waiting for MTC to release the data. MTC has the final say on layer release that Tan needs for the watershed model; SFEI has a draft that he is using for now. A draft report is nearly complete for the sediment conceptual model, with an expected finalization in March. A report is currently in progress for the sediment delivery to a south SF Bay marsh effort. A draft report is underway for the Integrated watershed-Bay modeling strategy, with an expected completion by the end of this year. The Regional Watershed Spreadsheet Model Update has been put on hold due to the delay in obtaining land use information from the MTC.

The Committee expressed approval of the timelines presented.

6. Decision: Approve Final Multi Year Plan for 2023

Jay noted that a draft of the Multi-Year Plan (MYP) had been shared at the last MYP/SC meeting. Feedback from the SC and TRC has been received and incorporated, and the document is ready to be approved at this meeting. Deletions from the draft MYP include the deletion of deadlines for the Municipal Regional Stormwater Permit, Mercury and PCBs Watershed Permit for Municipal and Industrial Wastewater, and Nutrient Watershed Permit for Municipal Wastewater in 2022, 2022, and 2029, respectively. Each will keep their renewals of 2027, 2027, and 2024 respectively. Additionally, pH, temperature, salinity, and hardness have been removed from the ongoing Determination of Wastewater Permit Limits. Finally, the new state plan on effluent and receiving water toxicity is no longer a driver. Edits and additions to the Decisions, Policies and Actions include the implementations of the mercury and PCB TMDLS in 2027, 303(d) and 305(b) reports in 2023, 2026, and 2029, updates to the

CEC tiered risk-based framework, current use pesticide driver, copper driver, and tribal and subsistence use as a potential future driver. Tom thanked Luisa for suggesting many of these edits.

Decision:

- Eric Dunlavey motioned to approve the final Multi-Year Plan for 2023. Adam Olivieri seconded the motion. The motion was carried by all present members.

7. Information/Decision: Update on SEPs and MMP Funds

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. Rebecca Sutton brought up the new pilot for PFAS in harbor seals and porpoises that may be accomplished solely through alternate funding. SEPs that are currently underway include the \$119K temporal variability in sediment delivery to a North and a Central San Francisco Bay salt marsh that is expected to be final at the end of February and the new \$252K algae bloom data analysis. Regarding cleanup of the SEP list, Eric suggested the year proposed seems an obvious place to start for determining at a high level whether a project might have become "stale" if it has not been pursued for more than 5 years for example. It would not automatically boot a project off the SEP list but would signal the project is in need of closer re-consideration. The Committee reaffirmed the current SEP list.

Jay requested Committee decisions on whether to fund two proposals to use MMP funds. The first proposal was presented previously at the November meeting. The Analysis and Reporting of Non-Targeted Analysis (NTA) for Sediment Data could not be completed by the analytical lab (Lee Ferguson of Duke University) so work will be completed by SFEI. Rebecca Sutton presented four funding options. The first choice is completing a technical report only for \$22.8K with the addition of a fact sheet for a total of \$34.1K. An alternative is to produce a manuscript for \$26.3K, with the option to add a fact sheet for a total of \$37.6K. The upgrade from a technical report to a manuscript would be an additional \$3.5K with the addition of a fact sheet to either option an additional \$11.3K. Becky urged the Committee to think of their target audience for these products. The technical report would be most apt for Committee members and other parties already familiar with the subject. Meanwhile a manuscript would be more accessible to the broader scientific community. There is already much interest in the paint pigments from yellow road paint and if this information is disseminated correctly, it is likely an interested party could help develop future methods. Fact sheets are great concise ways to communicate to everyone. Becky reiterated it is up to the SC how much they are willing to spend and who they want to reach. Tom expressed his support

for any effort that helps show the efficacy of NTA and that would help the RMP become less dependent on academic labs. Amanda gave her vote of support for fact sheets, stating they were more likely to be read and understood by all parties, with Eric seconding this, noting fact sheets were easy for stakeholders to disseminate to peers. Maureen liked the idea of a fact sheet with the caveat that preliminary data from NTA are not used for regulatory purposes.

The second MMP proposal is a new one that has been developed by Becky Sutton with the approval of Melissa Foley. This PFAS in Archived Sport Fish Communications Supplement would supplement a 2022 special study of PFAS in archived sport fish and include the production of a manuscript and presentation at a conference. The Water Board provided funds to this project. Becky explained that the original proposal was a bare bones report. However, motivated by fish consumption as an important exposure pathway, comparable to drinking water, the RMP is hoping to reach larger audiences with these findings. With new analytical methods that encompassed 40 analytes (up from the previous availability of 13 analytes) and the ability to tease out temporal trends. Tom supported disseminating this data but expressed concern that some findings may be sensationalized. Karin agreed that peer-reviewed journals and conferences are a good way to increase RMP visibility. Adam inquired if a short communication would suffice as it is less expensive and labor intensive.

Jay will bring a suggested process for handling MMP proposals to the SC at the April meeting. There is no procedure at the moment.

Action Items:

- Include NMS projects in the SEP list (Jay Davis, February 28, 2023).
- Bring a suggested process for handling MMP proposals to the SC at the April meeting (Jay Davis, April 26, 2023)
- Jay coordinate with RMP staff to clean up the current SEP list, share it with Tom, and then bring it to the SC at the April meeting (Jay Davis, March 30, 2023)

Decisions:

- The Committee reaffirmed the current SEP list.
- Maureen Dunn motioned to approve the completion of a manuscript and fact sheet for the Analysis and Reporting of Non-targeted Analysis (NTA) Sediment Data. Karin North seconded the motion. The motion was carried by all present members.
- Adam Olivieri motioned to approve the PFAS in Archive Sport Fish Communications Supplement. Karin North seconded the motion. The motion was carried by all present members.

8. Decision: Funding Request for Sampling Additional Storms

Alicia Gilbreath of SFEI presented a request for additional funding to sample additional storms in the current water year. With WY2023 already including the second wettest 21-day period in SF in the last 180 years, the RMP has exhausted the funding allocated for this water year. Originally, the stormwater team requested \$10K of funds this year in addition to \$80K of unused funds rolled over from previous years for a total of \$90K to support Pollutants of Concern (Hg, PCBs, and suspended sediment) monitoring. The effort was intended to be a multi-year study to support loads modeling and trends tracking by sampling four to six storms at three flow-gauged locations over two to three years. The study sought to optimize sampling methods for a cost-effective monitoring program to address reductions in pollutant loads required by TMDLs, while comparing strategies for determining annual pollutant loads and determining the power and sample size needed to detect declining trends in concentrations. Earlier years determined that sampling a first flush, a large storm event, and 4-6 total samples per year achieved a decent middle ground of power.

Alicia showed a table that displayed which type of storm had been sampled for each site. Each site still needed a large storm with Guadalupe River and Walnut Creek missing their first flushes. With an extremely strong and able stormwater team this year, Alicia estimates the RMP would be able to handle up to six more events at a cost of \$12K per event (\$7K for sampling and labor with \$5K for laboratory analysis) for a total request of up to \$72K to be spent pending the occurrence of targeted storms. Unspent funds would be returned after the wet season. This work would support the developing Watershed Dynamic Model that addresses PCBs and Hg with Tan confirming this number of storms was sufficient to support the model. The TRC echoed strong support for this request. Alicia clarified that sampling more storms now could decrease the need to sample storms in later, potentially drier years. Maureen inquired as to why two sites were not able to be sampled at first flush, with Alicia explaining a variety of factors contributed to this especially as Guadalupe River and Walnut Creek are rain shadowed. Tom weighed in, clarifying that first flush is variable depending on the watershed and pollutant. \$90K has already been expended this first year of a three year effort. Committee members noted that the upcoming PCB TMDL should be a priority with first flush data for Guadalupe River deemed important. Tetra Tech monitored Hg in the Guadalupe watershed this year and has hit their quota so nobody is currently slated to monitor future events there. Eric stated that with the wet year the Bay Area is currently experiencing, SFEI should take advantage of this opportunity.

The Committee inquired about SFEI's ability to sample multiple sites in the same storm. Alicia clarified that this was the strongest stormwater team in recent years with

seven to eight potential leads. Maureen voiced support for this, along with Tom. Dialogue will continue at the Sources, Pathways, and Loadings Workgroup meeting. If six storms do not occur this water year, the funds would not automatically roll over to future years and be returned instead.

Decision:

- Karin North motioned to approve the allocation of \$72K (initially from the 3022 unallocated funds, then from SEP MMP funds if necessary) to support the POC study in the case of six additional storms this year. Maureen Dunn seconded the motion. The motion was carried by all present members.

9. Information: Progress on Workgroup Strategy Updates

Jay will send slides to the SC summarizing the progress workgroups are making in determining their strategy for the upcoming MYP redesign. The SC and TRC will be able to share feedback at their respective upcoming meetings.

10. Discussion: Factors to Consider in Activating or Deactivating Workgroups

Jay will send an email to the SC outlining the proposed procedures in determining the status of workgroups.

11. Discussion: Adding an Advisor to the Microplastic Workgroup

Diana Lin of the Microplastics Workgroup proposed the addition of an advisor to the Workgroup. The upcoming Microplastics Strategy aims to provide pivotal guidance for the RMP and other collaborators by revising management questions, prioritizing monitoring data needs, providing leadership in steering science and management discussions, and demonstrating RMP collaborative approach and philosophy for the upcoming State Plastics Monitoring Strategy. The Ocean Protection Council (OPC) just approved \$3.6 million to address plastics with \$750K reserved for a Statewide Plastics Monitoring Strategy and Plan. There is also a \$2.5 million proposal to implement a pilot monitoring program. At the moment, the Microplastics Workgroup only has one advisor, who has been influential in determining the new strategy recently approved by the SC. Diana proposed adding a new advisor, Dr. Barbara Beckingham, an associate professor at the College of Charleston, South Carolina. Her research on legacy and emerging contaminants, with an emphasis on microplastics and tirewear particles align with those of the RMP. Her engineering and chemistry background will provide valuable guidance on the Microplastics Strategy. The budget to add an advisor would be \$2.5K annually for

the honorarium as well as \$2K for travel expenses in the event that the RMP returns to in-person meetings. Tom and Luisa inquired as to the level of OPC and statewide support, with Tom expressing that he has become more supportive of microplastics work as statewide and third-party support has increased recently.

Decision:

- Eric Dunlavey motioned to approve the addition of Dr. Barbara Beckingham as an advisor to the RMP Microplastic workgroup. Amanda Roa seconded the motion. The motion was carried by all present members.

12. Discussion: Funding Additional Items as Part of Status and Trends

Continuing discussion from the MYP workshop, the SC discussed whether regular pathway monitoring should be included in S&T as an early indicator and if model maintenance tasks should be moved out of the special studies budget and into the S&T budget or other long-term pot of funding. Jay proposed a decision process that starts with special studies under ECWG (similar to other S&T matrices). High priority CECs that are identified become candidates for S&T pathway monitoring with proposed monitoring feeding into the S&T review process outlined at the MYP Workshop (starting with the S&T Review Subcommittee [S&TRS] then reviewing with advisors after which designs are finalized by the TRC and then approved by the SC). The S&T design will be reevaluated after three years but possibly sooner. Adam Olivieri reminded the group of the significant costs committed to the last redesign of the S&T this past year, but Jay stated that regular check-ins (as opposed to the first redesign in twenty years) would be significantly cheaper. Tom supported this structure.

Model maintenance does not fit neatly into the S&T, so Jay has proposed creating a new category for these necessary funds. Proposed titles include “long term elements, core elements, model maintenance”. Examples of model maintenance currently needed include the watershed dynamic model (\$50k/year starting in 2024) and the in-Bay fate model (\$150K/year starting in 2026). Jay brought forth a proposed process to address model maintenance. Proposed scopes would be peer reviewed by relevant workgroups with approved scopes reviewed by the TRC and then approved by the SC. However, funds would come from the new budget category. After work is performed, future scopes will be reviewed every two to three years by the relevant workgroup. Eric noted a concern about the turnover of both models and modelers as time goes on, questioning what would sustain nutrient work in the future. Tom explained that model maintenance would be essential. Adam suggested charging fees to what are open source models at the moment, with Eric seconding this. However, with the influx of EPA money, this will

have to be discussed further in the future. This could be housed under the EPA's new program office with an understanding that a certain amount of funds are needed to support O&M. This could be a place to look for base funding in the future. Tom also emphasized that the RMP's relationship with the USACE is as strong as ever. As the RMP enters workgroup season and the annual special studies funding process, the summer SC meeting will be a key checkpoint. The Committee gave a general consensus of allowing Jay to create the appropriate funding categories as necessary.

Action Items:

- Prepare a proposal for WDM maintenance for review by the SPLWG (Tan Zi, May 2023)

Decisions:

- Allow inclusion of pathway monitoring in S&T and model maintenance in a separate long-term funding category following the process outlined in this item.

13. Information: Successful Water Quality Improvement Fund Proposal – Destination Clean Bay (and Carquinez Strait Fish)

Jay reviewed the successful Water Quality Improvement Fund (WQIF) proposals the RMP recently submitted and had been involved in. Destination Clean Bay was a joint proposal by the RMP and NMS that aims to identify optimal paths to meeting water quality goals by using monitoring and modeling as decision support tools. Observations made through monitoring will inform the modeling decision support tools that will aid in the development of management plans. The EPA will provide matching funds of approximately \$3 million to support this effort. Task 1 will prioritize data collection for model development with \$980k provided by the EPA. The RMP will monitor local tributaries and Bay water for PCBs, CECs, and nutrients. The EPA funds will primarily be allocated for labor. The CEC stormwater task was allocated \$287k for labor and direct expenses, including \$30k for labs and \$67k for equipment such as the development of remote samplers. The NMS will focus on monitoring shoals and developing remote sensors to track suspended sediment and nutrients in the open Bay. Task 2 will focus on creating models to estimate PCB, CEC, and nutrients loadings from the watersheds of the SF Bay. With \$1.22 million in funds from the EPA, Task 3 will focus on creating a management toolbox to evaluate the fate and transport of sediment, PCBs, and CECs using models. Task 4 will be supported by \$780k of EPA funds to evaluate future scenarios and identify nutrient management alternatives and nature-based solutions. Jay clarified that this collective effort will occur over a timeline of four years.

Jay concluded the item by sharing a WQIF project that will complement the RMP. All Positives Possible (APP), a community-based organization that supports African-American community members based in Vallejo, will lead the Carquinez Strait Fish and Preservation Project. With a total budget of \$949k, the effort will involve RMP-style and citizen science fish collection and include a consumption survey. \$400k will be available to SFEI (and subcontractors) to lead fish monitoring efforts. The study will be fully comparable to RMP studies and will focus on mercury (Hg), PCBs, and PFAS. This effort is expected to be conducted in this upcoming year.

Karin expressed concerns about staffing and budget to support these efforts but Jay assured the Committee that SFEI will be proactive in hiring as well as finding staffing options.

14. Discussion: Communications

For this agenda item, Jay gave a brief review of various RMP communication products. Jay thanked all involved for their contributions to the 2022 Pulse. Keeping up with the theme of the 50th Anniversary of the Clean Water Act, Jay contributed to an op-ed published in the San Francisco Chronicle reflecting on the Act. Content from the Pulse has also been the basis of recent presentations to the San Mateo County CCAG and Contra Costa Clean Water Program Management Committee.

Jay then gave a quick summary of attendee feedback following the 2022 Annual Meeting. 85 people attended the event in person at the David Brower Center, joined by 245 online participants on Zoom. Survey results indicated favorable feedback, with the hybrid format and individual speakers being lauded in particular. The Center has been reserved for October 12, 2023 for the upcoming Annual Meeting. Jay informed the group that the Estuary News will be sunseting, with its final issue coming in March 2023. Ariel Rubissow Okamoto has expressed interest in a final RMP article related to the issue theme of restoration.

Jay concluded the item by reviewing the communications strategy developed by the Steering Committee in 2014. He noted that many communications elements have changed over the years, for example noting how the Annual Meeting's new hybrid format has allowed for a wider audience. A poll was sent out to survey SC and TRC members on which communications products to prioritize.

The SC unanimously agreed that the website should be a priority. Luisa suggested that SFEI investigate which pages are drawing the most web traffic, making sure to prioritize those pages in the redesign. Eric agrees that the website update will be integral to communications, with the website serving as a landing spot for other

resources and should be among the primary locations the RMP can direct interested parties to. With many efforts being conducted on environmental justice and fish data, Maureen questioned the group on the best way to get that data to the public. Luisa suggested one-page summaries as accessible material that could feature on the website. Tom supported Luisa's one-page summary and Jay's fact sheet suggestions, stating that investing the time to create concise, communicable products using simple language would benefit both the public as well as Committee members. Adam reiterated that key resources such as presentations, executive summaries, and abstracts should be easily accessible on the website.

15. Discussion: Status of RMP Deliverables and Action Items

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

16. Discussion: Plan Agenda Items for Future Meetings

Jay will work with Tom and Karin to plan agenda items for the upcoming SC meeting on April 26, 2023.

17. Discussion: Plus/Delta

The group commended Amy's work in contributing to her first SC meeting. The SC will target a return to a hybrid meeting format for upcoming meetings.

18. Adjourn

Bay RMP Action Items Stoplight Report_New

Bay RMP Action Items Scorecard Report

Key to Status Colors:

Green indicates greater than 90 days until the deliverable is due.

Yellow indicates a deliverable due within 90 days.

Red indicates a deliverable that is overdue.

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
SC Action Items from 11/02/2022	Highlight how long bills are outstanding in the future	Jennifer Hunt	01/25/23				🚩	🚩	●		11/02/22
SC Action Items from 01/25/23	Include NMS projects in the SEP list	Jay Davis	02/28/23				🚩	🚩	●		01/25/23
SC Action Items from 11/02/2022	Document the process for starting a new workgroup	Jay Davis	04/30/23	01/25/23	57	1	🚩	🚩	●	Will present initial outline at Jan SC meeting	11/02/22
SC Action Items from 01/25/23	Bring a suggested process for handling MMP proposals to the SC at the April meeting	Jay Davis	04/26/23				🚩	🚩	●		01/25/23
SC Action Items from 01/25/23	Jay coordinate with RMP staff to clean up the current SEP list, share it with Tom, and then bring it to the SC at the April meeting	Jay Davis	03/30/23				🚩	🚩	●		01/25/23
SC Action Items from 01/25/23	Prepare a proposal for WDM maintenance for review by the SPLWG	Tan Zi	05/01/23				🚩	🚩	●		01/25/23
TRC Action Items from 09/22/21	Gather small group for Bivalve design review	Jay Davis	12/31/23	01/31/22	416	3	🚩	🚩	●	Item is of low urgency. Will convene the small group this fall. Low urgency and Jay has limited capacity due to RMP management transition and WQIF	09/22/21
SC Action Items from 11/02/2022	Discuss event-based monitoring planning at the December 2023 TRC meeting and January 2024 meeting	Jay Davis	01/26/24				🚩	🚩	●		11/02/22

Bay RMP Deliverables Stoplight Report_new

Bay RMP Deliverables Scorecard Report

Key to Status colors:

Green indicates greater than 90 days until the deliverable is due.

Yellow indicates a deliverable is due within 90 days.

Red indicates a deliverable that is overdue.

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
	Bay RMP (2022)	Special Study: PCB In-Bay contaminant modeling (SLB)	Report section outlining conceptual site mode, data gaps, and selected modeling approach.	Jay Davis	05/01/22							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. A revised deliverable timeline will be developed under the guidance of the PCBWG at the spring meeting.
	Bay RMP (2023)	Special Study: Tire-related Contaminants in wet season Bay water	Task 1. Update sampling plan	Rebecca Sutton	09/30/22							
	Bay RMP (2022)	K, S&T Field Sampling Report & Support	Garage & Lab Manager	Martin Trinh	01/01/23							
Selenium Strategy	.	2017 Sturgeon Derby Monitoring	Data management	Adam Wong	02/28/23	09/30/17	2000			2		Data mgmt for this got lumped in with planned data mgmt for NB selenium monitoring work. No sturgeon plug monitoring in 2020 or 2023 delays data mgmt efforts another year Extended due date to 2023, assuming fishing efforts happen in November 2022. Will add a new deliverable for later years with funding
	Bay RMP (2020)	6. Status and Trends Monitoring	Margins report	Don Yee	03/22/23	12/31/21	447			4		SFEI workflow issues Internal draft reviewed, in revision draft to go to TRC
	Bay RMP (2022)	G. North Bay Selenium Monitoring	Data from labs	Michael Weaver								
	Bay RMP (2022)	F. North Bay Selenium Monitoring Data Management	Process and upload data	Adam Wong								NB Selenium still sampling
	Bay RMP (2023)	Special Study: PFAS in Archived Sport Fish	Task 3. PFAS analysis	Miguel Mendez	03/30/23							
	Bay RMP (2020)	3. QA and Data Services	QA Summary Report for 2020 S&T Activities	Don Yee	03/31/23	03/31/21	722			8		Sample data receiving mid May 2023, so adjusted date based on time for QA of data; SFEI workflow issues Some sediment ancillary data review not yet complete. prioritized margins report
	Bay RMP (2022)	J. Sample Archive	Short-term RMP sample archive purging	Martin Trinh	03/31/23	12/31/22	82					
	Bay RMP (2023)	5. Communications	Q1 RMP eUpdate	Jay Davis	03/31/23							
Sediment Strategy	RMP SEP	21. Sediment Dynamics Assessment and Uncertainty Analysis for San Francisco Bay	Interpretive Technical Report	Scott Dusterhoff	04/01/23	12/31/21	447			3		Final report completed following comments at the Sediment WG in May 2022. There have been unexpected delayed and staff turnover that has made this effort take longer than initially envisioned
	Bay RMP (2021)	Special Study: Toxicology Thresholds for Emerging Contaminants	Task 1. Synthesize and assess quality of available CEC toxicity thresholds; identify toxicity threshold knowledge gaps	Ezra Miller	04/01/23	11/01/20	872			1		This work is complimentary to and leveraging work done for a statewide CEC synthesis and prioritization project for the State and Region 2 Water Boards, which has been delayed due to covid and delays in other related projects. As a result, this project is now slated to be finished for (and results presented at) the 2022 ECWG meeting.
	Bay RMP (2021)	Special Study: Toxicology Thresholds for Emerging Contaminants	Task 2. Calculate thresholds to fill knowledge gaps, preliminary results presentation to the ECWG	Ezra Miller	04/01/23	04/01/21	721			1		This work is complimentary to and leveraging work done for a statewide CEC synthesis and prioritization project for the State and Region 2 Water Boards, which has been delayed due to covid and delays in other related projects. As a result, this project is now slated to be finished for (and results presented at) the 2022 ECWG meeting.
	Bay RMP (2021)	Special Study: Toxicology Thresholds for Emerging Contaminants	Task 3. Compare measured concentrations and updated thresholds to assess placement of Possible Concern contaminants within the tiered risk-based framework and identify priorities for future work	Ezra Miller	04/01/23	09/01/21	568			1		This work is complimentary to and leveraging work done for a statewide CEC synthesis and prioritization project for the State and Region 2 Water Boards, which has been delayed due to covid and delays in other related projects. As a result, this project is now slated to be finished for (and results presented at) the 2022 ECWG meeting.
	Bay RMP (2021)	Special Study: Toxicology Thresholds for Emerging Contaminants	Task 4. Presentation to the ECWG and "living document" made available to stakeholders	Ezra Miller	04/01/23	04/01/22	356			1		
	Bay RMP (2023)	1. Program Management	Update Deltak Program Plans for Open RMP Years	Jennifer Hunt	04/25/23							
	Bay RMP (2023)	1. Program Management	SC Meeting Stoplight Report	Martin Trinh	04/25/23							

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
	Bay RMP (2023)	2. Governance	April SC Meeting	Amy Kleckner	04/28/23							
	RMP SEP	15. North Bay Selenium Clam and Water Data Management and Reporting	Report	Jay Davis	04/30/23	12/01/21	477			2		At Jan '23 SC mtg, was conveyed that the report was in in progress and expected to be completed by March 2023. Lead author's (Melissa) workflow)
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	722			3		A critical partner, MTC, was directed away from the land-use data layer renewal by more pressing concerns. They are now fully engaged, have approved our approach, and provided our team access to the requisite resources. All of SFEI's tasks will be complete by the end of Q1 2022 but the final map from MTC may be further delayed due to rearrangement of priorities for staff at MTC. Still waiting for MTC.
	Bay RMP (2020)	41. Selenium in North Bay clams and water	Technical Report	Melissa Foley	04/30/23	06/30/21	631			5		Data and workflow issues No sturgeon results from 2020 and 2023; technical report likely delayed until 2022. Workflow issues Internal workflow issues
	Bay RMP (2021)	26. Integrated watershed modeling and monitoring implementation strategy	Final report	Lester McKee	04/30/23	09/01/21	568			3		Have spend the last 4 weeks laying out the vision (again) and getting internal agreement. Made a start on the writing in earnest yesterday. Plan to have a full internal wroking draft by mid April and a draft ready for external review by April 30th and then complete the project by June 30th. Main slow down has been staff capacity. It was on my plate since last August and only now do I have bandwidth. Only me and Alicia at the moment have time - Kelly and Tan are busy until 3rd week of April. I suggest this could end up not being true as well so its possible the rest of the internal work wont get done in April, pushing the external review to June and completion in July or August. So I propose October 31st as the new deadline to give us plenty of room. OK? "Still to complete first draft and have internal review / input but the team have learned alot and gelled around some core ideas over the past few years since this project was conceived so the result will be a much better planning document that if we had rushed at it 2 years ago. Then there will be committee review, before finalisation. So the timeline that seems practically doable would seem to be : 1. Internal draft completed by late Feb, then 2. RMP workgroup / committee review by mid-late March, then 3. Finalisation and publication early to mid April. "
	Bay RMP (2021)	Floating percentile method	Revise sediment guidelines using floating percentile methodology	Don Yee	04/30/23	06/30/21	631			6		RB & EPA too busy with WQIF proposals for draft review, expect response early/mid Nov, draft to sed group -Thanksgiving Delay getting comments from DMMO team on methods; internal delays due to workflow issues. Adam will have data analysis done by end of 2023.; Draft ready for SedWG meeting in May Received RB/EPA review comments Jan 2023, in revision draft out to SedWG/TRC for review
	Bay RMP (2023)	3. QA and Data Services	QAPP Update	Don Yee	04/30/23							
	Bay RMP (2023)	Special Study: Ethoxylated Surfactants in Water, Year 2	Task 1. Finalize sampling design and protocol with wastewater treatment facilities	Diana Lin	04/30/23							
	Bay RMP (2023)	Special Study: PFAS and NTA in Marine Mammals	Task 1. Establish study design & sample collection protocol	Rebecca Sutton	04/30/23	01/30/23	52			1		In conversation with Marine Mammals Center staff to finalize protocol.
	Bay RMP (2023)	Special Study: Tidal Area Remote Sampler	Development/selection/modification of remote sampler	Don Yee	04/30/23							
	Bay RMP (2023)	Special Study: Tidal Area Remote Sampler	Pilot testing during rainy season	Don Yee	04/30/23							
	Bay RMP (2021)	Special Study: CEC in Urban Stormwater Year 3	Task 4. Draft manuscripts and management summary	Rebecca Sutton	05/01/23							
	Bay RMP (2021)	21. Impact of Remediation Actions on San Leandro Bay Recovery from PCB Contamination	Task 4: Draft technical report	Diana Lin	05/01/23	10/31/22	143			1		Pushed back because due to delay in receiving laboratory results. PCB data from laboratory expected this week
	Bay RMP (2022)	Special Study: PCB In-Bay contaminant modeling (SLB)	Report section outlining hydrodynamic, sediment transport, and sediment bed model development, validation, and results.	Jay Davis	05/01/23							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. A revised deliverable timeline will be developed under the guidance of the PCBWG at the spring meeting.
		I. S&T Laboratory Intercomparison Studies	Complete Study Design	Don Yee	05/01/23							

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	Bay RMP (2021)	26. Integrated watershed modeling and monitoring implementation strategy	Complete integrated watershed modeling and monitoring implementation strategy	Lester McKee	05/15/23	09/01/21	568			4		<p>Have spend the last 4 weeks laying out the vision (again) and getting internal agreement. Made a start on the writing in earnest yesterday. Plan to have a full internal wroking draft by mid April and a draft ready for external review by April 30th and then complete the project by June 30th. Main slow down has been staff capacity. It was on my plate since last August and only now do I have bandwidth. Only me and Alicia at the moment have time - Kelly and Tan are busy until 3rd week of April. I suggest this could end up not being true as well so its possible the rest of the internal work wont get done in April, pushing the external review to June and completion in July or August. So I propose October 31st as the new deadline to give us plenty of room. OK?</p> <p>Still to complete first draft and have internal review / input but the team have learned a lot and gelled around some core ideas over the past few years since this project was conceived so the result will be a much better planning document that if we had rushed at it 2 years ago. The timeline that seems practically doable would seem to be :</p> <ol style="list-style-type: none"> 1. Internal draft completed by late Feb 2. RMP workgroup / committee review by mid-late March 3. Finalisation and publication early to mid April. <p>Yes - Lester has completed a full internal draft and is getting input from the resto of the internal team members presently. Jay is planning to review that input around Mar 24 and there maybe further team discussion in the week of Mar27-31 with the intent of getting it our for WG review late March at best. We typically provide 3 weeks for WG review so best case scenario is now late April for completion. So a further two week buffer on the best case takes the due date to May 15, 2023.</p>
	Bay RMP (2023)	Special Study: Nontargeted Data Mining	Task 1. Develop spreadsheet structure, assemble available contaminant identifications, ancillary and metadata	Rebecca Sutton	05/30/23							
	Bay RMP (2023)	Special Study: Tidal Area Remote Sampler	Update presentation at SPLWG on the results to date	Don Yee	05/30/23							
	Bay RMP (2021)	3. QA and Data Services	QA Summary Report for 2021 S&T Activities	Don Yee	05/31/23	09/30/22	174			3		<p>Bird eggs still outstanding</p> <p>To be completed with 2020 summary, lower priority than margins report awaiting bird eggs</p>
	Bay RMP (2021)	F. 2021 Bird Egg Data Mgmt	Processing and upload bird egg data	Adam Wong	05/31/23	10/31/22	143			1		<p>Samples still being processed. Guessed at an extension date</p> <p>Potentially? Eggs still being processed. Some subsamples will need to be shipped back to United States. 2 months is potentially unrealistic for analysis time for SGS AXYS as well.</p>
	Bay RMP (2021)	Special Study: Nutrients Light Attenuation and moored sensors	Task 2: Technical memo evaluating the potential utility of remote-sensed products for estimating surface turbidity and light attenuation.	Dave Senn	05/31/23	12/31/22	82			1		<p>Major shift in modeling-related work focus (including evaluation of RS-Kd) due to HAB event. Work thus far suggests that RS products have promising potential, but the in-depth analysis will happen over the next several months we pursued the sediment transport model trials first, and remote-sensing second).</p> <p>The recently-awarded EPA-WQIF project includes support for remote-sensing that (in addition other uses within the WQIF project) has the potential to greatly increase</p>
	Bay RMP (2021)	DMMO Database	DMMO Database Enhancements	Cristina Grosso	05/31/23	12/31/21	447			2		<p>Due to staffing shortages, we will need to request an extension for this Special Study. The Data Services team was busy with other RMP-related projects, and we did not hire a new DBA/DBD to replace Shira until November.</p> <p>Extension requested to allow time to discuss DMMO Database priorities with the DMMO Database Project Team. We have subcontracted with Exa to revise the data templates. SFEI is working on revising the upload scripts and modifying the database to accommodate the streamlined data template structure.</p>
	Bay RMP (2022)	Special Study: DMMO Database Enhancements	Make testing results accessible on the DMMO website	Cristina Grosso	05/31/23	12/31/22	82					
	Bay RMP (2023)	2. Governance	ECWG Meeting	Rebecca Sutton	05/31/23							
	Bay RMP (2023)	2. Governance	Microplastics WG Meeting	Diana Lin	05/31/23							
	Bay RMP (2023)	2. Governance	SPLWG Meeting	Lester McKee	05/31/23							
	Bay RMP (2023)	2. Governance	Sediment WG Meeting	Scott Dusterhoff	05/31/23							
	Bay RMP (2023)	G. Nearfield and margins sediment & prey fish	Complete Sampling and Analysis Plan	Miguel Mendez	06/01/23							
	Bay RMP (2023)	G. Nearfield and margins sediment & prey fish	Complete contracts	Miguel Mendez	06/01/23							
		I. S&T Laboratory Intercomparison Studies	Complete contracts	Beth Ebner	06/01/23							
	Bay RMP (2023)	2. Governance	PCB WG Meeting	Jay Davis	06/03/23							
Emerging Contaminants	RMP SEP	16. Sunscreen in Wastewater	Technical Report	Diana Lin	06/15/23	10/31/21	508			4		<p>SFEI will be leading report instead of Stanford U because Bill Mitch's student has graduated. Sample collection was delayed one year due to Covid pandemic. Samples will be collected summer 2023.</p> <p>Draft report undergoing review process.</p>
	Bay RMP (2023)	2. Governance	June TRC Meeting	Amy Kleckner	06/23/23							
Sources Pathways and Loadings	RMP SEP	14. Quantifying Stormwater Flow and Sediment Flux to the Bay	Technical Report	Alicia Gilbreath	06/30/23	12/01/21	477			3		<p>Added Kyle Stark (RL) to assist the project to completion.COVID and dry years so far - not much data have been collected. Water Board staff and confirmed an extension is possible and we have informed contractors. I suggest we push this to December 31st, 2022. I think it doing to be hard to get USGS to work up the data in the spring - thats the time they spend setting up new monitoring stations.</p>

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Sources Pathways and Loadings	RMP SEP	14. Quantifying Stormwater Flow and Sediment Flux to the Bay	Summary Factsheet	Alicia Gilbreath	06/30/23	12/01/21	477	■	■	3	●	Added Kyle Stark (RL) to assist the project to completion.COVID and dry years so far - not much data have been collected. Water Board staff and confirmed an extension is possible and we have informed contractors. I suggest we push this to December 31st, 2022. I think it doing to be hard to get USGS to work up the data in the spring - thats the time they spend setting up new monitoring stations.
Sources Pathways and Loadings	RMP SEP	14. Quantifying Stormwater Flow and Sediment Flux to the Bay	Post data to CD3	Alicia Gilbreath	06/30/23	12/01/21	477	■	■	3	●	Added Kyle Stark (RL) to assist the project to completion.COVID and dry years so far - not much data have been collected. Water Board staff and confirmed an extension is possible and we have informed contractors. I suggest we push this to December 31st, 2022. I think it doing to be hard to get USGS to work up the data in the spring - thats the time they spend setting up new monitoring stations.
	Bay RMP (2021)	30. Small Tributaries Loading POC Watershed Reconnaissance Monitoring	Laboratory analysis, QA & Data Management	Adam Wong	06/30/23	09/01/21	568	■	■	3	●	Final Samples only sent out end of August. Still don't have data. Haven't received data back from the lab, most notably from SGS AXYS as we haven't finalized the contract with them. Discussions still ongoing about wrapping analysis or WY21 samples in with WY22. Final samples still not processed by SGS AXYS Still do not have final analyses from SGS AXYS. Plan is to wrap in with WY 21, 22, 23.
	Bay RMP (2022)	Special Study: STLS WY21 POC Recon Monitoring	Final report	Alicia Gilbreath	06/30/23			■	■		●	
	Bay RMP (2023)	5. Communications	Q2 RMP eUpdate	Jay Davis	06/30/23			■	■		●	
	Bay RMP (2023)	5. Communications	Updates to RMP website - Q2	Martin Trinh	06/30/23			■	■		●	
	Bay RMP (2023)	Special Study: Suspended Sediment in LSB-Year 2	Publically available wave height and period data from one station in South Bay	Melissa Foley	06/30/23			■	■		●	
	Bay RMP (2021)	Special Study: CEC in Urban Stormwater Year 3	Task 5. Final manuscripts and management summary	Rebecca Sutton	07/01/23			■	■		●	
	Bay RMP (2021)	21. Impact of Remediation Actions on San Leandro Bay Recovery from PCB Contamination	Task 5: Final technical report	Diana Lin	07/01/23	12/31/22	82	■	■	1	●	
	Bay RMP (2023)	C. 2023 Dry season Bay Water Cruise	Complete contracts	Amy Kleckner	07/01/23			■	■		●	
	Bay RMP (2023)	E. 2023 Wet season water sampling	Complete contracts	Amy Kleckner	07/01/23			■	■		●	
	Bay RMP (2023)	L. Ambient Bay sediment	Complete contracts	Beth Ebner	07/01/23			■	■		●	
	Bay RMP (2023)	2. Governance	July SC Meeting	Amy Kleckner	07/23/23			■	■		●	
	Bay RMP (2023)	1. Program Management	Q2 RMP Financial Report	Jennifer Hunt	07/25/23			■	■		●	
	Bay RMP (2023)	1. Program Management	Update Deltak Program Plans for Open RMP Years	Jennifer Hunt	07/25/23			■	■		●	
	Bay RMP (2023)	1. Program Management	SC Meeting Stoplight Report	Martin Trinh	07/25/23			■	■		●	
	Bay RMP (2023)	4. Annual Reporting	2023 Annual Meeting Agenda	Jay Davis	07/30/23			■	■		●	
	Bay RMP (2023)	Special Study: PFAS in Archived Sport Fish	Task 4. Data QA review	Miguel Mendez	07/30/23			■	■		●	
Selenium Strategy	Bay RMP (2019)	Selenium in Muscle Plugs	Collect and analyze muscle plug samples	Melissa Foley	07/31/23	03/31/20	1087	■	■	2	●	Muscle plug samples will be collected during CDFW cruises between August and October 2019. Laboratory analysis will follow. Data management and reporting was not funded. https://www.sfei.org/sites/default/files/events/SeWG%20-%2003%20-%20Sturgeon%20Muscle%20Plug.pdf Not enough tissue was collected by CDFW in 2019 so this will be delayed until 2020. No ability for DFW to collect samples for the RMP in 2020 and 2023 so this will be delayed again until 2022. Sampling will occur in March & April 2023.
	Bay RMP (2023)	C. 2023 Dry season Bay Water Cruise	Complete Sampling and Analysis Plan	Amy Kleckner	08/15/23			■	■		●	First draft out by 3/24/23
	Bay RMP (2023)	L. Ambient Bay sediment	Complete Sampling and Analysis Plan	Don Yee	08/15/23			■	■		●	
	Bay RMP (2023)	Special Study: Ethoxylated Surfactants in Water, Year 2	Task 2. Complete wastewater effluent sample collection	Diana Lin	08/30/23			■	■		●	
	Bay RMP (2023)	Special Study: STLS Regional Model Development	Model data collation and preparation	tanz@sfei.org	08/30/23			■	■		●	
	Bay RMP (2022)	Special Study: Ethoxylated surfactants in ambient water, margin sediment, wastewater. Part 2	Final Report	Diana Lin	08/31/23			■	■		●	
	Bay RMP (2023)	G. Nearfield and margins sediment & prey fish	Collect samples	Miguel Mendez	08/31/23			■	■		●	
	Bay RMP (2022)	Special Study: Stormwater monitoring strategy for CEC's	Final strategy document	Kelly Moran	09/01/23			■	■		●	
	Bay RMP (2022)	Special Study: CEC modeling exploration	Report	tanz@sfei.org	09/01/23	12/31/22	82	■	■		●	
	Bay RMP (2023)	E. 2023 Wet season water sampling	Complete Sampling and Analysis Plan	Amy Kleckner	09/01/23			■	■		●	

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	Bay RMP (2023)	2. Governance	September TRC Meeting	Amy Kleckner	09/22/23							
	Bay RMP (2023)	C. 2023 Dry season Bay Water Cruise	Collect samples	Amy Kleckner	09/27/23							
	Bay RMP (2023)	L. Ambient Bay sediment	Collect samples	Don Yee	09/27/23							
	Bay RMP (2021)	6. Selenium in Clams	Task 4. Draft Report	Amy Kleckner	09/30/23	12/31/22	82			1		delayed to allow for 2022 collections before working on the report
	Bay RMP (2021)	3. QA and Data Services	QA Summary Report for 2022 S&T Activities	Don Yee	09/30/23							
	Bay RMP (2022)	Special Study: CEC in Urban Stormwater Year 4	Final manuscripts and management summary	Rebecca Sutton	09/30/23							
	Bay RMP (2022)	Special Study: Tire-related contaminants in Bay water (wet season)	Final stormwater manuscript	Rebecca Sutton	09/30/23							
	Bay RMP (2023)	4. Annual Reporting	RMP Update	Jay Davis	09/30/23							
	Bay RMP (2023)	5. Communications	Updates to RMP website - Q3	Martin Trinh	09/30/23							
	Bay RMP (2023)	4. Annual Reporting	Annual Meeting	Amy Kleckner	10/14/23							
	Bay RMP (2023)	2. Governance	October SC Meeting	Amy Kleckner	10/20/23							
	Bay RMP (2023)	1. Program Management	2024 Multi-Year Plan	Amy Kleckner	10/23/23							
	Bay RMP (2023)	1. Program Management	2024 Detailed Workplan and Budget	Amy Kleckner	10/23/23							
	Bay RMP (2023)	1. Program Management	Q3 RMP Financial Report	Jennifer Hunt	10/24/23							
	Bay RMP (2023)	1. Program Management	Update Deltek Program Plans for Open RMP Years	Jennifer Hunt	10/24/23							
	Bay RMP (2023)	1. Program Management	SC Meeting Stoplight Report	Martin Trinh	10/24/23							
	Bay RMP (2023)	Special Study: STLS Regional Model Development	Control measures impact estimation	tanz@sfei.org	10/30/23							
	RMP SEP	29. PFAS in Archived Sport Fish Communications Supplement	Manuscript	Miguel Mendez	10/31/23							Poster presentation at SETAC 4/30-5/4
	Bay RMP (2023)	5. Communications	Q3 RMP eUpdate	Jay Davis	10/31/23							
	Bay RMP (2023)	5. Communications	RMP Update to BACWA	Amy Kleckner	10/31/23							
	Bay RMP (2023)	5. Communications	RMP Update to BAMS (Bay Area Municipal Stormwater)	Amy Kleckner	10/31/23							
	Bay RMP (2023)	5. Communications	RMP Update to LTMS	Amy Kleckner	10/31/23							
	Bay RMP (2023)	5. Communications	RMP Update to BPC	Amy Kleckner	10/31/23							
	Bay RMP (2023)	5. Communications	RMP Update to WSPA	Amy Kleckner	10/31/23							
	Bay RMP (2023)	5. Communications	RMP Update at RB2 Meeting	Amy Kleckner	10/31/23							
	RMP SEP	30. Analysis and Reporting of NTA Sediment Data	Manuscript	Ezra Miller	11/30/23							Continuation of 3018-036.
	Bay RMP (2023)	Special Study: CEC stormwater monitoring strategy	Task 1. Development of draft stormwater CECs monitoring strategy	Rebecca Sutton	11/30/23	03/30/23	-7			1		The draft strategy has been delayed due to delays in the interlinked stormwater groundwork project.
	Bay RMP (2023)	2. Governance	December TRC Meeting	Amy Kleckner	12/09/23							
	Bay RMP (2023)	Special Study: PFAS and NTA in Marine Mammals	Task 2. Sample collection	Rebecca Sutton	12/30/23							
	Bay RMP (2023)	Special Study: PFAS and NTA in Marine Mammals	Task 3. Target PFAS analysis	Rebecca Sutton	12/30/23							
	Bay RMP (2023)	Special Study: PFAS and NTA in Marine Mammals	Task 4. Nontargeted analysis	Rebecca Sutton	12/30/23							
	Bay RMP (2023)	Special Study: PFAS in Archived Sport Fish	Task 6. Final report	Miguel Mendez	12/30/23							
	Bay RMP (2023)	Special Study: STLS Regional Model Development	Final modeling report and data sharing portal	tanz@sfei.org	12/30/23							
	Bay RMP (2023)	Special Study: Tidal Area Remote Sampler	Data upload to CEDEN	Don Yee	12/30/23							Unclear if we are actually expecting site data (on contaminants?) uploadable to CEDEN
	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	12/30/23							Jessie Lacy and Karen Thorne (USGS) conducting this work
	Bay RMP (2023)	Special Study: Sediment Delivery to Marshes in C&N Bays: project expansion	Data release: deposition, accretion, and vegetation characteristics (WEREC)	Melissa Foley	12/30/23							

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Emerging Contaminants	RMP SEP	19. Quaternary Ammonium Compounds (QACs) in Bay Area Wastewater	QA/QC and data management	Diana Lin	12/31/23	12/31/21				2		Bill Arnold received an NSF grant that allows for two additional years of monitoring (pro bono). Preliminary data for samples collected to date will be presented at the 2022 ECWG meeting., Bill Arnold will present preliminary data at ECWG
	RMP SEP	23. Integrated Watershed Bay Modeling Strategy and Pilot Implementation	Report	tanz@sfei.org	12/31/23							Jan. 2023 - Draft report in progress
	RMP SEP	24. Regional Watershed Spreadsheet Model	Updated model	Alicia Gilbreath	12/31/23	06/05/21	656					Jan. 2023 - Waiting for land use update
	RMP SEP	30. Analysis and Reporting of NTA Sediment Data	Fact Sheet	Ezra Miller	12/31/23							
PCB Strategy	Bay RMP (2019)	Priority Margin Unit Stormwater PCB Monitoring	Stormwater sample collection at Emeryville Crescent sites in WY19 and WY20	Alicia Gilbreath	12/31/23	04/30/20	1057			2		Extended through WY2023 Analysis of samples will be covered by SEP funds (3300-011-A). Results will be reported in the WY20 STLS POC Reconnaissance Monitoring Report (due 12/31/20). https://www.sfei.org/sites/default/files/events/PCBWG%20-%202002%20-%20Priority%20Margin%20Unit%20Stormwater%20PCB.pdf Due to low rainfall, sampling was not completed in WY20 and so the study shall be extended into WY21. This project got an extension because of the low rainfall seasons during climatic years 2020 and 2023.
	Bay RMP (2020)	21. Priority Margin Unit Stormwater PCB Monitoring	Stormwater sample collection at Emeryville Crescent sites in WY19 and WY20	Alicia Gilbreath	12/31/23	04/30/21	692			2		This project got an extension because of the low rainfall seasons during climatic years 2020 and 2023. Funding rolled forward from previous years so sampling can happen this wet season. If wet season does not include a storm at a low tide, then we will need to roll forward another year if possible.
	Bay RMP (2021)	6. Selenium in Clams	Task 5. Final Report	Amy Kleckner	12/31/23	02/28/23	23			1		delayed to allow for 2022 collections before working on the report
	Bay RMP (2022)	Special Study: STLS Regional Model Development	Final modeling report and data sharing portal	tanz@sfei.org	12/31/23							
	Bay RMP (2023)	1. Program Management	RMP Participation Letters for BACWA and WSPA Agencies	Amy Kleckner	12/31/23							
	Bay RMP (2023)	1. Program Management	Honoraria Payments to Science Advisors	Amy Kleckner	12/31/23							
	Bay RMP (2023)	3. QA and Data Services	Online Data Access CD3	Cristina Grosso	12/31/23							
	Bay RMP (2023)	3. QA and Data Services	Database Maintenance	Adam Wong	12/31/23							
	Bay RMP (2023)	3. QA and Data Services	Updates to SOPs and Templates	Adam Wong	12/31/23							
	Bay RMP (2023)	3. QA and Data Services	DMMO Database Support	Cristina Grosso	12/31/23							
	Bay RMP (2023)	5. Communications	Q4 RMP eUpdate	Jay Davis	12/31/23							
	Bay RMP (2023)	5. Communications	Updates to RMP website - Q4	Martin Trinh	12/31/23							
	Bay RMP (2023)	A. USGS Sacramento Support	Continuous suspended sediment monitoring at 5 stations	Amy Kleckner	12/31/23							
	Bay RMP (2023)	B. USGS Menlo Park Support-Contract	Monthly measurements of basic water quality at 38 stations	Amy Kleckner	12/31/23							
	Bay RMP (2023)	J. Sample Archive	(1) Update documentation and template (2) General upkeep and maintenance for tools and data (3) Set up User Accounts and Help Desk (4) Manage internal and external data requests	michaelw@sfei.org	12/31/23							
	Bay RMP (2023)	J. Sample Archive	Short-term RMP sample archive purging	Martin Trinh	12/31/23							
	Bay RMP (2023)	Special Study: Ground work CEC Stormwater	Final Brief Report	Alicia Gilbreath	12/31/23							
	Bay RMP (2023)	K. S&T Field Sampling Report & Support	Garage & lab manager	Martin Trinh	01/01/24							
	Bay RMP (2023)	Special Study: Ethoxylated Surfactants in Water, Year 2	Task 3. Complete laboratory analysis of samples	Diana Lin	01/30/24							
	Bay RMP (2023)	Special Study: Nutrients moored sensors	Sensors deployed, downloaded, maintained, and calibrated	Dave Senn	01/30/24							
	Bay RMP (2023)	Special Study: Tidal Area Remote Sampler	Report (draft and final)	Don Yee	01/30/24							
	Bay RMP (2023)	1. Program Management	Q4 RMP Financial Report	Jennifer Hunt	01/31/24							
	Bay RMP (2023)	D. 2023 Dry season Bay Water Cruise Data Mgmt	Process and upload dry season Bay water cruise data	Adam Wong	01/31/24							
	Bay RMP (2023)	H. Nearfield and margins sediment & prey fish data mgmt.	Process and upload sampling data	Adam Wong	02/28/24							
	Bay RMP (2023)	M. Ambient Bay sediment data mgmt.	Process and upload sampling data	Adam Wong	02/28/24							

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	Bay RMP (2023)	Special Study: CEC stormwater monitoring strategy	Task 4. Final strategy document	Rebecca Sutton	02/28/24	09/01/23	-162			1		The final strategy has been delayed due to delays in the interlinked stormwater groundwork project.
		I. S&T Laboratory Intercomparison Studies	Presentation to the TRC on findings from IC studies.	Don Yee	03/01/24							
	Bay RMP (2023)	Special Study: Tire-related Contaminants in wet season Bay water	Task 2. Field sampling – wet season Bay water samples	Rebecca Sutton	03/30/24							
	Bay RMP (2023)	Special Study: Suspended Sediment in LSB-Year 2	Publically available 15-minute SSC time series from eight stations in South Bay and Lower South Bay	Melissa Foley	03/30/24							
	Bay RMP (2023)	Special Study: Ethoxylated Surfactants in Water, Year 2	Task 4. QA/QC and data management	Diana Lin	04/30/24							
	Bay RMP (2023)	Special Study: Nontargeted Data Mining	Task 3. Presentation to ECWG on additional targets	Rebecca Sutton	04/30/24							
	Bay RMP (2023)	Special Study: Suspended Sediment in LSB-Year 2	Report detailing data collection, turbidity-to-SSC calibrations, and limited, descriptive interpretation	Melissa Foley	04/30/24							
	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	04/30/24							Jessie Lacy and Karen Thorne (USGS) conducting this work
	Bay RMP (2023)	Special Study: Sediment Delivery to Marshes in C&N Bays: project expansion	Final Presentation to RMP Sediment Workgroup	Melissa Foley	04/30/24							Jessie Lacy and Karen Thorne (USGS) conducting this work
	Bay RMP (2022)	Special Study: PCB In-Bay contaminant modeling (SLB)	Final report	Jay Davis	05/01/24							
	Bay RMP (2023)	E. 2023 Wet season water sampling	Collect samples	Amy Kleckner	05/01/24							
Emerging Contaminants	RMP SEP	19. Quaternary Ammonium Compounds (QACs) in Bay Area Wastewater	Present data at ECWG	Diana Lin	05/31/24	05/31/22				1		Additional funding from NSF increased the scope of the project. The ECWG agreed to the suggested revised due dates for the deliverables so they can include the additional data.
	Bay RMP (2023)	Special Study: Nontargeted Data Mining	Task 4. Spreadsheet of compiled data mining results	Rebecca Sutton	07/30/24							
	Bay RMP (2022)	Special Study: PCBs in sediment and fish SS/RC	Technical Report	Jay Davis	08/01/24							
	Bay RMP (2023)	Special Study: Tire-related Contaminants in wet season Bay water	Task 3. Lab analysis	Rebecca Sutton	08/30/24							
	Bay RMP (2023)	Special Study: PCBs in sediment and fish SS/RC (Year 2)	Final Technical Report	Jay Davis	08/30/24							
Emerging Contaminants	RMP SEP	19. Quaternary Ammonium Compounds (QACs) in Bay Area Wastewater	Technical Memo	Diana Lin	08/31/24	08/31/22				2		Additional funding from NSF increased the scope of the project. The ECWG agreed to the suggested revised due dates for the deliverables so they can include the additional data.
	Bay RMP (2022)	Special Study: Sediment delivery to marshes in C&N Bay	Report	Melissa Foley	09/01/24	12/01/23	-253					Jessie Lacy and Karen Thorne (USGS) doing the work
	Bay RMP (2023)	3. QA and Data Services	QA Summary Report for 2023 S&T Activities	Don Yee	09/30/24							
	Bay RMP (2023)	Special Study: STLS WY21 POC Recon Monitoring	Laboratory analysis, QA, & Data Management	Alicia Gilbreath	09/30/24							
	Bay RMP (2023)	Special Study: Tire-related Contaminants in wet season Bay water	Task 4. QA/QC, data management, and data upload	Rebecca Sutton	10/30/24							
	Bay RMP (2023)	F. 2023 Wet season water data mgmt.	Process and upload wet season water sampling data	Adam Wong	10/31/24							
	Bay RMP (2023)	Special Study: Ethoxylated Surfactants in Water, Year 2	Task 6. Final report	Diana Lin	11/30/24							
	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							
	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
	Bay RMP (2023)	Special Study: Sediment Flux Richmond Bridge	Data release	Scott Dusterhoff	12/31/24	05/11/23	-49			1		Work not moving forward in 2023 as planned
	Bay RMP (2023)	Special Study: STLS WY21 POC Recon Monitoring	Interpretation & reporting for BAMSC	Alicia Gilbreath	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
	RMP SEP	26. PFAS & Chlorinated Paraffins in Bay Sediment	?	Rebecca Sutton	04/04/25							
	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							
	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							
	Bay RMP (2023)	Special Study: PFAS and NTA in Marine Mammals	Task 5. Draft manuscript(s), S&T study design recommendations (technical memo), presentation to TRC.	Rebecca Sutton	06/30/25							
	Bay RMP (2023)	Special Study: STLS WY21 POC Recon Monitoring	Final report	Alicia Gilbreath	06/30/25							
	RMP SEP	28. SF Bay Sediment Transport and Fate Modeling	Technical Report	Dave Senn	09/05/25							
	Bay RMP (2023)	Special Study: Tire-related Contaminants in wet season Bay water	Task 7. Final short report	Rebecca Sutton	09/30/25							
	Bay RMP (2023)	Special Study: PFAS and NTA in Marine Mammals	Task 6. Final manuscript(s)	Rebecca Sutton	09/30/25							