



Multi-Year Planning Workshop & RMP Steering Committee Meeting

October 23, 2019
9:00 AM – 4:00 PM

REMOTE ACCESS

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

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

AGENDA

MULTI-YEAR PLANNING WORKSHOP		
1.	<p>Introductions and Review Goals for the Meeting</p> <p>Welcome people from Delta RMP and Karen McLaughlin from SCCWRP</p> <p>Goals for the meeting:</p> <ul style="list-style-type: none"> ● Discuss possibility of a redesign for the Status & Trends program ● Discuss Workgroup costs ● Determine the focus and membership of a Coordination Workgroup ● Provide overarching guidance to the TRC and Workgroups for selection of special studies for 2021. ● Establish a general framework for planning for 2022 and beyond. 	<p>9:00</p> <p>Tom Mumley</p>
2.	<p>Discussion: Status and Trends Redesign</p> <p>The last major review of the Status & Trends (S&T) program was done in the early 2000s. Since that time, the priorities of the RMP have been evolving. Many of the contaminants measured in the S&T program are legacy pollutants. However, there is an increasing number of “active” and “emerging” pollutants that may need to be incorporated into S&T monitoring.</p> <p>In this discussion, we will frame the issue and present options for a workplan that can be discussed further at the next meeting or by a subgroup made up of Steering Committee and Technical Review Committee members.</p> <p>Materials: Current S&T design, pages 7-9 slides at meeting</p> <p>Desired outcome:</p> <ul style="list-style-type: none"> ● Identify next steps for S&T rescoping exercise ● Identify people willing to be on a subgroup to discuss the issue further 	<p>9:10</p> <p>Melissa Foley, Jay Davis</p>

3.	<p>Decision: Workgroup Coordination and Planning Costs</p> <p>The cost to run workgroup meetings has increased every year. In large part this is a reflection of the success of these workgroups. However, this is a significant budget element that deserves scrutiny.</p> <p>We will present the cost associated with each workgroup and propose a way to standardize accounting between workgroups.</p> <p>Materials: Slides at meeting</p> <p>Desired outcomes:</p> <ul style="list-style-type: none"> ● Informed committee on workgroup costs ● Decision on standardizing accounting between workgroups 	9:40 Melissa Foley
4.	<p>Decision: Formation of a Coordination Workgroup</p> <p>The six RMP workgroups are beginning to undertake projects that are of interest to multiple workgroups. This Coordination Workgroup would be responsible for ensuring special studies are coordinated and leveraging expertise and resources across workgroups.</p> <p>Materials: Slides at meeting</p> <p>Desired outcomes:</p> <ul style="list-style-type: none"> ● Determine the focus of the workgroup ● Determine the membership of the workgroup 	10:10 Melissa Foley
	Short Break	10:40
5.	<p>Discussion: Anticipated Management Decisions and Policies, and Related Information Needs</p> <p>The Draft Multi-Year Plan contains a list of upcoming management decisions relevant to the RMP. Steering Committee members will be asked to talk about their highest priority management decisions and to identify any issues that are missing from the list. The RMP Manager will provide an update on any issues identified during stakeholder meetings.</p> <p>Materials: Draft 2020 Multi-Year Plan https://www.sfei.org/documents/2020-rmp-multi-year-plan</p> <p>Desired outcomes:</p> <ul style="list-style-type: none"> ● Consensus on management drivers and deadlines for the RMP ● Prioritized management decisions to inform in the next 5 years 	10:50 Tom Mumley, Group

6.	<p>Decision: Setting Planning Budgets for Workgroups</p> <p>To be efficient in proposal development and workgroup meetings, the Steering Committee needs to set clear planning budgets for each of the Workgroups. We will also discuss a three-tiered system for workgroup multi-year plans.</p> <p>The outline for this agenda item is:</p> <ol style="list-style-type: none"> a) The Program Manager will present an overview of the available funding for special studies in 2021-2023 (5 mins) b) The Program Manager and Lead Scientist will present the types of special studies being proposed for each Workgroup (10 mins) c) Discussion by the SC (15 mins) <p>If necessary, this discussion will be continued at the January Steering Committee meeting.</p> <p>Materials: Draft 2020 Multi-Year Plan https://www.sfei.org/documents/2020-rmp-multi-year-plan</p> <p>Desired outcomes:</p> <ul style="list-style-type: none"> • Decide on planning budgets for WGs • Confirm all workgroups to have meetings in 2020 • Decide on any multi-year plans to review in more detail in January • Give direction to workgroups or the Technical Review Committee on topics that are a high priority for the Steering Committee 	11:20 Melissa Foley, Jay Davis, Group
7.	Summary, Action Items, Adjourn Planning Session	11:50
	Lunch (provided)	12:00
STEERING COMMITTEE MEETING		
8.	Introductions, Review Agenda, and Confirm Chairs for 2020	12:30 Tom Mumley
9.	<p>Decision: Approve Meeting Summary from August 13, 2019 and confirm/set dates for future meetings.</p> <p>Proposed meetings (4th Wednesdays): SC: January 22, 2020 SC: April 22, 2020 SC: July 22, 2020 SC: October 28, 2020</p>	12:45 Tom Mumley

	<p>Scheduled meetings: TRC: December 12, 2019 TRC: March 12, 2020 TRC: June 11, 2020 TRC: September 10, 2020</p> <p>Materials: SC Meeting Summary, see pages 10-19</p> <p>Desired outcome:</p> <ul style="list-style-type: none"> • Approve meeting summary, confirm existing meeting dates, and set dates for future meetings 	
10.	<p>Information: TRC Meeting Summary</p> <p>Topics discussed at the most recent TRC meeting included:</p> <ul style="list-style-type: none"> • Planning for North Bay margins sampling • Review S&T Monitoring Design and Budgets • Revised 2017 Water Cruise Copper Results • Communication Products and Agenda for RMP Annual Meeting <p>Materials: TRC Meeting Summary, see pages 20-26</p> <p>Desired Outcome: Informed committee</p>	<p>12:55</p> <p>Melissa Foley</p>
11.	<p>Decision: Approve two SEP proposals from STLS</p> <p>The TRC approved the addition of two projects from the STLS to the SEP list.</p> <p>Materials: STLS proposals, see pages 27-28</p> <p>Desired Outcome: Approve the addition of these projects to the SEP list</p>	<p>1:05</p> <p>Melissa Foley</p>
12.	<p>Information: RMP Financial Update for 2019 Quarter 3</p> <p>The RMP Financial Update report summarizes the balance of budgeted and reserved RMP funds as well as its cash position.</p> <p>Materials: Financial Update Memo, see pages 29-55</p> <p>Desired outcome:</p> <ul style="list-style-type: none"> • Approve Water Cruise budget overage (\$11K) • Help collect dredger fees (\$112K) 	<p>1:10</p> <p>Jen Hunt</p>
13.	<p>Decision: Approve the 2020 Budget and Detailed Workplan</p> <p>The 2020 Detailed Workplan and Budget presents the revenue, expenses and deliverables that are planned for 2020. In July, the Steering Committee approved</p>	<p>1:35</p>

	<p>the special studies for 2020. In September, the TRC reviewed proposed budgets for Status and Trends Monitoring. The Detailed Workplan includes the special studies plus Program Management, Governance, Data Services & Quality Assurance, Annual Reporting, Communications, and Status and Trends Monitoring. The Steering Committee needs to approve this workplan so that work can begin.</p> <p>Materials: Hand out at meeting - detailed Workplan and Budget for 2020</p> <p>Desired outcome: Approval of the 2020 Budget and Detailed Workplan</p>	Melissa Foley, Jen Hunt
	Short Break	2:20
14.	<p>Discussion: Funding Plan for 2022 and Beyond</p> <p>Begin discussions on the funding plan for 2022 and beyond. The budget has increased by 3% each year. Do we stay the course?</p> <p>Materials: Slides at meeting</p> <p>Desired Outcome: Discuss options for funding the RMP in 2022 that stakeholders can take back to their organizations for comments.</p>	2:30 Melissa Foley
15.	<p>Information: Upcoming Reports and Communications Products</p> <p>A review of the 2019 Pulse and Annual Meeting and updates on upcoming reports and communications products.</p> <p>Materials: none</p> <p>Desired Outcomes: Informed committee</p>	3:15 Jay Davis
16.	<p>Discussion: Status of RMP Deliverables and Action Items</p> <p>Materials: Action Items & Deliverables Stoplight Reports, see pages 56-60</p> <p>Desired outcome: Informed committee about the status of RMP deliverables</p>	3:35 Melissa Foley
17.	<p>Discussion: Plan Agenda Items for Future Meetings</p> <p>Desired Outcome: Identify future agenda items</p>	3:45 Jay Davis
18.	Discussion: Plus/Delta	3:55
19.	Adjourn	4:00

Recently Completed RMP Reports/Products

Davis, J. A.; Gilbreath, A. N. 2019. Small Tributaries Pollutants of Concern Reconnaissance Monitoring: Pilot Evaluation of Source Areas Using PCB Congener Data. SFEI Contribution No. 956. San Francisco Estuary Institute: Richmond, CA.

McKee, L. J. .; Gilbreath, A. N.; Hunt, J. A.; Wu, J.; Yee, D.; Davis, J. A. 2019. Small Tributaries Pollutants of Concern Reconnaissance Monitoring: Loads and Yields-based Prioritization Methodology Pilot Study. SFEI Contribution No. 817. San Francisco Estuary Institute: Richmond, CA.

Napa River hydrology and sediment gage data:

https://waterdata.usgs.gov/nwis/inventory/?site_no=11458000&agency_cd=USGS

SFEI. 2019. The Pulse of the Bay 2019: Pollutant Pathways. SFEI Contribution No. 954. San Francisco Estuary Institute: Richmond, CA.

Shimabuku, I. 2019. 2017 Update to Copper Rolling Average.

Shimabuku, I. 2019. 2017 Update to Cyanide Rolling Average.

Sonoma Creek hydrology and sediment gage data:

https://waterdata.usgs.gov/ca/nwis/inventory/?site_no=11458500&agency_cd=USGS

Sutton, R.; Lin, D.; Sedlak, M.; Box, C.; Gilbreath, A.; Holleman, R.; Miller, E.; Wong, A.; Munno, K.; Zhu, X.; et al. 2019. Understanding Microplastic Levels, Pathways, and Transport in the San Francisco Bay Region. SFEI Contribution No. 950. San Francisco Estuary Institute: Richmond, CA.

Wu, J.; McKee, L. 2019. Regional Watershed Modeling and Trends Implementation Plan. SFEI Contribution No. 943. San Francisco Estuary Institute: Richmond, CA.

Regional Monitoring Program for Water Quality in San Francisco Bay

Monitoring Design for the Status and Trends Monitoring Program (2014-2027)

Program	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
USGS Moored Sensor Network for Suspended Sediment (5 targeted sites) ^a														
Parameters: SSC, Water temperature, Salinity	X	X	X	X	X	X	X	X	X	X	X	X	X	X
USGS Monthly Cruises for Nutrients and Phytoplankton in Deep Channel (38 targeted sites)														
Parameters: CTD profiles, light attenuation, SSC, DO, Chl-a, Phytoplankton speciation, Nutrients (NO ₂ , NO ₃ , NH ₄ , PO ₄ , Si) ^b	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Every 2 Years: Toxic Contaminants in Water (5 targeted sites and 17 random sites)														
MeHg, Cu, Se (dissolved & particulate fractions in 2017 and onwards, dissolved & total fractions measured in 2015)		X		X		X		X		X		X		X
CN, Hardness, SSC, DOC, POC		X		X		X		X		X		X		X
Aquatic Toxicity (9 stations) ^c		X		X		X		X		X		X		X
Chl-a and Nutrients (NH ₄ , NO ₃ , NO ₂ , TN, PO ₄ , TP, Si) (at GG site only).				X		X		X		X		X		X
PCBs, PAHs, Pesticides								X						
CTR parameters (10 samples at 3 targeted stations) ^d		X										X		
Every 2 years: Toxic Contaminants in Bivalve Tissue (7 targeted sites) ^e														
Se, PAHs	X		X		X		X		X		X		X	
PBDEs	X		X											
PCBs	X								X					
Every 3 Years: Toxic Contaminants in														

Program	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Bird Egg Tissue														
Cormorant Eggs: Hg, Se, PCBs, PBDEs, PFCs (3 targeted sites) ^f			X		X			X			X			X
Tern Eggs: Hg, Se, PBDEs (variable fixed sites) ^g			X		X			X			X			X
Every 2 Years: Toxic Contaminants in Bay Margin Sediments (~40 random sites)														
Ag, Al, As, Cd, Cu, Fe, Hg, MeHg, Mn, Ni, Pb, Se, Zn, PCBs, TOC, N, % Solids, Grain Size		X		X			X		?		?		?	
Every 4 Years: Toxic Contaminants in Sediment (7 targeted sites and 20 random sites) ^h														
Ag, Al, As, Cd, Cu, Fe, Hg, MeHg, Mn, Ni, Pb, Se, Zn, PAHs, PCBs, TOC, N, % Solids, Grain Size	X				X				X				X	
PBDEs	X				X				X					
Legacy Pesticides and Fipronil (reconsider whether to include before the 2018 cruise)	X				?				?				?	
Sediment Toxicity ⁱ									?				?	
Benthic Macroinvertebrates ^j									?				?	
Every 5 Years: Toxic Contaminants in Sport Fish Tissue (7 targeted sites)														
Hg, Se, PCBs, PBDEs, PFCs, Dioxins	X					X					X			

Notes:

"X" = Planned sampling event. "?" = Event that is planned but must be approved by the RMP Steering Committee before implementation. Additional parameters can be added to sampling events to support RMP Special Studies.

a. The RMP Status and Trend Program provides direct support to the U.S. Geological Survey (PI: Dave Schoellhamer) for 5 SSC stations. However, this contribution leverages SSC data at 2 more stations and salinity at 8 stations funded by other partners. In addition, since 2012, the RMP has used Special Studies funds to add DO sensors at 6 stations and nutrient-related sensors to 3 stations.

b. Monthly cruises are completed by the U.S. Geological Survey (PI: Jim Cloern). Phytoplankton speciation and nutrient sampling only occurs at 14 of stations.

c. Aquatic Toxicity is measured following EPA Method 1007.0 (*Americamysis bahia*).

- d. CTR sampling occurs at the Sacramento River, Yerba Buena Island, and Dumbarton Bridge sites.
- e. Mussels (*Mytilus californianus*) are collected from Bodega Head State Marine Reserve, an uncontaminated “background” site of known chemistry, and are transplanted to 7 targeted locations in the Bay. After ~100 days, mussels from the transplanted sites and a sample from Bodega Head are collected for analysis. Three of the 7 transplant sites serve as back-ups in case something goes wrong with the transplants at the 4 primary sites. At the same time, resident clams (*Corbicula fluminea*) are collected from 2 sites in the Sacramento River and San Joaquin River.
- f. Double-crested Cormorants (*Phalacrocorax auritus*). Cormorant eggs are collected at three sites: Don Edwards National Wildlife Refuge, the Richmond-San Rafael Bridge, and Wheeler Island.
- g. Forster’s Tern (*Sterna forsteri*). Tern eggs are typically collected from multiple sites in the Don Edwards National Wildlife Refuge and the Hayward Shoreline Regional Park.
- h. Sediment samples are collected in the dry season (summer).
- i. Sediment toxicity is measured using the following methods: EPA 600/R-94-025 (*Eohaustorius estuaries*), EPA 821/R-02-012M (*Ceriodaphnia dubia*), EPA 600/R-99-064 (*Hyalella azteca*), and EPA 600/R-95-136M (*Mytilus galloprovincialis*)
- j. Benthic macroinvertebrates are measured during dry-season sediment sampling events (2014, 2022). Sediment samples are sieved through nested 1.0 and 0.5 mm sieves. Organisms are sorted into major taxonomic categories and taxonomy and abundance are determined to the lowest practical taxonomic level.

Acronyms:

SSC: Suspended Sediment Concentration

Chl-a: Chlorophyll-a

CTD: Conductivity, Temperature, and Depth

CTR: California Toxics Rule, see

<http://water.epa.gov/lawsregs/rulesregs/ctr/>

DO: Dissolved Oxygen

DOC: Dissolved Organic Carbon

MeHg: Methylmercury

NH₄: Ammonia (dissolved)

NO₂: Nitrite (dissolved)

NO₃: Nitrate (dissolved)

PAHs: Polynuclear Aromatic Hydrocarbons

PCBs: Polychlorinated Biphenyls

PBDEs: Polybrominated Diphenyl Ethers

“Pesticides”: The suite of legacy pesticides that has been routinely measured by the RMP: Chlordanes (Chlordane, cis-; Chlordane, trans-; Heptachlor; Heptachlor Epoxide; Nonachlor, cis-; Nonachlor, trans-; Oxychlordane); Cyclopentadienes (Aldrin; Dieldrin; Endrin); DDTs (DDD(o,p’); DDD(p,p’); DDE(o,p’); DDE(p,p’); DDT(o,p’); DDT(p,p’)); HCHs (HCH, alpha-; HCH, beta-; HCH, delta-; HCH, gamma-); Organochlorines (Hexachlorobenzene; Mirex).

PFCs: Perfluorinated Compounds

PO₄: Phosphate (dissolved)

POC: Particulate Organic Carbon

Si: Silica (dissolved)

TN: Total Nitrogen

TOC: Total Organic Carbon

TP: Total Phosphorus



RMP Steering Committee Meeting

August 13, 2019
9:30 AM – 3:00 PM

Meeting Summary

SC Member	Affiliation	Representing	Present
Eric Dunlavey	City of San Jose	POTW-Large	Yes
Leah Walker	City of Petaluma	POTW-Small	Yes
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	No
Tawny Tran	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
- Melissa Foley - SFEI
- Nina Buzby - SFEI
- Ila Shimabuku - SFEI
- Becky Sutton -SFEI
- Warner Chabot - SFEI
- Jen Hunt - SFEI
- Liz Miller - SFEI
- Patrick Walsh - SFEI
- Jeremy Lowe - SFEI
- Scott Dusterhoff - SFEI
- Lester Mckee - SFEI (phone)

1. Introductions and Review Agenda

Tom Mumley began the meeting by welcoming Steering Committee (SC) members, allowing time for introductions, and briefly reviewing the agenda items. Tom mentioned the most

important item of the meeting would involve reviewing the 2020 Special Studies. Additionally, it was pointed out that a priority toxicology study would be proposed to leverage additional funds allocated to the ECWG strategy in 2020.

2. Decision: Approve Meeting Summary from April 30, 2019 and Confirm/set Dates for Future Meetings

There were no comments on the April meeting summary and no Committee members expressed conflicts with future meetings. Melissa Foley noted that the morning of the October meeting would be the Multi-Year Planning Workshop. In order to allow Committee members time to review meeting materials, the next agenda package will be sent out two weeks before the meeting because the coinciding State of the Estuary conference is the two days prior to the MYP meeting.

Decision:

- Adam Oliveri motioned to approve the April Steering Committee meeting summary, Eric Dunlavey seconded the motion. The motion for approval was carried by all present members.

3. Information: TRC Meeting Summary

Melissa Foley updated the SC on the recent Technical Review Committee (TRC) meeting that largely covered topics related to the 2020 Special Study proposals. The recommendation process was much faster than last year given the lower number of proposals, excellent TRC member attendance at workgroup meetings, and workgroup prioritization that assumed each group would only receive 70% of the available funding.

Melissa noted that the TRC also updated the SEP list, adding - aside from unfunded proposals that were reviewed by the workgroups - three sediment studies. Other workgroups including the Sources Pathways and Loadings as well as PCB workgroups also expressed interest in proposing additional SEPs, but had not yet finalized ideas. The SC also received an update on the RMP Data Challenge, and Melissa reminded the meeting participants that the full challenge launch would occur at the end of August, 2019. The SC members would also receive flyers and promotional material to distribute amongst their networks and help get the word out.

The July TRC meeting also included a conversation on how to approach adding new emerging contaminants to Status & Trends work. The constant budget will likely not be able to sustainably support a growing number of emerging contaminants without phasing out other things currently being monitored. Karin North suggested bringing this topic to the Multi-Year Planning Workshop.

4. Information: RMP Financial Update for 2019 Quarter 2

Jen Hunt presented on the current state of 2019 projects/expenditures, revenue, as well as the status of prior years' budgets that remain open. Specifically, Jen went through the status of the 2018 budget which was 89% expended at the time of the meeting, and expected to finish within budget but will not have any remaining funds to unencumber.

Most notably, Jen informed the meeting participants of a net revenue shortfall of approximately \$36K. The actual shortfall is closer to \$150K, though this year's expenses are lower than available revenue and make up some of the difference. Melissa and Jen attributed the shortfall to dredger(s) that have not paid fees to the RMP, and proposed reducing 2019 unallocated funds to \$0 and moving roughly \$16K from the undesignated reserve to account for the shortfall. The SC members agreed with this approach and noted that John Coleman - not present at the meeting - should be asked on how to deal with the ongoing dredger shortfall in fees.

The discussion of the shortfall incited another topic related to the Army Corps' contributions. Their contribution will increase to \$400K starting in 2020; however from 2017-2019 the Corps only contributed \$250K per year instead of their required \$400K. Tom Mumley provided context to the group, explaining that the Corps' contributions have not increased in the same manner as other RMP contributors and were due for a larger increase.

For 2019, though only 34% of the budget has been expended, Jen highlighted that more than half of the funds for governance tasks have been spent due to heavy staff time for workgroup meetings (\$38K labor overage for the workgroup task). The North Bay selenium project will also be overbudget due to higher than expected boat costs. Given these and recent other project overages, Jen and Melissa provided a process on how to address overages moving forward. Melissa proposed that when a project goes over budget by \$5,000 or 5% (whichever is a smaller sum) the entire Steering Committee should be informed. Overages below this threshold will only need to be taken to the Chair and Vice Chair of the Committee. The meeting participants approved this process.

Decision:

- The decisions for this part of the meeting were voted on as a package. Adam Oliveri motioned to approve: (1) reducing the 2019 surplus to \$0 and moving \$16K from the reserves to the RMP in order to make up for the revenue shortfall; (2) moving \$16,762 from LAIF interest to undesignated funds; and (3) covering the \$4K overage from task 3018-034 (CECs in stormwater) by trying to be under budget in another task - no budget transfer needed at this time. Karin North seconded the motion. The motion for approval was carried by all present members.
- The SC decided to hold off on approving moving funds for the respective \$38K and \$9K overages on tasks 3019-002-C (workgroup efforts) and 3019-041 (North Bay selenium in clams & water) until a future meeting.

Action Items:

- Update financial update memo language to improve clarity in the description of the project overage procedure. (Melissa Foley, 8/31/19)
- Account for 2019 revenue shortfall with 3019 unallocated funds (19K) and a transfer of RMP undesignated reserve funds (\$16.5K) (Jen Hunt, 8/31/19)

5. Decision: Predictive Toxicology Proposal

During the Emerging Contaminants Workgroup Meeting there was a suggestion to begin predictive toxicology work in 2019, rather than 2020. This idea came from a consensus of the group that toxicology is a priority; the recent hiring of a toxicologist - Liz Miller - also spurred action now. SC members discussed that the proposal had not gone through the typical approval process, but the special circumstances allowed for the exception. Adam Oliveri commented that unique circumstances such as the new proposal should be communicated to the SC in a memo.

Liz Miller presented to the meeting attendees a proposal that would help identify and evaluate current predictive toxicology tools, as well as assess how such tools can inform future RMP study design and data analysis. Liz noted the alignment with the first ECWG management question - "Which CECs have the potential to adversely impact beneficial uses in San Francisco Bay," as predictive toxicology aims to bridge the gap between chemical properties and adverse effects.

The proposed budget would cover Liz's labor and senior scientist review and would come from the RMP reserves. These funds would be in addition to the already funded toxicology webinar (January 2020). The webinar's purpose is to inform workgroup members, SFEI staff, and stakeholders on predictive toxicology tools and assess how they can be implemented into the RMP. Information garnered from the webinar will then be used to develop an actual implementation strategy. Adam Oliveri brought up the importance of which toxicologists the RMP will look to, to which Liz commented that 1-2 of the experts from the webinar would likely become a new ECWG advisor. Tom Mumely also noted that this work may be able to be incorporated into statewide efforts.

Decision:

- Adam Oliveri motioned to approve funding the proposal using RMP undesignated reserve funds. Karin North seconded the motion. The motion for approval was carried by all present members.

Action items:

- Move \$15,000 from the RMP reserves to the 3019 budget (Jen Hunt, 8/31/2019)

6. Discussion: RMP Fees for 2021

Melissa outlined that this item was a confirmation of the 3% increase in fees from 2020 for 2021. This will be the final year of a three-year stint (2019-2021) where fees and increases were

approved in November of 2017. The SC members were in agreement and did not discuss any changes to the current fee structure.

Karin North mentioned that discussion of the next three-year spread (2022-2024) should be introduced at the 2019 Multi-Year Planning Workshop with the goal to have a decision approved at the following January 2020 SC meeting. Karin also brought up the points that stormwater fee payers may have a harder time meeting fee increases and any future economic changes should be taken into account. For example, around the recession RMP fees did not increase at all for 3-4 years. These constraints will be key points to consider during future fee discussions.

Action Items:

- Include discussion of 2022-2024 fee structure in MYP agenda (Melissa Foley, 10/11/19)

7. Decision Approve Special Studies for 2020 and List of Eligible RMP Studies for SEP Funding

Melissa Foley presented the meeting attendees with the TRC special studies recommendations, noting one small budget change and highlighting that the \$13K overage in RMP core funds can be balanced by one of the SPLWG project budgets. SC members discussed this overage and Adam Oliveri suggested that the start date of some special studies be delayed to get a better sense of whether projects are going to stay within or below budget. Tom Mumley also noted that an extra step of budget groundtruthing is worked into the SC's final budget approval process.

When discussing eligible SEP studies, Melissa presented three additional SEPs proposed by the Sediment Workgroup. In addition to the sediment SEPs, all unfunded proposals assessed by the Workgroups and TRC will also be added to the list of eligible studies. No ideas would come off the list, with the exception of projects funded as a 2020 special study.

When looking over the funding amounts, the SC members brought up the topic of RMP contributions to the Nutrients work. Eric Dunlavey voiced a concern that simply putting aside \$250K may not reflect the priority of nutrient monitoring for wastewater agencies. This priority was determined at the 2018 MYP Workshop and serves as a motivator for RMP funding. Melissa noted that it is inherently difficult for the TRC to take a more in-depth approach to nutrient funding because there is no specific workgroup meeting for TRC members to attend, and the members also don't often go to Nutrient Management Strategy (NMS) meetings. The attendees agreed that this discussion would be a good item for the MYP Workshop.

Decision:

- Leah Walker motioned to approve the funding of the TRC recommended 2020 Special Studies and adding three sediment SEPs to the list of eligible studies. Eric Dunlavey seconded the motion. The motion was carried by all present members.

Action Items:

- Evaluate burn rate of set aside funds and report back to the SC (Melissa Foley, 10/23/19)
- Include further discussion on RMP contributions to Nutrient work in the Multi-Year Planning Workshop agenda (Melissa Foley, 10/11/19)
- Include external/additional funding for special studies in the Multi-Year Plan document (Melissa Foley, 10/23/19)
- Convene PCB workgroup to discuss multi-year planning, margin work, TMDL revision, and possible SEPs; also invite the waterboard to participate (Jay Davis, 10/23/19)
- Update SEP master list and share with Tom Mumley (Melissa Foley, 10/23/19)

8. Science Update: Sport Fish Sampling

This item occurred before the sediment science update because the meeting was running ahead of schedule and there was time to get through the item before breaking for lunch.

Jay Davis updated the meeting participants on the current Status & Trends (S&T) monitoring of sport fish in the Bay. The previously discussed additional funding from the EPA was officially allocated to this work, allowing the RMP to move forward with a more robust sampling design that could investigate more species that could allow OEHHA to expand their advisory. Jay praised the work of Luisa Valiela (TRC member) in championing the effort to get the RMP these funds.

In outlining the objectives of S&T sport fish monitoring, Jay brought up the point that the first management question regards providing information for updating advisories. This more clearly indicated the role of groups like OEHHA in sport fish monitoring decisions, as the data from sport fish directly translates into actionable updates.

Jay then outlined the monitoring locations and species of interest. The species include a select number of core species that have been monitored historically by the RMP, as well as others that are of special interest to OEHHA. Jay also mentioned that the RMP focuses on more popular species, with a specific consumption study providing the rationale. Looking back at data from the 2014 monitoring gave more context to the importance of some of the species. For example, striped bass, a core RMP sampling species, appeared to be the main indicator of mercury levels in the bay.

9. Science Update: Sediment Conceptual Model and Monitoring Strategy

Jeremy Lowe gave a presentation to the Committee members on the Sediment Workgroup, which was only created in 2016. Jeremy outlined the group's motivations, guiding management questions, and past accomplishments. Current projects were also presented to the group, most notably the integrated modeling and monitoring strategy. Jeremy outlined the other entities

interested in Bay sediment, which include the San Francisco Bay Conservation and Development Commission (BDCD) and the Wetland RMP (WRMP). Critical to the strategy of the sediment workgroup is avoiding redundancy amongst groups and leveraging opportunities to collaborate.

Jeremy then went into further detail on the development process for the integrated modeling and monitoring strategy. Starting with the workshop held in October 2018, the workgroup has been working towards identifying the basis of information available, as well as data gaps that monitoring and modeling could address. The monitoring would help meet modeling needs, and in turn models would inform monitoring design. Future steps that Jeremy outlined included scheduling another modeling workshop for fall 2019, presenting at the State of the Estuary Conference, and developing a draft strategy document.

The meeting participants were in support of the workgroup's efforts to coordinate with BDCD and the WRMP, and highlighted the importance of sustaining such work. Tom Mumley noted that having a system that is "public" prevents the siloing of information down the line (e.g., agreed upon data needs, universal code/data management structure, non-proprietary models).

10. Decision: Approve Agenda for 2019 Annual Meeting, and Discuss Upcoming Reports & Communication Products

Jay began the item by updating the Committee members on the annual meeting agenda because a few changes had been made after the agenda package was sent out. The meeting participants identified a lack of intrigue to the planned dredging talks and discussed alternative speakers and topics. The group settled on a restructuring of the afternoon sessions.- first combining the existing dredging and industrial wastewater speakers into a single session with four talks. The meeting participants agreed that each of the talks should be shortened to 15-minute blocks to allow for 20 minutes of discussion at the end. Maureen Dunn will act as the moderator for this discussion.

The final session of the day would then serve a summarizing role and highlight the RMP's involvement in other efforts. Melissa Foley will speak on RMP highlights and integration for the first two talks, followed by a presentation on the recently completed Adaptation Atlas. Tom Mumley would act as moderator for the final discussion session of the day.

Jay then showed a mock-up of the upcoming Pulse draft that included a graphic representing one of the discussed pathways. Each additional pathway will also have an associated graphic, as well as one integrating all pathways together. Jay gave special thanks to all the contributors, both as authors and editors, with a request that SC members review the laid-out draft within 5 working days. Since the draft will be sent out at the end of August, this timeline allows for sufficient time to revise and get the document to the printer.

Finally, Jay reminded the group of the upcoming topics for the Estuary News articles. Currently the newsletter is working on an article covering bisphenols, and the December issue will

highlight microplastics. The microplastics article will follow-on from the October Microplastics Symposium and final microplastics reports.

Action Items:

- Restructure annual meeting agenda to reflect Steering Committee discussion outlined in above text. (Jay Davis, 8/30/19)
- Reach out to SFEI staff that would be interested and capable of presenting on the Adaptation Atlas (Melissa Foley, 8/30/19)

11. Discussion: Develop Agenda for Multi-year Planning Meeting

Melissa Foley presented the Steering Committee with three possible topics to be the focus of the upcoming MYP Workshop, providing a brief outline and rationale for each: (1) workgroups, (2) future of status and trends, and (3) funding. Leah Walker initiated some preliminary dialogue on possible approaches to streamlining the workgroup process to prevent budget problems similar to those experienced in 2019. Various Committee members discussed possible strategies and actions, though the conversation was tabled as it began to evolve into an actual multi-year planning discussion.

Melissa asked but did not receive any comments from the meeting attendees on changes they would like to see in the formatting or outline of the Multi-Year Plan document. Additionally, Melissa asked for input from the Committee on forming a planning subgroup to help, or start to answer some of the questions posed at MYP workshops. Given that the workshop is rather short, getting a head start with subgroup discussions could be helpful. Jay Davis also brought up the idea of lengthening the workshop. Karin North inquired about TRC participation, and Melissa informed the group that Bridgette DeShield, Richard Looker, Chris Sommers, and Luisa Valiela had volunteered to participate. In hearing the TRC participation, the meeting participants agreed that it would be simple enough to have a subgroup meet prior to the MYP to come up with the agenda for the meeting.

Action Items:

- Schedule meeting with TRC volunteers, Karin North, and Tom Mumley to plan Multi-Year Planning workshop agenda (Melissa Foley, 10/23/19)
- Examine placeholder budgets in current Multi-Year Plan (Melissa Foley, 10/23/19)
- Coordinate with Matt Heberger to invite Delta RMP participants to the MYP workshop (Melissa Foley, 10/23/19)

12. Discussion: Status of RMP Deliverables and Action Items

Melissa Foley gave an overview of the deliverables and action items that were delayed and/or had new due dates. Melissa mentioned that finalizing many CEC reports had been put on hold because the microplastic report and upcoming symposium has taken up a lot of CECs staff time. Tom Mumley noted some items without revised due dates and reminded the group of the importance of documenting any delays, as well as providing reasoning.

Action Items:

- Get updated due date from Lester McKee for the SPL data analysis interpretive report (Melissa Foley, 8/31/19)

13. Discussion: Plan Agenda Items for Future Meetings

Jay Davis indicated items that are on the regular meeting schedule including confirming Committee chairs and approving the workplan and budget for the year. The list also included approval of the annual report outline, which Tom Mumley agreed could be delayed.

Melissa informed the group of the upcoming announcement of the Delta SeaGrant Fellowship. Each applicant will require a mentor (e.g. stakeholders, agency staff) so, if interested, meeting attendees could possibly participate in this role. Tom Mumely also briefed the group on the water quality sessions occurring at the upcoming State of the Estuary Conference. These include one session on emerging contaminants and another on nutrients.

14. Plus/Delta

Karin North expressed interest in starting meetings earlier to accommodate those traveling high-traffic routes. Other Committee members agreed that a 9:00 am start time would work well. Jay Davis commended the group for discussing and coming to a solution on the annual meeting agenda and Maureen Dunn suggested that Chevron's shipping people should attend future Sediment Workgroup meetings.

ADJOURN

Monitoring for PCB and Hg (and other pollutants) concentrations, loadings, and trends in select small tributaries (\$70k - \$150k)

Over the past two decades, considerable amounts of monitoring and modeling have been conducted by Bay Area municipalities, the Water Board, and the RMP to establish baseline stormwater loading estimates for PCBs and mercury and other pollutants. These estimates provide the foundation for measuring stormwater pollutant trends and assessing progress towards TMDL pollutant reduction goals. In 2018, the Small Tributaries Loading Strategy (STLS) Team of the RMP developed the first version of the RMP's Stormwater Modeling and Trends Strategy to provide a framework and workplan for the collection of pollutant concentration and loading trend information. The Strategy called for the development of a regional model to support regional loads estimates for multiple contaminants and eventually trends of PCBs and mercury that was funded by the RMP in 2019. The Strategy also recommended collection of data in a minimum of three small tributaries that are geographically distributed around the Bay and that represent a range of climate, watershed sizes, and management implementation progress and styles.

Although the details of a sampling program for each contaminant would need to be finalised with oversites from each of the workgroups, the proposed sampling program would collect appropriate samples for laboratory analysis of suspended sediment concentrations (SSC) and contaminants during storms that mostly occur between October and April of each wet season. Depending on discussions with the overseeing workgroups, discrete grab samples or composite samples will be collected on the rising and falling limbs of the storm hydrograph to provide representative samples that characterise storms.

The outcome of this study will be quality assured data on suspended sediments, PCBs and Hg (and other pollutants of interest) for one, two or three field locations. The data would be provided to the public via the online RMP CD3 tool and supported by a short technical report outlining, at a minimum, methods, results and basic meta-data on data quality.

Estimated Cost per year (assuming SSC, PCBs and Hg only and flow monitoring is already operating):
\$70k (1 sampling site);
\$110k (2 sampling sites);
\$150k (3 sampling sites)

Data to support prioritizing tidally influenced industrial runoff sites for management and mitigation (\$82k - \$115k)

Old industrial land use is the main source of the greatest yields as well as total mass of PCB loads in the region. Areas nearer the Bay are more likely to include heavy industrial land use

that historically serviced rail and ship-based transport and are often very difficult to sample because of a lack of public rights-of-ways and tidal-related constraints near the Bay. In this study, we would utilize a low draft boat or other means to access tidal sites downstream from these types of heavy industrial areas. There we would anchor a coarse-screened passive suspended sediment sampler and an auto-logging micro salinity probe in the water column. The sampling equipment would be installed just prior to a storm and retrieved after. The data from the salinity probe would be used to determine the amount of time that fresh water runoff from the industrial area of interest was sampled and therefore if the sample is suitable to send off for analysis. Sediment collected would be analyzed for concentrations of PCBs and mercury on sediment particles. If sample masses collected are too small to analyze as sediment, samples may be analyzed as water samples, and concentrations on solids calculated/estimated as a ratio to suspended sediment. This study would help to identify industrialised drainage areas on the Bay Margin for management consideration that we have otherwise been unable to sample. The deliverable of this project would be quality assured PCB and mercury data made available through the CD3 web tool, and a report detailing the results of the study.

Project tasks and cost estimate:

- a) Project planning and project management (1 person, 60-100 hrs, \$9,000- \$15,000)
- b) Equipment cost (\$3,000)
- c) Collect samples at 10-20 locations (2 people, 5 hours each per location, \$15,000-\$30,000)
- d) Analytical costs (\$12,000 - \$24,000)
- e) Data Management (\$20,000)
- f) Evaluating the data and reporting (1 person, 150 hours, \$23,000)



Bay RMP Technical Review Committee Meeting

September 26, 2019

San Francisco Estuary Institute

Meeting Summary

Attendees

TRC Member	Affiliation	Representing	Present
Irene Lui-Wong	EBMUD	POTW	yes
Yuyun Shang	EBMUD	POTW	no
Mary Lou Esparza	Central Contra Costa Sanitary District	POTW	no
Tom Hall	EOA, Inc.	POTWs	phone
Ross Duggan	City and County of SF	CCSF	no
Anne Hansen	City of San Jose	POTWs	no
Bridgette DeShields*	Integral Consulting	Refineries	yes
Chris Sommers	BASMAA (EOA, Inc.)	Stormwater	no
Shannon Alford	Port of San Francisco	Dredgers	no
Richard Looker	SF Bay Regional WQCB	Water Board	no
Luisa Valiela	US EPA	US EPA -IX	yes
Ian Wren	Baykeeper	NGOs	yes
Jim Mazza	US Army Corps of Engineers	USACE	no
Simret Yigzaw	City of San Jose	POTWs	no
<i>Xavier Fernandez</i>	<i>SF Bay Regional WQCB</i>	<i>Water Board</i>	yes
<i>Shelah Sweatt</i>	<i>US Army Corps of Engineers</i>	<i>USACE</i>	no

*Chair

Guests and Staff

- Jay Davis - SFEI
- Melissa Foley - SFEI
- Nina Buzby - SFEI
- Ila Shimabuku - SFEI
- Alicia Gilbreath - SFEI
- Paul Salop - AMS

- Don Yee - SFEI
- Lester McKee - SFEI (phone)
- Julie Beagle - SFEI

1. Introductions and review agenda

Melissa Foley allowed time for introductions and noted the newer faces (alternates) in the room were due to the absence of a few of the regular committee members.

2. Decision: approve meeting summary from June 13, 2019, and confirmation/set dates for future meetings

Bridgette DeShields asked the committee members for comments on the last meeting. The only comment came from Luisa Valiela, who asked for a language change concerning the description EPA funding efforts for RMP Sport Fish work.

Bridgette then went over upcoming meeting dates, and urged attendance to the upcoming Multi-Year Planning meeting on October 13, 2019. Melissa Foley also reminded meeting attendees to register and attend the RMP Annual Meeting scheduled for October 10, 2019. The only possible conflict noted was a WRMP core meeting that is also scheduled for March 12, 2020. Luisa commented that the WRMP meeting date is subject to change, and the committee members agreed to go over meeting dates again in December.

Decisions:

- Luisa Valiela motioned to approve the June 13, 2019 TRC meeting summary. Xavier Fernandez seconded the motion. The motion for approval was carried by all present members.

3. Information: SC Meeting Summary from August 13, 2019

Melissa Foley summarized the previous month's Steering Committee meeting. The Steering Committee approved the TRC special studies recommendations as well as a proposal to begin toxicology efforts in the current year (2019). Jay Davis and Jeremey Scott presented on the sport fish sampling and sediment workgroup efforts, respectively. The Steering Committee also brainstormed possible topics for discussion at the Multi-Year Planning meeting. The topics of interest are too much to cover all in one meeting, which prompted the formation of a small group of both TRC and SC members to decide the focus of the upcoming meeting.

4. Discussion: North Bay Margins Sediment Sampling Design

Previously, the TRC heard from Don Yee about the results of the 2017 South Bay Margins study and agreed the the RMP should sample the North Bay margins. Don Yee presented a

preliminary sampling design (to be carried out in 2020 or 2021) to the meeting participants. In addition to reminding the TRC of the motivation behind sampling margins areas and more specifically those in the North Bay, Don relayed the locations of randomized sampling sites in Suisun Bay/San Pablo Bay/Carquinez Strait as well as potential analytes, analytical laboratories and budget. The accompanying discussion focused on how to properly balance randomized sampling locations with places of interest. In other words, how many deterministic sites and random sites should be included in the sampling design.

Possible deterministic locations/areas brought up by meeting attendees included: the mouth of Walnut Creek, southern shorelines of Suisun and San Pablo Bays, and Mare Island. With these areas in mind the TRC members agreed that Don would present a final sampling design, with integrated deterministic sites, for approval at the December meeting. This schedule came out of committee agreement that sampling should be carried out in 2020, rather than 2021.

5. Decision: Status and Trends Monitoring Design for 2020, including plans for laboratory intercalibration studies

Melissa directed meeting participants to the current RMP Status and Trends monitoring table, noting that bivalves will be sampled in 2020, bird eggs and water in 2021, and sediment in 2022. Paul Salop noted that Bodega Bay Marine Labs experienced a large mussel die off from the past year's heat waves. Though not likely, AMS will start on permitting applications earlier to account for any possible concerns/roadblocks.

When asking for comments and/or suggested changes on the bivalve deployment design, the TRC began to discuss the value and use of the data. Of the two target analytes - selenium and PAHs - selenium seemed to be the most pertinent. Data on PAHs is most useful as a baseline in oil spill scenarios, while the topic of selenium is of particular interest to the water board. Bridgette DeShields suggested that the committee would attentively approve the 2020 bivalve monitoring plan, dependent on a selenium data update to be presented at the December TRC meeting.

6. Discussion Delta RMP and Bay RMP overlaps

Melissa Foley presented the TRC with a list of the Delta RMP membership and a breakdown of stakeholder representation (e.g. 3 representatives for stormwater, 2 for agriculture). This list was to deliver on the previously discussed motivation to increase Delta RMP and Bay RMP coordination. Melissa noted that the Delta RMP committees are larger in size due to additional stakeholder interest; agriculture, flood control, irrigated agriculture, and resource agencies.

Melissa informed the TRC that six Delta RMP members, from the program's planning subcommittee, have been invited to the October Multi-Year Planning meeting. This should offer a good opportunity for cross pollination amongst the programs. Melissa asked the meeting

participants for any other ideas on how to further coordinate with the Delta RMP. Bridgette DeShields and Luisa Valiela suggested that an RMP representative and an EPA representative (Terry Flemming) attend the Delta RMP's equivalent Multi-Year Planning meeting.

7. Information: Data Challenge Update

Melissa Foley reminded the TRC members that the Data Exploration Challenge is live and open to submissions until January 2020. She encouraged the committee to share the challenge materials to any teachers and/or professors that may be interested. Luisa Valiela put forward a goal for each person to share the information with at least one person.

Item discussion also prompted a future meeting agenda item to revisit challenge evaluation criteria. Because the prompt includes a more specific scenario, it is possible that previous judging standards will need to be altered.

8. Information: Update on Copper and Cyanide Results from 2017 Water Cruise

Ila Shimabuku reminded the group that the results of the 2017 Water Cruise copper and cyanide monitoring had been presented in the previous year, but after completing QA/QC efforts some of the results changed.

The changes to the cyanide results were only altered due to evidence of blank contamination. More notably, were the differences in findings between two analytical methods for copper analysis. Brooks Applied Laboratories (BAL) had implemented a new ion-column (IP) method for copper analysis in 2017, which tended to show significantly high results. After re-running samples using the previous reductive precipitation (RP) method, Ila explained that a difference of approximately 20% was observed. Don Yee added that the cause of this variation was likely due to the interference of a titanium species present in the samples with the IP method. With these considerations in mind the now published, revised averages were based off the RP data.

The meeting participants agreed that, going forward, samples should be run using both RP and IP methods. However, this would be subject to change based off Don's recommendations. It is possible that BAL has improved their IP methods to prevent titanium interference, which could be investigated after SFEI receives the 2019 water cruise data.

9. Decision: Update List of RMP Projects Eligible for Supplemental Environmental Project (SEP) Funding

The purpose of this item was primarily to review two new SEP proposals from the Small Tributaries Loading Strategy (STLS). The first proposal planned to monitoring for PCBs and mercury at select sites that would be a piggy back item on existing trends work. Such data

would be helpful in informing 2020 modeling efforts. Melissa Foley noted that this study is also included in the STLS multi-year planning table, so it could also be a possible special study in the future.

The second proposal focused on deploying passive samplers at tidally influenced stormwater sampling sites. In an attempt to fill data gaps related to tidal runoff sites, the passive sampling may lead to a better chance of actually be able to sample.

The TRC did not have any comments on the proposals and unanimously agreed to add the studies to the SEP list. Melissa Foley also communicated the recent sediment SEP approvals from the previous month's Steering Committee meeting. Jay Davis added that the PCB workgroup would be convening for a call in October and possibly discuss additional SEP topics as well. Discussion of SEP studies incited a comment from Luisa Valiela to include more information about how the funding would be appropriated for each project. For instance, how much work would need to be contracted out compared to SFEI efforts. Similarly, Melissa suggested adding a column specifying a project's geography. With these added details the group agreed that it would be easier to identify any possible gaps or opportunities in the list.

Action Items:

- Incorporate STLS proposals in to the SEP list (Melissa Foley, 10/18/19)
- Add suggested SEP detail columns to SEP table (Melissa Foley, 12/31/19)

10. Information: Agenda for Annual Meeting

Jay Davis began the item by highlighting recent speaker and schedule changes that had been implemented since the last TRC meeting. The third session had been altered to allow for a combined session of dredging and industrial wastewater; including four shorter talks, that would come from just regulators and dischargers. As a result, the final session became an opportunity to cover RMP highlights and integration efforts. Melissa Foley's talk would address both topics, and Julie Beagle from the SFEI Resilient Landscapes team would give an example of integration work in a presentation on the recently completed Adaptation Atlas.

11. Information: RMP Communications Products

Jay Davis updated the TRC on the completion of the 2019 Pulse of the Bay, thanking all article contributors and acknowledging the payoffs of the increased coordination efforts. Jay highlighted the goal to develop helpful infographics for the report that could also be resources going forward (e.g. presentations).

12. Information: Preview of Annual Meeting Presentations

To get feedback from the TRC, the three speakers representing SFEI presented preliminary versions of their RMP Annual Meeting talks.

Melissa Foley

When discussing highlights and integration, Melissa asked the meeting participants for feedback on the organization and flow of the presentation. The structure of the presentation started by discussing achievements of each of the RMP workgroups. When covering microplastics work, there was some discussion on the process of elevating contaminant status. Meeting participants agreed that addressing the nuances to elevating microplastics would be helpful and could be further informed by the Microplastics Symposium.

Luisa Valiela noted that the presentation could be a unique platform to discuss areas for RMP improvement. Specifically the meeting would be an ideal time to acknowledge partnership and collaboration opportunities. Despite being a less interesting presentation topic, Paul Salop and Jay Davis noted the benefits of having a laundry list of collaborators. After asking the meeting participants for any additional ideas that she didn't cover, Ian Wren suggested including more detail about Melissa's background. Luisa and Jay also commented on framing and linking the talk to the State of the Estuary Conference (e.g. focus more on CECs).

Julie Beagle

Julie gave an adapted version of a talk on the Adaptation Atlas that she had presented at other engagements. The Adaptation Atlas is a waterboard-funded tool that provides a place-specific framework to work with nature to adapt landscapes to sea level rise.

The TRC members provided various helpful comments, focusing mostly on how to revise the presentation to appeal more to the Annual Meeting's audience. Xavier Fernandez identified areas where examples could be framed in a more water-quality focused manner. Luisa Valiela noted that current contamination levels is another aspect that would need consideration, in addition to the atlas' assessment. Meeting participants also provided suggestions on what areas could be shortened and context of earlier sessions that could be incorporated.

Melissa Foley brought up a schedule change option that would shift the task of tying together water quality and the Adaptation Atlas to her. By presenting after Julie, at the end of the day, Melissa could better reference points from Julie's talk and also provide a summary that would help close out the meeting.

Alicia Gilbreath

Alicia's presentation would occur during the second session focused on stormwater, and function as the session's science update. The talk covered continued reconnaissance monitoring work as new studies such as emerging contaminant stormwater sampling and microplastic trash and stormwater monitoring. After presenting monitoring results, Alicia concluded by discussing the successful remediation observed in a rain garden in El Cerrito.

Most TRC comments focused on maintaining consistency and preventing confusion when discussing microplastic results as well as figure improvements. Jay Davis also commented that

stormwater POC monitoring has shouldered many other projects, and the RMP meeting is an opportune platform to provide reason to stakeholders for increased funding.

Action Items:

- Distribute Microplastics Workgroup meeting summary to the TRC (Ila Shimabuku, 9/30/19)
- Incorporate TRC recommendations/comments into Annual Meeting presentations (Melissa Foley, Julie Beagle, Alicia Gilbreath; 10/9/19)

13. Information: Action Items and Deliverables

Melissa Foley communicated that most of the delayed deliverables were coming from staff that have been incredibly focused on Microplastics efforts. An incredibly exciting deliverable itself, Melissa highlighted the recent completion of the Microplastics Report which is the culmination of three years of effort.

Melissa noted specifics related to a few other delayed reports, generally noting that most reports were very close to being complete. Discussion of deliverables brought up a discussion about the open positions at SFEI, to which Melissa provided brief status updates on the hiring process.

14. Agenda Items for Future Meetings

Melissa Foley summarized future meeting items that came up during the day's discussions. The list included an update on past bivalve data, with regards to selenium and PAHs, next steps for the North Bay Margins work, revising data challenge judging criteria, and further SEP ideas.

Adjourn



DATE: October 14, 2019

TO: RMP Steering Committee

FROM: Jen Hunt and Melissa Foley

RE: RMP Financial Update – Period Ending 8/31/19

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 information presented are for job to date labor and expense billing through August 31, 2019, hereafter referred to as the “current period.”

RMP 2019 BUDGET

Revenue

\$3,293,445 of the \$3,369,606 (95%) in 2019 fees have been collected (Notes: 1. the full 2019 revenue is \$3,819,850 which includes \$109,762k from undesignated reserve funds, 2. the total amount invoiced does not include \$90,482 for Caltrans which has not yet been invoiced, 3. the total amount invoiced does not include the \$250,000 that will go from USACE to USGS directly). Table 6 shows the remaining outstanding Accounts Receivable for 2019.

The expected fees are the sum of core fees (\$3,430,787) 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). There is a dredger fee shortfall of \$262,334 (\$150,000 shortfall from USACE and \$112,334 shortfall from local dredgers). Due to this shortfall, the planned 2019 RMP expenses exceeded revenue by \$36,108. At the August 2019 Steering Committee meeting, a decision was made to move \$16,762 from Undesignated Reserve Funds to RMP 2019 and to reduce the RMP 2019 unallocated budget from \$19,346 to \$0. These two changes have now balanced the RMP 2019 budget.

Expenses

Overall, 47% of the 2019 funds have been spent. We are currently about \$11,000 over budget on the 2019 water cruise task. A primary factor on this overage is that the water cruise labor budget was lower in 2019 than in 2017 despite needing the same number of days and crew to complete the work and costs have increased over time as well. We will try to cover this overage by being under budget, in total, on tasks 1-5. To date, in RMP 2019, we are over budget by about \$50,000 (\$38.5k on workgroup meetings, \$11k on the water cruise, and \$9k on the Se NB clam study). In addition, we are holding one additional workgroup meeting for the PCB Workgroup which we anticipate will cost about \$4k. We will also be over budget by about \$9,000 on the Selenium North Bay Clam and Water Sampling (approved at the last SC meeting) which would bring the overage on all projects to about \$63,000. We will continue to update as we progress through the next quarter to see if we can balance out this overage.

Unencumbrances this Quarter

- There is no request to unencumber at this meeting.

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, 90% of the 2018 funds have been spent. The remaining projects are mostly special studies. For the Status and Trends tasks, most of the remaining expenses are laboratory invoices and data management.

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 (1 task is open) and 2017 (11 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 \$8.4k and \$66.4k 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. The historical and projected balance of the Set-Aside Fund is shown in Figure 3.

Dedicated Dredger Reserve Fund

The balance of the Dredger Reserve Fund was reset to zero on January 1, 2018, when new dredger fees took effect. In 2018, there was a \$62,665 credit to the Fund for dredger fees associated with the 6-month "stub year" that was created when the new fee schedule was developed^[1]. There was also a debit of \$109,060 because the local dredger fee payments were below their target for the year. In 2019, there is a dredger deficit of \$262,334. Therefore, the balance of the Dredger Reserve is currently **-\$308,729 (a deficit)**. Table 3 tracks the running balance of the Dredger Reserve Fund.

Undesignated Funds

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

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

Any remaining Undesignated Funds are available for spending at the discretion of the Steering Committee. Figure 2 shows how the balance of Undesignated Funds has changed over time. The balance of Undesignated Funds through the current period is **\$871,968**. The balance decreased by \$31,762 in the last quarter due to withdrawing \$15,000 from undesignated funds to fund an emerging contaminants toxicology project in RMP 2019 (approved at the August Steering Committee Meeting) and withdrawing \$16,762 to cover a RMP 2019 revenue short fall (approved at the August Steering Committee Meeting). Table 4 shows the withdrawals and deposits in the Undesignated Funds during the last two budget years.

Supplemental Environmental Project (SEP) Funds

The total amount of RMP SEP funds received through the current period is \$1,841,000, which includes \$1,829,350 in SEP settlement funding and \$11,650 for oversight costs. \$72,500 of SEP settlement funds received has not yet been committed to a project. As of the current period, a total of \$1,037,078 has been spent on all SEP projects (includes open and closed projects to date), leaving a current balance of **\$803,922** (includes the funds that have not yet been committed to a project). 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.

FOR STEERING COMMITTEE APPROVAL

- Request approval to be over budget on the water cruise 2019 labor task by \$11,000.
- Request approval for an additional \$4k in labor on the 2019 workgroup task. Note that this task is already over budget by \$38.5k (previously approved). The total overage will be about \$42.5k.

Figures and Tables

Budget Final and Actuals JTD

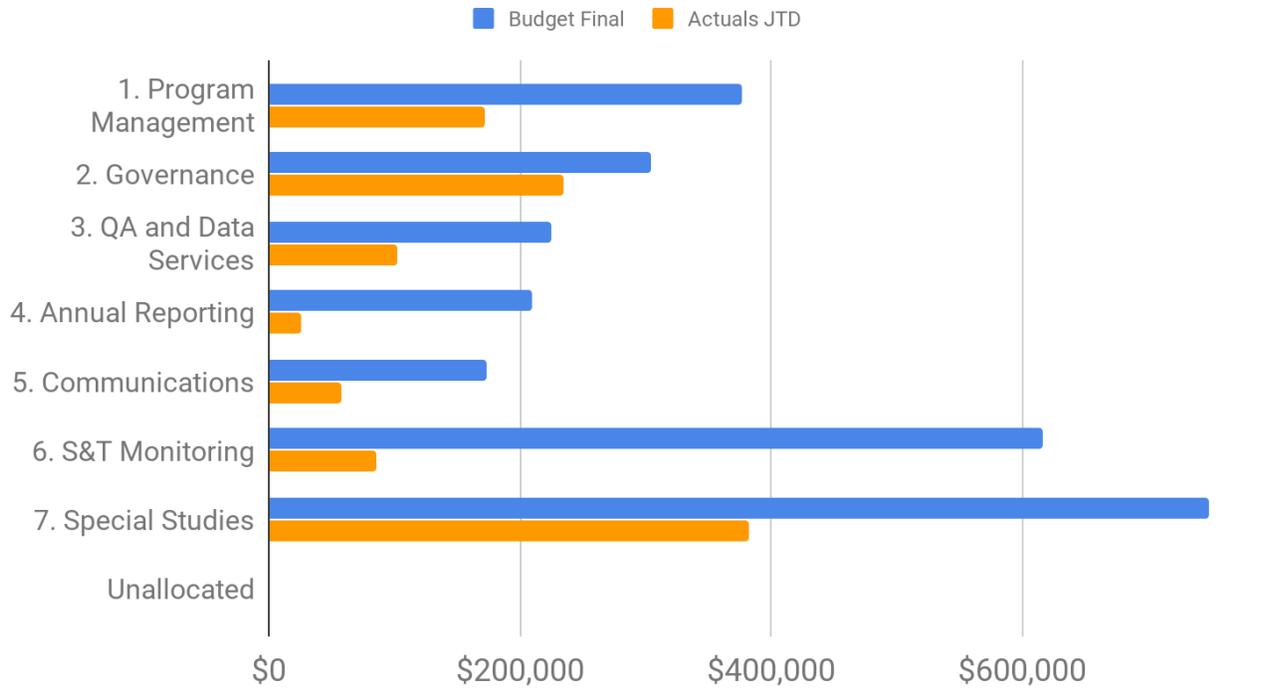


Figure 1: Bay RMP 2019 Budget. Budget and expenses through the current period by category.

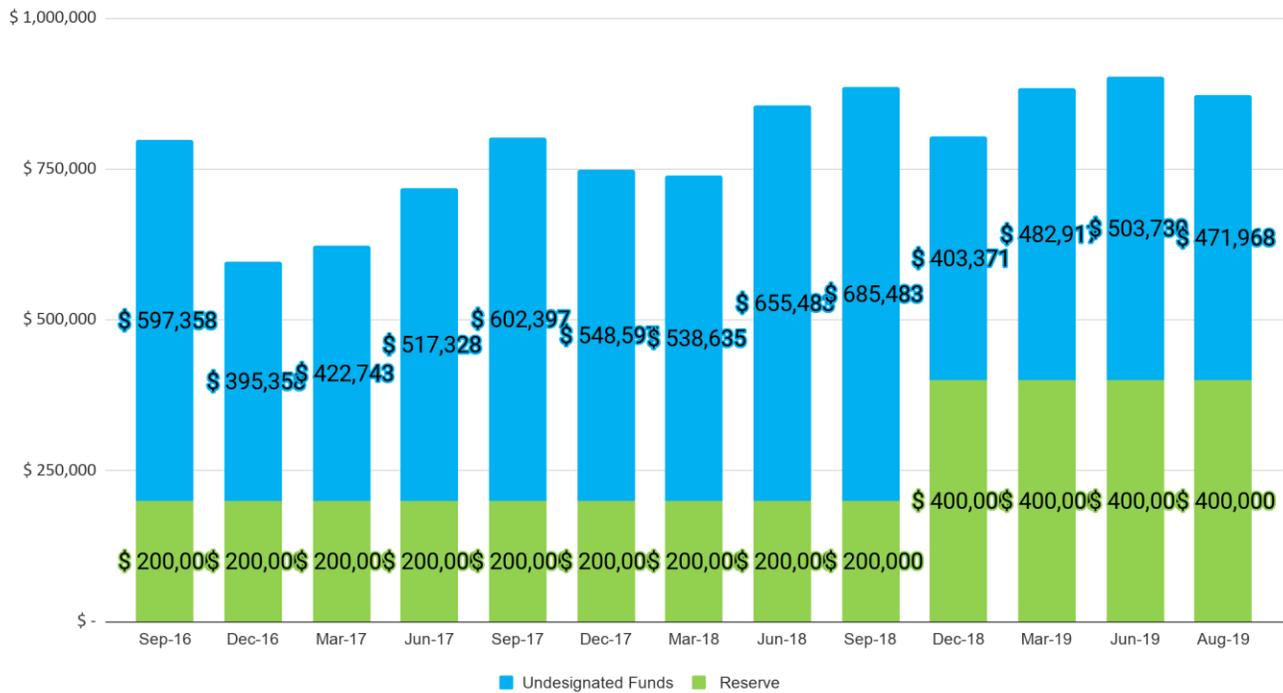


Figure 2: Bay RMP Undesignated Funds Balance over the past two years. The height of the bar shows the total balance of the Undesignated Funds. The bar is color coded to indicate the RMP policy that \$400,000 of the Undesignated Funds should not be spent. Note that prior to December 2018, the RMP policy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

S&T Monitoring Dedicated Set-Aside Funds

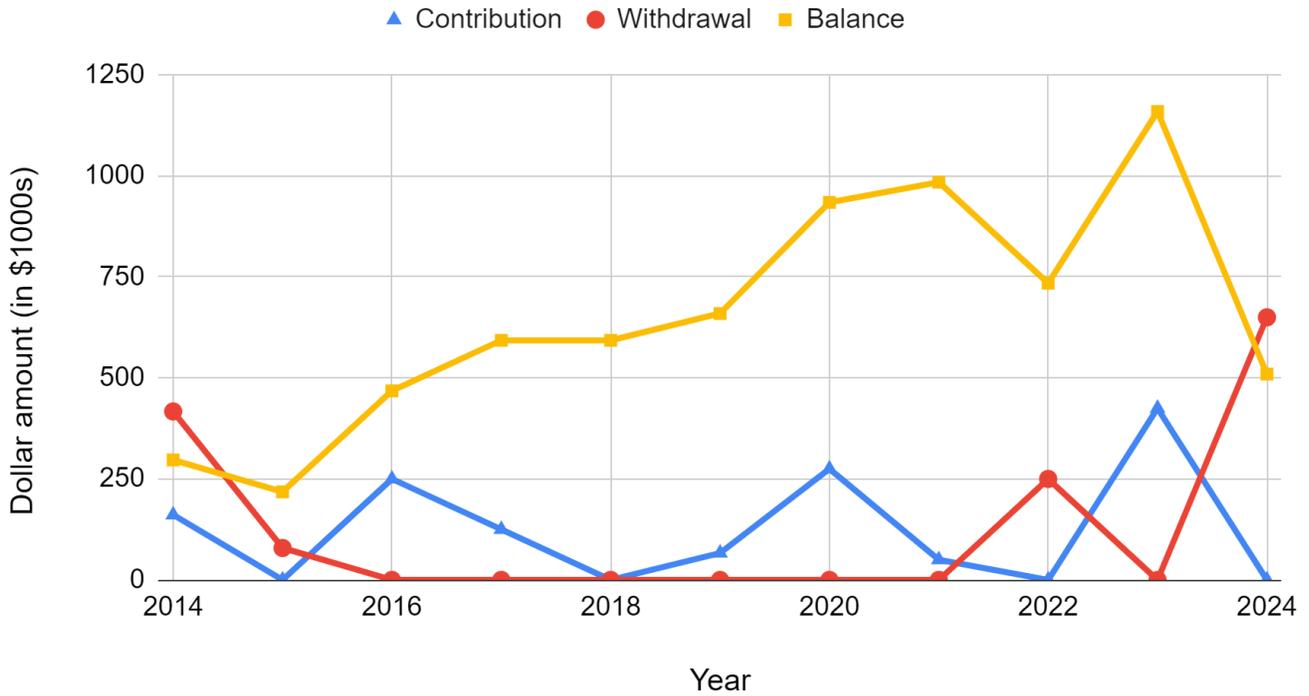


Figure 3. Contributions to and withdrawals from the Set-Aside Fund from 2014 to 2019 and anticipated contributions and withdrawals from 2020 to 2024.

Table 1

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

<i>Task</i>	<i>Subtask</i>	<i>Subtask Name</i>	<i>Status</i>	<i>Budget</i>	<i>Expenses JTD</i>	<i>Percent Complete</i>
Task Number: 001 Program Management	A	Budget and Workplan Development	Active	\$41,200.00	\$20,992.94	51%
	B	Contract and Financial Management	Active	\$140,000.00	\$79,474.92	57%
	C	Technical Oversight	Active	\$60,000.00	\$41,222.22	69%

<i>Task</i>	<i>Subtask</i>	<i>Subtask Name</i>	<i>Status</i>	<i>Budget</i>	<i>Expenses JTD</i>	<i>Percent Complete</i>
	D	Internal Coordination	Active	\$90,000.00	\$57,313.38	64%
	E	External Coordination Total		\$32,000.00	\$23,757.95	74%
	F	Administration	Active	\$13,500.00	\$3,690.61	27%
Task Number: 002 Governance	A	SC meetings	Active	\$51,600.00	\$33,176.33	64%
	B	TRC meetings	Active	\$59,600.00	\$24,920.51	42%
	C	WG meetings	Inactive	\$133,000.00	\$171,534.01	129%
	D	External Science Advisors	Active	\$60,000.00	\$14,532.04	24%
Task Number: 003 QA and Data Services	A	Quality Assurance System	Active	\$30,000.00	\$32,549.19	108%
	B	Online Data Access: CD3	Active	\$65,000.00	\$38,154.15	59%
	C	Database Maintenance	Active	\$50,000.00	\$46,864.33	94%
	D	Updates to SOPs and Templates	Active	\$30,000.00	\$25,095.51	84%
	E	DMMO Database Support	Active	\$50,000.00	\$28,146.28	56%

<i>Task</i>	<i>Subtask</i>	<i>Subtask Name</i>	<i>Status</i>	<i>Budget</i>	<i>Expenses JTD</i>	<i>Percent Complete</i>
Task Number: 004 Annual Reporting	A	Pulse Report	Active	\$140,000.00	\$76,243.91	54%
	B	Annual Meeting	Active	\$69,000.00	\$6,889.76	10%
Task Number: 005 Communications	A	Communications Plan Implementation	Active	\$44,000.00	\$30,899.52	70%
	B	Stakeholder Engagement	Active	\$24,000.00	\$12,474.61	52%
	C	Responses to Information Requests	Active	\$12,000.00	\$3,363.33	28%
	D	Outreach Products	Active	\$30,000.00	\$2,756.72	9%
	E	Presentations at Conferences and Meeting	Active	\$50,000.00	\$13,795.40	28%
	G	RMP Website Maintenance	Active	\$13,000.00	\$4,685.05	36%
Task Number: 006 S&T Monitoring	A	USGS Sacramento Support	Active	\$250,000.00	\$0.00	0%
	B	USGS Menlo Park Support	Active	\$242,000.00	\$118,651.50	49%
	C	2019 Water Cruise	Inactive	\$190,500.00	\$126,552.69	66%

<i>Task</i>	<i>Subtask</i>	<i>Subtask Name</i>	<i>Status</i>	<i>Budget</i>	<i>Expenses JTD</i>	<i>Percent Complete</i>
	D	2019 Water Data Mgmt	Active	\$25,000.00	\$5,534.41	22%
	E	2019 Sport Fish Monitoring	Active	\$360,000.00	\$63,756.38	18%
	F	2019 Sport Fish Monitoring Data Mgmt	Active	\$45,000.00	\$3,534.26	8%
	I	S&T Laboratory Intercomparison Studies	Active	\$49,350.00	\$19,468.80	39%
	J	Sample Archive	Active	\$83,500.00	\$53,933.30	65%
	K	S&T Field Sampling Report & Support	Active	\$22,000.00	\$1,728.52	8%
Task Number: 020 Special Study: PCB Strategy Support		Special Study: PCB Strategy Support	Inactive	\$10,000.00	\$10,670.39	107%
Task Number: 021 Special Study: PCB Stormwtr Mon. for PMU		Special Study: PCB Stormwtr Mon. for PMU	Active	\$30,000.00	\$12,178.58	41%
Task Number: 022 Special Study: Nutrient Special Studies		Special Study: Nutrient Special Studies	Active	\$250,000.00	\$250,407.68	100%
Task Number: 023 Special Study: Microplastic Strategy		Special Study: Microplastic Strategy	Active	\$15,000.00	\$11,850.30	79%

<i>Task</i>	<i>Subtask</i>	<i>Subtask Name</i>	<i>Status</i>	<i>Budget</i>	<i>Expenses JTD</i>	<i>Percent Complete</i>
Task Number: 024 Special Study: Microplastic in Sportfish		Special Study: Microplastic in Sportfish	Active	\$15,000.00	\$4,043.73	27%
Task Number: 026 Special Study: STLS Adv. Data Analysis		Special Study: STLS Adv. Data Analysis	Active	\$50,000.00	\$4,564.37	9%
Task Number: 027 Special Study: STLS Strat. Supp. & Coord		Special Study: STLS Strat. Supp. & Coord	Active	\$40,000.00	\$17,766.94	44%
Task Number: 029 Special Study: STLS Reg. Model Devpmt.		Special Study: STLS Reg. Model Devpmt.	Active	\$60,000.00	\$56,096.68	93%
Task Number: 030 Special Study: STLS WY19 POC Recon Monit	A	Project Management	Active	\$17,000.00	\$11,302.25	66%
	B	Field Work	Active	\$26,338.00	\$11,534.77	44%
	C	Data Management	Active	\$35,000.00	\$10,881.45	31%
	D	Reporting	Active	\$35,000.00	\$1,208.30	3%
	E	Labs and Subs	Active	\$11,662.00	\$1,100.63	9%
Task Number: 033 Special Study: EC Strategy Support		Special Study: EC Strategy Support	Active	\$70,000.00	\$24,258.77	35%

<i>Task</i>	<i>Subtask</i>	<i>Subtask Name</i>	<i>Status</i>	<i>Budget</i>	<i>Expenses JTD</i>	<i>Percent Complete</i>
Task Number: 034 Special Study: EC in Urban Stormwater	A	Stormwater Sampling	Active	\$129,500.00	\$55,257.13	43%
	B	Data Management	Active	\$2,500.00	\$172.32	7%
Task Number: 035 Special Study: EC Ethoxylated Surf. Stud	A	Sample Collection and Reporting	Active	\$98,300.00	\$13,667.89	14%
	B	Data Management	Active	\$24,700.00	\$516.00	2%
Task Number: 040 Special Study: Selenium Strategy Support		Special Study: Selenium Strategy Support	Inactive	\$10,000.00	\$10,010.72	100%
Task Number: 041 Special Study: Selenium N.Bay Clam&Water		Special Study: Selenium N.Bay Clam&Water	Active	\$75,000.00	\$29,108.89	39%
Task Number: 042 Special Study: Selen'm Sturg Muscle Plug		Special Study: Selen'm Sturg Muscle Plug	Active	\$22,000.00	\$0.00	0%
Task Number: 045 Special Study: Sed.Conc.Und.&.Mon.Strat.		Special Study: Sed.Conc.Und.&.Mon.Strat.	Active	\$77,600.00	\$35,679.09	46%
Task Number: 046 Special Study: Sed.Bathy Change Study		Special Study: Sed.Bathy Change Study	Active	\$77,000.00	\$21,039.79	27%

<i>Task</i>	<i>Subtask</i>	<i>Subtask Name</i>	<i>Status</i>	<i>Budget</i>	<i>Expenses JTD</i>	<i>Percent Complete</i>
Task Number: 047 Special Study: Sed.Benefic.Reuse.Wrkshp		Special Study: Sed.Benefic.Reuse.Wr kshp	Active	\$30,000.00	\$9,111.55	30%
Task Number: 048 Special Study: Sed. Bulk Density Study		Special Study: Sed. Bulk Density Study	Active	\$30,000.00	\$1,848.73	6%
Task Number: 049 DMMO Data synthesis for PCBs		DMMO Data synthesis for PCBs	Inactive	\$8,000.00	\$8,023.75	100%
Task Number: 050 EC Predictive Toxicology		EC Predictive Toxicology	Active	\$15,000.00	\$0.00	0%

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

<i>Task</i>	<i>Subtask</i>	<i>Subtask Name</i>	<i>Status</i>	<i>Budget</i>	<i>Expenses JTD</i>	<i>Percent Complete</i>
Task Number: 006 S&T Monitoring	C	2018 Bivalve Cruise	Active	\$108,500	\$97,467	90%
	K	2018 S&T Field Sampling Report	Active	\$10,000	\$1,502	15%
Task Number: 029 RWSM		RWSM	Active	\$7,000	\$4,295	61%
Task Number: 030 WY18 POC monitoring	C	Data Management	Active	\$26,881	\$20,372	76%
	D	Reporting	Active	\$24,546	\$18,433	75%
	E	Lab	Active	\$38,147	\$32,969	86%
Task Number: 032 EC Microplastic in Bivalves	A	Project Management	Active	\$37,600	\$23,630	63%
	B	Data Management	Active	\$8,000	\$1,272	16%
Task Number: 034 EC CUP in Margin Sediment and Water	A	Project Management	Active	\$117,970	\$119,196	101%
Task Number: 036 EC Non-Targeted Analysis of Sed &		EC Non-Targeted Analysis of Sed & Water	Active	\$101,000	\$31,841	32%

<i>Task</i>	<i>Subtask</i>	<i>Subtask Name</i>	<i>Status</i>	<i>Budget</i>	<i>Expenses JTD</i>	<i>Percent Complete</i>
Water						
Task Number: 039 Moored sensor / DO /biogeochem		Moored sensor / DO /biogeochem	Active	\$230,229	\$219,281	95%
Task Number: 040 Channel Monitoring		Channel Monitoring	Active	\$119,771	\$92,482	77%
Task Number: 047 Sediment Dumbarton Bridge Flux Monitorin		Sediment Dumbarton Bridge Flux Monitorin	Active	\$120,000	\$37,680	31%
Task Number: 053 EC North Bay Wildfire Monitoring		EC North Bay Wildfire Monitoring	Active	\$58,000	\$23,323	40%

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

<i>Task</i>	<i>Subtask</i>	<i>Subtask Name</i>	<i>Status</i>	<i>Budget</i>	<i>Expenses JTD</i>	<i>Percent Complete</i>
Task Number: 006 S&T Monitoring	F	2017 South Bay Margins Sediment Study	Active	\$255,000	\$254,224	100%
	H	Global Passive Sampling Initiative	Active	\$8,000	\$6,846	86%
Task Number: 021 PCB Steinberger Slough Conceptual Model		PCB Steinberger Slough Conceptual Model	Active	\$60,000	\$52,145	87%
Task Number: 030 STLS Wet Weather Characterization	E	Labs and Subs	Active	\$11,876	\$4,275	36%
Task Number: 032 EC Imidacloprid	A	Water Monitoring	Active	\$37,610	\$35,517	94%
Task Number: 034 EC Phosphate Flame Retardant Water Monit	A	EC Phosphate Flame Retardant Water Monit	Active	\$42,625	\$37,260	87%
Task Number: 035 EC Bisphenol Water Monitoring	A	EC Bisphenol Water Monitoring	Active	\$46,750	\$32,671	70%
Task Number: 036 EC Triclosan Fish Monitoring	A	EC Triclosan Fish Monitoring	Active	\$37,300	\$30,823	83%
Task Number: 037 EC Microplastic Study		EC Microplastic Study	Active	\$75,000	\$65,971	88%
Task Number: 039 Nutrient Moored Sensor Monitoring		Nutrient Moored Sensor Monitoring	Active	\$220,000	\$221,199	101%
Task Number: 040 Nutrient Ship-Based Monitoring		Nutrient Ship-Based Monitoring	Active	\$153,000	\$139,808	91%

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

<i>Task</i>	<i>Subtask</i>	<i>Subtask Name</i>	<i>Status</i>	<i>Budget</i>	<i>Expenses JTD</i>	<i>Percent Complete</i>
Task Number: 031 EC Non-Targeted Analysis		EC Non-Targeted Analysis	Active	\$52,000	\$43,583	84%

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)

Year	Yearly Surplus/Deficit	Balance
		\$62,665 (total)
2018	-\$109,060	-\$46,395
2019	-\$262,334	-\$308,729

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
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.

Budget Year	Deposit or Withdrawal	Reserve Type	Authorization	Date of Authorization	Amount	Comment
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 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 to a few tasks that were closed changed the balance of funds that could be unencumbered.

Budget Year	Deposit or Withdrawal	Reserve Type	Authorization	Date of Authorization	Amount	Comment
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	7/25/18: 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.
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	10/24/18: 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	Steering Committee	10/24/2018	-\$60,000	Transfer from undesignated funds to set aside - this offsets the expected 2019

Budget Year	Deposit or Withdrawal	Reserve Type	Authorization	Date of Authorization	Amount	Comment
		Funds				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 reserve to rmp 2018 to cover the overage due to lost mooring; completed in October books
2014	Deposit	Undesignated Funds	Program Manager	12/26/2018	\$319,540	unused remainder of 3014 subcontract to U of Florida for bioanalytical tools (task 90s)
2015	Deposit	Undesignated Funds	Steering Committee	1/23/2019	81.54	unencumbrance of rmp 2015
2010	Withdrawal	Undesignated Funds	Steering Committee	by email	-\$6,350	Tributary 209 PCB/Coplanar PCB Analyses
2011	Withdrawal	Undesignated Funds	Steering Committee	sometime between 4/19/11 and 8/11/11.	-\$17,000	Modeling assistance
2003	Deposit	Undesignated Funds			\$330,209	Actual end of year budget balance. Consider this the opening balance for the Reserve.
2004	Deposit	Undesignated Funds			\$132,996	Actual end of year budget balance
2018	Deposit	Undesignated Funds	Steering Committee	4/30/2019	\$79,145	Transfer remaining interest in RMP 2018 interest account
2018	Deposit	Undesignated Funds	Steering Committee	8/13/2019	\$287	Actual amount in RMP 2018 interest account was \$79,432.16. SC approved \$79,145 so need to get additional transfer of \$286.95 approved. Funds were moved in Apr 2019 but need to get approval in arrears
2019	Withdrawal	Undesignated Funds	Steering Committee	4/30/2019	-\$8,000	Moved \$8k from undesignated funds to the SEP project 3300/9A to cover the overage incurred on the project (DMMO database)
2018	Deposit	Undesignated Funds	Steering Committee	8/13/2019	\$28,526	Transfer q2 LAIF and other interest to reserve

Budget Year	Deposit or Withdrawal	Reserve Type	Authorization	Date of Authorization	Amount	Comment
2019	Withdrawal	Undesignated Funds	Steering Committee	8/13/2019	-15000	Move \$15k from undesignated to RMP 2019 to cover new EC tox project
2019	Withdrawal	Undesignated Funds	Steering Committee	8/13/2019	-16762	Moved \$16,762 from undesignated reserve to rmp 2019 to cover rev shortfall. the budget is now in balance with revenue.

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

SEP Project	Amount Received	Amount Spent	SEP Balance
Task 007: HAB Investigation in SFB	\$195,000	\$115,708	\$79,292
Task 008: North Bay Selenium Synthesis (Closed in Q-2, 2019)	\$54,500	\$54,500	\$0
Task 010: Napa & Sonoma Stream Gages	\$115,000	\$104,492	\$10,508
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: Lower South Bay Sediment Transport Monitoring Study	\$158,000	\$0	\$158,000
Task 014: Quantifying Stormwater Flow and Sediment Flux to the Bay	\$385,000	\$38,130	\$346,870
Task 015: North Bay Selenium Clam and Water Data Management and Reporting	\$40,000	\$0	\$40,000

SEP Project	Amount Received	Amount Spent	SEP Balance
Unallocated SEP Funding Received as of 6/30/2019	\$72,500	\$0	\$72,500
Total for active current projects and unallocated funds	\$1,116,752	\$312,830	\$803,922

Table 5b: Bay RMP Supplemental Environmental Project Descriptions

Study Name	Budget	Description	Status
Task 007: HAB Investigation in SFB	\$195,000	<p>This project will conduct a series of investigations of HABs in the Bay. The types of investigations to be completed are listed below:</p> <ol style="list-style-type: none"> 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

Study Name	Budget	Description	Status
Task 010 Napa & Sonoma Stream Gages	\$115,000	<p>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.</p>	Approved
Task 011 PCB Priority Margin Unit (PMU) Stormwater Study	\$67,000 total project cost with \$37,000 paid by SEP funding	<p>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.</p>	Approved

Study Name	Budget	Description	Status
		<p>This project is funded by RMP Core Funds & SEP Funds:</p> <p>\$30K in Bay RMP Core Funds (3018-021), \$22K in MMP settlement funds, and \$15K in an ACL settlement (R2-2018-1021).</p>	
<p>Task 012 PCB Priority Margin Unit (PMU) Surfperch Survey</p>	<p>\$59,752</p>	<p>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.</p>	<p>Approved</p>

Study Name	Budget	Description	Status
<p>Task 013 Lower South Bay Sediment Transport Monitoring Study</p> <p>(LSB Sediment Flux Study Year 2)</p>	<p>\$158,000</p>	<p>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 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>Approved</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</p>	<p>Approved</p>

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

Table 6: Steering Committee RMP Budget Summary

as of 8/31/2019

Budget and Current Expenses								
Year		Budget	Expended	Balance	Previously Unencumbered	Unencumbered this Period	Balance minus Unencumbered (Remainder)	% Remaining
		\$	\$	\$	\$	\$		
SEP		1,841,000	1,037,078	803,922	0	0	803,922	44%
2019		3,819,850	1,798,085	2,021,765	0	0	2,021,765	53%
2018		3,818,427	3,430,228	388,199	0	0	388,199	10%
2017		3,798,111	3,711,156	86,955	56,787	0	86,955	2%
2016		2,784,973	2,747,096	37,877	176,145	0	37,877	1%
	Grand Total	16,062,361	12,723,642	3,338,719	232,932	0	3,338,719	21%
Cash, Set-Asides, and Undesignated Funds as of reporting date								
	Item	\$	Notes					
	Cash on Hand	5,001,841						
	< 2018 A/R & Remaining Interest (see below)	0						
	Total Assets	5,001,841						
	Total Current Liabilities (figures above)	-3,338,719						
Set Asides	Monitoring Contingency	-50,000						
	Program Review	-88,179						
	S&T Monitoring	-652,975						
	Total Liabilities	-6,160,312						
	Undesignated Funds	871,968	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	Bank Interest Remaining	0	2/28/2018	2018 Budget = \$35k. This amount of interest has been received and added to the 2018 budget account.				

	3018.61 City of Napa River Park Marina - Dredger	5,990	core fees					
	3018.76 Port of Richmond - Dredger	5,265	core fees					
2019	3019.47 Alameda-Stormwater	36	core fees					
	3019.57 Port of SF-Dreger	50,648	core fees					
	3019.58 Chevron Richmond Long Wharf-Dredger	6,666	core fees					
	3019.60 Phillips 66 Co Rodeo Terminal-Dredger	6,516	core fees					
	3019.62 Benicia Port Terminal, Pier 95-Dredger	1,538	core fees					
	3019.63 Belvedere Cove Address Channel-Dredger	1,288	core fees					
	3019.65 Marina Dredge Neighbors-Dredger	200	core fees					
	3019.66 Port of Redwood City-Dredger	4,344	core fees					
	3019.67 Glen Cove Marina-Dredger	4,923	core fees					

^[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 were charged a fee for this disposal using the old Fee Schedule.

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
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 BPC	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				
Emerging Contaminants	Bay RMP (2016)	EC Non-targeted Analysis	Report on Non-Targeted Analysis of Water-Soluble CEC Compounds	Rebecca Sutton	10/31/19		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. Final document is delayed due to revisions on the part of our analytical partner.
Emerging Contaminants	Bay RMP (2016)	EC Non-targeted Analysis	Fact Sheet on Non-Targeted Analysis of Water-Soluble CEC Compounds	Rebecca Sutton	10/31/19		06/30/17		Fact sheet to accompany the final report. Factsheet was reviewed by ECWG, TRC, SC. Provide final fact sheet to EB Parks. Final document is delayed due to revisions on the part of our analytical partner.
Emerging Contaminants	Bay RMP (2017)	Phosphate Flame Retardants in Bay Water	Report on phosphate flame retardants in ambient Bay water	Rebecca Sutton	10/31/19		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. Final draft delayed due to comment deadline extension requested by experts. Final document will be slightly delayed due to internal workflow issues.
Emerging Contaminants	Bay RMP (2017)	Bisphenol in Bay Water	Report on bisphenol compounds in ambient Bay water	Ila Shimabuku	10/31/19		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. Final draft delayed due to comment deadline extension requested by experts. Final document will be slightly delayed due to internal workflow issues.
Emerging Contaminants	Bay RMP (2019)	Ethoxylated Surfactants Study	Wastewater and water sample collection	Diana Lin	10/31/19		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 (2017)	Imidacloprid in Ambient Bay Water	Report on imidacloprid in ambient Bay water	Rebecca Sutton	12/31/19		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. Final draft delayed due to comment deadline extension requested by experts. Final document will be slightly delayed due to internal workflow issues.

Focus Area	Project	Primary	Deliverable	Assigned To	Due Date	Due Date Extended	Old Due Date	Status	Comments
Emerging Contaminants	Bay RMP (2018)	CUPs and Wastewater Contaminants in Margin Sediment and Water	Technical Report	Matt Heberger	12/31/19		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. Final document will be slightly delayed due to internal workflow issues. All comments in. Becky needs to address comments.
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 (2017)	Triclosan in Small Fish	Report on triclosan in small fish	Diana Lin	04/15/20		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 winter 2020; final by ECWG 2020 meeting.
Emerging Contaminants	Bay RMP (2019)	EC Strategy	Present updated RMP CEC Strategy at SC	Rebecca Sutton	05/31/20				
Emerging Contaminants	Bay RMP (2018)	Non-targeted Analysis of Sediment and Water	Fact sheet and technical report	Rebecca Sutton	08/01/20		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. Lee and Eunha would like to present their findings to the ECWG in spring 2020 before finalizing the report.
Emerging Contaminants	Bay RMP (2018)	Non-targeted Analysis of Sediment and Water	Manuscript	Rebecca Sutton	08/01/20		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. Lee and Eunha would like to present their findings to the ECWG in spring 2020 before finalizing the report.
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	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 (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 (2018)	Microplastics in San Francisco Bivalves	Technical Report	Meg Sedlak	12/15/19		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. Margin samples have been collected. Bay samples were collected in October. Project is delayed because we have not received the results yet. It will not be possible to meet Sept 2 deadline.
Microplastics	Bay RMP (2018)	Microplastics in San Francisco Bivalves	Presentation to TRC/SC	Meg Sedlak	12/15/19		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. Sample analysis has been delayed; we will not be ready to present in late September as we do not have the results yet.
Microplastics	Bay RMP (2019)	Microplastic Strategy	Present updated Microplastic Strategy to SC	Meg Sedlak	01/31/20				
PCB Strategy	Bay RMP (2017)	PCB Margins Conceptual Model	Steinberger Slough Priority Margin Unit Conceptual Model Report	Jay Davis	09/30/19		08/31/17		Revised due dates due to workflow and timing of WG meeting. Draft for WG/TRC/SC by March 2019. Analyses nearly completed, but did not reach goal of completing before PCBWG meeting.
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

Focus Area	Project	Primary	Deliverable	Assigned To	Due Date	Due Date Extended	Old Due Date	Status	Comments
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	2020 Multi-Year Plan	Melissa Foley	10/23/19				Draft in October '19, final in January '20
Program Management	Bay RMP (2019)	1. Program Management	2020 Detailed Workplan and Budget	Melissa Foley	10/23/19				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 Deltek Program Plans for Open RMP Years	Jennifer Hunt	10/24/19				
Program Management	Bay RMP (2019)	1. Program Management	SC Meeting Stoplight Report	Melissa Foley	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	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. Discussed the need to use db maintenance funding for the data management overages associated with the sediment and bivalve studies. The labs (AXYS and ALS) provided many incomplete and improperly formatted datasets and provided data sporadically which increased the number of times we had to check the data. This request was for \$4277 for bivalves and 10-13K for sediment.
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.
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 2019 S&T Activities	Don Yee	03/31/20				
Sediment Strategy	Bay RMP (2019)	Sediment Conceptual Understanding and Monitoring Strategy	Presentation of Final Conceptual Understanding and Strategy	Jeremy Lowe	10/31/19		10/31/19		Forum will be the RMP Sediment WG 2020 or a Healthy Watersheds/Resilient Baylands Project meeting. Additional money for CY2020 will push this deliverable due date out.
Sediment Strategy	Bay RMP (2019)	Sediment Bulk Density Study	Draft Framework for local expert review	Jeremy Lowe	11/30/19		08/30/19		https://www.sfei.org/sites/default/files/events/SedimentWG%20-%2004%20-%20Lowe%20-%20Bulk%20density%20RMP%20Special%20Studies%20Proposal.pdf This was discussed at the last sediment workgroup meeting on May 7. The workshops are now July-Aug and report drafted Sept. Lets talks about it in the next sediment monitoring check-in. - I am meeting with Scott and Katie this week as we have been overlapping on this.
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%20Whoie%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%20Whoie%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	Bay RMP (2019)	Sediment Bulk Density Study	Technical Report	Jeremy Lowe	01/30/20		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. Draft pushed back to September 30 - final due by end of November. Pushed off because focused on getting the modeling strategy completed. Now have new staff that can help work on the draft. Not a critical path item.
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 Daniel 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	Bay RMP (2019)	Sediment Conceptual Understanding and Monitoring Strategy	Final Conceptual Understanding and Monitoring Strategy Report	Jeremy Lowe	05/31/20		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. Due date needs to be updated in additional money for special studies in 2020. Additional money for CY2020 will push this deliverable due date out.
Sediment Strategy	RMP SEP	13. Lower South Bay Sediment Transport Monitoring Study	Interpretive Technical Report	Melissa Foley	12/31/20				Coordinate with Daniel 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 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	D.WY19 POC Report	Alicia Gilbreath	11/30/19				Draft by 11/30/19. Final by March 30, 2020.
Status and Trends	Bay RMP (2017)	6. Status and Trends F. Margins Sediment Study	Final Report for South Bay Margins Sediment Study	Don Yee	10/31/19		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. It's been on Hiatus. Maybe have some time in June. Jay said jam it into the available hours, which can be done if we commit to all of Bridgette's requests, and just scale effort to what can be easily done on Lester's numerous musings. So e.g. first pass on Lester's comments to do all the wording changes/add references ones. Then if time allows a second pass for things that would require regrouping/reanalysis of data or digging out/compiling info from lit or other sources.
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	Present to TRC on IC studies	Don Yee	12/31/19				For this year, primarily Se intercomp (already presented to TRC, could recap briefly) and will include some fish archive results
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	Processing and upload Sport Fish data	Amy Franz	03/01/20		12/31/19		
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
PCBWG Action Items from 5/15/2019	Develop SEP ideas	Jay Davis	08/30/19	●	Need to have another workgroup call to discuss	05/15/19	<input type="checkbox"/>
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 8/13/19	Include discussion of 2022-2025 fee structure in MYP agenda	Melissa Foley	10/11/19	●		08/13/19	<input type="checkbox"/>
Steering Committee Action Items from 8/13/19	Evaluate burn rate of set aside funds and report back to the SC	Melissa Foley	10/23/19	●		08/13/19	<input type="checkbox"/>
Steering Committee Action Items from 8/13/19	Include further discussion on RMP contributions to Nutrient work in the Multi-Year Planning Workshop agenda	Melissa Foley	10/11/19	●		08/13/19	<input type="checkbox"/>
Steering Committee Action Items from 8/13/19	Include external/additional funding for special studies in the Multi-Year Plan document	Melissa Foley	10/23/19	●		08/13/19	<input type="checkbox"/>
Steering Committee Action Items from 8/13/19	Convene PCB workgroup to discuss multi-year planning, margin work, TMDL revision, and possible SEPs; also invite the waterboard to participate	Jay Davis	10/23/19	●		08/13/19	<input type="checkbox"/>
Steering Committee Action Items from 8/13/19	Examine placeholder budgets in current Multi-Year Plan	Melissa Foley	10/23/19	●		08/13/19	<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"/>
Sediment WG Action Items from 05/07/2019	Host half- to full-day workshop to get feedback on monitoring & modeling strategy and MYP priorities for 2021	Jeremy Lowe	10/15/19	●		05/07/19	<input type="checkbox"/>
ECWG Action Items from 4/12/2019	Revise CEC risk strategy to add imidiclopid, OPEs, and bisphenol A as contaminants of moderate concern	Rebecca Sutton	05/01/20	●	Strategy will be updated before the 2020 workgroup meeting	04/12/19	<input type="checkbox"/>
PCBWG Action Items from 5/15/2019	Update PCB multi-year plan	Jay Davis	06/01/20	●		05/15/19	<input type="checkbox"/>