



RMP Steering Committee Meeting

April 30, 2019
9:30 AM – 2:45 PM

REMOTE ACCESS

Audio by Phone: (415) 594-5500, Access Code 943-326-397#

Slides: <https://join.me/sfei-conf-cw1>

AGENDA

1.	Introductions and Review Agenda	9:30 Tom Mumley
2.	<p>Decision: Approve Meeting Summary from January 23, 2019, and confirm/set dates for future meetings.</p> <p>Scheduled meetings: (4th Wednesdays): SC: 7/24/19 MYP & SC: 10/23/19 SC: 1/22/20</p> <p>Materials: SC Meeting Summary, pages 5-13</p> <p>Desired outcomes:</p> <ul style="list-style-type: none"> ● Approve meeting summary ● Confirm future meeting dates 	9:40 Tom Mumley, Group
3.	<p>Information: TRC Meeting Summary</p> <p>Topics discussed at the most recent TRC meeting included:</p> <ul style="list-style-type: none"> ● Short-term archive purge done in February; ~\$900/month cost savings ● Data Visualization Challenge next steps ● Ocean acidification in the Bay ● USGS cruise next steps <p>Materials: TRC Meeting Summary, pages 14-23</p>	9:50 Melissa Foley

	Desired Outcome: Informed committee	
4.	<p>Information: Workgroup dates & special studies budget</p> <p>All six workgroups are scheduled:</p> <ul style="list-style-type: none"> ● March 19 (morning only) - Sediment #1 ● April 11 & 12 - Emerging Contaminants ● April 26 - Selenium ● May 7 - Sediment #2 ● May 15 - PCBs ● May 22 - Microplastics ● May 30 - Sources, Pathways & Loadings <p>Review budget for 2020 Special Studies.</p> <p>Materials: Page 24</p> <ul style="list-style-type: none"> ● Budget figure - available versus proposed costs <p>Desired outcomes: Informed committee</p>	10:05 Melissa Foley
5.	<p>Decision: Approve 2019 Multi-Year Plan</p> <p>Minor changes were requested by the SC at the January meeting and have been incorporated. Revisions to the Plan will be highlighted.</p> <p>Materials:</p> <ul style="list-style-type: none"> ● Draft Final Multi-Year Plan - linked here <p>Desired outcomes:</p> <ul style="list-style-type: none"> ● Approve Multi-Year Plan 	10:20 Melissa Foley
6.	<p>Information: RMP Financial Update for 2019 Quarter 1</p> <p>The RMP Financial Update summarizes the balance of budgeted and reserved RMP funds as well as its cash position. The presentation will also review incomplete projects from the previous year and revised schedules to complete these projects.</p> <p>Materials: Financial Update Memo, pages 25-52</p> <p>Desired outcome:</p> <ul style="list-style-type: none"> ● Approve transfer of LAIF interest to reserve funds ● Approve going forward with larger scope of sportfish S&T sampling 	10:35 Jen Hunt

7.	<p>Decision: Update on 2019 Pulse Outline and Speakers for Annual Meeting</p> <p>The outlines for each pollutant pathway included in the 2019 Pulse are being developed further with author teams. Jay will give an update on progress.</p> <p>Brainstorm ideas for speakers at the 2019 RMP Annual Meeting (October 10th).</p> <p>Materials:</p> <ul style="list-style-type: none"> ● Pulse outline, pages 53-58 ● Annual Meeting program from 2018, pages 59-60 <p>Desired outcomes:</p> <ul style="list-style-type: none"> ● List of potential speakers for 2019 Annual Meeting 	11:10 Jay Davis
	Lunch (provided)	12:00
8.	<p>Information: Nutrient Science Update; USGS Bay-wide Cruise Status and Next Steps</p> <p>Update from the nutrients program & an update on the status of the Bay-wide USGS cruise and next steps.</p> <p>Materials: None</p> <p>Desired outcome: Informed committee</p>	12:45 Dave Senn
9.	<p>Information/Discussion: DMMO PCB Report</p> <p>Materials: None</p> <p>Desired outcomes: Informed committee</p>	1:45 Don Yee
10.	<p>Information/Discussion: Status of RMP Deliverables and Action Items</p> <p>Materials: Action Items & Deliverables Stoplight Reports, pages 61-68</p> <p>Desired outcomes:</p> <ul style="list-style-type: none"> ● Informed committee ● Feedback on progress 	2:15 Melissa Foley

11.	Discussion: Plan agenda items for future meetings Desired Outcome: Identify future agenda items & science updates	2:30 Melissa Foley
12.	Discussion: Plus/Delta	2:40
13.	Adjourn	2:45

Recently Completed RMP Reports/Products

Nuss, E.; Zhang, Z.; Holleman, R.; Chelsky, A.; Winchell, T.; Wu, J.; Senn, D. 2019. Hydrodynamic and Water Quality Model Calibration and Application in San Francisco Bay. SFEI Contribution No. 913. San Francisco Estuary Institute: Richmond, CA.

<https://www.sfei.org/documents/hydrodynamic-and-water-quality-model-calibration-and-application-san-francisco-bay>

Sun, J.; Davis, J. A.; Stewart, R. 2019 Selenium in muscle plugs of white sturgeon from North San Francisco Bay, 2015-2017. SFEI Contribution No. 929. San Francisco Estuary Institute: Richmond, CA.

<https://www.sfei.org/documents/selenium-muscle-plugs-white-sturgeon-north-san-francisco-bay-2015-2017-0>

Sutton, R.; Chen, D.; Sun, J.; Greig, D. J.; Wu, Y. 2019. Characterization of brominated, chlorinated, and phosphate flame retardants in San Francisco Bay, an urban estuary. Science of the Total Environment 652, 212-223 . SFEI Contribution No. 859.

<https://www.sfei.org/documents/characterization-brominated-chlorinated-and-phosphate-flame-retardants-san-francisco-bay>

Winchell, T.; Sylvester, Z.; King, E.; MacVean, L.; Trowbridge, P.; Senn, D. 2019. Nutrient Moored Sensor Program: Program Update. SFEI Contribution No. 930. San Francisco Estuary Institute: Richmond, CA.

Yee, D.; Wong, A.; Hetzel, F. 2018. Current Knowledge and Data Needs for Dioxins in San Francisco Bay. SFEI Contribution No. 926. San Francisco Estuary Institute: Richmond, CA.

<https://www.sfei.org/documents/dioxin-synthesis>

Yee, D.; Wong, A. 2019. Evaluation of PCB Concentrations, Masses, and Movement from Dredged Areas in San Francisco Bay. SFEI Contribution No. 938. San Francisco Estuary Institute: Richmond, CA.

<https://www.sfei.org/documents/evaluation-pcb-concentrations-masses-and-movement-dredged-areas-san-francisco-bay>



RMP Steering Committee Meeting

January 23, 2019
9:30 AM – 3:00 PM

Meeting Summary

Attendees

SC Member	Affiliation	Representing	Present
Eric Dunlavey	City of San Jose	POTW-Large	Yes
Leah Walker	City of Petaluma	POTW-Small	No
Robert Wilson	City of Petaluma Alternate	POTW-Small	Yes
Karin North**	City of Palo Alto	POTW-Medium	Yes
Adam Olivieri	BASMAA / EOA, Inc.	Stormwater	Yes
John Coleman	Bay Planning Coalition	Dredgers	Yes
Craig Conner	US Army Corps of Engineers	USACE	No
Tom Mumley*	SFB Regional Water Quality Control Board	Water Board	Yes
Maureen Dunn	Chevron	Refineries	Yes

* Chair, ** Vice Chair

Guests and Staff

- Jay Davis - SFEI
- Nina Buzby - SFEI
- Melissa Foley - SFEI
- Don Yee - SFEI
- Matt Heberger - SFEI
- Jen Hunt - SFEI
- Patrick Walsh - SFEI
- Scott Dusterhoff - SFEI
- Becky Sutton - SFEI

1. Introductions and Review Agenda

Tom Mumley allowed time for introductions and reviewed the day's agenda. The Committee was informed that Army Corps representative Craig Conner has moved on and thus someone else will need represent this group at future meetings.

2. Decision: Approve Meeting Summary from October 24, 2018, and confirm/set dates for future meetings.

Eric Dunlavey had one comment on the October meeting summary relating to a date typo on page 3 of the summary. No other comments were made before approval. Karin North noted a conflict with the April meeting and it was rescheduled to Tuesday 4/30/19.

Decision:

- Adam Oliveri motioned to approve the October Steering Committee meeting summary. Karin North seconded the motion. The motion for approval was carried by all present members.

Action Items:

- Reschedule April SC meeting for 4/30/19 and send out updated calendar invite (Nina Buzby, 1/25/19)

3. Information: TRC Meeting Summary

Jay Davis summarized topics of the December TRC meeting, noting that in upcoming meetings this responsibility will be taken over by new RMP Program Manager, Melissa Foley. Jay informed the Committee that the scheduled guest speaker, Karina Nielsenn, was unable to attend the TRC meeting and instead her talk is planned for March. Jay also summarized the decisions made at this meeting. These included choosing winners of the Data Visualization Challenge and approving a 50% buffer margin for Workgroup planning budgets.

The TRC meeting included an update from Data Services, which prompted a SC discussion on data management strategies. Tom Mumley wondered if it would be worthwhile to dedicate time to investigate any data management cost-saving opportunities. Jay Davis noted that Melissa Foley's new role offers an excellent opportunity to assess program elements like this with a fresh perspective. This was followed by a discussion on S&T work in relation to NMS and CEC activities. With Jim

Cloern's retirement from the USGS, the NMS is looking into ways to offset the loss of USGS funding for his monthly cruises. Another consideration regarding S&T monitoring is that different monitoring designs may be needed for CECs than those developed for legacy pollutants. The Committee agreed that the Becky Sutton and the ECWG should consider CEC monitoring needs outside of the constraints of the existing S&T monitoring plan. Meeting participants agreed to have an item at the April SC meeting to discuss the response to the Cloern issue and its budget implications, as well as forming a smaller workgroup to assist Dave Senn, would be worthwhile. Adam Oliveri noted that as discussions occur, all sources of funds and programs should be on the table relative to addressing the potential lack of usgs efforts. This approach may allow for options that could be conducted within the available RMP match funds already provided to USGS.

Action Items:

- Discuss response to the Cloern retirement at the TRC meeting in March and consider creating a smaller workgroup of the TRC to assist Dave Senn (Melissa Foley, Dave Senn, 3/14/19)
- Discuss response to the Cloern retirement and budget implications at April SC meeting (Melissa Foley, Dave Senn, 4/30/2019)

4. Information: Financial Update for 2018 Quarter 4

Jennifer Hunt provided a financial update to the Committee, starting with a big picture summary of still-active budgets back to 2015 and then a more detailed breakdown of the past year. Jen noted that the core tasks from 2018 currently have \$39K remaining but that number may change once all reports are in for 2018. The program management task was overspent as predicted and discussed in previous SC meetings, but other governance and communication tasks ended under budget, thus balancing the overall RMP budget. The update also included an overview of undesignated funds. Jen made two suggestions: closing the 2015 budget and unencumbering the leftover \$82, and keeping all remaining 2016 and 2017 tasks open. The Committee unanimously agreed with both of these suggestions.

Action Items:

- Tell John Coleman which dredgers are late on their payments and he will assist (Jen Hunt, 1/31/19)
- Unencumber 2015 funds consistent with the SC agreement (Jen Hunt, 1/31/19)

5. Decision: Approve Multi-Year Plan

Jay Davis walked meeting participants through the changes made to the Multi-Year Plan since the initial presentation at the October 2018 Multi-Year Planning Workshop. In addition to fixing discrepancies in the overall special studies budget table, each focus area budget table had a consistent set of changes. These involved highlighting multi-year and prioritized studies within the planning budget. Karin North noted that the budget tables were inconsistent, particularly with respect to the documentation of external funding between workgroups.

Following up on action items from the October meeting, a new pie chart was created to distinguish the fraction of special study funding allocated to each focus area from 2017 to 2019. Committee members discussed useful changes to this figure and also suggested the creation of an additional chart that outlines total RMP and external funding. Additionally, Jay Davis presented two options for an “outcomes table” that outlines decisions, policies, and actions stemming from RMP work. The Steering Committee preferred a categorical organization, and asked to have time to identify any additional outcomes.

Decisions:

- Adam Oliveri motioned to approve the MYP as a living document, pending revisions in the following areas: consistency of budget tables, creation of a new pie chart, and fine tuning the RMP outcomes table. Karin North seconded the motion. The motion for approval was carried by all present members.

Action Items:

- Reformat tables in the Multi-Year Plan to maintain consistency in how external funding sources are documented (Melissa Foley, 2/18/19)
- Amend pie chart of the RMP Budget to distinguish SEP funding in each focus area (Melissa Foley, 1/31/19)
- Create new pie chart of RMP special study amounts to include external funding sources (Melissa Foley, 1/31/19)
- Send MYP table of policy and decision outcomes to SC members for consideration (Melissa Foley, 1/31/19)
- Contribute additional actions to MYP table of policy and decision outcomes (Becky Sutton, Committee members, 1/31/19)

6. Decision: Update on RMP Communications and Approve 2019 Pulse Outline

When showing Steering Committee members the updated Pulse outline, Jay mentioned that in past editions Committee members have been co-authors on articles. He asked meeting participants to confer with their teams and suggest possible contributors. For the municipal wastewater article, Lorien Fono, Tom Hall, and Dave Williams were recommended. Tom Mumley and Richard Looker will be the points of contact for identifying Water Board staff to coauthor the four articles. For the stormwater article, Adam Olivieri mentioned Chris Sommers and noted that he would check with the BASMAA Board of Directors and get back to RMP staff. . For the industrial wastewater article, Maureen Dunn, Kevin Buchan, Bridgette DeShields, and Robert Schlipf were recommended. For the dredging article, John Coleman volunteered and Josh Gravenmeier, Beth Christian, and Brian Ross were recommended. We should also try to find an Army Corps contributor. Jay also showed the Committee example graphics and asked members to provide additional examples.

Jay reminded the Committee that the upcoming Annual Meeting date is scheduled for 10/10/19 at the David Brower Center in Berkeley.

The discussion then focused on upcoming topics for the year's Estuary News articles. Adam Oliveri and Karin North brought up the topic of green infrastructure and it's growing importance given the upcoming municipal requirements for green infrastructure plans. The June Estuary News could be good timing for this article since green infrastructure plans are due 1 July 2019. This article could also link to the RMP work on pollutants of concern that are being monitoring in stormwater as well as beneficial reuse of dredged materials. Karin also suggested an article that relates to the RMP's ability to adapt to change, which Tom Mumley noted would be a good way to bring attention to Jim Cloern's and Jan Thompson's retirements and the anticipated loss in USGS funding for Jim Cloern's long-term monitoring. This could be the topic for the March Estuary News. With input from Becky Sutton, the Committee members agreed that articles on CEC topics - bisphenols and microplastic - would be good ideas for the September and December articles, respectively.

Lastly, Jay Davis informed the Committee that an eUpdate did not go out in the fourth quarter of 2019 but one would be sent out shortly. The topics covered in this update will include the introduction of Melissa Foley as RMP Manager, Data Visualization Challenge winners, as well as recent journal article and report publications.

Decision:

- Tom Mumley moved to approve the updated Pulse outline. John Coleman seconded the motion. The motion for approval was carried by all present members.

Action Items:

- Tom Mumley and Adam Olivieri coordinate to identify coauthors for the Pulse articles (Tom Mumley, Adam Olivieri, 2/8/19)
- Coordinate with SC contributors to Pulse articles (Jay Davis, 5/31/19)
- Send example Pulse graphics to SC members (Jay Davis, 1/31/19)
- Include Becky Sutton's NPR interview in upcoming eUpdate (02/18/19)
- Send Estuary News ideas to Ariel Rubissow-Okamoto (Jay Davis, 1/31/19)

7. Information: Status and Trends Margins Monitoring - South Bay Results

Don Yee gave a presentation on the results of the 2017 South Bay Margins study, which he also gave to the TRC in December 2018. Don defined margin areas, presented expectations for South Bay findings, and explained the pros and cons of the probabilistic sampling design chosen for the study. The target analytes of this study included PCBs, Hg, MeHg, metals, TN, TOC, and sediment grain size. There were additional add-ons to the study; however, not all of these results have been received and will be included in a later CEC report.

Don presented concentrations of each analyte, comparing the margins and open bay data (through statistical tests and cumulative distribution plots) and visual presentations (mapped bubble plots). Don showed mapped plots that also included previous Central Bay margins and open bay data to provide further context to the results. Additionally, Don explained the effects of grain size normalization on results - noting that, in general, South Bay margin sediment was coarser grained and thus had higher normalized concentrations.

Similar to the TRC discussion, SC members noted that geographic markers on the bubble plot maps would help identify possible source locations. For example, members noticed that the previous site of the Romic hazardous waste may be near elevated contaminant levels in the LSB. Maureen Dunn suggested looking into data from DFW NRDA efforts that may have data that could be used as comparison to the current results.

Don then presented the next steps discussed at the December TRC meeting. These include moving forward with North Bay margins monitoring and possible long-term monitoring every third open Bay cycle. Tom Mumley wondered if the cost of future monitoring would be worthwhile, and Don responded that he thinks that completing the margins boxed set (South, Central, and North Bay) is a higher priority than open Bay sampling, so margins sampling could be substituted for open Bay sampling in 2022.

Action Items:

- Look into NRDA data as a source for comparative Margins data (Don Yee, 04/30/19)

8. Information: Introducing the New RMP Program Manager

To better introduce herself to the Steering Committee, Melissa Foley gave a presentation on her educational and professional background. Melissa began with a brief overview of her education at OSU and UCSC as well as her past experience with the Center for Ocean Solutions, USGS, and Auckland Council. Her research contributions at OSU and PhD work at UCSC both focused on coastal ecosystem monitoring in kelp forests and intertidal zones.

Melissa then dove deeper into specific professional projects to support a theme that ties together her diverse background: “science informing management.” These projects included working with scientists to determine a set of ecological principles that could guide decision making (Center for Ocean Solutions), ensuring dam removal in Washington wouldn’t impact water supply and salmon migration (USGS), and developing a monitoring framework that integrates marine and terrestrial work (Auckland Council).

9. Information/Discussion: Delta RMP Update

Matthew Heberger gave a presentation on the Delta RMP. It included a high-level overview of the Delta environment and the Program’s mission statement, as well as details on the Program’s evolution since it began in 2015. Matt identified some of the most notable differences from the Bay RMP in the Delta RMP’s governance. The Delta RMP’s Steering Committee does not include representatives from industry and refineries, but instead has seats for agricultural representatives and CalTrans. It has had a growing number of participants and funding in recent years and has leveraged many in-kind contributions.

Matt explained the Delta RMP's main monitoring efforts relate to pesticides, aquatic toxicity, nutrients, and mercury. However, Matt noted there is an effort to begin CEC monitoring in the upcoming year. Tom Mumley commented that this shift may be difficult given the Delta RMP's budget and would be a possible area for coordinated work with the Bay RMP.

After hearing about the similarities and differences between the Delta and Bay programs, the discussion moved to possible collaboration and coordination efforts. Matt suggested that a Delta RMP SC member(s) could act as a representative and attend Bay RMP SC meetings. Tom noted the inherent crossover between the Bay and Delta RMPs in East Contra Costa County. This community pays about \$40k into the Bay RMP even though their discharge permit comes from the Region 5 Water Board. The SWRCB is working to change the rules for split counties so only one discharge permit would be required. Adam Oliveri and Karin North suggested sharing meeting agendas between Steering Committees and inviting Delta RMP members to the multi-year planning workshop. The Committee agreed to continue this discussion at the next meeting and Matt noted that having Delta RMP members brainstorm in parallel would also be worthwhile. A small group including Jay, Matt, Melissa, Tom Mumley, and John Coleman agreed to work on developing a list of options for increased coordination with the Delta RMP.

Action Items:

- Bring ideas for increased Delta RMP coordination to April SC Meeting (Melissa Foley and others, 4/30/19)
- Send list of Delta RMP members to John Coleman (Matt Heberger, 4/30/19)

10. Information/Discussion: Status of RMP Deliverables and Action Items

Jay presented the Steering Committee with a spotlight of notable deliverables and action items. The majority of delayed deliverables are reports either in the final stages or pushed back due to late lab reporting. Additionally, Jay reiterated that a fourth quarter eUpdate did not go out in 2018 but one will be sent out shortly to cover the current quarter. Tom Mumley had one comment on the delayed Steinberger Slough report and Jay explained the backlog of other reports that have higher prioritization and the new due date now coincides advantageously with the PCB Workgroup Meeting in the spring.

11. Discussion: Plan Agenda Items for Future Meetings

Jay Davis informed the Committee of annual calendar items on the docket for the April meeting. These include planning speakers for the annual meeting and guidance for workgroups. Previous discussion at this meeting also brought up two other items: planning a response to the likely loss of USGS funding for nutrient monitoring and a Delta RMP coordination update.

The meeting participants also discussed which group they would like to hear from in a program update. Karin North suggested the STLS group and Tom Mumley suggested NMS because it would tie into a conversation of nutrient funding changes. The group agreed on having a nutrient update, as it would be a good complement to the nutrient funding discussion.

Adjourn



Bay RMP Technical Review Committee Meeting

March 14, 2019

San Francisco Estuary Institute

Meeting Summary

Attendees

TRC Member	Affiliation	Representing	Present
Nirmela Arsem	EBMUD	POTWs	no
Mary Lou Esparza	CCCSD, BACWA	POTWs	yes
Tom Hall	EOA, Inc.	POTWs	phone
Heather Peterson (alt)	SFPUC	POTWs	yes
Anne Hansen	City of San Jose	POTWs	yes
Bridgett DeShields*	Integral Consulting	Refineries	yes
Chris Sommers	BASMAA, EOA	Stormwater	yes
Shannon Alford	Port of SF	Dredgers	no
Ian Wren	San Francisco Baykeeper	NGOs	yes
Richard Looker	SFBRWQCB	Water Board	yes
Luisa Valiela	USEPA	US-EPA IX	yes
Shelah Sweatt	USACE	USACE	yes

*Chair

Guests and Staff

- Jay Davis - SFEI
- Melissa Foley - SFEI
- Nina Buzby - SFEI
- Ila Shimabuku - SFEI
- Cristina Grosso - SFEI
- Dave Senn - SFEI
- Ryan Mayfield - City of San Jose
- Karina Nielsen - SFSU
- Paul Salop - AMS (phone)
- Don Yee - SFEI
- Tom Mumley - SFBRWQCB (phone)

1. Introductions and Review Agenda

Melissa Foley welcomed the members of the Committee and time was given to allow for introductions. Melissa noted that this meeting would include a presentation previously planned

for the last meeting (December 2018) by Karina Nielsen. Additionally, Melissa noted that Scott Dusterhoff was sick and would be unable to present the sediment monitoring item, though she would summarize the topic in his place.

Decision:

- Ian Wren motioned to approve Bridgette DeShields as TRC chair for the next year. Luisa Valiela seconded the motion. The motion for approval was carried by all present members.

2. Decision: Approve Meeting Summary from December 13, 2018, and Confirm/set Dates for Future Meetings

The Committee members had no comments on the meeting summary and no additional changes were made to the December 13th meeting summary before approval.

The TRC confirmed the planned future meeting dates for the rest of 2019. Ian Wren noted that he would be unable to attend the June meeting and would appreciate the agenda packet as early as possible so he can provide his funding suggestions for special studies. He later noted that Jon Rosenfield (Baykeeper) would also attend the June TRC meeting in his place.

Decision:

- Richard Looker motioned to approve the December 13, 2018, TRC meeting summary. Luisa Valiela seconded the motion. The motion for approval was carried by all present members.

3. Information: SC Meeting Summary from January 23, 2019

Melissa Foley summarized the topics of the January Steering Committee meeting. She highlighted the approval of the Multi-Year Plan (with minor edits that would be shown at the April SC meeting) as well as the 2019 Pulse outline. Melissa noted the presentation of South Bay Margins work by Don was quite similar to the presentation the TRC heard in December. The SC had some discussion on the value of doing margins sampling in the North Bay, but did approve future work to occur in 2020.

The TRC was also informed of the presentation and discussion concerning the Delta RMP. Matt Heberger presented on the evolution of the program as well as various points of comparison to the Bay RMP. The SC meeting participants then talked about strategies of how to interface between the two programs such as sharing meeting agendas and inviting Delta RMP members to the Bay RMP Multi-Year Planning Workshop. The TRC had a few questions about the Delta RMP meeting schedule and governance members. Melissa and Jay noted the growth of the Delta RMP Steering Committee and the resulting greater challenge in consensus-based decision-making.

Action Items:

- Create slides that compare membership of Delta and Bay RMPs as well as the difference in geographic reach of the two programs (Melissa Foley/Matt Heberger, 6/13/19)

4. Information: Workgroup Dates and Special Studies Budget

Melissa informed the Committee that all the 2019 Workgroup meetings have been scheduled and noted their dates. The first meeting is next week and the rest will occur throughout April and May. The March meeting will be the first of two Sediment Workgroup meetings, given 2019 is only the group's second year. The first meeting would ensure that all members are reminded and aware of the group's priorities and allow for proposal assignments and preparation.

Melissa noted that the agenda package for the June TRC meeting would be sent out 10 days prior to the meeting given the final WG meeting date (5/30/19). Melissa informed the Committee that if any delay occurred the RMP would get portions of the agenda out earlier to allow for enough time for Committee members to review the WG proposals.

The TRC discussed guidance to communicate to WG leads to help ease the proposal evaluation process happening in the summer. Bridgette DeShields noted that WG members should definitely prioritize proposals and be aware that while the planning budget amounts to 150% of available funds, groups aren't guaranteed funds at the 100% level. The distribution of the special studies budget will be subject to discussion. Ian Wren encouraged that proposals are written succinctly and Luisa Valiela suggested that the study's urgency be added into the description. Understanding the timing of projects will help the TRC determine if a proposal would be a better candidate for future years or as a SEP proposal.

Meeting participants then discussed SEP projects and the possibility of getting a better understanding of what projects would have a stronger chance of getting SEP funding. RMP staff noted that it is difficult to form predictions concerning SEPs, but did provide information on the number of studies and range of funding amounts from 2018.

The conversation moved on to the prioritization terminology used to distinguish WG projects. The Committee members noted that the "must do" label for projects was misleading, given that they amount to the full 150% of the planning budget and can't all be funded. The TRC noted that "must do" would relate more to multi-year studies and strategy/management costs, while other studies currently included in the "must do" category would actually be more like "high priority studies." Bridgette DeShields and Luisa Valiela noted it would be helpful if proposals included a statement explaining why the study needs to be funded in the present year.

The item finished with a short discussion reminding the TRC members of the status of the EEWG. The EEWG is currently dormant because many of its former topics have been incorporated into Status and Trends or other workgroups (ECWG and Sediment WG, mainly).

Action Items:

- Include statements in proposals about the urgency of the study and whether or not the work can be postponed or spread across multiple years (WG Leads, 5/30/19)

5. Information: Short-Term Archive Purge

Nina Buzby presented the outcome of the short-term RMP archive purge that occurred in late February. She reminded the Committee members of the number and type of samples that were discarded (bivalve, fish, and non-historic site sediment samples older than 10 years) and the resulting \$1000 /month savings due to the archive consolidation. The storage of Bob Risebrough's sample archive was also discussed - specifically the donation of some bird samples to the California Academy of Sciences and Golden Gate Raptor Observatory.

The next steps for the short-term archives were also presented to the Committee. Further consolidation and organization of existing archives will likely offer more cost-saving opportunities. RMP staff communicated that the current hurdle is communicating with Bob Risebrough about the cost distribution (between SFEI and Bob) of storing his samples and that SFEI will be working to iron out the details in the coming weeks.

Ian Wren noted that it would be useful to keep a record of why archive samples were discarded, so that their lack of viability, age, etc. would be communicated to those assessing the archive resources in the future.

Action Items:

- Write a memo on the reasoning behind short-term archive purge to be included in the next TRC agenda package (Melissa Foley and Nina Buzby, 6/13/19)
- Add Paul Salop to email correspondence with Bob Risebrough (Jay Davis, 3/15/19)

6. Discussion: Coordinated Sediment Monitoring for Bay RMP and Wetland RMP

In place of Scott Dusterhoff, Melissa Foley gave a quick overview of the status of sediment monitoring discussions happening between the Wetland RMP (WRMP) and Bay RMP. Currently four different groups are planning and implementing sediment-related activities around the Bay: the Bay RMP, WRMP, Healthy Waters Resilient Baylands (HWRB), and the Bay Conservation and Development Commission (BCDC). Given the number and variety of actions happening, Melissa noted the importance of coordination and strategic alignment. Specifically, conversations between the RMP and WRMP offer an opportunity to maximize benefits from possible collaboration since they are both in early stages of planning and strategy.

Melissa presented the management questions for the Bay RMP Sediment Monitoring Strategy and WRMP monitoring questions and asked the TRC members for suggestions and advice on how to further coordinate between groups. Ian Wren commented that BCDC may be misinformed of the funding being allocated to the RMP sediment efforts and Richard Looker

brought up the importance of having some sort of standardization of suspended sediment monitoring methods. Additionally, meeting participants agreed that modeling efforts could be an important resource to guide monitoring efforts.

Chris Sommers thought it would be important to make sure other RMP efforts are being utilized. Namely, the NMS water modeling and STLS watershed modeling could offer helpful insights. Melissa noted that the timing and data needs of these efforts may be different and should be kept in mind. It is important for WG leads to attend one another's meetings so that the various perspectives can be included in the dialogue and efforts can be coordinated.

7. Discussion: Data Visualization Challenge Update

Cristina Grosso gave an update on next steps for the second Data Visualization Challenge and the outcomes of the subcommittee recommendations at the December meeting. She noted that the subcommittee (Cristina Grosso, Richard Looker, and Chris Sommers) met and discussed possible strategies to improve outreach efforts for high school and university groups. These strategies include contacting science leads, department heads, and school districts. Cristina also showed the TRC a proposed timeline for this year's Challenge that would allow more time for outreach and submissions and also prevent school-year and holiday conflicts. Roughly, the Challenge would be announced in September and run through January/February and winners would be announced after the March TRC meeting.

Cristina and subcommittee members Chris Sommers and Richard Looker asked for input from the meeting participants on the project goals as well as outreach strategies. Ian Wren commented that one of the goals from the previous year was to increase traffic to the CD3 database, which happened. Jay Davis noted that the challenge may be more of an opportunity for education and outreach, as well as encouraging students to engage with the data. Luisa Valiela mentioned that the submission goals and challenge tasks should be categorized into two tiers related to the high school and university level participants.

Don Yee suggested there should be questions or prompts for this year's challenge, such as drivers of variation within the Bay; common sources of pollutants; predicting trends of pollutants over time. Richard Looker added on to Don's ideas by suggesting that other themes be provided to allow participants to choose. He suggested these could be organized around the following questions: (1) is something changing over time? Are things getting better or worse? (2) are things related? (3) is something a problem? Richard also noted he is interested in getting the participants to think about how to use data to answer questions. Along these lines, Chris Sommers suggested providing links to background materials to help guide hypothesis generation.

Jay Davis noted that one of the past winning submissions included an interesting visualization of fish data. He thought fish contaminants would be a good topic to build upon given that participants would be working on and learning about an important human health concern in the

Bay, helping enhance our communication of the this information to the public. Chris Sommers shared this sentiment, adding that people are likely to relate well to the fish as species that they may interact with. Richard Looker then suggested the following possible scenario:

The participants need to figure out where people fishing in the Bay are at greatest risk. Conduct some sort of analysis to figure out where the problems are the worst and what species are affected, and possibly which species and contaminants would be of most concern for public health.

Richard noted that providing hints that guide participants to get more than just baseline information (i.e., what species are most commonly consumed, how would one address a multi-lingual public) would help guide students in a constructive direction. Further investigation would be awarded extra credit. The meeting participants agreed that Richard's scenario would be a good prompt for high schoolers, and Don's questions or added tasks to the fish scenario may work well for university students.

The discussion then returned to outreach strategies. Anne Hansen, Sheila Sweatt, and Chris suggested also reaching out to community colleges, science fairs, St. Mary's College, and the California Academy of Sciences. Jay Davis noted that it might be advantageous to announce the challenge in August, instead of the proposed time in September to better align with teacher schedules. Finally, the meeting participants discussed the possible distribution of cash prizes, noting that the split between academic levels should also be reflected in the prize amounts.

Action Items:

- Schedule another subcommittee meeting (Cristina Grosso, 3/31/19)
- Craft challenge task description and come up with additional components and more complex requirements for college students (Cristina Grosso & Subcommittee, 6/13/19)
- Discuss and determine prize amounts (Melissa Foley and Cristina Grosso, 8/1/19)

8. Discussion/Decision: USGS Water Sampling Cruise End

Melissa Foley started by giving an overview of the situation surrounding Jim Cloern's retirement. Given the RMP cannot absorb all the costs of his USGS position, there is a need to think about long-term and short-term options to continue Jim's program of bimonthly cruises. Dave Senn presented the scenarios for continuing the long-term monitoring work with and without USGS support. He noted that the RMP currently contributes approximately \$250k for moored sensor and ship-based monitoring work and another \$250k for Status and Trends work.

The possible external partners Dave has spoken with include Karina Nielsen at the Estuary and Ocean Science Center with SFSU and Alex Parker at the California Maritime Academy. Dave noted the benefits to partnering with these other groups, such as supporting new research opportunities and possibly discounted access to ships. Ryan Mayfield also pointed out that the monthly DFW cruises could be a helpful resource to consider.

There was also discussion of the complexities of USGS funding, specifically that there are multiple aspects to the monitoring work: Jim Cloern's position, boat research technicians and other lab group members, and facilities and resources (i.e., boat). Each element is funded by a different USGS mission area and thus it is difficult to know whether certain elements will be funded or not. Additionally, Dave noted that their current contacts at USGS are advocates for the program but aren't actually the decision making authority. These factors contribute to the uncertainty and importance of putting together a list of RMP and NMS desires and boundaries that the USGS can take into their internal conversations.

Because the monitoring work is slated to end in August 2019, Dave suggested it might be helpful to present the USGS with considerations and thresholds of what the RMP would be willing to agree to before USGS decides that for the RMP. Chris Sommers noted that if the partnership with USGS continued, it would be worthwhile to establish a clear agreement that helps establish an understanding of how rates would increase over time, as well as the opportunity to have some flexibility for including other water and sediment collections (in order to be more cost-effective). Chris Sommers and Richard Looker noted two points that the agreement should include: (1) a longer period of time for breaking the agreement (longer than a typical 30-day period) and (2) meeting on a yearly basis to amend and add extra work based on the year's projects.

Dave noted that having terms established by SFEI's governance groups (SC, TRC, Nutrient Management Strategy) may be more well received by the USGS than coming from Dave himself. Ian Wren suggested bringing more TRC and SC members into the planning conversations to help develop concrete guidelines to give to USGS.

The discussion had to be cut somewhat short to maintain the meeting schedule, however Chris Sommers and Jay Davis had two final points. Chris brought up the fact that federal funding is somewhat unpredictable, and it would be helpful to have a program that is self sustaining over time. One option could be looking into SWAMP funding as there is statewide interest in nutrient work and all National Pollutant Discharge Elimination System (NPDES) permits require dischargers to pay into SWAMP. Jay noted that it would be helpful for Dave to create a draft of what the "RMP message" to USGS might look like (i.e., guidelines and thresholds) and send it out to the TRC and SC for comment.

Action Items:

- Invite TRC and SC members to help craft the terms of agreement that will be sent to the USGS (Dave Senn, 3/31/19)
- Create draft of USGS guidelines and share with TRC and SC (Dave Senn, 4/5/19)

9. Science Presentation: Dr. Karina Nielsen (SFSU)

Melissa introduced Dr. Karina Nielsen, the Director at the Estuary and Ocean Science Center (EOS) at SFSU. Her work focuses on the ecology of coastal systems; she co-organized a workshop on ocean acidification (OA) with SFEI in 2016. Melissa described that Karina would be presenting data from moored sensors within SF Bay and why we should be thinking about ocean acidification within the ecosystem.

Karina began her presentation by discussing the importance of studying coastal systems, specifically in the Pacific, and the general processes and drivers of OA. She then discussed the pathways of OA in the San Francisco Bay, including a conceptual model of how low pH, undersaturated waters enter and influence the Bay. Data and models currently suggest that low pH water will enter the Bay at depth, primarily be seen in the deep channels of Central Bay, and be more prevalent during the spring and early summer when upwelling is strongest and river outflow is highest.

In order to measure the influence of low pH ocean water in the Bay, SFSU has established monitoring stations within the Bay using surface (Bay Ocean Buoy - BOB), 20 m depth (Marine Acidification Research Inquiry - MARI), and fixed depth sensors. This equipment was deployed during the spring/summer of last year at two locations: by the EOS pier in Tiburon and the California Maritime Academy by Carquinez Strait. Results from these stations show that pH measurements were noisy due to instrument failures/issues, but were somewhat correlated to DO and temperature. The presence of distinct water masses with differing pH values was best observed when superimposing pH data onto temperature/salinity graphs.

Karina concluded her talk with plans for a second season of sensor deployment along with the hope to be able to hindcast carbonate system scenarios from existing biogeochemistry data. In order to do so, Karina noted the need to build a more robust understanding of the salinity-alkalinity relationship within the Bay. Ideally, she would like to be able to correlate temperature, salinity, and DO to pH and alkalinity because those sensors are better and more robust than pH sensors.

Meeting attendees had a few final questions for Karina, including one from Chris Sommers about the fate of contaminants given a change in pH within the Bay. Additionally Melissa Foley brought up the point that OA influence in the Bay may also be more than just deep water intrusion and that there may also be more local drivers that we can actually control (i.e., local nutrient sources that contribute to phytoplankton and/or harmful algal blooms that can draw down DO and pH).

10. Discussion: Communications Update

Jay Davis informed the Committee that not many developments have occurred with the 2019 Pulse to date. During the last SC meeting more contributing authors to various articles were

recommended. Shelah Sweatt agreed to be involved for USACE. Jay also noted that RMP staff would soon be reaching out to co-authors to discuss the details of the article contents.

The conversation then shifted to a brainstorm for the annual meeting, particularly the opportunity to invite outside speakers. Jay asked the TRC to send any ideas of possible speakers or topics.

Jay told the TRC about the 2019 calendar of Estuary News topics established by the SC at their last meeting. This quarter's topic would be on Jim Cloern's USGS work, followed by an article on stormwater POC (pollutants of concern) loads and green infrastructure in the summer, bisphenols in the fall, and microplastic in the winter following the Microplastic Symposium in October.

11. Information: Status of Deliverables and Action Items

Melissa Foley noted that with Workgroup season approaching there are many reports that are coming out soon for TRC comment. These reports include topics such as current use pesticides in Bay margins, neonicotinoids, bisphenols, OPFRs, and non targeted analysis work. Melissa reminded the TRC that comments on the non-targeted analysis (NTA) work as well as the South Bay sediment margins reports were due in the coming days/week.

Chris Sommers had a question about the NTA report, noting that the fact sheet was coming out concurrently and that the report itself felt somewhat short compared to other RMP technical reports. Melissa Foley noted that the report is being written as a manuscript for journal publication, so it's actual publication will take some time. The fact sheet is therefore something that can come out during this interim period and still provide information on the project's findings. Chris would like the workgroups to discuss their outputs and determine if journal articles meet the needs of TRC or if there should be a technical report (longer) AND a journal article. This is how SCCWRP manages their publications.

12. Discussion: Plan Agenda Items for Future Meetings

The meeting participants brought up topics that had been discussed previously in the meeting, such as reviewing materials for the Data Visualization Challenge, looking over the memo on short-term archives, as well as the USGS cruise updates.

The TRC agreed that the majority of the June meeting will be focused on evaluating special study proposals. Bridgette DeShields and Ian Wren noted the importance of coming prepared (i.e., attending WG meetings, reading the proposals in advance) so we don't use up time summarizing and going over each proposal prior to the evaluations.

13. Discussion: Plus/Delta

The TRC noted a big plus to Melissa running her first successful meeting. Meeting attendees also appreciated the festive pies. TRC members also provided Melissa with tips on how to prepare for the June meeting and advised her to speak with RMP staff that has been at these meetings in the past.

BUDGET: Special Studies 2016-2022

RMP actual and planned expenditures on special study topics. Costs for 2016-2019 are the approved budgets. Costs for 2020 and beyond are estimates for planning based on the most recent input from the Workgroups and Strategy Teams. The funds available for 2020-2022 were estimated by assuming RMP revenue will increase by 3% per year, subtracting estimated programmatic expenses (pages 13-30), and subtracting estimated Status and Trends monitoring costs (page 32).

FOCUS AREA	2016	2017	2018	2019	2020	2021	2022
	<i>Budget</i>	<i>Budget</i>	<i>Budget</i>	<i>Budget</i>	<i>Planning</i>	<i>Forecast</i>	<i>Forecast</i>
PCBs	\$40,000	\$70,000	\$31,000	\$40,000	\$120,000	\$110,000	\$110,000
Emerging Contaminants	\$130,000	\$284,835	\$366,000	\$325,000	\$465,000	\$571,000	\$669,000
Small Tributaries	\$311,000	\$410,000	\$302,000	\$275,000	\$400,000	\$400,000	\$400,000
Exposure and Effects	\$35,000	\$55,000	\$61,000	\$0	\$0	\$0	\$00
Selenium	\$47,000	\$106,000	\$10,000	\$107,000	\$120,000	\$107,000	\$144,000
Nutrients	\$300,000	\$373,000	\$350,000	\$250,000	\$400,000	\$400,000	\$400,000
Microplastic	\$25,000	\$75,000	\$46,000	\$30,000	\$115,000	\$235,000	\$215,000
Sediment	\$33,000	\$90,000	\$215,000	\$215,000	\$260,000	\$345,000	\$345,000
SPECIAL STUDIES TOTAL	\$921,000	\$1,515,835	\$1,381,000	\$1,242,000	\$1,880,000	\$2,268,000	\$2,383,000
PREDICTED SPECIAL STUDIES BUDGET TOTAL					\$1,280,623	\$1,282,082	\$1,424,835
<i>Predicted RMP Core Budget for Special Studies</i>					\$1,010,623	\$1,012,082	\$1,154,835
<i>Predicted AMR Funds</i>					\$270,000	\$270,000	\$270,000

*The estimated RMP budgets on this table do not cover all of the funding needs for the Nutrients Management Strategy and Small Tributary Loading Strategy. Funding for these strategies is partially provided from other sources.

In 2016, the RMP became eligible to receive penalty funds for Supplemental Environmental Projects. Wastewater agencies also began to provide the RMP with Alternative Monitoring Requirement (AMR) funds for additional emerging contaminants studies. These new funding streams will augment the core RMP budget for special studies. The AMR funds are tied to a permit condition so the amount is predictable. The SEP funds are not predictable. Therefore, only AMR funds have been included in the predicted special studies budget total in the table above.

DATE: April 30, 2019
TO: RMP Steering Committee
FROM: Jen Hunt and Melissa Foley
RE: RMP Financial Update – Period Ending 3/31/19

The purpose of this memorandum is to provide an update of budgets and expenses for all open RMP budget years and the balances of reserve and designated funds. All of the values presented are current as of March 31, 2019, hereafter referred to as the “current period.”

RMP 2019 BUDGET

Revenue

\$2,369,730 of the \$3,822,422 (47%) in 2019 fees have been collected (1. note that dredgers have not been invoiced yet but dredging volumes have been requested; 2. also note that the full 2019 budget is \$3,892,422 which includes \$70k from undesignated reserve funds). The expected fees are the sum of core fees (\$3,543,121) and supplemental fees paid by wastewater agencies (\$279,301) under Water Board Order R2-2016-0018 (hereafter referred to as Alternative Monitoring Requirement funds or AMR funds).

Expenses

Overall, 16% of the 2019 funds have been spent. We anticipate being \$20,000 to \$30,000 over budget on the workgroup task. In 2019, we’ve added an additional workgroup (microplastic) and have two workgroups that will hold 2 days of meetings each. The 2019 workgroup budget is about \$12k less than the 2018 budget and has a larger scope of work. We will report the overage at the July meeting since all workgroup activities will be complete by then.

Unencumbrances this Quarter

NA

RMP 2018 BUDGET

Revenue

\$3,584,805 of the \$3,596,060 (99%) in 2018 fees have been collected. The expected fees are the sum of core fees (\$3,326,493) and supplemental fees paid by wastewater agencies (\$269,575) under Water Board Order R2-2016-0018 (AMR funds).

The remaining 2018 fees to be collected are (note all dredging stub year AR has been paid):

- City of Napa River Park Marina – Dredger (\$5,990)
- Port of Richmond – Dredger (\$5,265)
- Total of \$11,255

Expenses

Overall, 83% of the 2018 funds have been spent which is consistent with the expected burn rate for the year. The remaining projects are mostly special studies. For the Status and Trends tasks, most of the remaining expenses are laboratory invoices and data management.

The refrigeration costs for the archives in Oakland Schaefer’s Storage was over budget by \$7k. We planned and completed an archive sample purge in February so should start to see lower archive costs as of March 2019.

Fifteen of the special studies tasks are complete. These tasks ended with a cumulative budget overage of \$12,819. This overage will be partially offset by the \$6k of unallocated funds in Task 070 (Unallocated Funds) and any remaining balances in tasks 1-5.

Overall, the 2018 budget is very tight. We expect to finish on budget. There will not be many left-over funds to unencumber from this budget year. The Steering Committee was made aware of this eventuality when this budget was presented and approved.

Unencumbrances this Quarter

There is no request to unencumber at this meeting.

PRIOR YEAR BUDGETS

Revenue

All of the RMP fees and interest from prior years have been collected.

Expenses

Some special study tasks remain open in the 2016 (4 tasks are open) and 2017 (13 tasks are open) budget years. These tasks need to remain open because they are multi-year studies or have open contracts awaiting a final invoice. The balance of funds in these years are \$28k and \$149k for 2016 and 2017, respectively. There’s also an additional \$9.6k and \$20k remaining in unallocated funds, respectively. We anticipate finishing all the remaining tasks on budget.

For more detailed information on budgets and expenses by line item, please refer to Tables 1c-1d.

Unencumbrances this Quarter

There is no request to unencumber at this meeting.

RESERVE FUNDS

Dedicated Set-Aside Funds

The RMP has several dedicated set-aside funds. The purpose of these funds is to spread out the cost of large projects across multiple budget years. The current balance of all set-aside funds is **\$791,154**. The current balance of each set-aside fund is shown in Table 2.

Dedicated Dredger Reserve Fund

The balance of the Dredger Reserve Fund was reset to zero on January 1, 2018, when new dredger fees took effect. In 2018, there was a \$62,665 credit to the Fund for dredger fees associated with the 6-month “stub year” that was created when the new fee schedule was developed¹. There was also a debit of \$109,060 because the local dredger fee payments were this amount below their target for the year. Therefore, the balance of the Dredger Reserve is currently **-\$46,395 (a deficit)**. It is expected that a fee surplus in a future year will make up for this deficit in 2018. Table 3 tracks the running balance of the Dredger Reserve Fund.

Undesignated Funds

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

In April 2019 (interest accrued through 3/31/2019), we will transfer all remaining LAIF and savings account interest accrued in the 2018 RMP interest account to Undesignated Funds. The amount that will be transferred is \$79,145.21 which includes \$25,538.39 of interest earned in Q1 2019. Going forward all RMP earned interest will be deposited directly into Undesignated Funds and will be reported each quarter.

Any remaining Undesignated Funds are available for spending at the discretion of the Steering Committee. Figure 2 shows how the balance of Undesignated Funds has changed over time. The balance of Undesignated Funds through the current period is **\$882,917**. The balance increased by \$79,546 in the last quarter due to unencumbering \$81.52 when closing RMP 2016 (Steering Committee approved in January 2019), a remittance of \$319.54 from remaining funds from the University of Florida, and remaining 2018 interest income. Table 4 shows the withdrawals and deposits in the Undesignated Funds during the last two budget years.

¹ In December 2016, the Fee Schedule was updated to cover the 2017-2019 period. One of the changes was to switch from a fiscal year to a calendar year basis. Specifically, for the last cycle of the old Fee Schedule, the fees were assessed for the period 7/1/15-6/30/16. For the first cycle of the new Fee Schedule, the fees were assessed using the period 1/1/17-12/31/17. This left a 6-month gap of 7/1/16 to 12/31/16 (the “stub year”). Dredgers with in-Bay dredge disposal in this stub year was charged a fee for this disposal using the old Fee Schedule.

Supplemental Environmental Project (SEP) Funds

The total amount of RMP SEP funds received through the current period is \$1,740,850, which includes \$1,729,200 in direct SEP funding and \$11,650 for oversight costs. A total of \$24,000 of SEP funds has been received that are not yet committed to a project. As of the current period, a total of \$946,519 has been spent on all SEP projects (includes open and closed projects to date), leaving a Final balance of **\$805,981**. Table 5a summarizes the current budget status for active, open SEP projects. Descriptions of the active and approved projects are shown in Table 5b. When a new SEP project is proposed it will be described in Table 5b.

We are over budget on the DMMO database synthesis for PCBs by about \$8-\$9k. The overage is due to unexpected difficulties mining the DMMO database and developing an analysis method that accounted for the high number of samples that were below the detection limit. The calculations for determining the concentration of PCBs removed from or moved around in the Bay through dredge disposal are sensitive to how the non-detects were handled in the analysis.

FOR STEERING COMMITTEE APPROVAL

- Approve transfers of University of Florida remittance on 2014 project to Undesignated Funds.
- Approve transfer of remaining LAIF funds (\$79,145.21) to Undesignated Funds.

Figures and Tables

Budget Final and Actuals JTD

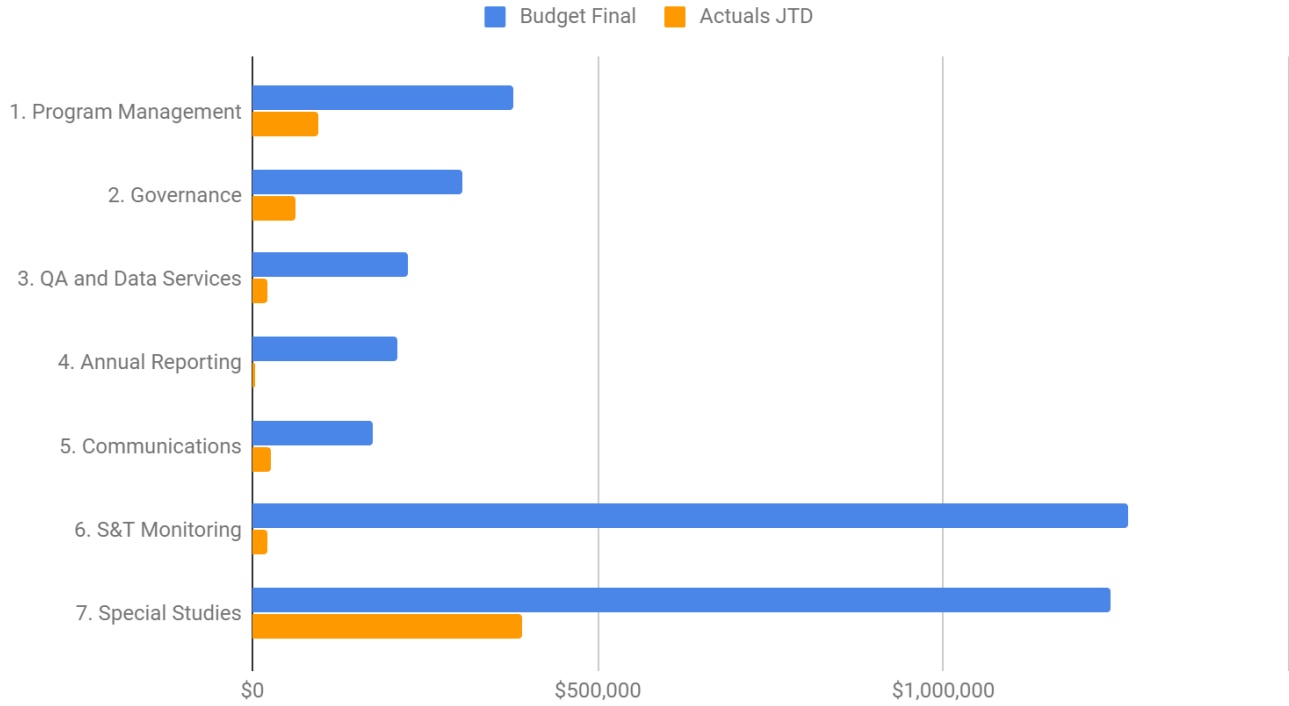


Figure 1a: Bay RMP 2019 Budget. Budget and expenses through the current period by category.

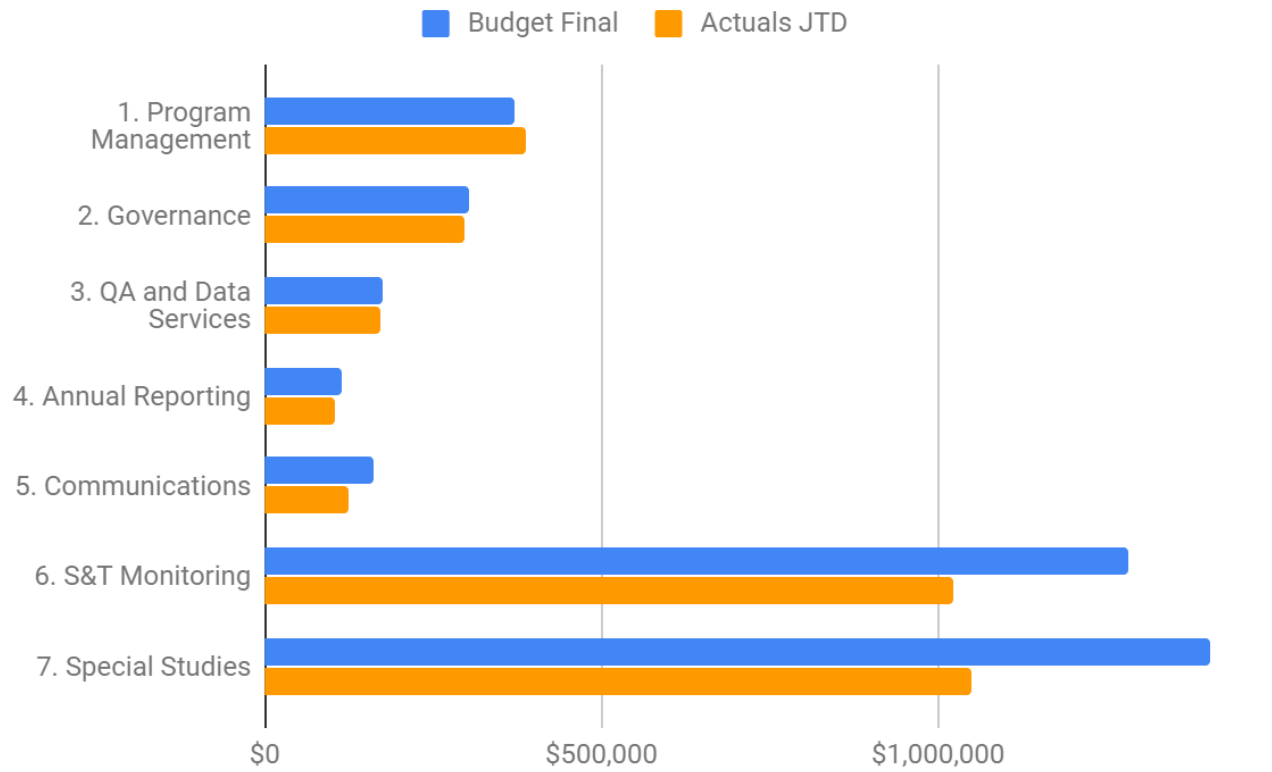


Figure 1b: Bay RMP 2018 Budget. Budget and expenses through the current period by category.

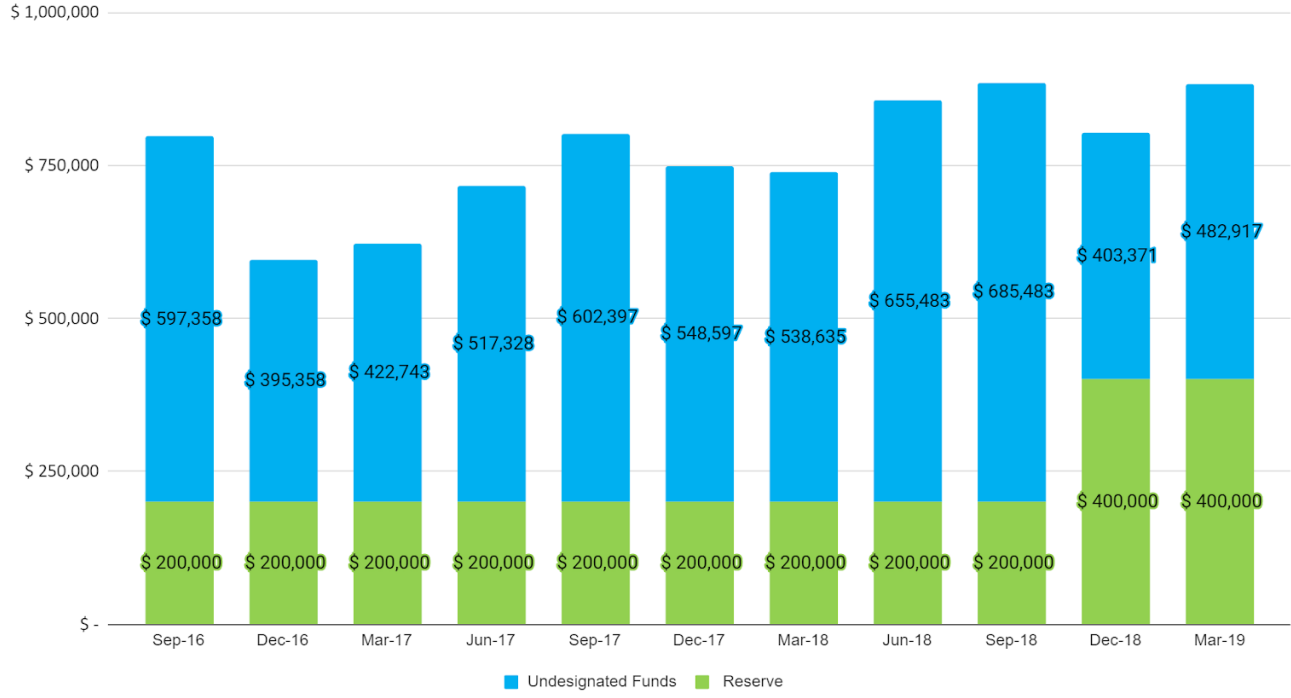


Figure 2: Bay RMP Undesignated Funds Balance over the past two years. The height of the bar shows the total balance of the Undesignated Funds. The bar is color coded to indicate the RMP policy that \$400,000 of the Undesignated Funds should not be spent. Note that prior to December 2018, the RMP policy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

Table 1

Table 1a: Bay RMP 2019 Budget: Budget and expenses through the current period by line item.

Task	Subtask	Subtask Name	Status	Budget	Expenses JTD	% Complete
Task Number: 001 Program Management	A	Budget and Workplan Development	Active	\$41,200	\$13,086	32%
	B	Contract and Financial Management	Active	\$140,000	\$28,154	20%
	C	Technical Oversight	Active	\$60,000	\$19,954	33%
	D	Internal Coordination	Active	\$90,000	\$22,473	25%
	E	External Coordination	Active	\$32,000	\$10,083	32%
	F	Administration	Active	\$13,500	\$1,753	13%
Task Number: 002 Governance	A	SC meetings	Active	\$51,600	\$14,485	28%
	B	TRC meetings	Active	\$59,600	\$9,907	17%
	C	WG meetings	Active	\$133,000	\$35,766	27%
	D	External Science Advisors	Active	\$60,000	\$1,292	2%
Task Number: 003 QA and Data Services	A	Quality Assurance System	Active	\$30,000	\$1,589	5%
	B	Online Data Access: CD3	Active	\$65,000	\$1,877	3%
	C	Database Maintenance	Active	\$50,000	\$6,011	12%
	D	Updates to SOPs and Templates	Active	\$30,000	\$4,034	13%
	E	DMMO Database Support	Active	\$50,000	\$8,571	17%
Task Number: 004 Annual Reporting	A	Pulse Report	Active	\$140,000	\$2,053	1%
	B	Annual Meeting	Active	\$69,000	\$2,220	3%
Task Number: 005 Communications	A	Communications Plan Implementation	Active	\$44,000	\$5,179	12%
	B	Stakeholder Engagement	Active	\$24,000	\$7,958	33%
	C	Responses to Information Requests	Active	\$12,000	\$901	8%
	D	Outreach Products	Active	\$30,000	\$331	1%
	E	Presentations at Conferences and Meeting	Active	\$50,000	\$9,562	19%
	G	RMP Website Maintenance	Active	\$13,000	\$1,703	13%

Task	Subtask	Subtask Name	Status	Budget	Expenses JTD	% Complete
Task Number: 006 S&T Monitoring	A	USGS Sacramento Support	Active	\$250,000	\$0	0%
	B	USGS Menlo Park Support	Active	\$242,000	\$0	0%
	C	2019 Water Cruise	Active	\$190,500	\$2,109	1%
	D	2019 Water Data Mgmt	Active	\$25,000	\$0	0%
	E	2019 Sport Fish Monitoring	Active	\$360,000	\$5,402	2%
	F	2019 Sport Fish Monitoring Data Mgmt	Active	\$45,000	\$0	0%
	I	S&T Laboratory Intercomparison Studies	Active	\$49,350	\$10,029	20%
	J	Sample Archive	Active	\$83,500	\$3,466	4%
	K	S&T Field Sampling Report & Support	Active	\$22,000	\$348	2%
Task Number: 020 Special Study: PCB Strategy Support		Special Study: PCB Strategy Support	Active	\$10,000	\$633	6%
Task Number: 021 Special Study: PCB Stormwtr Mon. for PMU		Special Study: PCB Stormwtr Mon. for PMU	Active	\$30,000	\$8,916	30%
Task Number: 022 Special Study: Nutrient Special Studies		Special Study: Nutrient Special Studies	Active	\$250,000	\$250,000	100%
Task Number: 023 Special Study: Microplastic Strategy		Special Study: Microplastic Strategy	Active	\$15,000	\$5,001	33%
Task Number: 024 Special Study: Microplastic in Sportfish		Special Study: Microplastic in Sportfish	Active	\$15,000	\$3,053	20%
Task Number: 026 Special Study: STLS Adv. Data Ananlysis		Special Study: STLS Adv. Data Ananlysis	Active	\$50,000	\$1,583	3%
Task Number: 027 Special Study: STLS Strat. Supp. & Coord		Special Study: STLS Strat. Supp. & Coord	Active	\$40,000	\$10,771	27%
Task Number: 029 Special Study: STLS Reg. Model Devpmt.		Special Study: STLS Reg. Model Devpmt.	Active	\$60,000	\$22,891	38%
Task Number: 030 Special Study: STLS WY19 POC Recon Monit	A	Project Management	Active	\$17,000	\$7,432	44%
	B	Field Work	Active	\$26,338	\$6,817	26%
	C	Data Management	Active	\$35,000	\$5,247	15%
	D	Reporting	Active	\$35,000	\$593	2%

Task	Subtask	Subtask Name	Status	Budget	Expenses JTD	% Complete
	E	Labs and Subs	Active	\$11,662	\$759	7%
Task Number: 033 Special Study: EC Strategy Support		Special Study: EC Strategy Support	Active	\$70,000	\$13,170	19%
Task Number: 034 Special Study: EC in Urban Stormwater	A	Stormwater Sampling	Active	\$129,500	\$46,412	36%
	B	Data Management	Active	\$2,500	\$25	1%
Task Number: 035 Special Study: EC Ethoxylated Surf. Stud	A	Sample Collection and Reporting	Active	\$98,300	\$346	0%
	B	Data Management	Active	\$24,700	\$257	1%
Task Number: 040 Special Study: Selenium Strategy Support		Special Study: Selenium Strategy Support	Active	\$10,000	\$1,351	14%
Task Number: 041 Special Study: Selenium N.Bay Clam&Water		Special Study: Selenium N.Bay Clam&Water	Active	\$75,000	\$0	0%
Task Number: 042 Special Study: Selen'm Sturg Muscle Plug		Special Study: Selen'm Sturg Muscle Plug	Active	\$22,000	\$0	0%
Task Number: 045 Special Study: Sed.Conc.Und.&.Mon.Strat.		Special Study: Sed.Conc.Und.&.Mon.Strat.	Active	\$77,600	\$2,648	3%
Task Number: 046 Special Study: Sed.Bathy Change Study		Special Study: Sed.Bathy Change Study	Active	\$77,000	\$0	0%
Task Number: 047 Special Study: Sed.Benefic.Reuse.Wrkshp		Special Study: Sed.Benefic.Reuse.Wrkshp	Active	\$30,000	\$3,471	12%
Task Number: 048 Special Study: Sed. Bulk Density Study		Special Study: Sed. Bulk Density Study	Active	\$30,000	\$0	0%
Task Number: 070 Unallocated		Unallocated	Active	\$19,346	\$0	0%

Table 1b: Bay RMP 2018 Budget: Budget and expenses through the current period by line item.

Task	Subtask	Subtask Name	Status	Budget	Expenses JTD	% Complete
Task Number: 001 Program Management	A	Program Planning	Inactive	\$40,000	\$47,980	120%
	B	Contract and Financial Management	Inactive	\$160,000	\$160,676	100%
	C	Technical Oversight	Inactive	\$50,000	\$59,571	119%
	D	Internal Coordination	Inactive	\$80,000	\$90,090	113%
	E	External Coordination	Inactive	\$30,000	\$26,788	89%
	F	Administration	Inactive	\$10,000	\$3,836	38%
Task Number: 002 Governance	A	SC meetings	Inactive	\$49,600	\$46,298	93%
	B	TRC meetings	Inactive	\$49,600	\$57,988	117%
	C	WG meetings	Inactive	\$145,000	\$146,381	101%
	D	External Science Advisors	Inactive	\$60,000	\$46,789	78%
Task Number: 003 QA and Data Services	A	Quality Assurance System	Inactive	\$30,000	\$28,615	95%
	B	Online Data Access: CD3	Inactive	\$65,000	\$65,005	100%
	C	Database Maintenance	Inactive	\$50,000	\$50,017	100%
	D	Updates to SOPs and Templates	Inactive	\$30,000	\$28,910	96%
Task Number: 004 Annual Reporting	A	RMP Update Report	Inactive	\$55,000	\$41,778	76%
	B	Annual Meeting	Inactive	\$60,000	\$62,919	105%
Task Number: 005 Communications	A	Communications Plan Implementation	Inactive	\$42,000	\$35,485	84%
	B	Stakeholder Engagement	Inactive	\$20,000	\$19,438	97%
	C	Responses to Information Requests Total		\$12,000	\$6,103	51%
	D	Outreach Products	Inactive	\$30,000	\$17,415	58%
	E	Presentations at Conferences and Meeting	Inactive	\$45,000	\$33,777	75%
	G	RMP Website Maintenance	Inactive	\$13,000	\$12,058	93%
Task Number: 006 S&T Monitoring	A	USGS Sacramento Support	Inactive	\$250,000	\$250,000	100%
	B	USGS Menlo Park Support	Inactive	\$235,000	\$235,000	100%
	C	2018 Bivalve Cruise	Active	\$108,500	\$82,743	76%
	D	2018 Bivalve Cruise Data Mgmt	Active	\$15,000	\$6,970	46%

Task	Subtask	Subtask Name	Status	Budget	Expenses JTD	% Complete
	E	2018 Bird Egg Monitoring	Inactive	\$182,000	\$88,675	49%
	F	2018 Bird Egg Monitoring Data Mgmt	Active	\$40,000	\$16,174	40%
	G	2018 Sediment Cruise	Inactive	\$255,000	\$142,210	56%
	H	2018 Sediment Cruise Data Mgmt	Active	\$36,000	\$33,220	92%
	I	S&T Laboratory Intercomparison Studies	Inactive	\$30,000	\$30,904	103%
	J	Sample Archive	Inactive	\$47,000	\$61,032	130%
	K	2018 S&T Field Sampling Report	Active	\$10,000	\$975	10%
	L	Acoustic Release System Purchase	Inactive	\$74,500	\$74,471	100%
Task Number: 020 Special Study: PCB Strategy Support		Special Study: PCB Strategy Support	Inactive	\$10,000	\$11,040	110%
Task Number: 021 Special Study: PCB Richmond Harbor Conce		Special Study: PCB Richmond Harbor Conce	Dormant	\$0	\$0	
Task Number: 022 Special Study: PCB San Leandro Bay Fish		Special Study: PCB San Leandro Bay Fish	Inactive	\$21,000	\$21,215	101%
Task Number: 025 STLS Unallocated Funds		STLS Unallocated Funds	Inactive	\$0	\$0	
Task Number: 026 STLS Data Analysis		STLS Data Analysis	Active	\$125,000	\$125,749	101%
Task Number: 027 STLS Management support		STLS Management support	Inactive	\$32,000	\$32,107	100%
Task Number: 028 Trends Road Map		Trends Road Map	Inactive	\$0	\$0	
Task Number: 029 RWSM		RWSM	Active	\$7,000	\$4,176	60%
Task Number: 030 WY18 POC monitoring	A	Project Managment	Inactive	\$16,650	\$16,275	98%
	B	Field work	Inactive	\$18,776	\$18,918	101%
	C	Data Management	Active	\$26,881	\$20,372	76%
	D	Reporting	Active	\$24,546	\$16,575	68%
	E	Lab	Active	\$38,147	\$20,249	53%
Task Number: 031 STLS AFR Conceptual Model Dev		STLS AFR Conceptual Model Dev	Inactive	\$13,000	\$14,426	111%
Task Number: 032 EC Microplastic in Bivalves	A	Project Management	Active	\$37,600	\$20,116	53%
	B	Data Management	Active	\$8,000	\$955	12%

Task	Subtask	Subtask Name	Status	Budget	Expenses JTD	% Complete
Task Number: 033 EC Strategy Support		EC Strategy Support	Inactive	\$65,000	\$65,054	100%
Task Number: 034 EC CUP in Margin Sediment and Water	A	Project Management	Active	\$117,970	\$114,069	97%
	B	Data Management	Inactive	\$11,000	\$10,744	98%
Task Number: 035 EC Pharmaceuticals in Wastewater	A	Data Aanalysis	Inactive	\$22,000	\$24,758	113%
	B	Data Management	Inactive	\$8,000	\$7,906	99%
Task Number: 036 EC Non-Targeted Analysis of Sed & Water		EC Non-Targeted Analysis of Sed & Water	Active	\$101,000	\$19,426	19%
Task Number: 037 EC Archive Collection for PFAS Margin Se		EC Archive Collection for PFAS Margin Se	Inactive	\$2,500	\$2,517	101%
Task Number: 038 EC Archive Collection for NPE Margin Sed		EC Archive Collection for NPE Margin Sed	Inactive	\$2,500	\$2,489	100%
Task Number: 039 Moored sensor / DO /biogeochem		Moored sensor / DO /biogeochem	Active	\$230,229	\$192,550	84%
Task Number: 040 Channel Monitoring		Channel Monitoring	Active	\$119,771	\$95,183	79%
Task Number: 043 Selenium Strategy Support		Selenium Strategy Support	Inactive	\$10,000	\$9,859	99%
Task Number: 045 Sediment Workgroup Support		Sediment Workgroup Support	Inactive	\$10,000	\$9,963	100%
Task Number: 046 Sediment DMMO Database Support		Sediment DMMO Database Support	Inactive	\$55,000	\$55,435	101%
Task Number: 047 Sediment Dumbarton Bridge Flux Monitorin		Sediment Dumbarton Bridge Flux Monitorin	Active	\$120,000	\$1,434	1%
Task Number: 048 Sediment Mallard Island Flux Monitoring		Sediment Mallard Island Flux Monitoring	Inactive	\$30,490	\$30,000	98%
Task Number: 050 EE Strategy Support		EE Strategy Support	Inactive	\$10,000	\$12,006	120%
Task Number: 051 Sediment Bioaccumulation Guidance		Sediment Bioaccumulation Guidance	Inactive	\$30,000	\$29,859	100%
Task Number: 052 EE Benthic Community Synthesis		EE Benthic Community Synthesis	Active	\$21,000	\$21,000	100%
Task Number: 053 EC North Bay Wildfire Monitoring		EC North Bay Wildfire Monitoring	Active	\$58,000	\$18,086	31%
Task Number: 070 Unallocated		Unallocated	Inactive	\$6,167	\$0	0%

Table 1c: Bay RMP 2017 Budget: Budget and expenses through the current period by line item.

Task	Subtask	Subtask Name	Status	Budget	Expenses JTD	% Complete
Task Number: 006 S&T Monitoring	F	2017 South Bay Margins Sediment Study	Active	\$255,000	\$252,214	99%
	H	Global Passive Sampling Initiative	Active	\$8,000	\$6,846	86%
	L	PBDE Analysis for Archived 2016 Bird Egg	Active	\$14,300	\$2,420	17%
Task Number: 021 PCB Steinberger Slough Conceptual Model		PCB Steinberger Slough Conceptual Model	Active	\$60,000	\$27,448	46%
	E	Labs and Subs	Active	\$11,876	\$2,710	23%
Task Number: 032 EC Imidacloprid	A	Water Monitoring	Active	\$37,610	\$34,156	91%
Task Number: 034 EC Phosphate Flame Retardant Water Monit	A	EC Phosphate Flame Retardant Water Monit	Active	\$42,625	\$34,781	82%
Task Number: 035 EC Bisphenol Water Monitoring	A	EC Bisphenol Water Monitoring	Active	\$46,750	\$29,213	62%
Task Number: 036 EC Triclosan Fish Monitoring	A	EC Triclosan Fish Monitoring	Active	\$37,300	\$30,396	81%
Task Number: 037 EC Microplastic Study		EC Microplastic Study	Active	\$75,000	\$45,788	61%
Task Number: 039 Nutrient Moored Sensor Monitoring		Nutrient Moored Sensor Monitoring	Active	\$220,000	\$210,779	96%
Task Number: 040 Nutrient Ship-Based Monitoring		Nutrient Ship-Based Monitoring	Active	\$153,000	\$139,808	91%
	D	Reporting	Active	\$8,261	\$8,590	104%
Task Number: 052 Sediment Strategy Development		Sediment Strategy Development	Active	\$50,000	\$45,435	91%

Table 1d: Bay RMP 2016 Budget: Budget and expenses through the current period by line item.

Task	Name	Budget Final	Expenses JTD	% Spent	Status
Task Number: 031 EC Non-Targeted Analysis	EC Non-Targeted Analysis	\$52,000	\$43,583	84%	Active
Task Number: 038 Nutrients Margins	Nutrients Margins DO Monitoring	\$200,000	\$199,874	99%	Active

DO Monitoring						
Task Number: 040 Nutrient Monitoring Program Development		Nutrient Monitoring Program Development	\$39,675	\$19,999	50%	Active
Task Number: 070 Unallocated		Unallocated	\$9,657	\$0	0%	Active
Grand Total			\$301,332	\$250,074	83%	

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

Reserve Type	Purpose	Balance
Dedicated Set-Aside Fund	Program Review	\$88,179
Dedicated Set-Aside Fund	S&T Monitoring	\$652,975
Dedicated Set-Aside Fund	Monitoring Contingency	\$50,000
	TOTAL	\$791,154

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

Year	Yearly Surplus/Deficit	Balance
Starting Balance from "Stub Year"		\$62,665 (received) \$62,665 (total)
2018	-\$109,060	-\$46,395

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

Budget Year	Deposit or Withdrawal	Reserve Type	Authorization	Date of Authorization	Amount	Comment
2017	Withdrawal	Undesignated Funds	Steering Committee	11/1/2016	-\$133,000	Borrowing for the 2018 South Bay Margins Study. These funds will be repaid in 2018 and 2019. SC approved 11/1/16 as part of budget approval.
2017	Withdrawal	Undesignated Funds	Steering Committee	11/1/2016	-\$35,000	Match for Moore Fdn Microplastics Grant. SC approved 11/1/16
2017	Withdrawal	Undesignated Funds	Steering Committee	11/1/2016	-\$15,000	Increase budget selenium strategy support (task 043). Approved by SC on 11/1/16.
2017	Withdrawal	Undesignated Funds	Steering Committee	11/30/2016	-\$19,000	Increase budget for selenium monitoring (task 044). Approved by SC by email on 11/30/16.
2015	Deposit	Undesignated Funds	Steering Committee	1/17/2017	\$39,385	Left-over funds from 3015.00 unencumbered at the 1/17/17 SC meeting. See financial memo for details.
2017	Withdrawal	Undesignated Funds	Steering Committee	1/17/2017	-\$12,000	Increase budget for dioxin synthesis task (task 022). Approved by SC on 1/17/17.
2016	Deposit	Undesignated Funds	Steering Committee	4/26/2017	\$134,585	Left-over funds from 3016.00 unencumbered at the 4/26/17 SC meeting. See financial memo for details.
2017	Withdrawal	Undesignated Funds	Steering Committee	4/26/2017	-\$40,000	Funds for Sediment Supply Synthesis, approved the SC on

Budget Year	Deposit or Withdrawal	Reserve Type	Authorization	Date of Authorization	Amount	Comment
						4/26/17.
2014	Deposit	Undesignated Funds	Steering Committee	7/19/2017	\$25,375	Released funds from the 2014 budget per 7/19/17 Budget Memo to the SC. These funds were unbudgeted so the projected end of year budget balance should be zero.
2015	Deposit	Undesignated Funds	Steering Committee	7/19/2017	\$26,487	Left-over funds from 3015.00 unencumbered at the 7/19/17 SC meeting. See financial memo for details.
2016	Deposit	Undesignated Funds	Steering Committee	7/19/2017	\$33,207	Left-over funds from 3016.00 unencumbered at the 7/19/17 SC meeting. See financial memo for details.
2017	Withdrawal	Undesignated Funds	Steering Committee	11/1/2017	-\$14,300	Analysis of tern egg samples for PBDEs, approved by SC on 11/1/17.
2018	Withdrawal	Undesignated Funds	Steering Committee	11/1/2017	-\$70,000	Revenue to balance the 2018 budget. Approved by SC on 11/1/17.
2018	Deposit	Undesignated Funds	Steering Committee	11/1/2017	\$66,500	Repayment of half the "borrowed" 2018 margins funds. Second half will be repaid in 2019. "Borrowing" was SC approved 11/1/16 as part of the 2017 budget approval.
2018	Withdrawal	Undesignated Funds	Steering Committee	11/29/2017	-\$36,000	SC email decision to fund proposal for North Bay Fire Response Monitoring
2016	Deposit	Undesignated Funds	Steering Committee	1/24/2018	\$5,038	Left-over funds from 3016.00 unencumbered

Budget Year	Deposit or Withdrawal	Reserve Type	Authorization	Date of Authorization	Amount	Comment
						at the 1/24/18 SC meeting. See financial memo for details.
2018	Withdrawal	Undesignated Funds	Steering Committee	1/24/2018	-\$15,000	SC decision to add \$15,000 to the bivalve cruise budget for the boat rental (accidentally left out of the original budget).
2014	Deposit	Undesignated Funds	Steering Committee	4/25/2018	\$750	Released funds from the 2014 budget per 4/19/18 Budget Memo.
2015	Deposit	Undesignated Funds	Steering Committee	4/25/2018	\$50,019	Released funds from the 2015 budget per 4/19/18 Budget Memo. Includes unallocated funds.
2016	Deposit	Undesignated Funds	Steering Committee	4/25/2018	\$33,458	Released funds from the 2016 budget per 4/19/18 Budget Memo. Includes unallocated funds.
2017	Deposit	Undesignated Funds	Steering Committee	4/25/2018	\$112,872	Released funds from the 2017 budget per 4/19/18 Budget Memo. Includes unallocated funds.
2018	Withdrawal	Undesignated Funds	Steering Committee	4/25/2018	-\$80,000	SC decision to use \$80k to purchase acoustic release systems for bivalve cruise. Added to 3018-006-L.
2016	Withdrawal	Undesignated Funds	Program Manager	7/14/2018	-\$166	Correction to amount of funds released to Undesignated funds (7/14/18). Late charges to a few tasks that were closed changed the balance of funds that could be unencumbered.
2017	Withdrawal	Undesignated Funds	Program Manager	7/14/2018	-\$85	Correction to amount of funds released to Undesignated funds (7/14/18). Late charges

Budget Year	Deposit or Withdrawal	Reserve Type	Authorization	Date of Authorization	Amount	Comment
						to a few tasks that were closed changed the balance of funds that could be unencumbered.
2017	Deposit	Undesignated Funds	Steering Committee	7/25/2018	\$5,000	Released funds from the 2017 budget per 7/25/18 Budget Memo. These funds were released by reducing the budget of the South Bay Margins Study by \$5k. The funds will be transferred to the 2018 budget to cover overages/fee shortfalls there. See matching entry for the 2018 budget below.
2018	Withdrawal	Undesignated Funds	Steering Committee	7/25/2018	-\$5,000	SC decision to add \$5k to the 2018 budget to cover overages and fee shortfalls per 7/25/18 Budget Memo. These funds were released from the 2017 budget by reducing the budget of the South Bay Margins Study by \$5k. See matching entry for the 2017 budget above.
2018	Deposit	Undesignated Funds	Steering Committee	7/25/2018	\$30,000	SC approval to close and unencumber the Richmond Harbor PCB Study task (3018-021). The funds will be applied to a new PCB project in 2019.
2015	Deposit	Undesignated Funds	Steering Committee	10/24/2018	\$9,365	Released funds from the 2015 budget per 10/24/18 Budget Memo. Includes unallocated funds.

Budget Year	Deposit or Withdrawal	Reserve Type	Authorization	Date of Authorization	Amount	Comment
2016	Deposit	Undesignated Funds	Steering Committee	10/24/2018	23	Released funds from the 2016 budget per 10/24/18 Budget Memo.
2018	Withdrawal	Undesignated Funds	Steering Committee	10/24/2018	-\$22,000	SC approved moving \$22,000 from undesignated reserve to 3018 53 for additional NTA analysis for the north bay wildfire monitoring
2019	Withdrawal	Undesignated Funds	Steering Committee	10/24/2018	-\$70,000	Extra revenue to balance the 2019 budget. Approved by SC on 10/24/18. See also SC decision on 7/25/18 and notes in the "Revenue" tab of the 2019 budget sheet.
2019	Deposit	Undesignated Funds	Steering Committee	10/24/2018	\$66,500	Repayment of half the "borrowed" 2018 margins funds. First half was repaid in 2018. "Borrowing" was SC approved 11/1/16 as part of the 2017 budget approval.
2019	Withdrawal	Undesignated Funds	Steering Committee	10/24/2018	-\$60,000	Transfer from undesignated funds to set aside - this offsets the expected 2019 LAIF interest that will be deposited into undesignated in April 2020
2018	Withdrawal	Undesignated Funds	Steering Committee	10/30/2018	-\$6,000	SC approved via email from J.Davis on 10/29 to move funds from Undesignated Funds to RMP2018 to cover the overage due to lost mooring; completed in

Budget Year	Deposit or Withdrawal	Reserve Type	Authorization	Date of Authorization	Amount	Comment
						October books
2015	Deposit	Undesignated Funds	Steering Committee	1/23/2019	\$81.54	unencumbrance of rmp 2015
2014	Deposit	Undesignated Funds	Program Manager	12/26/2018	\$319.54	unused remainder of 3014 subcontract to U of Florida for bioanalytical tools (task 90s)
2018	Deposit	Undesignated Funds	Steering Committee	3/31/2019	\$79,145.21	Transfer remaining interest in RMP 2018 interest account
Total					\$882,917	Total UF Balance

Table 5a: Bay RMP Supplemental Environmental Project (SEP) Funds for open, current projects. Penalty funds received and expenses through the end of the reporting period. The RMP maintains records of each individual payment in a separate spreadsheet.

Project Assignment	Amount Received	Amount Spent	Balance
Task 006: Suisun Bay Selenium Monitoring Study	\$121,500	\$118,398	\$3,102
Task 007: HAB Investigation in SFB	\$195,000	\$83,777	\$111,223
Task 008: North Bay Selenium Synthesis	\$54,500	\$53,564	\$936
Task 009: DMMO Data Synthesis for PCBs	\$45,150	\$54,233	-\$9083
Task 010: Napa & Sonoma Stream Gages	\$115,000	\$85,886	\$29,114
Task 011: PCB Stormwater Monitoring for PMUs	\$37,000	\$0	\$37,000
Task 012: PCB Shiner Surfperch PMU Survey	\$59,752	\$0	\$59,752
Task 013: LSB Sediment Transport Monitoring Study Yr 2	\$158,000	\$0	\$158,000
Task 014: Quantifying Stormwater Flow and Sediment Flux to the Bay	\$385,000	\$2146	\$382,854
Unassigned SEP funds received	\$24,000	\$0	\$24,000
Total	\$1,194,902	\$398,004	\$796,898

Table 5b: Bay RMP Supplemental Environmental Project Descriptions

Study Name	Budget	Description	Status
Task 006: Suisun Bay Selenium Monitoring Study	\$121,500	The goal of the study is to develop and pilot test a selenium monitoring program in Suisun Bay to evaluate potential trends in selenium levels due to changes in hydrology in the Delta or changes in selenium loads to Bay-Delta tributaries in the Central Valley. The project tasks include the following: 1) assemble existing data on selenium concentrations in Suisun Bay; 2) use the data to develop a quantitative statistical study design framework to monitor for selenium trends in Suisun Bay; 3) conduct monitoring to pilot test the study design framework and report the monitoring results.	Approved
Task 007: HAB Investigation in SFB	\$195,000	This project will conduct a series of investigations of HABs in the Bay. The types of investigations to be completed are listed below: 1. Expanded biota sampling for improved understanding of toxin sources, spatio-temporal variability, and food web exposure. 2. Continuous deployment of the Imaging Flow CytoBot (IFCB) in Central Bay: building moored capacity and establishing a coastal end-member signal. 3. Determine whether SFB hosts internal sources of Alexandrium in the form of cysts in sediments. 4. Determine if coastal Pseudonitzchia or Alexandrium isolates can grow in SFB, or face obstacles beyond low-light and strong-mixing.	Approved
Task 008: North Bay Selenium Synthesis	\$54,500	The goal of the study is to perform an information synthesis to support development of a selenium monitoring program for the North Bay. The synthesis would support an integrated and strategic approach to monitoring in support of the TMDL. Specific items to be covered include examination of the linkages between the three indicators (e.g., water column, sediment, and tissue), completing the development of the statistical framework for monitoring design and data evaluation, and consideration of analytical methods for long-term monitoring.	Approved
Tasks 010: DMMO Data Synthesis for PCBs	\$45,150	The Dredged Material Management Office (DMMO) maintains a database that compiles sediment chemistry testing data from all dredging projects in San Francisco Bay. This rich database has only recently been released to the public. This study would synthesize the available information from the DMMO database to evaluate PCB concentrations from dredging projects, to compare their concentrations ranges to other areas (e.g., open water and margin ambient sites), and to estimate the mass of PCB removed from the Bay by dredging. These data would provide valuable information to confirm the PCB TMDL assessment that dredging results in a net loss of PCBs from the Bay and to leverage data already collected to evaluate the current conceptual model of PCBs in the Bay.	Approved

Study Name	Budget	Description	Status
Task 010 Napa & Sonoma Stream Gages	\$115,000	The calculation and monitoring of sediment loads entering San Francisco Bay are important for a variety of reasons, such as to inform dredging and tidal wetland restoration projects and to assess aquatic ecology, among others. While the information on sediment loads from many tributary sources is up-to-date, for other areas, such as the North Bay watersheds, there is little or no recent data. The objective of the study is to address this data gap by monitoring sediment loads at two existing USGS gages in the North Bay watersheds: 11458000 NAPA R NR NAPA CA, and 11458500 SONOMA C A AGUA CALIENTE CA. These two existing USGS gages currently monitor water flow rates following standard USGS methods. The addition of sediment load monitoring at these two gages is particularly important now because it will also provide information on sediment loads following the recent and extensive North Bay fires in these watersheds. Both gages have burned areas upstream. For this reason, it is critical that the monitoring begin as soon as possible.	Approved
Task 011 PCB PMU Stormwater Study	\$37,000 in MMP funds (\$67,000 total)	This study will yield valuable information on PCB concentrations and particle ratios in stormwater in two Priority Margin Unit (PMU) watersheds. The study areas include the major subwatersheds draining into the Emeryville Crescent, and one subwatershed draining into San Leandro Bay. The subwatershed draining into San Leandro Bay is downstream of a recently remediated hotspot, the former General Electric (GE) transformer and electrical equipment facility, where PCB contamination was severe. The goals of the study are to better estimate current PCB loads into these PMUs (a critical component of the PMU mass budgets) and to support tracking of the effectiveness of the major remediation action on the GE property. Sampling will be completed over two years, as storms allow.	Approved
Task 012 PCB PMU Surfperch Survey	\$59,500	Conceptual site models for PCBs in priority margin units have been developed for the Emeryville Crescent and San Leandro Bay. The San Leandro Bay model was supported by an intensive field study. These conceptual site models identified shiner surfperch as a crucial indicator of impairment in these areas, due to their explicit inclusion as an indicator species in the TMDL, their importance as a sport fish species, their tendency to accumulate high concentrations, their site fidelity, and other factors. The conceptual site models recommend periodic monitoring of shiner surfperch to track trends in the PMUs, and as the ultimate indicator of progress in reduction of impairment. Shiner surfperch and other sport fish species will be monitored in 2019 as part of RMP Status and Trends (S&T) monitoring. A coordinated sampling of PCBs in shiner surfperch in four PMUs is proposed as an add-on to the 2019 S&T sport fish sampling. This coordination will yield significant savings in data management and reporting, because these results can be easily added to the S&T activities with negligible additional cost. In addition, a dataset for shiner surfperch will be obtained that is directly comparable across the four PMUs and the five locations that are sampled in S&T.	Approved
Task 013 LSB Sediment Flux Study Year 2	\$158,000	For January through September 2019, the San Francisco Bay Regional Monitoring Program (RMP) will continue the observations of suspended-sediment flux obtained in 2018 and will study the effects of flocculation on suspended-sediment flux measurements at the Dumbarton Bridge. The study will provide a monitoring dataset to understand the amount of sediment that is transported into and out of	Approved

Study Name	Budget	Description	Status
		<p>Lower South Bay (the “sediment flux”). An interpretive technical report for RMP’s 2018 – 2019 results will be submitted. This data is critically important for restoring marshes for the South Bay Salt Ponds Restoration Project and for understanding transport of sediment-associated contaminants. At two locations in the water column at Dumbarton Bridge, continuous, 15-minute observations of turbidity, water velocity, and depth will be collected. These datasets will be related to suspended-sediment concentration and channel discharge using periodic boat-based measurements; the product of these two quantities is suspended-sediment flux. This sediment flux monitoring will follow previously established United States Geological Survey (USGS) methods (Shellenbarger et al., 2013). To quantify the effect of flocculation on these sediment flux computations, additional field campaigns will be conducted to observe in situ floc size and particle size distributions through an entire tidal cycle during spring and neap tides of the dry (July – Sept) and wet (Oct – June) seasons.</p>	
<p>Task 014 Quantifying stormwater flow and sediment</p>	<p>\$385,000</p>	<p>Information on urban storm water flow, either measured or estimated using modeling, is fundamental to policy development, planning and environmental management and supports drainage engineering, pollutant loading estimates, and models of transport and fate of pollutants. In the Bay Area, the majority of flow data have been collected by the USGS and partner flood control and water supply agencies in less urbanized larger watersheds mainly in support of flood risk analysis, the operation of water supply systems, and riparian flows for fish and wildlife. Presently there are 12 watershed being gauged by USGS and six others being gauged by flood control and water district staff or consultants to support these issues. Flow data are not being collected in the smaller highly urban watersheds that fringe the Bay that have rainfall-runoff characteristics that are distinctly different to larger non-urban watersheds. This project aims to fill these data gaps.</p>	<p>Approved</p>

Table 6: Steering Committee RMP Budget Summary
as of 3/31/2019

Budget and Current Expenses							
Year	Budget	Expended	Balance	Previously Unencumbered	Unencumbered this Period	Balance minus Unencumbered (Remainder)	% Remaining
	\$	\$	\$	\$	\$		
SEP	1,729,200	965,189	764,011	0	0	764,011	44%
2019	3,816,196	628,441	3,187,755	0	0	3,187,755	
2018	3,818,427	3,155,035	663,392	0	0	663,392	17%
2017	3,798,111	3,627,179	170,932	56,787	0	170,932	5%
2016	2,784,973	2,747,096	37,877	176,145	0	37,877	1%
Grand Total	15,946,907	11,122,940	4,823,967	232,932	0	4,823,967	30%
Cash, Set-Asides, and Undesignated Funds as of reporting date							
	Item	\$	Notes				
	Cash on Hand	5,034,091					
	< 2018 & 2019 A/R & Remaining Interest (see below)	1,463,947					
	Total Assets	6,498,038					
	Total Current Liabilities (figures above)	(4,823,967)					
Set Asides	Monitoring Contingency	(50,000)					
	Program Review	(88,179)					
	S&T Monitoring	(652,975)					
	Total Liabilities	(5,615,121)					
	Undesignated Funds	882,917	RMP SC has set a policy to maintain a minimum balance of \$400K of Undesignated Funds (changed from \$200k to \$400k in Oct 2018).				
Year	Accounts Receivables & Remaining Interest:	Amount	Anticipated Collections by	Notes			
2018	Remaining AR	0	?				
	3018.61 City of Napa River Park Marina - Dredger	5,990					
	3018.76 Port of Richmond - Dredger	5,265					
2019	3019.05 Central Marin - Municipal	45,922					
	3019.07 EBDA - Municipal	59,283					

3019.09 Fairfield/Suisun - Municipal	47,308	
3019.16 Petaluma - Municipal	20,176	
3019.17 Pinole/Hercules - Municipal	21,281	
3019.20 San Francisco SE - Municipal	202,797	
3019.28 Sunnyvale - Municipal	40,244	
3019.34 Yountville - Municipal	5,838	
3019.44 USS-POSCO - Industrial	38,320	
3019.47 Alameda - Stormwater	200,584	
3019.48 Contra Costa - Stormwater	81,839	
3019.52 San Francisco - Stormwater	45,466	
3019.53 Vallejo - Stormwater	14,692	
Caltrans	90,481	Will be invoiced in Oct 2019
Dredgers	522,149	Will be invoiced soon

Theme and Draft Outline for 2019 Pulse

Theme: Pollutant Pathways to the Bay

Introduction to Pollutant Pathways

- Authors
 - SFEI: Jay
- Definitions: sources, pathways, loadings
- Overall illustration

Municipal Wastewater

- Authors
 - SFEI: Jay Davis or Melissa Foley
 - BACWA: Lorien Fono, Tom Hall, Dave Williams
 - Water Board: Bill Johnson, Robert Schlipf
- Take-home Messages (THMs) (“Highlights” section at the beginning of the article)
 - Municipal wastewater (MWW) treatment improvements have occurred in phases, with primary treatment (solids removal) in the 50s and 60s, secondary treatment (organics removal) in the 70s and 80s, a period where the focus shifted to pretreatment and pollution prevention for toxics control, and now we’re facing major improvements to reduce nutrient discharges and a shift toward resource recovery
 - MWW is highly regulated, perhaps the most closely regulated pollutant pathway
 - While MWW is no longer the most important pathway for many pollutants, it is the primary pathway for nutrients and many contaminants of emerging concern
 - Municipal wastewater infrastructure is aging, and infrastructure planning needs to address nutrients, climate change, and other evolving issues
 - Municipal wastewater is increasingly being looked at as a valuable resource: a source of water, soil amendments, and energy
- Pathway 101
 - Basic description with illustration
 - Map of plants and flows
 - Scale of the investment in wastewater treatment – capital, annual O&M
 - THM: Phases of improvements: primary, secondary, pretreatment and pollution prevention, nutrients, resource recovery
- Regulatory Framework
 - THM: MWW is highly regulated
 - Highlights of current framework
 - NPDES Permits
 - Pretreatment
 - Pollution prevention
 - Mercury and PCBs Watershed Permit
 - Nutrient Watershed Permit, NMS

- Alternative Monitoring Requirements - links directly to the RMP - most of these priority pollutants are “old school”, adopted 40+ years ago by USEPA and not updated since. Many have either been banned, are no longer produced or significantly in use, and are either present at non-detect levels or at levels well below their corresponding CTR WQOs. The AMR also touches on toxicity testing (screening studies in abeyance) but I think toxicity is probably too complicated a topic, and too much still in a state of flux, to complicate this article with (unless you’re short on verbiage).
 - Others
 - Future directions
- Recent Findings
 - THM: While MWW is no longer the most important pathway for many pollutants, it is the primary pathway for nutrients and many contaminants of emerging concern
 - Long-term trends and present loads – reinforce the phases of improvements
 - Population growth
 - Flow
 - BOD and TSS
 - Copper – consider dropping – old news
 - Nutrients
 - Emerging Contaminants
 - Pharmaceuticals - 2018 RMP Special Study
 - Pesticides - 2016 RMP Special Study
 - Microplastic?
 - TMDL Pollutants (mercury, PCBs, selenium) – latest loading estimates and trends – covered in Water Quality Updates section
- Future Work, Directions, and Challenges
 - THM: Municipal wastewater infrastructure is aging (there’s a societal need to invest in it), and infrastructure planning needs to address nutrients, climate change (including sea level rise), and other evolving issues
 - THM: Municipal wastewater is increasingly being looked at as a valuable resource: a source of water, soil amendments, and energy - the emergence of POTWs as resource recovery entities, and the corollary cross media challenges, such as:
 - POTWs are being encouraged to accept organic waste to help the State meet GHG reduction goals by using excess digester capacity to produce biogas. One impact is to increase nutrient loads to the Bay via a sidestream from the digesters.
 - We’re getting to the end of low-hanging fruit on purple pipe recycled water projects. The future looks like it will be IPR/DPR projects which will lead to RO concentrate management challenges
 - SCVWD pilot wetland project
 - Removing pollutants from effluent often means moving them from the liquid to the solid stream. Per upcoming regulations, POTWs

will need to divert biosolids from landfill to various forms of land application reuse. This highlights the importance of pollution prevention over end-of-pipe treatment, and regulatory advocacy where pollution prevention is not possible.

- Potential use of WW to sustain wetlands for treatment and SLR protection – consideration of near-shore discharge
 - Oro Loma
- Dealing with decreased flows and higher concentrations due to increasing water conservation i.e. impacts on traditionally designed conveyances and treatment systems plus potential for more decentralized systems with solids being returned to the regional plants and the impacts on treatment systems and solids beneficial reuse
- As IPR/DPR becomes routine, the issue of brine disposal and the potential for localized impacts in the receiving waters.
- Bay contaminant challenges
 - Emerging contaminants – new CEC monitoring strategy
 - Microplastic
 - Nutrients
- Wet weather overflows – “old news” – largely stormwater – only include if there is space for it

Stormwater

- Authors
 - SFEI: Jay Davis, Lester McKee
 - BASMAA: Chris Sommers, James Downing
 - Water Board: Richard Looker, Tom Mumley
- Take-home Messages (THMs) (“Highlights” section at the beginning of the article)
 - Probably largest pathway for contaminants and sediment for most pollutants (name the categories for which this is true)
 - Yet funding for stormwater trickier to secure compared to WW and much less currently spent (single digit millions vs tens of millions for WW)
 - MRP is the main regulatory driver for PCBs and Mercury - brief description of the phased approach of MRP1 through MRPN
 - Large storms can deliver huge loads if a reservoir is present and activated- the astonishing Guad 5-day Hg load in Jan 2017
 - Need for infrastructure upgrade, parallel concept linking to WW discussion - old infrastructure, can we be smart as we refresh it?
 - Confronting climate change impacts (SLR, threat to low-lying infrastructure like pump stations and treatment plants, rainfall and runoff patterns changing)
- Pathway 101
 - THM: Probably largest pathway for contaminants and sediment for most pollutants (name the categories for which this is true)

- Basic description with illustration
- Long-term rainfall data
- Map of locations and flows
- THM: Yet funding for stormwater trickier to secure compared to WW and much less currently spent (single digit millions vs tens of millions for WW)
 - Scale of the investment in stormwater management – capital, annual O&M
 - Current
 - Future – green infrastructure
- Important Regulations
 - THM: MRP is the main regulatory driver for PCBs and Mercury - brief description of the phased approach of MRP1 through MRPN
 - Highlights of current framework
 - MRP
 - PCBs TMDL, Mercury TMDL
 - Future directions
 - MRP 3.0, 4.0
 - Green infrastructure plans
- Recent Findings
 - Urban runoff
 - Present loads, long-term trends, spatial patterns
 - PCBs
 - Trends
 - STLS trend study – no trend in Guadalupe 2003-2014
 - Wetland cores
 - Any other relevant info to show on trends?
 - Spatial patterns
 - Latest POC map
 - PMU studies
 - Importance of small storms
 - Load reductions should lead to improvement in the Bay
 - Mercury
 - Trends
 - Wetland cores
 - Any other relevant info to show on trends?
 - Spatial patterns
 - Latest POC map
 - Emerging Contaminants
 - NTA ambient Bay study
 - Other contaminants: Copper, nutrients, selenium
 - Nonurban runoff
 - THM: Large storms can deliver huge loads if a reservoir is present and activated- the astonishing Guad 5-day Hg load in Jan 2017
 - Mercury

- Guadalupe mercury (sidebar?)
 - North Bay fire studies (sidebar?)
 - Water Board
 - USGS – Takesue (sidebar)
 - RMP NTA
- Future Work, Directions, and Challenges
 - THM: Need for infrastructure upgrade, parallel concept linking to WW discussion - old infrastructure, can we be smart as we refresh it?
 - THM: Confronting climate change impacts (SLR, threat to low-lying infrastructure like pump stations and treatment plants, rainfall and runoff patterns changing)
 - Stormwater CEC study
 - PMU studies
 - Trends strategy: modeling and monitoring
 - Green infrastructure
 - Climate change

Industrial Wastewater

- Authors
 - SFEI:
 - WSPA: Maureen Dunn, Kevin Buchan, Bridgette DeShields
 - Water Board: Robert Schlipf
 -
- Pathway 101
 - Basic description with illustration
- Important Regulations
 - Current
 - Future
- Recent Findings
 - Present loads and long-term trends for pollutants of concern
 - Selenium
 - Others?
- Future Work and Challenges
 - xx

Dredged Material Disposal

- Authors
 - SFEI:

- BPC: John Coleman, Josh Gravenmeier
- Water Board: Beth Christian
- EPA: Brian Ross
- Army Corps: Should find somebody
- Pathway 101
 - Basic description with illustration
- Important Regulations
 - Current
 - Future
- Recent Findings
 - DMMO PCB synthesis
 - TRV Study
- Future Challenges
 - xx

Central Valley – discuss in overview

- Recent Findings
 - Selenium: Tetra Tech modeling

Atmospheric Deposition – Discuss in overview, xx sidebar in Stormwater

- Recent Findings
 - Present loads and long-term trends for pollutants of concern
 - Mercury – Joel Blum info
 - Dioxins – updated estimate from Dioxin Synthesis



RMP 2018 ANNUAL MEETING AGENDA

Theme: RMP Update

October 11, 2018, The David Brower Center, Berkeley, CA

Remote Access: Audio: 1.415.594.5500, Access Code 943-326-397#; Slides: <https://join.me/sfei-conf-cw1>

9:00	Welcome and Introduction - <i>Tom Mumley, San Francisco Bay Water Board</i>
Session 1: RMP Highlights	
9:10	RMP Highlights: 2018 and 2019 - <i>Phil Trowbridge, San Francisco Estuary Institute</i>
9:30	Selenium in the Bay: Monitoring at a Crossroads - <i>Robin Stewart, US Geological Survey</i>
10:00	Dioxins in the Bay: Sources, Impairment, and Recovery - <i>Don Yee, San Francisco Estuary Institute</i>
10:20	Discussion - <i>Moderated by Tom Mumley, San Francisco Bay Water Board</i>
10:40	BREAK
Session 2: From Watersheds Through the Bay	
10:55	Water Quality Monitoring of the North Bay Fires - <i>Kevin Lunde, San Francisco Bay Water Board</i>
11:15	Green PlanIT: Planning Green Infrastructure for Stormwater Management in the Bay Area - <i>Jing Wu, San Francisco Estuary Institute</i>
11:35	Sediment Flux Through the Golden Gate During the High Flows of 2017 - <i>Maureen Downing-Kunz, US Geological Survey</i>
11:55	Discussion - <i>Moderated by Naomi Feger, San Francisco Bay Water Board</i>
12:10	LUNCH
Session 3: Nutrients	
1:10	The Dissolved Oxygen TMDL for Suisun Marsh - <i>Barbara Baginska, San Francisco Bay Water Board</i>
1:30	What Factors Control Phytoplankton Blooms in the Bay? - <i>Zhenlin Zhang, San Francisco Estuary Institute</i>
1:50	Harmful Algae in San Francisco Bay - <i>Dave Senn, San Francisco Estuary Institute</i>
2:10	Discussion - <i>Moderated by Eric Dunlavy, City of San Jose</i>
2:25	BREAK
Session 4: Contaminants of Emerging Concern	
2:45	Pharmaceuticals in Wastewater - <i>Diana Lin, San Francisco Estuary Institute</i>
3:05	Bisphenols (Endocrine Disrupting Components in Plastics) in the Bay - <i>Ila Shimabuku, San Francisco Estuary Institute</i>



RMP
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3:25	Flame Retardants in the Bay after the PBDE Ban <i>- Rebecca Sutton, San Francisco Estuary Institute</i>
3:45	Discussion - <i>Moderated by Kelly Moran, TDC Environmental, LLC</i>
4:00	Adjourn to Social

Bay RMP Deliverables 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.

Focus Area	Project	Primary	Deliverable	Assigned To	Due Date	Due Date Extended	Old Due Date	Status	Comments
Annual Reporting	Bay RMP (2019)	4. Annual Reporting	2019 Annual Meeting Agenda	Jay Davis	06/30/19	🚩		🟡	
Annual Reporting	Bay RMP (2019)	4. Annual Reporting	2019 Annual Meeting Venue and Catering Reservations	Nina Buzby	08/15/19	🚩		🟢	Brower Center has been reserved for 10/10. Nina to handle reservations closer to meeting.
Annual Reporting	Bay RMP (2019)	4. Annual Reporting	Pulse Report	Jay Davis	09/30/19	🚩		🟢	
Annual Reporting	Bay RMP (2019)	4. Annual Reporting	Annual Meeting	Melissa Foley	10/10/19	🚩		🟢	
Communications	Bay RMP (2019)	5. Communications	Q2 Estuary News Article	Jay Davis	06/30/19	🚩		🟡	
Communications	Bay RMP (2019)	5. Communications	Q2 RMP eUpdate	Jay Davis	06/30/19	🚩		🟡	
Communications	Bay RMP (2019)	5. Communications	Updates to RMP and NMS websites	Nina Buzby	06/30/19	🚩		🟡	
Communications	Bay RMP (2019)	5. Communications	Q3 Estuary News Article	Jay Davis	09/30/19	🚩		🟢	
Communications	Bay RMP (2019)	5. Communications	Updates to RMP and NMS websites	Nina Buzby	09/30/19	🚩		🟢	
Communications	Bay RMP (2019)	5. Communications	Q3 RMP eUpdate	Jay Davis	10/31/19	🚩		🟢	
Communications	Bay RMP (2019)	5. Communications	RMP Update to BACWA	Melissa Foley	10/31/19	🚩		🟢	
Communications	Bay RMP (2019)	5. Communications	RMP Update to BASMAA	Melissa Foley	10/31/19	🚩		🟢	
Communications	Bay RMP (2019)	5. Communications	RMP Update to LTMS	Melissa Foley	10/31/19	🚩		🟢	
Communications	Bay RMP (2019)	5. Communications	RMP Update to BPC	Melissa Foley	10/31/19	🚩		🟢	
Communications	Bay RMP (2019)	5. Communications	RMP Update to WSPA	Melissa Foley	10/31/19	🚩		🟢	
Communications	Bay RMP (2019)	5. Communications	RMP Update at RB2 Meeting	Melissa Foley	10/31/19	🚩		🟢	
Communications	Bay RMP (2019)	5. Communications	Q4 Estuary News Article	Jay Davis	12/31/19	🚩		🟢	
Communications	Bay RMP (2019)	5. Communications	Q4 RMP eUpdate	Jay Davis	12/31/19	🚩		🟢	
Communications	Bay RMP (2019)	5. Communications	Updates to RMP and NMS websites	Nina Buzby	12/31/19	🚩		🟢	
Data Management	Bay RMP (2018)	3. QA and Data Services	QA Officer Report for 2018 S&T Activities	Don Yee	06/30/19	🚩	03/31/19	🟡	Report will cover 2018 Bird Egg, 2018 Bivalve, and 2018 Sediment data. Many sample shipping issues so data has been delayed.
Emerging Contaminants	Bay RMP (2017)	Imidacloprid in Ambient Bay Water	Report on imidacloprid in ambient Bay water	Rebecca Sutton	04/30/19	🚩	06/30/18	🟡	Draft report anticipated as part of ECWG 2019 meeting package. Due dates extended by 6 months because of delays at the laboratory. Preliminary results delivered in April 2018.
Emerging Contaminants	Bay RMP (2019)	EC in Urban Stormwater Year 1	Pilot study sample collection	Rebecca Sutton	04/30/19	🚩		🟡	Sample collection is ongoing.
Emerging Contaminants	Bay RMP (2017)	Phosphate Flame Retardants in Bay Water	Report on phosphate flame retardants in ambient Bay water	Rebecca Sutton	05/15/19	🚩	09/30/18	🟡	Draft report by 3/31/19. Will be taking advantage of comments/discussion from 2019 ECWG meeting. Final due 5/15/19 after review by ECWG. Report was originally due 9/30/18 but data were data were 8 months late. Will be written up in the same report as bisphenols.
Emerging Contaminants	Bay RMP (2017)	Bisphenol in Bay Water	Report on bisphenol compounds in ambient Bay water	Ila Shimabuku	05/15/19	🚩	09/30/18	🟡	Draft report by 3/31/19. Will be taking advantage of comments/discussion from 2019 ECWG meeting. Final due 5/15/19 after review by ECWG. Report was originally due 9/30/18 but data were data were 8 months late. Will be written up in the same report as OPFRs.
Emerging Contaminants	Bay RMP (2016)	EC Non-targeted Analysis	Report on Non-Targeted Analysis of Water-Soluble CEC Compounds	Rebecca Sutton	06/30/19	🚩	06/30/17	🟡	Preliminary findings presented to ECWG on 3/30/17. Dr. Ferguson received an extension for his draft report to 5/31/18 to allow him to do additional analyses with newly purchased, faster and higher-resolution equipment. Progress was slower than expected due to the large number of new detects from the new equipment as well as urgent activities relating to the aftermath of Hurricane Florence. A draft was reviewed by ECWG, TRC, and SC; revisions are underway.

Focus Area	Project	Primary	Deliverable	Assigned To	Due Date	Due Date Extended	Old Due Date	Status	Comments
Emerging Contaminants	Bay RMP (2016)	EC Non-targeted Analysis	Fact Sheet on Non-Targeted Analysis of Water-Soluble CEC Compounds	Rebecca Sutton	06/30/19		06/30/17		Fact sheet to accompany the final report. Factsheet was reviewed by ECWG, TRC, SC. Provide final fact sheet to EB Parks.
Emerging Contaminants	Bay RMP (2018)	CUPs and Wastewater Contaminants in Margin Sediment and Water	Technical Report	Matt Heberger	06/30/19		09/30/18		Internal draft due by 12/31/18, draft for external review due by 1/15/19. Final was originally due by 9/30/18. Now is due March 31, 2019. Deadline pushed back because data processing is going slower than expected. Preliminary data were presented during ECWG 2018 meeting. Draft for ECWG, TRC, and SC review is going out in March (was due by 1/15/19). Final was originally due by 9/30/18. Now is due March 31, 2019. Due to data issues, final report pushed back to 30 Apr 2019. Now is due June 30, 2019. Deadline pushed back because data processing is going slower than expected. Preliminary data were presented during ECWG 2018 meeting. Draft for ECWG, TRC, and SC review is going out in spring.
Emerging Contaminants	Bay RMP (2017)	Triclosan in Small Fish	Report on triclosan in small fish	Diana Lin	08/31/19		07/31/18		Report initially delayed because lab partner had not provided data. AXYS was still finalizing the lab method. Data now received and analyzed. Results will be presented at ECWG in April 2019. New schedule: Draft by 6/30/19; final due 8/31/19.
Emerging Contaminants	Bay RMP (2019)	Ethoxylated Surfactants Study	Wastewater and water sample collection	Diana Lin	08/31/19				https://www.sfei.org/sites/default/files/events/ECWG%20-%2004%20-%20Ethoxylated%20Surfactants%20Proposal_2019_TRC.pdf
Emerging Contaminants	Bay RMP (2018)	North Bay Post-Fire Monitoring	Brief technical memorandum with results of non-targeted analysis	Meg Sedlak	11/30/19		11/30/18		On 10/24 SC approved additional 22k of undesignated funds to analyze additional (previously collected) samples.
Emerging Contaminants	Bay RMP (2018)	North Bay Post-Fire Monitoring	Manuscript on results of non-targeted analysis	Meg Sedlak	11/30/19		01/31/19		On 10/24 SC approved additional 22k of undesignated funds to analyze additional (previously collected) samples.
Emerging Contaminants	Bay RMP (2019)	EC in Urban Stormwater Year 1	Sampling and analysis plan for Years 2-3	Rebecca Sutton	11/30/19				Remove this item if it is not funded by the TRC
Emerging Contaminants	Bay RMP (2018)	Non-targeted Analysis of Sediment and Water	Fact sheet and technical report	Rebecca Sutton	12/31/19		08/02/19		De-prioritized for ECWG meeting in favor of North Bay Fire NTA. Draft report and fact sheet by fall '19; Final report and fact sheet by Dec '19.
Emerging Contaminants	Bay RMP (2018)	Non-targeted Analysis of Sediment and Water	Manuscript	Rebecca Sutton	12/31/19		08/02/18		De-prioritized for ECWG meeting in favor of North Bay Fire NTA. Draft report and fact sheet by fall '19; Final report and fact sheet by Dec '19.
Emerging Contaminants	Bay RMP (2019)	Ethoxylated Surfactants Study	QA of data and upload to CEDEN	Amy Franz	02/28/20				
Emerging Contaminants	Bay RMP (2019)	EC Strategy	Update RMP CEC Strategy Document	Rebecca Sutton	04/01/20				https://www.sfei.org/sites/default/files/events/ECWG%20-%2001%20-%20ECstrategyProposal2019.pdf
Emerging Contaminants	Bay RMP (2019)	Ethoxylated Surfactants Study	Preliminary results presentation at ECWG Meeting	Diana Lin	04/01/20				
Emerging Contaminants	Bay RMP (2019)	EC Strategy	Present updated RMP CEC Strategy at SC	Rebecca Sutton	05/31/20				
Emerging Contaminants	Bay RMP (2019)	Ethoxylated Surfactants Study	Manuscript and summary for managers	Diana Lin	08/01/20				Draft due 8/31/20. Final due 1/31/21.
Governance	Bay RMP (2019)	2. Governance	April SC Meeting	Melissa Foley	04/30/19				
Governance	Bay RMP (2019)	2. Governance	Microplastics WG Meeting	Meg Sedlak	05/31/19				
Governance	Bay RMP (2019)	2. Governance	SPLWG Meeting	Jing Wu	05/31/19				
Governance	Bay RMP (2019)	2. Governance	PCB WG Meeting	Jay Davis	05/31/19				
Governance	Bay RMP (2019)	2. Governance	Selenium WG Meeting	Jay Davis	05/31/19				
Governance	Bay RMP (2019)	2. Governance	Sediment WG Meeting	Scott Dusterhoff	05/31/19				
Governance	Bay RMP (2019)	2. Governance	June TRC Meeting	Melissa Foley	06/13/19				
Governance	Bay RMP (2019)	2. Governance	July SC Meeting	Melissa Foley	07/24/19				
Governance	Bay RMP (2019)	2. Governance	September TRC Meeting	Melissa Foley	09/26/19				
Governance	Bay RMP (2019)	2. Governance	October SC Meeting	Melissa Foley	10/23/19				
Governance	Bay RMP (2019)	2. Governance	December TRC Meeting	Melissa Foley	12/12/19				
Microplastics	Bay RMP (2017)	Microplastic Characterization Study (Moore Foundation)	Baseline Report - Year 2	Meg Sedlak	09/02/19				Due to the complexity of the analyses, we have received an extension. The final report is due 9/01/2019.
Microplastics	Bay RMP (2018)	Microplastics in San Francisco Bivalves	Technical Report	Meg Sedlak	09/02/19				Margin samples have been collected. Bay samples were collected in October. Results will be included in the Moore Microplastic Project final report.
Microplastics	Bay RMP (2018)	Microplastics in San Francisco Bivalves	Presentation to TRC/SC	Meg Sedlak	09/30/19		06/17/19		Sample analysis has been delayed so June is too soon to report to the TRC. The report back is not time sensitive so this timing should be fine. It also lines us with the technical report completion date.
Microplastics	Bay RMP (2019)	Microplastic Strategy	Update RMP Microplastic Strategy (appendix to existing strategy)	Meg Sedlak	09/30/19				https://www.sfei.org/sites/default/files/events/MPWG%20-%2001%20-%20Priority1StrategyProposal2019FINAL.pdf

Focus Area	Project	Primary	Deliverable	Assigned To	Due Date	Due Date Extended	Old Due Date	Status	Comments
Microplastics	Bay RMP (2019)	Microplastics in Sport Fish	Coordinate collection and archiving of sport fish samples for microplastic analysis	Meg Sedlak	10/31/19				Funding was not allocated for lab analysis. The samples will just be collected and archived. https://www.sfei.org/sites/default/files/events/MPWG%20-%2002%20-%20Priority2Microplastic%20in%20Sportfish%20Proposal05292018.pdf
Microplastics	Bay RMP (2019)	Microplastic Strategy	Present updated Microplastic Strategy to SC	Rebecca Sutton	01/31/20				
PCB Strategy	Bay RMP (2016)	PCB Margins Conceptual Model	San Leandro Bay Conceptual Model Report	Jay Davis	05/15/19		03/31/18		Significant comments from Gobas on this last installment require response/revision from Don Yee. Don also tasked with South Bay Margins and DMMO PCB reports due in Jan/Feb. Might be done sooner than 3/31. Other projects have been more urgent. Will be completed by the Workgroup meeting on May 15.
PCB Strategy	Bay RMP (2017)	PCB Margins Conceptual Model	Steinberger Slough Priority Margin Unit Conceptual Model Report	Jay Davis	06/28/19		08/31/17		Revised due dates due to workflow and timing of WG meeting. Draft for WG/TRC/SC by March 2019. Final by June 2019.
PCB Strategy	Bay RMP (2019)	PCB Strategy	Updated PCB multi-year plan	Jay Davis	06/30/19				https://www.sfei.org/sites/default/files/events/PCBWG%20-%2001%20-%20Strategy%20Support%20and%20Technical%20Coordination%202019.pdf
PCB Strategy	RMP SEP	12. PCB Shiner Surfperch PMU Survey	Sample collection and analysis (documented in S&T Sampling and Analysis Plan and Sampling Report)	Jay Davis	12/31/19				Coordinated sampling of PCBs in shiner surfperch in four PMUs as an add-on to S&T sport fish sampling. https://www.sfei.org/sites/default/files/events/PCBWG%20-%2003%20-%20Shiner%20Surfperch%20PMU%20Survey%20Revised.pdf
PCB Strategy	Bay RMP (2019)	Priority Margin Unit Stormwater PCB Monitoring	Stormwater sample collection at Emeryville Crescent sites in WY19 and WY20	Alicia Gilbreath	04/30/20				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-%2002%20-%20Priority%20Margin%20Unit%20Stormwater%20PCB.pdf
PCB Strategy	RMP SEP	11. PCB Stormwater Monitoring for PMUs	Analysis of stormwater samples from Emeryville Crescent sites in WY19 and WY20	Alicia Gilbreath	09/30/20				Samples will be collected with core funds (3018-021). Results will be reported in the WY20 STLS POC Recon Sampling Report. https://www.sfei.org/sites/default/files/events/PCBWG%20-%2002%20-%20Priority%20Margin%20Unit%20Stormwater%20PCB.pdf
PCB Strategy	RMP SEP	11. PCB Stormwater Monitoring for PMUs	Collection and analysis of stormwater samples from San Leandro Bay sites in WY19 and WY20	Alicia Gilbreath	09/30/20				Results will be reported in the WY20 STLS POC Recon Sampling Report.
PCB Strategy	RMP SEP	12. PCB Shiner Surfperch PMU Survey	Special Section in report on RMP S&T Sport Fish Sampling	Jay Davis	12/31/20				Draft by December 2020; Final by February 2021.
Program Management	Bay RMP (2019)	1. Program Management	Q2 RMP Financial Report	Jennifer Hunt	04/25/19				
Program Management	Bay RMP (2019)	1. Program Management	SC Meeting Stoplight Report	Jay Davis	04/25/19				
Program Management	Bay RMP (2019)	1. Program Management	Q3 RMP Financial Report	Jennifer Hunt	07/25/19				
Program Management	Bay RMP (2019)	1. Program Management	SC Meeting Stoplight Report	Jay Davis	07/25/19				
Program Management	Bay RMP (2019)	1. Program Management	2020 Multi-Year Plan	Melissa Foley	10/01/19				Draft in October '19, final in January '20
Program Management	Bay RMP (2019)	1. Program Management	2020 Detailed Workplan and Budget	Melissa Foley	10/01/19				Draft in October '19, final in January '20
Program Management	Bay RMP (2019)	1. Program Management	Q4 RMP Financial Report	Jennifer Hunt	10/24/19				
Program Management	Bay RMP (2019)	1. Program Management	Update Deltak Program Plans for Open RMP Years	Jennifer Hunt	10/24/19				
Program Management	Bay RMP (2019)	1. Program Management	SC Meeting Stoplight Report	Jay Davis	10/24/19				
Program Management	Bay RMP (2019)	1. Program Management	RMP Participation Letters for BACWA and WSPA Agencies	Melissa Foley	12/31/19				Update letters from previous budget year in: S:\Contracts & Proposals - Active\3018 Bay RMP 2018\Participant Fees
Program Management	Bay RMP (2019)	1. Program Management	Honoraria Payments to Science Advisors	Melissa Foley	12/31/19				Update letters from previous budget year in: S:\Contracts & Proposals - Active\3018 Bay RMP 2018\Honoraria
QA and Data Services	Bay RMP (2019)	3. QA and Data Services	QAPP Update	Don Yee	07/31/19				
QA and Data Services	Bay RMP (2019)	3. QA and Data Services	Online Data Access CD3	Cristina Grosso	12/31/19				(1) Pending: Create shared link and tutorial video for download tool; (2) In-progress: Add SFB Basic Planning Units; (3) In-progress: Automate sum generation and TEQs; (4) Pending: Link data to the EPA Chemistry Dashboard website; and (5) In-progress: Tool maintenance and performance upgrades - added ability to access mammal data on CD3
QA and Data Services	Bay RMP (2019)	3. QA and Data Services	Database Maintenance	Amy Franz	12/31/19				(1) Enforce VariableCodes constraint; (2) Fix orphaned RMP Tissue Records; (3) Fix Organism Records for prior years RMP; (4) Update location of Yerba Buena Island bivalve stations; (5) Address budget shortfalls resulting from issues encountered during formatting and QA review or add-on datasets not previously budgeted for.
QA and Data Services	Bay RMP (2019)	3. QA and Data Services	Updates to SOPs and Templates	Amy Franz	12/31/19				(1) Pulse graphics improvements (2) Update tissue scripts as needed. (3) Expected QA Table (4) Addition to Data Submittal Portal: Include a receipt back to data provider for their records.

Focus Area	Project	Primary	Deliverable	Assigned To	Due Date	Due Date Extended	Old Due Date	Status	Comments
QA and Data Services	Bay RMP (2019)	3. QA and Data Services	DMMO Database Support	Cristina Grosso	12/31/19				1) In-progress: Host and maintain website and database. Implement performance upgrades, including upgrading outdated technology; 2) Pending: Train labs/contractors on populating templates; 3) In-progress: Populate data templates with data stored in PDF reports and upload backlog of data templates to database; 4) In-progress: Perform improvements to website; 5) Pending: Expand querying and mapping of data by adding data to CD3; and 6) In-progress: Modify website to capture information needed for RMP dredger fee calculations.
QA and Data Services	Bay RMP (2019)	3. QA and Data Services	QA Summary Report for S&T Activities	Don Yee	03/31/20				
Sediment Strategy	Bay RMP (2018)	Mallard Island Suspended Sediment Monitoring	Data collected, processed, and QA/QCed by the USGS. Data made available to the public once approved.	Melissa Foley	04/30/19				USGS subcontract. Coordinate with Maureen Downing-Kunz. Final, approved turbidity and SSC for WY2018 (through 9/30/18) by 4/30/19. MMF emailed MDK on 21 February to ensure the project is still on track to finish. MDK reply on 26 Feb - still recovering from shutdown but April deadline should be doable.
Sediment Strategy	Bay RMP (2019)	Sediment Conceptual Understanding and Monitoring Strategy	Expert Review of Framework Report	Scott Dusterhoff	04/30/19		03/31/19		Again, this is expert review of the "monitoring strategy framework," not a "framework report." Since we are requesting a month extension for the Draft Conceptual Understanding and Strategy Framework, we also need a month extension for the Expert Review.
Sediment Strategy	Bay RMP (2019)	Sediment Bulk Density Study	Technical Report	Jeremy Lowe	04/30/19				4/30 due date is a draft in time for sediment WG. Final due in August. The proposal had the project starting in October 2018 before the start of funding was known. The funds don't start until January 1 2019. Deliverables were pushed back by the same amount (3 months). So due date for draft framework should be 05/30/19. This is not a time critical deliverable, all the work will be completed in 2019, and no other projects are dependent on it.
Sediment Strategy	Bay RMP (2017)	Sediment Monitoring Strategy	Sediment Monitoring Strategy (in collaboration with HWRB Project)	Jeremy Lowe	05/31/19				Draft for Sediment WG by May 2019. Final by August 2019. This project was amended with additional funding in 2019 (Project 3019-045) and new due dates were set. The original due date was 6/30/19. Part of Healthy Watershed Resilient Baylands Project.
Sediment Strategy	Bay RMP (2019)	Sediment Bathymetric Change Study (Year 1)	Update to the RMP Sediment Workgroup on preliminary results	Melissa Foley	05/31/19				Contract with Bruce Jaffe USGS. Project was split between two years. This is the first year of funding. The contract (#1385) has language for the 2nd year. If the second year of funding is approved, the contract can be amended to increase the funding amount. https://www.sfei.org/sites/default/files/events/SedimentWG%20-%2002%20-%20Jaffe%20-%20USGS%20Whole%20Bay%20Erosion%20and%20Accretion%20Update%205-24-18.pdf
Sediment Strategy	RMP SEP	10. Napa and Sonoma Streamgages	Data Products	Melissa Foley	06/30/19				Coordinate with Scott Wright (USGS). For both gauges: suspended sediment and bedload sediment sample results as well as 15-minute records of turbidity, SSC, suspended load, and bedload (depending on rating curves developed) served on the USGS public website.
Sediment Strategy	RMP SEP	10. Napa and Sonoma Streamgages	Presentation	Melissa Foley	06/30/19				Coordinate with Scott Wright (USGS). Presentation slides showing an analysis of sediment loads and comparisons with historical data. Presentation to be made at the Sediment WG meeting if possible.
Sediment Strategy	Bay RMP (2019)	Sediment Bulk Density Study	Draft Framework for local expert review	Jeremy Lowe	08/30/19				https://www.sfei.org/sites/default/files/events/SedimentWG%20-%2004%20-%20Lowe%20-%20Bulk%20density%20RMP%20Special%20Studies%20Proposal.pdf
Sediment Strategy	Bay RMP (2019)	Sediment Conceptual Understanding and Monitoring Strategy	Final Conceptual Understanding and Monitoring Strategy Report	Scott Dusterhoff	08/31/19				Draft for Sediment WG by May 2019. Final by August 2019. This report will be published by SFEI as a Healthy Watersheds/Resilient Baylands-RMP joint-funded report.
Sediment Strategy	Bay RMP (2019)	Sediment Beneficial Reuse Workshop	Workshop	Melissa Foley	09/30/19		03/31/19		Prepare background materials, organize & facilitate workshop https://www.sfei.org/sites/default/files/events/SedimentWG%20-%2003%20-%20Trowbridge%20-%20Beneficial%20Reuse%20Thresholds.pdf . Due date updated to reflect timing agreed upon in the sediment workgroup.
Sediment Strategy	Bay RMP (2019)	Sediment Conceptual Understanding and Monitoring Strategy	Presentation of Final Conceptual Understanding and Strategy	Scott Dusterhoff	10/31/19				Forum will be the RMP Sediment WG or a Healthy Watersheds/Resilient Baylands Project meeting.
Sediment Strategy	Bay RMP (2019)	Sediment Bathymetric Change Study (Year 1)	USGS Data Release with new bathymetric grids for San Pablo Bay, Carquinez Strait, and Suisun Bay	Melissa Foley	12/31/19				Contract with Bruce Jaffe USGS. Project was split between two years. This is the first year of funding. The contract (#1385) has language for the 2nd year. If the second year of funding is approved, the contract can be amended to increase the funding amount. https://www.sfei.org/sites/default/files/events/SedimentWG%20-%2002%20-%20Jaffe%20-%20USGS%20Whole%20Bay%20Erosion%20and%20Accretion%20Update%205-24-18.pdf
Sediment Strategy	Bay RMP (2019)	Sediment Bathymetric Change Study (Year 1)	Presentation at the 2019 State of the Estuary Conference on interim results	Melissa Foley	12/31/19				Contract with Bruce Jaffe USGS. Project was split between two years. This is the first year of funding. The contract (#1385) has language for the 2nd year. If the second year of funding is approved, the contract can be amended to increase the funding amount. https://www.sfei.org/sites/default/files/events/SedimentWG%20-%2002%20-%20Jaffe%20-%20USGS%20Whole%20Bay%20Erosion%20and%20Accretion%20Update%205-24-18.pdf

Focus Area	Project	Primary	Deliverable	Assigned To	Due Date	Due Date Extended	Old Due Date	Status	Comments
Sediment Strategy	Bay RMP (2019)	Sediment Beneficial Reuse Workshop	Workshop summary	Melissa Foley	12/31/19		05/31/19		Draft summary by May 2019 (for Sediment WG). Final by September 2019. This timing updated to reflect what came out of the sediment workgroup. Meeting by September 2019 and workshop summary by December 2019.
Sediment Strategy	RMP SEP	13. Lower South Bay Sediment Transport Monitoring Study	Upload 2019 data on turbidity, suspended sediment concentrations, sediment flux, and particle size data to a public USGS website.	Melissa Foley	03/30/20				Coordinate with Danial Livsey. *For the period 1/1/2019 – 09/30/2019, 15-minute records of turbidity, suspended-sediment concentration, and suspended-sediment flux served on USGS public website. *For the period 1/1/2019 – 09/30/2019, discrete suspended-sediment sample results served on USGS public website. *Particle size and density data needed to measure effects of flocculation served on a USGS public website
Sediment Strategy	RMP SEP	13. Lower South Bay Sediment Transport Monitoring Study	Interpretive Technical Report	Melissa Foley	12/31/20				Coordinate with Danial Livsey. *Interpretive technical report for the RMP of the results of the work conducted in 2018 – 2019. The interpretive report will be submitted to the RMP as a draft by December 31, 2020, and will be published by March 31, 2021.
Selenium Strategy	Bay RMP (2019)	Selenium Strategy	Update Selenium Multi-Year Plan	Jay Davis	06/30/19				https://www.sfei.org/sites/default/files/events/SeWG%20-%2001%20-%20Strategy%20Support%20and%20technical%20Coordination%202019.pdf
Selenium Strategy	Bay RMP (2019)	Selenium in Muscle Plugs	Collect and analyze muscle plug samples	Nina Buzby	03/31/20				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
Selenium Strategy	Bay RMP (2019)	Selenium in Clams and Water	Collect and analyze water and clam samples	Nina Buzby	06/30/20				Clam and water samples will be collected at two locations in Suisun Bay. Samples will be collected in Jul-19, Aug-19, Sep-19, Dec-19, Jan-20, and Feb-20. Data management and reporting was not funded. https://www.sfei.org/sites/default/files/events/SeWG%20-%2002%20-%20North%20Bay%20Clam%20and%20Water.pdf
Sources Pathways and Loadings	Bay RMP (2019)	STLS WY19 POC Recon Monitoring	B. Wet season samples collected and sent to labs for analysis	Alicia Gilbreath	04/30/19				
Sources Pathways and Loadings	Bay RMP (2019)	STLS Regional Model	Modeling Implementation Plan	Jing Wu	05/01/19				Draft for SPLWG review by May 2019. Final by July 2019. Task B "model development" was not funded. https://www.sfei.org/sites/default/files/events/SPLWG%20-%2003%20and%2005%20-%20Regional%20Model%20Development%20for%20Trends%20Strategy.pdf
Sources Pathways and Loadings	Bay RMP (2018)	Small Tributaries Loading POC Advanced Data Analysis	Advanced Data Analysis Interpretative Report	Lester McKee	05/30/19		11/01/18		Year 1 reports (A PCB congener methodology and a PCB loads and yields methodology): Preliminary results were presented to SPLWG in May 2019 (1st draft) and to STLS in September 2018 (2nd draft), and STLS in February 2019. New drafts of each report will be sent to SPLWG technical reviewers in later February for review. We expect to complete the final report for the year 1 work before the Work Group meeting. We have received reviewer comments on the reports from SPLWG advisors (4/9/2019). We will be addressing those comments over the coming weeks.
Sources Pathways and Loadings	Bay RMP (2018)	Small Tributaries Loading POC Watershed Characterization Reconnaissance Monitoring	Technical report on the WY 2018 reconnaissance monitoring	Alicia Gilbreath	06/30/19		03/15/19		Draft completed and submitted to STLS for review. The March 15 deadline was for completing the report draft so BASMAA could submit to the WB. The final draft of this report will not be ready until after SPLWG advisors review and we respond to comments. Comments back from SPLWG reviewers. Need to complete final revisions based on those comments.
Sources Pathways and Loadings	Bay RMP (2019)	STLS WY19 POC Recon Monitoring	D.WY19 POC Report	Alicia Gilbreath	11/30/19				Draft by 11/30/19. Final by March 30, 2020.
Sources Pathways and Loadings	Bay RMP (2019)	STLS Advanced Data Analysis (Phase II)	Technical Report on Advanced Data Analysis	Lester McKee	12/31/19		08/31/19		A technical report that provides the technical justification for the methods recommended and outlines in a stepwise fashion how to apply the methods to other Bay Area data sets. Draft for SPLWG by May 2019. Final by November 2019. https://www.sfei.org/sites/default/files/events/SPLWG%20-%2004%20-%20Advanced%20Data%20Analysis.pdf We will not get review from SPLWG on the 2018 report until the end of the first quarter of 2019. STLS does not want us to go any further until we get some external review from SPLWG. We will likely get that final guidance at SPLWG in May thus allowing a start on the next piece of work in June. This is the next phase of a project that was started in 2018. The product will be a new version of a report that provides the technical justification for the methods recommended for doing a more advanced interpretation of stormwater data using a loads and congener based analysis. The key outcome will be a stepwise method for application to other Bay Area data sets. Year 2 reports: Based on input at the SPLWG May 2019 meeting, work will be continued building upon the results of the Year 1 report. The final reports that likely be updated versions of the year 1 reports will be completed for review by September 2019 and finalized by December 2019.

Focus Area	Project	Primary	Deliverable	Assigned To	Due Date	Due Date Extended	Old Due Date	Status	Comments
Status and Trends	Bay RMP (2017)	6. Status and Trends L. PBDE Analysis for Archived 2016 Bird Eggs	Analysis of 12 archived tern egg samples. Results reported in an EDD.	Ila Shimabuku	04/30/19		12/31/18		AXYS gathering permits so USGS can ship. Archives are being shipped with 2018 samples. AXYS' deadline to submit all bird egg data (including archives) is 2/28/19. Due to issues with weather, permitting, Newcastle disease outbreak, and government shutdown, USGS had to wait until February 19 to ship tern eggs. Deadline for AXYS to submit data should be based on receipt of samples on 22 Feb. Samples had to be reanalyzed due to instrumentation malfunctions. Data expected the last week of April.
Status and Trends	Bay RMP (2018)	6. Status and Trends H. 2018 Sediment Cruise Data Mgmt	Format, QA, and Upload 2018 Sediment Cruise Data	Amy Franz	04/30/19		03/31/19		All data has been formatted and passed QA except AXYS sediment. The AXYS contract was not initially signed and we weren't notified until Amy checked in on the data 90 days after the cruise. Once the contract was signed AXYS fast tracked the data and will report it March 22.
Status and Trends	Bay RMP (2019)	6. Status and Trends Monitoring	Sport Fish subcontracts	Melissa Foley	05/01/19				
Status and Trends	Bay RMP (2017)	6. Status and Trends F. Margins Sediment Study	Final Report for South Bay Margins Sediment Study	Don Yee	05/10/19		12/01/18		Need extension to February. May have a draft report internal staff review by Christmas, out to external review mid Jan. Some prelim graphics and stats will be prepared in powerpoint for TRC mid December. All comments received by 22 March 2019. Final edits will be complete by 10 Apr 2019. Last comments received but review and upload of remaining S&T data to enable reporting for 2019 pulse a competing needed in the short term.
Status and Trends	Bay RMP (2019)	6. Status and Trends Monitoring	Water Cruise subcontracts	Nina Buzby	05/13/19		05/01/19		Waiting to decide on replacement lab for ALS
Status and Trends	Bay RMP (2019)	6. Status and Trends Monitoring	Sport Fish Sampling and Analysis Plan	Jay Davis	05/21/19		05/01/19		Will be done in time for sampling to begin at the end of May
Status and Trends	Bay RMP (2018)	6. Status and Trends D. Bivalve Cruise Data Management	Format, QA, and Upload 2018 Bivalve Cruise Data	Amy Franz	06/01/19		03/01/19		Data have not been provided. Samples were held up in customs. AXYS shipped subsamples on 2/25/19.
Status and Trends	Bay RMP (2019)	6. Status and Trends Monitoring	USGS Sacramento Support - Contract	Melissa Foley	06/01/19				
Status and Trends	Bay RMP (2019)	6. Status and Trends Monitoring	USGS Menlo Park Support - Contract	Melissa Foley	06/01/19				
Status and Trends	Bay RMP (2018)	6. Status and Trends F. 2018 Bird Egg Monitoring Data Mgmt	Format, QA, and Upload 2018 Bird Egg Data	Amy Franz	06/30/19		01/01/19		As part of the QA Memo, trend plots of bird egg data will be generated. Data was late. Samples were held up in customs. Data should be delivered to SFEI by the end of April.
Status and Trends	Bay RMP (2019)	6. Status and Trends Monitoring	Water Cruise Sampling and Analysis Plan	Amy Franz	07/31/19		05/01/19		Sampling and Analysis Plan Final Due date based on Water Cruise Task List
Status and Trends	Bay RMP (2019)	6. Status and Trends Monitoring	Field Sampling Report	Nina Buzby	12/01/19				
Status and Trends	Bay RMP (2019)	6. Status and Trends Monitoring	Process and upload Water Cruise data	Amy Franz	12/31/19				
Status and Trends	Bay RMP (2019)	6. Status and Trends Monitoring	Processing and upload Sport Fish data	Amy Franz	12/31/19				
Status and Trends	Bay RMP (2019)	6. Status and Trends Monitoring	Present to TRC on IC studies	Don Yee	12/31/19				
Status and Trends	Bay RMP (2019)	6. Status and Trends Monitoring	Maintain and enhance the Archive Data Sample tool	Amy Franz	12/31/19				(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 (5) Purge old archives from Shaeffers.
Status and Trends	Bay RMP (2019)	6. Status and Trends Monitoring	Sport Fish Report	Jay Davis	12/31/20				


Bay RMP Action Items

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	Status	Comments	Meeting Date	Complete
Steering Committee Action Items from 10/24/18	Find a venue/meeting to bring up an agenda item to cross pollinate knowledge between stormwater folks and Wetland RMP	Jay Davis	12/31/19		Work with Luisa Valiela. Recommendation was to do this sometime in 2019.	10/24/18	<input type="checkbox"/>
Steering Committee Action Items from 10/24/18	Coordinate Pulse and State of the Estuary Report efforts	Jay Davis	06/01/19			10/24/18	<input type="checkbox"/>
Steering Committee Action Items from 10/24/18	Look into sourcing pathway loading data and confer with the TRC and SC	Jay Davis	06/01/19			10/24/18	<input type="checkbox"/>
Steering Committee Action Items from 1/23/19	Discuss response to the Cloern retirement and budget implications at April SC meeting	Melissa Foley	04/30/19			01/23/19	<input type="checkbox"/>
Steering Committee Action Items from 1/23/19	Coordinate and/or schedule meetings with SC contributors to Pulse articles	Jay Davis	05/31/19			01/23/19	<input type="checkbox"/>
Steering Committee Action Items from 1/23/19	Look into NRDA data as a source for comparative Margins data	Don Yee	04/30/19			01/23/19	<input type="checkbox"/>
Steering Committee Action Items from 1/23/19	Bring ideas for increased Delta RMP coordination to April SC Meeting	Melissa Foley	04/30/19			01/23/19	<input type="checkbox"/>
Technical Review Committee Action Items from 6/14/18	When SCCWRP publishes their final report, contextualize their findings for the RMP in a memo.	Don Yee	03/31/19		Report on final round updates in internal review at SCCWRP. SCCWRP still has not provided an update. Sent reminder request early March	06/14/18	<input type="checkbox"/>
Technical Review Committee Action Items from 12/13/18	Revisit 50% buffer margin between WG planning budget and available funds in future December TRC meetings, given that future years may have differing SEP funding amount.	Melissa Foley	12/01/19			12/13/18	<input type="checkbox"/>
Technical Review Committee Action Items from 12/13/18	Begin plans for North Bay Margins monitoring	Don Yee	09/30/19			12/13/18	<input type="checkbox"/>
Technical Review Committee Action Items from 03/14/2019	Compare membership of Delta and Bay RMP members and the geographic extent of each program	Melissa Foley	06/13/19		Report back at next TRC meeting	03/14/19	<input type="checkbox"/>
Technical Review Committee Action Items from 03/14/2019	Schedule subcommittee meeting to continue planning for Data Visualization Challenge	Cristina Grosso	04/30/19		Extra time needed to accommodate the schedules of subcommittee members	03/14/19	<input type="checkbox"/>
Technical Review Committee Action Items from 03/14/2019	Craft Data Visualization Challenge scenario for high school students and add-ons for college/university students	Cristina Grosso	06/13/19			03/14/19	<input type="checkbox"/>
Technical Review Committee Action Items from 03/14/2019	Determine prize amounts for high school and university winners and where it will come from in the budget	Melissa Foley	08/01/19			03/14/19	<input type="checkbox"/>
Technical Review Committee Action Items from 03/14/2019	Create proposal ranking sheet for June TRC meeting and send with agenda package	Melissa Foley	05/30/19			03/14/19	<input type="checkbox"/>
STLS Action Items from 2/14/19	RMP staff will review the SPL list serve and make a recommendation on who to cull from or add to the list. This review should include the organizations (not just staff) that are represented. It may also be good to send an email asking if members are still interested in the list serve.	Jennifer Hunt	05/09/19			02/14/19	<input type="checkbox"/>

Primary	Deliverable	Assigned To	Due Date	Status	Comments	Meeting Date	Complete
STLS Action Items from 3/14/19	RMP staff will also develop a draft workplan for the kickup meeting of the new SEP funded stormwater and sediment monitoring project. RMP staff will also develop a framework for prioritizing monitoring sites and some potential sites based on that framework for initial consideration.	lester@sfei.org	06/30/19	●	We were planning to have a kickoff meeting with the stakeholders last week but then decided that was premature and that we need to get our ducks lined up internally first. The internal kickoff meeting is now scheduled for Monday April 22nd. We have not rescheduled the first stakeholder meeting yet but will probably do so tomorrow at the STLS meeting. Just to be safe, I have pushed the due date out to end of June but in reality, I would like to do this meeting the week of May 6-10 since I will be in town that week.	03/14/19	<input type="checkbox"/>
Selenium WG Action Items from 5/29/18	Identify secondary clam laboratory	Don Yee	05/31/19	●	clam IC samples to be sent Jan. TBD based on outcome of clam IC study; archive samples to be sent to labs in January; results due by the end of April 2019	05/29/18	<input type="checkbox"/>
PCBWG Action Items from 5/3/18	Updated PCB Multi-Year Plan	Jay Davis	06/01/19	●		05/03/18	<input type="checkbox"/>
Sport Fish Workgroup Action Items from 11/14/18	Have a mid-season check-in on Marco's sampling progress - if necessary look at other options for obtaining target samples (Marine Science Institute, Sturgeon Derby, DFW Bay Study)	Nina Buzby	07/01/19	●		11/14/18	<input type="checkbox"/>