



Technical Advisory Committee Meeting Agenda Thursday, May 9, 2019 10:00 am – 4:30 pm

Training Room, Central Valley Regional Water Quality Control Board
11020 Sun Center Drive #200, Rancho Cordova, CA 95670

Remote Access:

Phone number: (415) 594-5500 Access Code: 808-941-519#

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#	Agenda Item and Desired Outcomes	Attachments	Start & Lead
1	<p>Introductions and Agenda Review and agree on agenda and desired outcomes.</p>		10:00 Stephen McCord
2	<p>Decision: Approve TAC Meeting Summary for Jan 17, 2019 meeting and confirm/set future TAC meeting dates</p> <p><u>Upcoming Scheduled Meetings</u> (Please bring your calendar)</p> <ul style="list-style-type: none"> Proposed to reschedule previously planned TAC meeting on Jun 11, 2019. Schedule in-person meeting for the fall. <p><u>Desired outcome:</u></p> <ul style="list-style-type: none"> Approve TAC meeting summary Confirm future TAC/SC meeting dates 	Draft TAC Meeting Summary from Jan 17, 2019	10:05 Stephen McCord
3	<p>Information: Steering Committee Update TAC co-Chair will summarize the Feb 22, 2019 SC meeting and Apr 23, 2019 SC Teleconference, including the decisions and action items relevant to the TAC.</p> <p><u>Desired Outcome:</u></p> <ul style="list-style-type: none"> Inform TAC regarding SC decisions and activities. Explain the rationale and context for agenda items below. 	<p>Draft SC Meeting Summary from February 22, 2019 Teleconference</p> <p>Draft SC Meeting Summary from April 23, 2019 Teleconference</p>	10:15 - 10:30 Stephen McCord Matt Heberger

#	Agenda Item and Desired Outcomes	Attachments	Start & Lead
4	<p>Technical Subcommittee and Monitoring Updates</p> <p>Brief updates on subcommittees, monitoring activities, and special projects.</p> <p><u>Desired outcome:</u></p> <ul style="list-style-type: none"> ● Review running table of past and upcoming sampling events. ● Inform TAC of subcommittee activities and recommendations. 	<p>Dashboard Tables (PDF in agenda package, live link here):</p> <ol style="list-style-type: none"> 1. Status of Delta RMP Datasets 2. Past & Planned Monitoring Events 	<p>10:30 – 11:00</p> <p>Mercury: Jay Davis</p> <p>Nutrients: Matt Heberger</p> <p>Pesticides: Jim Orlando</p> <p>Aquatic Toxicity: Marie Stillway</p>
5	<p>Discussion: Ranking for monitoring proposals for FY17/18</p> <p>TAC members will have an opportunity to fill in the decision grid on their own. Due by May 16. By having each TAC member to fill in the decision grid questionnaire, we will create a package of information to forward to the Steering Committee showing (1) strengths and weaknesses, (2) level of support among technical advisors and (3) supporting and dissenting viewpoints. We successfully piloted this approach last year; this presentation will review the process for filling in the ranking questionnaires.</p> <p>Desired Outcome:</p> <ul style="list-style-type: none"> ● Demo the use of the “Decision Grid” questionnaire ● Remind committee members of the conflict of interest policy in the Delta RMP Charter (duty to <i>disclose</i> and to <i>recuse</i>) 	<p>Questions for Ranking Monitoring Proposals (the “Decision Grid”)</p> <p>Delta RMP Charter, Sections 7.B.1 and 8.E, <i>Conflict of Interest Policy</i></p>	<p>11:00 - 11:10</p> <p>Matt Heberger</p>
6	<p>Discussion: Review monitoring proposals for FY 2019-20 (1)</p> <p>This spring, the technical subcommittees crafted proposed monitoring designs that help answer the Delta RMP’s management and assessment questions within the planning budgets set by the SC. We have planned 1 hour for 2 presentations plus questions and answers before lunch, then 2 hours after lunch for 2 more presentations followed by time for discussion.</p> <p>Presentations:</p> <ul style="list-style-type: none"> ● Nutrients: Janis Cooke and Lisa Thompson (30 min.) ● Mercury: Jay Davis and Wes Heim (30 min.) <p>Desired Outcome:</p> <ul style="list-style-type: none"> ● Inform committee of proposed monitoring and special studies, plus question and answer. 	<p>Draft Monitoring Design proposals</p> <p>(distributed separately to TAC members via email)</p> <ol style="list-style-type: none"> 1. Nutrients 2. Mercury 	<p>11:10 – 12:00</p>

#	Agenda Item and Desired Outcomes	Attachments	Start & Lead
	Lunch		12:00 – 1:00
7	<p>Discussion: Review monitoring proposals for FY 2019-20 (2)</p> <p>Presentations:</p> <ul style="list-style-type: none"> Contaminants of Emerging Concern (CECs): Matt Heberger and Brian Laurenson (30 min.) Pesticides: Matt Heberger / Stephen McCord (15 min.) <p>Desired Outcome:</p> <ul style="list-style-type: none"> Discuss proposed monitoring plans, and answer any questions to form the basis for scoring by TAC members. 	<p>Draft CEC Quality Assurance Project Plan (Google docs link)</p> <p>Memo on updates to Monitoring Design for Year 2</p>	1:00 – 3:00
	Break		3:00 - 3:15
8	<p>Study Planning Timeline</p> <p>Several TAC members have proposed a draft study development process in order to make the process more efficient and provide enough time for QAPP development and review before sampling begins. The goal is to create and follow a process that reduces the need for last minute changes and results in the QAPP being finalized before a study begins.</p> <p>Desired outcome:</p> <ul style="list-style-type: none"> Consensus on the appropriate timeline for planning future studies. 	Flowchart on proposed study development process	3:15 – 3:30 Tessa Fojut
9	<p>Update on the Pesticides Interpretive Report</p> <p>Our consultant Deltares has produced three sets of deliverables, including the database and a technical memo describing their planned approach. We will review the timeline and milestones for completing the study, including further opportunities to provide input and feedback.</p> <p>Desired outcome:</p> <ul style="list-style-type: none"> Informed committee 		3:30– 4:00 Matt Heberger

#	Agenda Item and Desired Outcomes	Attachments	Start & Lead
d10	<p>Management Drivers for Regional Monitoring</p> <p>At the previous TAC meeting, a group of volunteers presented the 2019 Management Drivers table, intended to provide information and context for the forthcoming long-range planning workshop in the Fall of 2019. The TAC provided suggestions and feedback, and the table has been completely revised.</p> <p>Desired outcome:</p> <ul style="list-style-type: none"> ● Informed committee; further feedback on the table of management drivers. 	Table of Management Drivers for Water Quality Monitoring in the Delta	4:00 – 4:15 Stephen McCord
11	<p>Information: Status of Deliverables and Action Items</p> <p><u>Desired outcomes:</u></p> <ul style="list-style-type: none"> ● Inform TAC about the status of RMP deliverables. ● Review action items from today’s meeting. 	Delta RMP Stoplight Reports	4:15 – 4:20 Matt Heberger
13	<p>Updates and wrap-up</p> <p><u>Desired outcomes:</u></p> <ul style="list-style-type: none"> ● Recap of message points (TAC to SC) ● Plan agenda items for future meetings 		4:20–4:30 Stephen McCord
	Adjourn		4:30

Materials for Agenda Item 2

Note that draft meeting summaries are made available only to TAC members and alternates.

Materials for Agenda Item 4

Status of Delta RMP Datasets		
Table last updated:	5/1/2019	
Parameter group	Published?	Explanation
Pesticides		
FY15-16 July 2015 - June 2016 Current Use Pesticides	✓	Published and publicly available via CD3, CEDEN, and NWIS
FY 15-16 field measurements (temperature, pH, DO, etc.) for Current Use Pesticides	☐	Matt's note on 4/4/2019: These should be publicly-available, but they are not in the CEDEN download. Needs to get fixed ASAP
FY16-17 July 2016 - June 2017 Current Use Pesticides	✓	Published and publicly available via CD3, CEDEN, and NWIS
FY 16-17 field measurements (temperature, pH, DO, etc.) for Current Use Pesticides	☐	Published 4/2//2019. Will be publicly available via CD3, CEDEN within about 2 weeks.
WY2019 Current Use Pesticides	☐	First samples collected Dec 19, 2018. Samples have been processed and but not analyzed due to the federal government shutdown. Samples need to be analyzed within 180 days.
Toxicity		
FY15-16 Aquatic Toxicity Results	✓	Published and publicly available via CD3 and CEDEN
FY16-17 Aquatic Toxicity Results	✓	Published and publicly available via CD3 and CEDEN
WY 2019 Aquatic Toxicity Results	☐	First samples collected in Dec 19, 2018. For further information, please do not contact the staff at Aquatic Health Program Laboratory at UC Davis. Rather, contact the contract manager, Melissa Morris at the State Water Board.
Mercury		
FY16-17 Fish, Water, and Sediment	✓	Published and publicly available via CD3 and CEDEN
FY17-18 Fish, Water, and Sediment	☐	As of April 2019, data undergoing final QA. This is about 3 months behind schedule as the lab submission was missing certain data, and the project manager instructed data services staff to wait until the full dataset was available.
FY18-19 Fish, Water	☐	Sampling underway; fish tissue data have undergone QA, water data collection not yet complete and not yet received from lab.
Nutrients		
FY17-18 High-Frequency Monitoring	☐	USGS to handle all data management and QA of the high-frequency data (very large datasets). Planned to upload these to a public repositior. Data available upon request from PI Brian Bergamaschi, bbergama@usgs.gov.
FY18-19 Chlorophyll-a Sensor Intercalibration	n/a	No plans to formally publish these data. Data from the intercalibration exercise are available upon request, contact Matthew Heberger, matth@sfei.org
Pathogens		
FY15-16 Pathogens	✓	Published and publicly available via CD3 and CEDEN
FY16-17 Pathogens	✓	Published and publicly available via CD3 and CEDEN
No further pathogens monitoring planned.		

Past & Planned Monitoring Events

Table last updated		5/1/2019					
Fiscal Year	Date	Monitoring Element	# Sites Sampled	Frequency	Comments		
FY16-17	Aug 22-23, 2016	Mercury (water)	5	Quarterly			
FY16-17	Aug 22-23, 2016	Mercury (fish)	5	Annually			
FY16-17	Sept 13, 2016	Mercury (fish)	1	Annually			
FY16-17	Nov 14-15, 2016	Mercury (water)	5	Quarterly			
FY16-17	Feb 28, 2017	Mercury (water) - quarterly	5	Quarterly			
FY16-17	April 25, 2017	Mercury (water) - quarterly	5	Quarterly			
FY17-18	Aug 14-18, 2017	Mercury (fish)	6	Annually			
FY17-18	Oct 18-19, 2017	Mercury (water and sediment)	6	Water: 8x per year, Sediment: quarterly			
FY17-18	Jan 29-30, 2018	Mercury (water and sediment)	8	Water: 8x per year, Sediment: quarterly			
FY17-18	Feb 26-27, 2018	Mercury (water)	8	Water: 8x per year, Sediment: quarterly			
FY17-18	Mar 19-20, 2018	Mercury (water)	8	Water: 8x per year, Sediment: quarterly			
FY17-18	Apr 16-18, 2018	Mercury (water and sediment)	8	Water: 8x per year, Sediment: quarterly			
FY17-18	May 15-16, 2018	Mercury (water)	8	Water: 8x per year, Sediment: quarterly			
FY17-18	Jun 20-21, 2018	Mercury (water and sediment)	8	Water: 8x per year, Sediment: quarterly			
FY18-19	Jul 9-10, 2018	Mercury (water), 8 sites	8	Water: 8x per year, Fish: annually			
FY18-19	Aug 13-14, 2018	Mercury (water), 8 sites	8	Water: 8x per year, Fish: annually			
FY18-19	Aug 20-22, 2018	Mercury (fish) - annual at 7 sites	7	Water: 8x per year, Fish: annually			
FY18-19	Sept 10-12, 2018	Mercury (water and fish)	1	Water: 8x per year, Fish: annually			
FY18-19	Jan 21-22, 2019	Mercury (water), 8 sites	8	Water: 10x per year (plan amended 10/29/2018)			
FY18-19	Feb 18-19, 2019	Mercury (water), 8 sites	8				
FY18-19	Mar 20-21, 2019	Mercury (water), 8 sites	8				
FY18-19	Apr 22-23, 2019	Mercury (water), 8 sites	8				
FY18-19	May 20-21, 2019 (planned)	Mercury (water), 8 sites	8	planned			
FY18-19	Jun 17-18, 2019 (planned)	Mercury (water), 8 sites	8	planned			
Dates for future monitoring events to be planned by ASC and MLML staff in collaboration with Mercury Subcommittee							

Pesticides

Fiscal Year	Date	Monitoring Element	# Sites Sampled	Frequency	Comments
WY2019	Dec 18-19, 2018	Pesticides	6	6 events	First Flush - first event to coincide with first major fall/winter storm. At each event, sample 4 random (GRTS) sites and the 2 fixed sites.
WY2019	Feb 4-6, 2019	Pesticides	6	6 events	Second Winter Storm
WY2019	April 29-30, 2019	Pesticides	6	6 events	Third Winter Storm or Spring Snowmelt runoff prior to irrigation
WY2019	TBD, May - Sept 2019	Pesticides	6	6 events	Spring
WY2019	TBD, May - Sept 2019	Pesticides	6	6 events	Summer
WY2019	TBD, May - Sept 2019	Pesticides	6	6 events	Fall
Dates for future monitoring events to be planned by ASC and USGS staff in collaboration with Pesticides Subcommittee. See QAPP Table 6.7 for further details of sampling triggers.					

Nutrients									
Fiscal Year	Date	Monitoring Element	# Sites Sampled	Frequency	Comments				
FY17-18	Sept 19-21, 2017	Nutrients High-Frequency Cruise (3 consecutive days)	n/a		First of 3 planned sets of 3-day cruises. One of the instruments did not work properly, so Days 2 & 3 were cancelled. Monitoring will continue in the spring and summer of 2018.				
FY17-18	May 15-17, 2018	Nutrients High-Frequency Cruise (3 consecutive days)	n/a		Repeat of first cruise which was cancelled due to equipment failure.				
planned and funded in FY17-18	July 24, 25, 26, 2018	Nutrients High-Frequency Cruise (3 consecutive days)	n/a		Second cruise (done)				
planned and funded in FY17-18	Oct 16, 17, 18, 2018	Nutrients High-Frequency Cruise (3 consecutive days)	n/a		Third cruise (planned)				
The USGS Biogeochemical Research Group has completed all 3 of the planned cruises, and is analyzing data and writing a report.									
FY18-19		Chlorophyll-a Sensor Intercalibration			Sensors from different agencies were deployed side-by-side for 2 weeks to compare their measurements				
FY18-19		Chlorophyll-a Sensor Intercalibration							
FY18-19	May 7, 2019	Chlorophyll-a Laboratory Intercalibration			First of 3 planned sampling events; samples will be split and triplicates sent to each lab "round robin" style				
CECs									
Detailed planning for CEC monitoring is currently underway. Sampling planned to begin in FY19/20 the summer or fall of 2019.									

Materials for Agenda Item 5

Delta RMP Proposal Ranking Questions aka the “Decision Grid”

A. Study Plan Responsiveness

1. Does the study proposal identify the management question addressed?
2. Are the Data Quality Objectives (DQOs; EPA 2006) clearly defined?
3. Does the study provide testable hypotheses (written as assessment questions or otherwise)?
4. Does the proposal demonstrate how the results will be presented?
5. Does the proposal adequately demonstrate how the results will be interpreted?
6. Does the proposal contribute to a larger body of data that can be used to answer Management Questions in the future?
7. Does the proposed study plan include an estimated budget that is responsive to Steering Committee guidance?

B. Technical Foundation

1. Geographic scope. Does the location selection support the study objectives?
2. Geographic scope. Does the study adequately characterize an area relevant to the Delta RMP?
2. Geographic scope. Does the study adequately characterize an area relevant to the Delta RMP?
3. Comments on the geographic scope:
4. Temporal resolution. Is the temporal scope and resolution of the study justified based on available data?
5. Temporal resolution. Does the study clearly define the conditions of interest (e.g. high flows)?
6. Temporal resolution. Can the results of the study be used to evaluate trends over the timescale of interest or target magnitude of change?
7. Comments on temporal scope:
8. Sample collection. Does the proposed data collection method introduce biases or errors that are not adequately mitigated or measured?
- 8.5. Comments on sample collection:
9. Monitoring tools. Where do the analytical tools fit on the ‘established methods’ spectrum? (1 = experimental, 5 = long-established, known, reliable)

10. Monitoring tools. Are additional information/data outside of the proposed study required to interpret study data and outcomes?

11. Comments on monitoring tools:

12. Interpretation. Are study condition controls adequately considered given the study timeframe, data collection frequency, and proposed interpretation to answer study hypotheses reliably?

13. Interpretation. Does the study have statistical power sufficient to answer study hypotheses reliably during the study timeframe?

14. Interpretation. Is the basis for outcome assessments technically supported?

15. Interpretation. Does the proposed study create new information to evaluate beneficial use attainment?

16. Interpretation. Does the proposed study's assessment questions and outcomes address specified management questions?

17. Comments on interpretation:

18. Technical Merit: Does the proposed study overall have technical merit? (New question added at the request of the TAC in March 2018.)

C. Budget, Priority, and Coordination Considerations

1. Budget. Is the proposed budget scalable in size?

2. Budget. Is the proposed study modular?

3. Comments on budget:

4. Priority. Is there urgency to conducting the monitoring, such as to inform planned policies or regulations?

5. Priority. Does the study timeframe allow it to inform time-sensitive decisions?

6. Comments on priority:

7. Coordination. Can the monitoring be coordinated with other efforts to increase the study's power or to reduce overall cost or duration?

Materials for Agenda Item 7



MEMO

From: Matthew Heberger

To: Delta RMP Technical Advisory Committee

Date: May 2, 2019

Subject: Updates to the monitoring design for pesticides and aquatic toxicity testing for Year 2 or Water Year 2020

In 2018, staff of the Aquatic Science Center (ASC), in collaboration with the Delta RMP Technical Advisory Committee (TAC) and its technical subcommittees, created a new 4-year monitoring plan for pesticides and aquatic toxicity in the Sacramento-San Joaquin Delta. The monitoring design was created from the ground up, and is based on probabilistic, or random, monitoring locations across Delta subregions. The monitoring design is described in detail in the current [Delta RMP FY18-19 Workplan](#), Attachment C, Pesticides and Aquatic Toxicity Monitoring. Detailed information can also be found in the Delta RMP [Quality Assurance Project Plan, v. 4.3](#).

We are currently mid-way through half of the first year of this study, having recently completed the third of six planned monitoring events. While the monitoring design covers four years, it was always intended to be “adaptively managed,” where adjustments could be made as we go along.

This memo outlines one relatively minor change recommended by the Pesticides Subcommittee. In addition, we discuss changes to how aquatic toxicity testing will be funded when the existing contract between the State Water Resources Control Board (hereafter State Board) and the Aquatic Health Program Laboratory at UC Davis expires.

Recommended changes to triggers for monitoring during wet-weather/ high-flow

In the fall/winter 2018, we received quite a bit of rain before the river rose enough to meet the “trigger” for sampling. The USGS crew first mobilized to sample on December 19. As a result, we may have missed non-point source pollution from local runoff.

The subcommittee recommended updated triggers for Water Year 2020 as follows:

1. The first event shall be an “urban first flush” event. The trigger shall be 0.5” of rainfall forecast in 24 hours for the basin.
2. There should be at least 10 consecutive dry days between sampling events. This allows pesticide applicators time to go out and spray.

Changes to funding for aquatic toxicity testing

For the past 3 years, all of the program’s aquatic toxicity testing has been performed by the Aquatic Health Program Laboratory at UC Davis (AHPL). This work has been funded directly by the State Water Board through the Surface Water Ambient Monitoring Program (SWAMP). This contract is set to expire in March 2020. As a result, the SWAMP funding will likely only carry us through half of Water Year 2020’s planned monitoring.

We propose to continue the tox. testing program as designed through the end of Water Year 2020, with funding for the final 3 events coming from the Delta RMP, i.e. funds contributed by Delta RMP participants and managed by ASC. This will maintain continuity and allow us to finish up year 2 of the study. Sufficient funds should be allocated to allow for toxicity identification evaluations (TIEs) if they are called for. The estimated cost to the Delta RMP is \$167,500. This is one half of the *annual* cost shown on the next page. (These costs may go up somewhat, as the university’s overhead rate is scheduled to increase, however, actual expenses may also be lower depending on whether TIEs are run.

We may wish to open a competitive bidding process for toxicity testing in Year 3, or Water Year 2021. In the instance that we do switch laboratories, it may be appropriate to send split samples to both old and new labs for a period of time to evaluate intercomparability of the results. A Steering Committee member has suggested inviting labs from around the state to participate in a round-robin style lab intercomparison exercise. The suggestion was that labs will participate in this for free, as a condition for being eligible to bid on future work with the Delta RMP. These are both ideas that should be considered by both the TAC and SC to determine if this is the direction we would like to go.

Table. Annual costs for aquatic toxicity testing at UC Davis lab.

Toxicity Lab Analysis	Number	Unit Cost	Total Cost
Ceriodaphnia 7-day test ¹	57	\$1,160	\$66,120
Hyalella 10-day test ²	51	\$1,160	\$59,160
Selenastrum (algae) 96-hr test	51	\$960	\$48,960
Chironomus (midge larvae) 10-day test	51	\$1,160	\$59,160
Pimephales (fathead minnow) 7-day test	51	\$1,200	\$61,200
Toxicity Testing Subtotal			\$294,600
 Toxicity Identification Evaluations (TIEs) Planning Budget³			
<i>Phase I TIE</i>	<i>4</i>	<i>\$6,600</i>	<i>\$26,400</i>
<i>Phase II TIE</i>	<i>1</i>	<i>\$14,000</i>	<i>\$14,000</i>
TIE Subtotal			\$40,400
Toxicity testing total			\$335,000

¹Budgeting for 6 extra samples with a nutrient addition, to test whether this is having an impact on the test results.

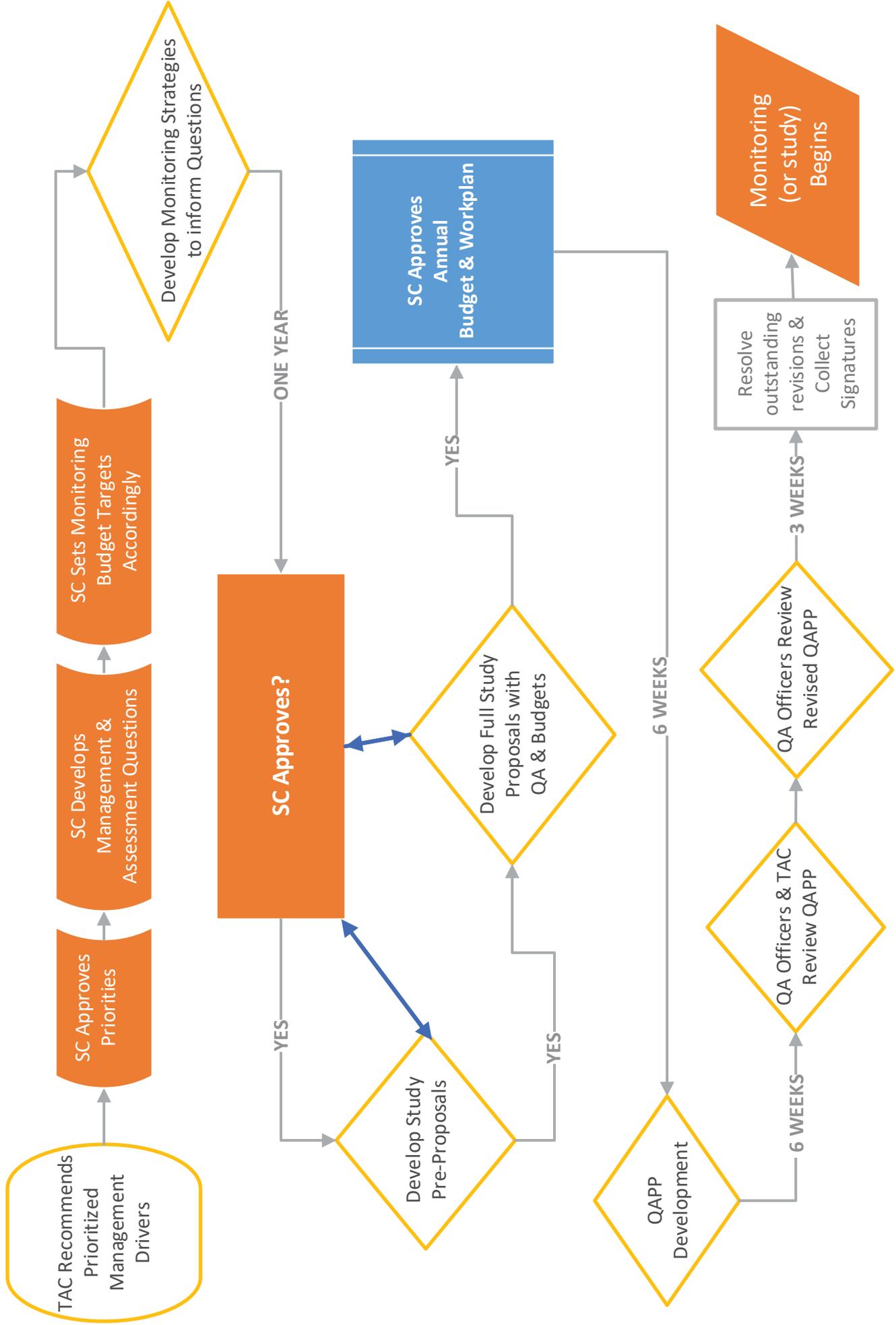
²48 samples, as noted above, plus two field blanks and one field duplicate

³TIES may or may not be necessary, pending results of toxicity testing

Materials for Agenda Item 8

DRAFT

DELTA RMP STUDY DEVELOPMENT PROCESS



Materials for Agenda Item 10

Row	Policy, Plan, or Activity	Drivers										Stakeholder Relevance										Priority Constituents Relevance					Other	Comments
		Status	Geographic Scope	Lead(s)	Timing	Relevance to Delta RMP	POTW	Strm.	Agric.	Mon.	Supply	Dredg.	Rsc.	Reg.	Habitat	C U Pests	Hg	Nut's	CECs									
1	Statewide Mercury Provisions	Existing (Adopted/Implemented)	Statewide	SWRCB	2017	1	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	Delta Methg TMDL supercedes. This may be relevant if tribal and subsistence beneficial uses are considered for the Delta.					
2	Pyrethroid Pesticides Control Plan (Basin Plan Amendment), including Research Plan	Existing (Adopted/Implemented)	Central Valley Region (Region 5)	CVRWQCB	2018	1	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	TMDL requires consideration of adoption of pyrethroid water quality objectives within fifteen years. Research Plan needed to address "considerable uncertainty in the characterization of the extent of the pyrethroid problem, the potential reductions needed, and the effectiveness of management practices and technology to control pyrethroid discharges."					
3	Delta Nutrient Research Plan	Existing (Adopted/Implemented)	Central Valley Region (Region 5)	CVRWQCB	2018	1	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	Effort led by the Central Valley Regional Water Quality Control Board. For the past 2 years, the Delta RMP has made it a goal to support the implementation of the Delta Nutrient Research Plan. Nutrient Subcommittee meetings have been held in conjunction with the NRP Stakeholder and Technical Advisory Group (STAG) since early 2018.					
4	Central Valley Diazinon and Chlorpyrifos Control Plan (Basin Plan Amendment)	Existing (Adopted/Implemented)	Central Valley Region (Region 5)	CVRWQCB	2017	1	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	Linked to statewide nutrient plan.					
5	Delta Methylmercury Total Maximum Daily Load, Phase I	Existing (Adopted/Implemented)	Central Valley Region (Region 5)	CVRWQCB	2022	1	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	Sediment	Delta RMP mercury monitoring to: 1) better quantify the fish-water linkage that is the foundation of the TMDL, 2) support calculations of mercury and methylmercury loads and mass balances, 3) support development of mercury models for the Delta and Yolo Bypass, and 4) support evaluation of the fish data by providing information on processes and trends. 5) potential evaluate habitat restoration on methylmercury levels.					
6	CECs monitoring program	In Development	Statewide	SWRCB	On-going	1	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	CECs special study conducted by Delta RMP should be evaluated in statewide context. The State Water Board has developed recycled water policy that included CECs. Far less is known about impacts on ecosystems. Drinking water policy relevance?					
7	Sediment Quality Provisions for Enclosed Bays and Estuaries (Part I and Part II)	Existing (Adopted/Implemented)	Statewide	SWRCB	2018	2	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	Sediments in bays and estuaries are often contaminated with a variety of pollutants stemming from sources including industrial and agricultural discharges, municipal wastewater treatment plants, storm water. Exposure to contaminated sediments can have a significant effect on the health, diversity and abundance of invertebrates such as clams and worms. Foraging fish and birds may also be exposed by ingesting contaminated invertebrates or sediments. In turn, those organisms consuming contaminated fish may be exposed to toxic pollutants. These effects underscore the need to develop sediment quality objectives that protect aquatic ecosystems and human health.					
8	Central Valley-Wide Salt and Nitrate Control Program (CV-SALTS)	Existing (Pending SWRCB adoption)	Central Valley Region (Region 5)	CVRWQCB	On-going	2	Y	Y	Y	N	?	N	Y	Y	Y	Y	Y	N	N	N	N	N	The State Water Resources Control Board (State Water Board) intends to develop and adopt sediment quality objectives (SQOs) for enclosed bays and estuaries. This process will require approximately four years to complete. This page contains links to information on the State Water Board's progress.					
9	Strategy to Optimize Resource Management of Storm Water (STORMS) - Project 6a. Establish Statewide Framework for Urban Pesticide Reduction	In Development	Statewide	SWRCB	2019	2	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	Not that a decade-old study found little to no toxicity in Delta sediments. Management of salt and nitrate required by the Basin Plan Amendment (BPA) will likely reduce the loading of nitrate to the Delta as all dischargers are required to reduce the loads discharged to either surface or groundwater.					
10	Water Quality Criteria Development for Oxyfluorfen, Promethyn, Simazine, Trifluralin and Fipronil	Future (Not Currently in Development)	Central Valley Region (Region 5)	CVRWQCB	?	2	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	N	N	N	N	N	Basin Plan Amendment? Compliance measure in STORMS for MS4 Permittees is to "Conduct pesticide monitoring, with an option to comply through participation in a coordinated statewide urban pesticide monitoring program." Delta RMP should coordinate future Delta RMP pesticides monitoring with the STORMS Statewide monitoring plan.					
11	Ammonia Water Quality Objectives	Future (Not Currently in Development)	Central Valley Region (Region 5)	CVRWQCB	?	2	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	N	N	N	N	N	Water quality criteria have developed, these have not been adopted as water quality objectives.					
12	SF Bay Hg TMDL	Existing (Adopted/Implemented)	Central Valley Region (Region 5)	CVRWQCB	2005	2	N	N	N	N	N	N	Y	Y	Y	Y	Y	N	N	N	N	N	The Delta has a total mercury (THg) load allocation, which requires monitoring to assess compliance. CVRWQCB has allocated THg load reduction to Cache Creek Settling Basin (managed by DWR) based on this allocation.					
13	Delta Smelt Resiliency Strategy	Existing (Adopted/Implemented)	Central Valley Region (Region 5)	Resources Agency	2016	2	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	Y	Under a comprehensive strategy, state and federal agencies will work to rapidly improve conditions for endangered Delta smelt, which are close to extinction. The strategy represents a management shift for state and federal water and wildlife agencies, which are addressing multiple stressors on Delta smelt in a systematic way while studying the synergy of the actions.					
14	Dissolved Oxygen Objectives	Future (Not Currently in Development)	Central Valley Region (Region 5)	CVRWQCB	2021	2	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	Development of site-specific dissolved oxygen objectives for Sacramento-San Joaquin Delta, Lower Stanislaus River, Old and Middle Rivers.					
15	Fungicides and Herbicides	In Development	Central Valley Region (Region 5)	UC Davis	2020	2	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	The Board has contracted \$375,000 with UC Davis to develop toxicity reference values for current use fungicides and herbicides found in the Delta on resident algal species. This work involves phytoplankton LC50 determination following four-day growth tests with up to four herbicides and fungicides commonly detected in Delta waters.					

Row	Policy, Plan, or Activity	Drivers										Stakeholder Relevance										Priority Constituents Relevance					Comments
		Status	Geographic Scope	Lead(s)	Timing	Relevance to Delta RMP	POTW	Strm.	Agric.	Mon.	Supply	Dredg.	Rsc.	Reg.	Habitat	C U Pests	Hg	Nut's	CECs	Other							
16	Conservation and Recovery Activities (for salmon, steelhead, and green sturgeon)	Existing (Adopted/Implemented)	Statewide	NAA Fisheries	Ongoing	3	N	N	N	N	N	N	N	Y	Y	Y	Y	Y	N	N	DFW conducting research on non-native species and contaminants. Nexus with Delta RMP?						
17	Statewide Bacteria Provisions & Use Attainability Analyses	Existing (Adopted/Implemented)	Statewide	SWRCB	2018	3	Y	Y	N	N	N	N	Y	N	N	N	N	N	Bacteria Indicators	N	The provisions allow the Regional Water Board to develop criteria for natural source exclusions. This seems like a perfect project for the Delta RMP to tackle. Finally, it is my understanding that the Provisions do not apply to agricultural discharges.						
18	Biological Integrity Assessment Implementation Plan & Biomimicry Substances Amendment	In Development	Statewide	SWRCB	2017-2022?	3	Y	Y	N	N	N	N	N	N	N	N	N	N	Various	N	To develop based on results of Statewide Nutrient Study Plan, need to ID reference conditions in Delta, also address harmful algal blooms (HABs).						
19	Temperature Criteria and Objectives	Future (Not Currently in Development)	Central Valley Region (Region 5)	CVRWQCB	?	3	Y	N	?	Y	N	Y	Y	N	N	N	N	Y	Y	N	Related to RMP holistically, but does not include specific water quality management drivers.						
20	Delta Science Plan Update	Existing (Adopted/Implemented)	Central Valley Region (Region 5)	Delta Stewardship Council	2018	3	N	N	Y	N	N	Y	Y	N	N	N	N	Y	Y	Y	The Science Action Agenda is a four-year science agenda for the Sacramento-San Joaquin Delta that prioritizes and aligns science actions to inform management decisions, fills gaps in knowledge, promotes collaborative science, builds the science infrastructure, and achieves the objectives of the Delta Science Plan. The primary purpose of the IEP Science Agenda is to guide the development of the IEP Annual Work Plans.						
21	Delta 2017-2021 Science Action Agenda	Existing (Adopted/Implemented)	Central Valley Region (Region 5)	Delta Stewardship Council	2017-2021	3	N	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Relevant to stakeholders other than State and Regional Water Boards? Ag will not allow cannabis operations to join; no registered pesticides approved for use on cannabis.						
22	Cannabis Cultivation General Order	Existing (Adopted/Implemented)	Statewide	SWRCB	2017	3	?	?	N	N	N	?	Y	N	Y	N	Y	N	?	N	Need to ID nexus to Delta RMP.						
23	Operations (dam releases, barriers)	Existing (Adopted/Implemented)	Statewide	DWR, USBR	Ongoing	3	N	N	N	Y	N	Y	Y	N	Y	N	N	N	N	N	Increased flows from dam releases dilute contaminants and may lessen their environmental impact. Releases can cause changes to water temperature, dissolved oxygen, suspended sediment, and other water quality parameters.						
24	Drinking Water Policy	Existing (Adopted/Implemented)	Central Valley Region (Region 5)	CVRWQCB	2014	3	Y	N	Y	Y	N	N	N	N	N	N	N	N	Bacterial Indicators	N	Clarify role for / its to Delta RMP since pathogen study completed						
25	North SF Bay Selenium TMDL	Existing (Adopted/Implemented)	Central Valley Region (Region 5)	SFBWQCB	2016	3	Y	N	Y	N	N	N	Y	N	N	N	N	N	Selenium	N	Fully approved and in effect since Aug 2016. Primary load allocation is "Central Valley Watershed", waste load allocation (WLA) to POTW, no WLA to stormwater dischargers, of significance to agriculture as part of CV Watershed. Full attainment expected by 2019.						
26	Control of Selenium in the Lower San Joaquin River Basin (San Joaquin River Selenium TMDL)	Existing (Adopted/Implemented)	Central Valley Region (Region 5)	CVRWQCB	2001	3	N	N	Y	N	N	N	Y	N	N	N	N	N	Selenium	N	Approved in August 2001. Subsurface agricultural drainage discharges from this area are the major source of selenium.						
27	Statewide Toxicity Provisions	In Development	Statewide	SWRCB	Early 2019	3	Y	Y	?	N	N	N	N	Y	N	N	N	N	N	N	DWR, two ports, and a yacht club have been required to participate in Delta RMP via 401 WQ cert. conditions. RMP provides overall, cumulative monitoring instead of project specific monitoring. Restoration Projects (e.g., under BDCP, EcoRestore http://resources.ca.gov/ecorestore/and BDCPs) & adaptive management						
28	Clean Water Act Section 401 Water Quality Certifications (dredge and fill permits)	Existing (Adopted/Implemented)	Central Valley Region (Region 5)	CVRWQCB	Ongoing	4	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Where rather than each small community having its own discharge permit, they have "blanket" coverage under a regional permit that applies to smaller communities. Typically those with a population less than 100,000. Regional Permit requires Permittees within the legal Delta to join the Delta RMP when obtaining coverage. Permittees outside the legal Delta may be required to participate in the Delta RMP. If directed and approved by the Executive Officer to address all or part of the local water quality monitoring requirements of this Order.						
29	Regional Stormwater Permit	Existing (Adopted/Implemented)	Central Valley Region (Region 5)	CVRWQCB	2016	4	N	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y							

Materials for Agenda Item 11

Delta RMP Deliverables

Key to Status Colors:

Checkmark indicates complete.

Green indicates that there are over 90 days until the deliverable is due.

Yellow indicates a deliverable is due in less than 90 days.

Red indicates a deliverable that is overdue.

Task	Deliverable	Assigned To	Due Date	Status	Old Due Date	Due Date Extended	Complete	Comments
1	FY17/18 Delta RMP Workplan						<input type="checkbox"/>	
2	3. Quality Assurance						<input type="checkbox"/>	
3	3.A. Quality Assurance	Matthew Heberger	09/30/18	✓			<input checked="" type="checkbox"/>	Distributed to signatories on Nov 21, 2018.
4	3.A. Data Management and QA Standard Operating Procedures	Matthew Heberger	06/30/18	✓			<input checked="" type="checkbox"/>	Requested by Melissa Morris, SWAMP QA Officer, as a condition of approving OAPP.
5	4. Communications		06/30/20	●			<input type="checkbox"/>	As of Dec 2018, the SC has approved the main themes and an outline. SC decided to push back publication of report to 2020. Note that budget does not include layout or design.
6	8. Pesticides Interpretive Report						<input type="checkbox"/>	
7	8.B. Contract Management	Matthew Heberger	11/15/17	✓			<input checked="" type="checkbox"/>	RFP issued in in spring 2018, proposals due March 16.
8	8.B. Contract Management	Matthew Heberger	03/31/18	✓			<input checked="" type="checkbox"/>	
9	8.A. Interpretive Report (Dellares)						<input type="checkbox"/>	
10	8.A.1. Stakeholder Engagement & Input						<input type="checkbox"/>	
11	8.A.1. Stakeholder Engagement & Input	Erwin Roex	07/01/18	✓			<input checked="" type="checkbox"/>	Kickoff meeting between Matt and Erwin held on July 12, 2018 via Skype.
12	8.A.1. Stakeholder Engagement & Input	Erwin Roex	09/25/18	✓			<input checked="" type="checkbox"/>	Meeting held on morning of Sept 25 at Regional San.
13	8.A.1. Stakeholder Engagement & Input	Erwin Roex	09/25/18	✓			<input checked="" type="checkbox"/>	Erwin's Powerpoint slide presentation was distributed to the Pesticides Subcommittee and TAC following the meeting.
14	8.A.1. Stakeholder Engagement & Input	Erwin Roex	10/15/18	✓			<input checked="" type="checkbox"/>	Matt H. wrote up a meeting summary, saving Dellares from having to complete this step.
15	8.A.1. Stakeholder Engagement & Input	Erwin Roex	12/10/18	✓	11/09/18		<input checked="" type="checkbox"/>	Postponed to Dec 10, 2018.
16	8.A.1. Stakeholder Engagement & Input	Erwin Roex	12/10/18	✓	11/09/18		<input checked="" type="checkbox"/>	
17	8.A.1. Stakeholder Engagement & Input	Erwin Roex	12/17/18	✓	11/16/18		<input checked="" type="checkbox"/>	
18	8.A.1. Stakeholder Engagement & Input	Erwin Roex	03/31/19	●			<input type="checkbox"/>	
19	8.A.1. Stakeholder Engagement & Input	Erwin Roex	03/31/19	●			<input type="checkbox"/>	
20	8.A.1. Stakeholder Engagement & Input	Erwin Roex	04/15/19	●			<input type="checkbox"/>	
21	8.A.2. Completion of existing data and literature						<input type="checkbox"/>	
22	8.A.2. Completion of existing data and literature	Erwin Roex	12/24/18	✓	09/30/18		<input checked="" type="checkbox"/>	As of Oct-19, 2018, State Board staff are still making adjustments to the Delta RMP toxicity data, preventing Dellares from finalizing their analysis.
23	8.A.2. Completion of existing data and literature	Erwin Roex	12/24/18	✓	09/30/18		<input checked="" type="checkbox"/>	
24	8.A.2. Completion of existing data and literature	Erwin Roex	12/24/18	✓	09/30/18		<input checked="" type="checkbox"/>	
25	8.A.3. Analysis Methods Report						<input type="checkbox"/>	
26	8.A.3. Analysis Methods Report	Erwin Roex	01/15/19	●	10/31/18		<input type="checkbox"/>	Per Erwin Roex, expected to deliver by end of February 2019. Update: Update on 3/20: expect by end of March. PI states that team has encountered many problems an inconsistencies in the data that caused delays.
27	8.A.3. Analysis Methods Report	Erwin Roex	01/15/19	●	11/30/18		<input type="checkbox"/>	
28	8.A.3. Analysis Methods Report	Erwin Roex	02/15/19	●			<input type="checkbox"/>	

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Task	Deliverable	Assigned To	Due Date	Status	Old Due Date	Due Date Extended	Complete	Comments
29	8.A.4. Interpretive Report						<input type="checkbox"/>	
30	8.A.4. Interpretive Report	Erwin Roex	01/31/19	●			<input type="checkbox"/>	Shown in their proposal as due in Nov, but changed to Jan. It doesn't make sense for them to issue a draft of the report until they have agreement on the analysis methods, to be discussed in Nov and finalized in Dec.
31	8.A.4. Interpretive Report	Erwin Roex	03/31/19	●			<input type="checkbox"/>	
32	8.A.4. Interpretive Report	Erwin Roex	05/31/19	●			<input type="checkbox"/>	
33	9. Nutrients Special Studies						<input type="checkbox"/>	
34	9.A. Cross-Delta Monitoring Using High-Frequency Tools	Brian Bergamaschi	03/31/19	●			<input type="checkbox"/>	The Nutrients Subcommittee decided to postpone the project so all 3 cruises will happen in Water Year 2018, commencing in spring, once flows recede. This delay sets the deadline for the final report as early 2019 as a draft. The final report will include a discussion of how the HF data should be used in the context of other monitoring data.
35	9.A. Cross-Delta Monitoring Using High-Frequency Tools	Brian Bergamaschi	03/31/19	●			<input type="checkbox"/>	
36	9.A. Cross-Delta Monitoring Using High-Frequency Tools	Brian Bergamaschi	03/31/19	●			<input type="checkbox"/>	
37	9.B. Continued Nutrient Data Analysis and Biennial Reporting	Philip Trowbridge	06/30/18	✓			<input checked="" type="checkbox"/>	Meetings held on 9/29/17, 12/1/17, 1/18/18, 2/15/18. 4 project proposals for FY-18-19 were developed.
38	9.B. Continued Nutrient Data Analysis and Biennial Reporting	Philip Trowbridge	06/30/18	✓			<input checked="" type="checkbox"/>	Proposal prepared for Nutrient Subcommittee. The Subcommittee set this project as a low priority for further action.
39	9.B. Continued Nutrient Data Analysis and Biennial Reporting	Philip Trowbridge	09/30/17	✓			<input checked="" type="checkbox"/>	This task was a placeholder for any follow-on analyses after the three synthesis reports were completed. The subcommittee did not authorize any additional statistical analyses so this task no longer relevant.
40	9.B. Continued Nutrient Data Analysis and Biennial Reporting	Philip Trowbridge	12/31/17	✓			<input checked="" type="checkbox"/>	This task was a placeholder for any follow-on analyses after the three synthesis reports were completed. The subcommittee did not authorize any additional statistical analyses so this task no longer relevant.
41	9.C. Chlorophyll Sensor Inter-calibration	Philip Trowbridge	06/30/18	✓			<input checked="" type="checkbox"/>	3 meetings held on 9/28/17 and 12/5/17 and 2/6/18.
42	9.C. Chlorophyll Sensor Inter-calibration	Philip Trowbridge	06/30/18	✓			<input checked="" type="checkbox"/>	Proposal for Phase II study prepared and presented to the SC on 5/11/18.
43	10. Mercury Monitoring						<input type="checkbox"/>	
44	10.B. Mercury Monitoring	Amy Franz	01/31/19	●	11/30/18		<input type="checkbox"/>	As of Sept 2018, MOST FY17/18 data has been received from the lab. Data management will not marked as complete until QA is complete and data is uploaded to CEDEEN.
45	10.B. Mercury Monitoring	Don Yee	01/31/19	●			<input type="checkbox"/>	Update Nov 2018; MML reports that there were problems with the TOC data (broken/malfunctioning equipment). They sent samples to an external, commercial lab to analyze for TOC. These data are not expected to be reported to her until early December.
46	10.C. Technical Coordination	Jay Davis	01/31/19	●	12/31/18		<input type="checkbox"/>	Matt (ASC project manager) instructed ASC data services team to delay doing the data management and QA until after the end of the year. The team has been working on this task and will have a report in mid-February. Matt will result in extra time and expense. (TOC is an important quality parameter for interpreting the mercury results, and I decided that even though we have 99% of the data, it did not make sense to move forward with an incomplete dataset.) New timeline to complete the QA is about mid-January taking into account planned time off for staff around the holidays.
47	10.C. Technical Coordination	Jay Davis	03/31/19	●			<input type="checkbox"/>	Update 2/13/2019: Moss Landing delivered the data and ASC will fast track Data Management and Quality Assurance.
48							<input type="checkbox"/>	As of Jan 2019, QA is complete for the fish tissue data, but we are waiting for the complete results for water and sediment.
49	FY18-19 Delta RMP Workplan						<input type="checkbox"/>	See note above about pushing back deadline by 2 months in order to wait for the full dataset and avoid going over budget.
50	1. Program management						<input type="checkbox"/>	
51	A. Program planning	Matthew Heberger	05/01/19	●			<input type="checkbox"/>	In progress. Will be a part of the 5/29 SC meeting agenda package.
52	A. Program planning	Matthew Heberger	06/30/19	●			<input type="checkbox"/>	
53	A. Program planning	Matthew Heberger	06/30/19	●			<input type="checkbox"/>	
54	A. Program planning	Matthew Heberger	12/31/18	✓			<input checked="" type="checkbox"/>	Some charter amendments were made at the Oct 29, 2018 SC meeting. Charter was amended and posted on the website.
55	A. Program planning	Matthew Heberger	09/30/18	✓			<input checked="" type="checkbox"/>	
56	A. Program planning	Matthew Heberger	12/31/18	✓			<input checked="" type="checkbox"/>	This will accompany the SC meeting package and finance memo.
57	A. Program planning	Matthew Heberger	04/30/19	●			<input type="checkbox"/>	In progress. Will be a part of the 5/29 SC meeting agenda package.
58	A. Program planning	Matthew Heberger	07/31/19	●			<input type="checkbox"/>	
59	B. Contract and financial management						<input type="checkbox"/>	
60	B. Contract and financial management	Matthew Heberger	10/08/18	✓			<input checked="" type="checkbox"/>	

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Task	Deliverable	Assigned To	Due Date	Status	Old Due Date	Due Date Extended	Complete	Comments
61	B. Contract and financial management	Quarterly finance update #2	Matthew Heberger	02/01/19	✓		<input checked="" type="checkbox"/>	
62	B. Contract and financial management	Quarterly finance update #3	Matthew Heberger	05/01/19	●		<input type="checkbox"/>	In progress. Will be a part of the 5/29 SC meeting agenda package.
63	B. Contract and financial management	Quarterly finance update #4	Matthew Heberger	07/30/19	●		<input type="checkbox"/>	
64	B. Contract and financial management	Invoices to Delta RMP participants/contributors	Matthew Heberger	05/15/19	●		<input type="checkbox"/>	In addition, invoices will be sent as needed to any new Delta RMP participants that may join during the year.
65	B. Contract and financial management	New or extended contracts for those Delta RMP participants that require a contract in order to pay ASC	Matthew Heberger	06/30/19	●		<input type="checkbox"/>	Participants requiring a contract include Regional San, Caltrans, State Water Contractors (formerly SFCWA)
66	B. Contract and financial management	Contracts with subcontractors, labs	Matthew Heberger	06/30/19	●		<input type="checkbox"/>	After the workplan has been approved by the SC, put in place contracts with any labs, contractors. USGS, M/LM, McCord, Orzall, AMS, and others.
67	2. Governance						<input type="checkbox"/>	
68	A. Steering Committee meetings						<input type="checkbox"/>	
69	Coordinating Committee Pre-Call #1	Agenda and informal summary	Matthew Heberger	06/15/18	✓		<input checked="" type="checkbox"/>	
70	Coordinating Committee Post-Call #1	Agenda and informal summary	Matthew Heberger	07/31/18	✓		<input checked="" type="checkbox"/>	
71	Coordinating Committee Pre-Call #2	Agenda and informal summary	Matthew Heberger	10/15/18	✓		<input checked="" type="checkbox"/>	
72	Coordinating Committee Post-Call #2	Agenda and informal summary	Matthew Heberger	11/15/18	✓		<input checked="" type="checkbox"/>	
73	Coordinating Committee Pre-Call #3	Agenda and informal summary	Matthew Heberger	01/15/19	✓		<input checked="" type="checkbox"/>	
74	Coordinating Committee Post-Call #3	Agenda and informal summary	Matthew Heberger	02/28/19	✓		<input checked="" type="checkbox"/>	
75	Coordinating Committee Pre-Call #4	Agenda and informal summary	Matthew Heberger	05/15/19	●		<input type="checkbox"/>	
76	Coordinating Committee Post-Call #4	Agenda and informal summary	Matthew Heberger	06/15/19	●		<input type="checkbox"/>	
77	SC Meeting #1 (2018-07-17)	Agenda Package	Matthew Heberger	07/07/19	✓		<input checked="" type="checkbox"/>	
78	SC Meeting #1 (2018-07-17)	Meeting Summary	Matthew Heberger	09/28/18	✓		<input checked="" type="checkbox"/>	
79	SC Meeting #2 (2018-10-29)	Agenda Package	Matthew Heberger	10/14/18	✓		<input checked="" type="checkbox"/>	
80	SC Meeting #2 (2018-10-29)	Meeting Summary	Matthew Heberger	12/28/18	✓		<input checked="" type="checkbox"/>	
81	SC Meeting #3 (2019-02-22)	Agenda Package	Matthew Heberger	01/15/19	✓		<input checked="" type="checkbox"/>	
82	SC Meeting #3 (2019-02-22)	Meeting Summary	Matthew Heberger	03/29/19	✓		<input checked="" type="checkbox"/>	
83	SC Meeting #4 (May 2019)	Agenda Package	Matthew Heberger	05/31/19	●		<input type="checkbox"/>	
84	SC Meeting #4 (May 2019)	Meeting Summary	Matthew Heberger	06/28/19	●		<input type="checkbox"/>	
85	SC Teleconference (as necessary)	Agenda Package	Matthew Heberger	06/28/19	✓		<input checked="" type="checkbox"/>	
86	SC Teleconference (as necessary)	Meeting Summary	Matthew Heberger	06/28/19	✓		<input checked="" type="checkbox"/>	
87	B. Technical Advisory Committee meetings						<input type="checkbox"/>	
88	TAC Meeting #1 (2018-09-21)	Agenda Package	Matthew Heberger	09/14/18	✓		<input checked="" type="checkbox"/>	Meeting held on Sept 21, 2018. Agenda package sent on Sept 17.
89	TAC Meeting #1 (2018-09-21)	Meeting Summary	Matthew Heberger	10/05/18	✓		<input checked="" type="checkbox"/>	Draft distributed to TAC via email on Oct 3, 2018.
90	TAC Meeting #2 (2019-01-17)	Agenda Package	Matthew Heberger	12/31/18	✓		<input checked="" type="checkbox"/>	Meeting held on Jan 17, 2019. Agenda package sent on Jan 9.
91	TAC Meeting #2 (2019-01-17)	Meeting Summary	Matthew Heberger	01/15/19	✓		<input checked="" type="checkbox"/>	Draft distributed to TAC via email on Jan 28, 2019
92	TAC Meeting #3 (Spring 2019)	Agenda Package	Matthew Heberger	02/28/19	✓		<input checked="" type="checkbox"/>	
93	TAC Meeting #3 (Spring 2019)	Meeting Summary	Matthew Heberger	03/15/19	✓		<input checked="" type="checkbox"/>	
94	TAC Meeting #4 (Summer 2019)	Agenda Package	Matthew Heberger	06/30/19	●		<input type="checkbox"/>	
95	TAC Meeting #4 (Summer 2019)	Meeting Summary	Matthew Heberger	07/15/19	●		<input type="checkbox"/>	
96	TAC Teleconference (as necessary)	Agenda Package	Matthew Heberger	06/30/19	✓		<input checked="" type="checkbox"/>	An 3-hour teleconferences was held on June 29, 2018 to discuss Monitoring proposals for FY 2018-19, pesticides and CECS.
97	TAC Teleconference (as necessary)	Meeting Summary	Matthew Heberger	06/30/19	✓		<input checked="" type="checkbox"/>	
98	C. Technical Subcommittees						<input type="checkbox"/>	
99	Pesticides subcommittee meetings						<input type="checkbox"/>	
100	Pesticides Subcommittee Meeting #1	Meeting agenda package; meeting summary	Matthew Heberger	08/01/18	✓		<input checked="" type="checkbox"/>	
101	Pesticides Subcommittee Meeting #2	Meeting agenda package; meeting summary	Matthew Heberger	08/28/18	✓		<input checked="" type="checkbox"/>	
102	Pesticides Subcommittee Meeting #3	Meeting agenda package; meeting summary	Matthew Heberger	09/13/18	✓		<input checked="" type="checkbox"/>	
103	Pesticides Subcommittee Meeting #4	Meeting agenda package; meeting summary	Matthew Heberger	12/31/18	✓		<input checked="" type="checkbox"/>	

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Task	Deliverable	Assigned To	Due Date	Status	Old Due Date	Due Date Extended	Complete	Comments
104	Pesticides Subcommittee Meeting #5	Matthew Heberger	03/31/19	✓			✓	
105	Pesticides Subcommittee Meeting #6	Matthew Heberger	06/30/19	✓			✓	
106	Nutrients subcommittee meetings							
107	Nutrients Subcommittee Meeting #1	Philip Trowbridge	09/30/18	✓			✓	
108	Nutrients Subcommittee Meeting #2	Philip Trowbridge	12/31/18	✓			✓	
109	Nutrients Subcommittee Meeting #3	Philip Trowbridge	03/31/19	✓			✓	
110	Nutrients Subcommittee Meeting #4	Philip Trowbridge	06/30/19	✓			✓	
111	Mercury subcommittee meetings							
112	Mercury Subcommittee Meeting #1	Jay Davis	10/31/18	✓			✓	
113	Mercury Subcommittee Meeting #2	Jay Davis	03/31/19	✓			✓	
114	CEC Subcommittee meetings							
115	CEC Subcommittee Meeting #1	Matthew Heberger	10/31/18	✓			✓	
116	CEC Subcommittee Meeting #2	Matthew Heberger	03/31/19	✓			✓	
117	Toxicity work group meetings							
118	Toxicity Work Group Meeting #1	Matthew Heberger	09/13/18	✓			✓	
119	Toxicity Work Group Meeting #2	Matthew Heberger	03/31/19	●			✓	Tox WG members invited to Feb 26 meeting of Pesticides Subcommittee.
120	3. Quality Assurance							
121	A. QAPP Revision	Don Yee	09/28/18	✓			✓	Revised QAPP required to kick off FY18-19 monitoring, adding new and revised elements for pesticides monitoring.
122	A. QAPP Revision	Don Yee	07/15/19	●			✓	Budgeted for a minor revision in the spring of 2019, following the approval of the FY19/20 workplan to account for any updated labs, protocols, etc. Note that the creation of a separate QAPP to cover CEC monitoring is included under a separate budget line and is listed as a standalone deliverable.
123	4. Nutrients Special Studies							
124	4.B. Chlorophyll Sensor Intercalibration Study							
125	Chlorophyll Sensor Intercalibration Study	Matthew Heberger	12/31/18	✓			✓	USGS will lead this task
126	Chlorophyll Sensor Intercalibration Study	Liz Stumppner	12/31/18	✓			✓	Liz gave a presentation about this at the Workgroup meeting on 3/13/2019.
127	Chlorophyll Sensor Intercalibration Study	Matthew Heberger	05/31/19	●			✓	The lab intercalibration was delayed until the spring to give us more time to organize the logistics and to recruit labs to participate. First round of samples will be taken the week of 4/22.
128	Chlorophyll Sensor Intercalibration Study	Matthew Heberger	06/30/19	●			✓	
129	Chlorophyll Sensor Intercalibration Study	Matthew Heberger	09/30/18	✓			✓	WG Meeting #1 held Sept 28, 2018
130	Chlorophyll Sensor Intercalibration Study	Matthew Heberger	12/31/18	✓			✓	WG Meeting #2 held Dec 5, 2018
131	Chlorophyll Sensor Intercalibration Study	Matthew Heberger	03/31/19	✓			✓	Meeting planned for March 2019
132	Chlorophyll Sensor Intercalibration Study	Matthew Heberger	06/30/19	●			✓	
133	4.A. WY2016 Modeling and Monitoring Synthesis							
134	WY2016 Modeling and Monitoring Synthesis	Matthew Heberger	07/31/18	✓			✓	Provided progress report to RBS to give to the STAG. Gave a presentation to the STAG on 9/18/18.
135	WY2016 Modeling and Monitoring Synthesis	Matthew Heberger	01/31/19	✓			✓	This update should be given at the Delta-Suisun Team Meeting
136	WY2016 Modeling and Monitoring Synthesis	Matthew Heberger	07/31/19	●			✓	This update should be given at the Delta-Suisun Team Meeting
137	WY2016 Modeling and Monitoring Synthesis	Matthew Heberger	01/31/20	●			✓	This update should be given at the Delta-Suisun Team Meeting
138	WY2016 Modeling and Monitoring Synthesis	Matthew Heberger	03/31/19	●			✓	WY2016 hydrodynamics will be developed in DFM by SFEI staff. The STAG/Nutrients Subcmte was briefed of this change on 9/18/18 and agreed.
139	WY2016 Modeling and Monitoring Synthesis	Matthew Heberger	12/31/19	●			✓	Allie King, PhD, a new SFEI staff scientist, began working on this in Nov 2018.
140	WY2016 Modeling and Monitoring Synthesis	Matthew Heberger	03/31/20	●			✓	Code will be developed during 2019. Code could not be developed in 2018 without delaying the project. The STAG/Nutrients Subcmte was briefed of this change on 9/18/18 and agreed.
141	WY2016 Modeling and Monitoring Synthesis	Matthew Heberger	06/30/20	●			✓	
142	5. Mercury Monitoring FY18-19							

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Task	Deliverable	Assigned To	Due Date	Status	Old Due Date	Due Date Extended	Complete	Comments
143	5.A. Mercury Data collection and analysis	Year 3 Mercury Data Report	Jay Davis	12/31/19	●		<input type="checkbox"/>	
144	5.B. Mercury Data Management and Quality Assurance	Mercury Fish and Water QA Summary Technical Memo	Don Yee	10/31/19	●		<input type="checkbox"/>	
145	5.B. Mercury Data Management and Quality Assurance	Formatted and QAed Mercury Data uploaded to CEDEN	Amy Franz	10/31/19	●		<input type="checkbox"/>	
146	6. Pesticide Monitoring Water Year 2019						<input type="checkbox"/>	
147	6.A. Field sample collection and laboratory analysis	Amendments to QAPP describing sampling and analysis for pesticides chemistry and aquatic toxicity	Don Yee	09/30/18	✓		<input checked="" type="checkbox"/>	
148	6.A. Field sample collection and laboratory analysis	Pesticides chemistry provisional data shared with TAC, Event #1	Matthew Heberger	12/31/18	✓		<input checked="" type="checkbox"/>	Updated 2/13/19: ASC has received from OCRL: (2) scanned field data sheets, and (3) Chain of Custody forms. Still expecting (1) Provisional results in a spreadsheet. Analysis of the samples was delayed because of the federal government shutdown.
149	6.A. Field sample collection and laboratory analysis	Pesticides chemistry provisional data shared with TAC, Event #2	Jim Orlando	02/28/19	✓		<input checked="" type="checkbox"/>	(1) Provisional results in a spreadsheet, (2) scanned field data sheets, and (3) Chain of Custody forms.
150	6.A. Field sample collection and laboratory analysis	Pesticides chemistry provisional data shared with TAC, Event #3	Jim Orlando	03/31/19	●		<input type="checkbox"/>	Monitoring conducted last week of April 2019. USGS OCRL staff plan to distribute chemistry results as soon as they are available, around mid-May
151	6.A. Field sample collection and laboratory analysis	Pesticides chemistry provisional data shared with TAC, Event #4	Jim Orlando	05/31/19	●		<input type="checkbox"/>	(1) Provisional results in a spreadsheet, (2) scanned field data sheets, and (3) Chain of Custody forms.
152	6.A. Field sample collection and laboratory analysis	Pesticides chemistry provisional data shared with TAC, Event #5	Jim Orlando	06/30/19	●		<input type="checkbox"/>	(1) Provisional results in a spreadsheet, (2) scanned field data sheets, and (3) Chain of Custody forms.
153	6.A. Field sample collection and laboratory analysis	Pesticides chemistry provisional data shared with TAC, Event #6	Jim Orlando	07/31/19	●		<input type="checkbox"/>	(1) Provisional results in a spreadsheet, (2) scanned field data sheets, and (3) Chain of Custody forms.
154	6.A. Field sample collection and laboratory analysis	Pesticides Chemistry Lab Report	Jim Orlando	12/31/19	●		<input type="checkbox"/>	Report to the Delta RMP; not a formal USGS Data Series Report
155	6.B. Toxicity reporting	Toxicity Lab Reporting, Sampling Event #1	Marie Stillway	12/31/18	●		<input type="checkbox"/>	ASC has contracted with AHPL to produce this reporting, as it is NOT covered under the contract with SWAMP. In lieu of a formal report, the lab manager will provide provisional data and information on the labs internal processes and controls, including: A) SWAMP Toxicity Transformers (no charge); B) Bench Sheet Copies; C) Reference Toxicant Control Charts; D) Corrective Actions Table.
156	6.B. Toxicity reporting	Toxicity Lab Reporting, Sampling Event #2	Marie Stillway	02/28/19	●		<input type="checkbox"/>	Due dates are approximate, as sampling will be coordinated with storms and runoff conditions, not set in advance.
157	6.B. Toxicity reporting	Toxicity Lab Reporting, Sampling Event #3	Marie Stillway	03/31/19	●		<input type="checkbox"/>	
158	6.B. Toxicity reporting	Toxicity Lab Reporting, Sampling Event #4	Marie Stillway	05/31/19	●		<input type="checkbox"/>	
159	6.B. Toxicity reporting	Toxicity Lab Reporting, Sampling Event #5	Marie Stillway	06/30/19	●		<input type="checkbox"/>	
160	6.B. Toxicity reporting	Toxicity Lab Reporting, Sampling Event #6	Marie Stillway	07/31/19	●		<input type="checkbox"/>	
161	6.C. Pesticides Data Management and Quality Assurance	Pesticides chemistry QA Summary and Technical Memo	Don Yee	12/31/19	●		<input type="checkbox"/>	
162	6.C. Pesticides Data Management and Quality Assurance	Formatted pesticides data uploaded to CEDEN	Amy Franz	12/31/19	●		<input type="checkbox"/>	
163	7. CEC Monitoring Plan for FY19-20						<input type="checkbox"/>	
164	7.A. CEC Monitoring Coordination and planning	Draft CEC Sampling and Analysis Plan	Matthew Heberger	03/04/19	✓		<input checked="" type="checkbox"/>	
165	7.A. CEC Monitoring Coordination and planning	Final CEC Sampling and Analysis Plan	Matthew Heberger	04/30/19	●		<input type="checkbox"/>	
166	7.B. QAPP Amendments to cover CEC Monitoring	Draft QAPP for CEC monitoring	Matthew Heberger	03/25/19	✓		<input checked="" type="checkbox"/>	
167	7.B. QAPP Amendments to cover CEC Monitoring	Final QAPP for CEC monitoring	Matthew Heberger	04/30/19	●		<input type="checkbox"/>	

Delta RMP Action Items

Key to Status Colors:

Checkmark indicates done.

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

Yellow indicates a deliverable is due within 90 days.

Red indicates a deliverable that is overdue.

Task	Date Created	Due Date	Assigned To	Status	Complete	Comments
1 Steering Committee (SC) Action Items					<input type="checkbox"/>	
2 SC Action Items 2/5/2018	02/05/18				<input type="checkbox"/>	
3 Circulate the revised RFP document to SC members and asked them to share it widely with their professional networks.	02/05/18	02/28/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
4 SC Action Items 3/2/2018	03/02/18				<input type="checkbox"/>	
5 Finalize the October 24, 2017 Joint Meeting Summary and post to the website.	03/02/18	03/31/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
6 Schedule additional 1 to 1.5 hr. Steering Committee conference call as needed to cover agenda items that we did not have time to cover at the March SC meeting	03/02/18	04/30/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
7 Form a data management subcommittee	03/02/18	04/30/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
8 Adam Laputz, Greg Gearheart, Sam Safi, and Debbie Webster will meet and complete feedback from committee members on the draft Delta Science Plan and forward to Yumiko Heinemann.	03/02/18	04/30/18	Adam Laputz	✓	<input checked="" type="checkbox"/>	
9 Update the Monitoring Design to include recommended changes to the Nutrients Assessment Questions approved by the Steering Committee	03/02/18	05/30/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
10 The SC requested that ASC and the Finance Subcommittee begin considering options for the upcoming fiscal year's work plan that are in line with possible funding scenarios	03/02/18	04/30/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	This is a regular part of our revenue forecasting and budgeting process.
11 The Finance Subcommittee was asked to develop some "out of the box" options for updating the budget for the upcoming period, taking into account the unwillingness of participants to vote for a fee increase at their next meeting	03/02/18	05/31/18	Finance Subcommittee	✓	<input checked="" type="checkbox"/>	Discussed the week of April 23, 2018.
12 Schedule a conference call for committee discussion of the fee increase issue	03/02/18	04/30/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	To discuss during the next regularly scheduled Finance Subcommittee meeting.
13 RMP should look into whether SCCWRP model is feasible for the Delta RMP contracting process (e.g., requiring labs to conduct inter-laboratory comparison testing so that they can participate in sampling for the program).	03/02/18	06/01/18	Adam Laputz	✓	<input checked="" type="checkbox"/>	Discussed at a meeting of the Toxicity Work Group on May 14, 2018. We concluded it is not feasible because (a) SCCWRP awards millions in contracts which gives them leverage that we do not have (b) at present we are locked into a single-source contract.
14 SC Action Items 5/11/2018	05/11/18				<input type="checkbox"/>	
15 Finalize the February 5, 2018 & March 2, 2018 Meeting Summaries and post to the website.	05/11/18	05/30/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
16 Circulate a Doodle Poll to select a date for the Fall Joint SC/TAC Meeting. (Matt Heberger)	05/11/18	05/30/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Meeting scheduled for Oct 29, 2018 at the Cal/EPA building.
17 Distribute login information for the TAC web site to the committee. Utilize a push notification for updates going forward.	05/11/18	05/30/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Detailed instructions sent on May 17 to TAC and SC members, subject line "How to Access Delta RMP Data." I have also put most of this information on a new page on our TAC workspace website for easy reference. Visit https://sites.google.com/site/delta-rmp and click "Data Access."
18 Technical Committee should discuss co-chair/chair needs and bring recommendation to the next Steering Committee meeting	05/11/18	07/17/18	Stephen McCord	✓	<input checked="" type="checkbox"/>	Discussed by the TAC at its June 12 meeting. See meeting summary for details.
19 Consider submitting a Prop 1 funding for the CEC Study and Pesticides Monitoring. This item should be added to the next TAC meeting agenda.	05/11/18	06/04/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	We looked into the possibility and did not see it as a good fit. One challenge is that the program does not have in place an approved pesticides monitoring design which could be expanded through grant funding. Another challenge is that this grant program is for "studies" and not ongoing monitoring, and there needs to be a strong link to wildlife.
20 Put in place subcontract with Deltarex for the Pesticides Interpretive Report)	05/11/18	06/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
21 Finance Subcommittee will discuss the options/framework for an overall funding process and how to make the process more efficient and bring a proposal to the next Steering Committee meeting.	05/11/18	06/30/18	Dalia Fadi	✓	<input checked="" type="checkbox"/>	The finance committee held a meeting to discuss financing options on June 19.
22 Technical Advisory Committee will develop a strategic plan for utilizing the Science Advisors	05/11/18	06/30/18	TAC members	✓	<input checked="" type="checkbox"/>	
23 SC Action Items 7/17/2018	07/17/18				<input type="checkbox"/>	
24 Verify that the budget in the workplan is correct, and reflects the 50% funding approved for the chlorophyll-a sensor intercalibration study.	07/17/18	07/27/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	It was correct.
25 Put Multi-Year Planning on the agenda for the Fall Joint Meeting.	07/17/18	09/28/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	

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Task	Date Created	Due Date	Assigned To	Status	Complete	Comments
26	07/17/18	09/28/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
27	07/17/18	07/27/18	Steering Committee	✓	<input checked="" type="checkbox"/>	
28	07/17/18	09/28/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	I have included this on the agenda for the meeting, and the co-leaders of this subcommittee are preparing a report.
29	10/29/18				<input type="checkbox"/>	
30	10/29/18	01/15/19	Patrick Morris	✓	<input checked="" type="checkbox"/>	Volunteers include Rebecca Franklin, Stephanie Hiestand, Patrick Morris, Dan Reardon, Greg Gearhart. The group has met once and will have a followup meeting in Jan 2019.
31	10/29/18	12/31/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
32	10/29/18	10/31/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
33	10/29/18	11/15/18	Adam Laputz, Patrick Morris	✓	<input checked="" type="checkbox"/>	These issues were (completely?) resolved at the Nov 9, 2018 Toxicity Work Group meeting.
34	10/29/18	12/15/18	Stephen McCord	✓	<input checked="" type="checkbox"/>	
35	10/29/18	05/15/19	Matthew Heberger	●	<input type="checkbox"/>	
36	10/29/18	12/31/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
37	10/29/18	12/31/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
38		02/10/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
39	10/29/18	11/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
40	02/22/19				<input type="checkbox"/>	
41	02/22/19	03/15/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
42	02/22/19	03/15/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
43	02/22/19	03/22/19	Greg Gearheart, Michael Johnson, Rebecca Franklin, Selina Cole	●	<input type="checkbox"/>	
44	03/20/19	03/20/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
45	02/22/19	02/28/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
46	02/22/19	03/31/19	Adam Laputz, Debbie Webster, Patrick Morris, Stephen McCord	✓	<input checked="" type="checkbox"/>	This group has met twice and has produced a document on how existing data in CEEN can be updated or amended if necessary.
47	02/22/19	03/15/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
48	02/22/19	04/15/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	From Edmund Yu, Delta Independent Science Board, who is the contract manager for the study: "It will be possible for us to provide a progress report to the Delta RMP Steering Committee this summer. We will likely have an ISB member do it, but this is subject to change based on the date of the meeting and what the Steering Committee wants out of the presentation. However, it will be important to note that the inventory will not be done by July/August."
49	02/22/19	04/30/19	Stephen McCord	✓	<input checked="" type="checkbox"/>	
50					<input type="checkbox"/>	
51					<input type="checkbox"/>	
52					<input type="checkbox"/>	
53	03/05/18				<input type="checkbox"/>	
54	03/15/18	04/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
55	03/15/18	04/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
56	03/15/18	03/21/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	

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Task	Date Created	Due Date	Assigned To	Status	Complete	Comments
57	03/15/18	03/21/18	Matthew Heberger	✓	✓	
58	03/15/18	03/21/18	Matthew Heberger	✓	✓	
59	03/15/18	04/30/18	Matthew Heberger	✓	✓	Emails sent the first week of May, awaiting confirmation from some.
60	03/15/18	04/30/18	Jay Davis	✓	✓	Changes to the report were made by the Principal Investigators, Jay Davis at SFEI and Wes Heim at the Moss Landing Marine Laboratory. The changes only affect the historic data shown in Figure 4 of the report.
61	04/23/18				☐	
62	04/23/18	04/30/18	Matthew Heberger	✓	✓	
63	04/23/18	04/30/18	Matthew Heberger	✓	✓	
64	04/23/18	05/05/18	Matthew Heberger	✓	✓	
65	04/23/18	05/15/18	Matthew Heberger	✓	✓	
66	04/23/18	04/30/18	Matthew Heberger	✓	✓	
67	04/23/18	05/05/18	Matthew Heberger	✓	✓	Drafted a 5-page memo which describes this year's proposal development, selection, and ranking process. Includes passages from the Decision Grid materials developed last year by a stakeholder-led working group.
68	04/23/18	05/30/18	Jay Davis	✓	✓	
69	04/23/18	04/30/18	Jay Davis	✓	✓	
70	04/23/18	05/15/18		✓	✓	Have confirmed with Jim Orlando and Marie Stillway that it is NOT feasible to run both fish species at once. Physical limitations based on the water volumes required, bench space, refrigeration, power load.
71	04/23/18	04/30/18		✓	✓	
72	04/23/18	05/15/18	Matthew Heberger	✓	✓	
73	04/23/18	06/01/18	Matthew Heberger	✓	✓	Placed on agenda for June meeting
74	06/12/18				☐	
75	06/12/18	06/30/18	Matthew Heberger	✓	✓	
76	06/12/18	06/15/18	Matthew Heberger	✓	✓	
77	06/12/18	06/15/18	Matthew Heberger	✓	✓	ASC staff worked with AHPL Lab manager to develop a quote for supplemental information provided to us at a cost of \$15K, rather than the \$50K report.
78	06/12/18	06/30/18	Matthew Heberger	✓	✓	
79	06/12/18	06/30/18	Beverly Anderson-Abbs	✓	✓	
80	06/12/18	06/30/18	Brian Laurenson	✓	✓	
81	06/12/18	06/30/18	Matthew Heberger	✓	✓	Following discussion with the Coordinating Committee, it was agreed to handle this as part of the FY19/20 budgeting process.
82	06/12/18	08/31/18	Matthew Heberger	✓	✓	
83	06/29/18				☐	
84	06/29/18	07/12/18	Beverly Anderson-Abbs	✓	✓	
85	06/29/18	07/12/18	Matthew Heberger	✓	✓	
86	06/29/18	07/01/18	Matthew Heberger	✓	✓	
87	06/29/18	07/01/18	TAC members	✓	✓	
88	06/29/18	07/10/18	Stephen McCord	✓	✓	

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Task	Date Created	Due Date	Assigned To	Status	Complete	Comments
89 Distribute slide presentation about the pesticides monitoring proposal to TAC members	06/29/18	07/12/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
90 TAC Action Items 09/21/2018	09/21/18				<input type="checkbox"/>	
91 Schedule doodle poll for next pesticides subcommittee meeting	09/21/18	10/07/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
92 Revise the June 29 tac summary, in the paragraph beginning "one tac member noted..." to replace the "would not" with "may not be useful."	09/21/18	09/30/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
93 Revise pathogens monitoring final report with committee comments. Committee members to submit final comments no later than Tuesday, 9/25.	09/21/18	10/15/18	Brian Laurson	✓	<input checked="" type="checkbox"/>	
94 Request TAC approval of the FY16/17 Pesticides data at the joint meeting agenda, prior to an SC vote on whether to approve and publish. (TAC members wanted more time to review the data.)	09/21/18	10/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
95 Jim Orlando requested Matt send him a copy of the appendix to the QAPP.	09/21/18	10/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
96 Invite one or more science advisors to the November 9, 2018 pesticides subcommittee (with Delatere). Also, schedule a one hour meeting with the science advisors (without Delatere) after the subcommittee meeting.	09/21/18	10/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	This meeting has been postponed until Dec 10 and changed to a teleconference. Invited our two pesticides advisors, Drs. Nowell and Cherr.
97 Include a specific science advisor engagement plan in next year's work plan.	09/21/18	05/15/19	Matthew Heberger	●	<input type="checkbox"/>	
98 Work with Cam Irvine to revise tox testing information in presentation.	09/21/18	10/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Recorded by Daphne. Emailed Cam to disambiguate. Neither of us could understand what it meant.
99 Matt will develop a timeline for completion of the QAPP and distribution to the TAC for review and approval. This will be added to the agenda of the next pesticides subcommittee (date TBD).	09/21/18	10/05/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
100 Matt will begin the process of securing funding and assistance for writing a CEC-related proposal. CEC subcommittee could also assist ASC in writing and review of the proposal.	09/21/18	10/05/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
101 Matt will look into securing a guest speaker for October 28th joint meeting.	09/21/18	10/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
102 Incorporate the following suggested items from the committee into the joint meeting agenda (see meeting summary for list)	09/21/18	10/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
103 Ask Dave Mount from EPA his expert opinion on the use of an alternative mid-range conductivity control for toxicity testing with Ceriodaphnia dubia	09/21/18	10/03/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Received an email from Debra Denton with Dr. Mount's comments on Oct 3.
104 Propose that OIMA revise the memo on the use of low-conductivity controls for toxicity testing with Ceriodaphnia dubia.	09/21/18	10/03/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Informed by Melissa Morris via email on Oct 2 that they are considering revising their guidance documents, but the timeline is uncertain.
105 TAC Action Items 2019-01-07					<input type="checkbox"/>	
106 Update project management plan (Gantt chart) with correct dates for the Pulse publication timeline (Fall 2020)	01/17/19	01/25/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
107 Contact Janis Cooke regarding bivalve sampling program she is managing and potential for coordinating/cost-sharing	01/17/19	01/25/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Matt spoke to Janis on Jan. 25. She is contracting with the Fisheries Foundation, a nonprofit fish biology firm in Elk Grove. Only one of their planned monthly sampling sites is in the same location as the planned Delta RMP sampling sites, however other sites on the Sacramento River are somewhat close to ours. They field crew is planning on 3 days to monitor all 10 of their sites. We had presumed it would take 2 days to monitor our 5 sites for bivalves and sediment. So it appears economies of scale are likely to be minor. However, we will consider obtaining a bid from this firm.
108 Update monitoring event summary worksheet to correct typo (Mercury sampling planned in 2019).	01/17/19	01/25/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
109 Add an errata sheet to the toxicity lab reports, to indicate to readers that the C. dubia data has been modified after the report was written, and that data users should obtain updated data from CEDEN, and be aware that tables and summaries may be inaccurate.	01/17/19	01/31/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	This report was updated and the new file was published online. https://www.sfsai.org/documents/delta-pesticides-2016 An email was sent to the TAC on 2019-03-24.
110 Update and reconfirm members of our TIE Committee	01/17/19	01/31/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
111 Add Ted Swift (DWR) to the chlorophyll intercalibration workgroup	01/17/19	01/31/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
112 Add "science strategies" to our table of management drivers	01/17/19	01/31/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
113 Distribute announcement on pesticides symposium to TAC members	01/17/19	01/31/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
114 This spring, review the management and assessment questions for each focus area with the relevant technical subcommittee.	01/17/19	01/31/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Pesticides Subcommittee on Feb 26, 2019 recommended adding a question related to drinking water impacts. To discuss at a future TAC/SC meeting. Background material is a white paper by Kelly Moran and distributed to the subcommittee by Armand Ruby. Further, now that the Delta RMP is planning monitoring for CECs, it is appropriate to put in place "Management and Assessment Questions" for this focus area. ASC scientists are creating a "strawman" first draft to be discussed by the TAC and SC.
115 Schedule a pesticides subcommittee meeting for this spring in order to review the wet weathering flow monitoring triggers and potentially lower them.	01/17/19	01/31/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
116					<input type="checkbox"/>	
117 Coordinating Committee Action Items					<input type="checkbox"/>	
118 Coordinating Committee Meeting on 4/11/2018					<input type="checkbox"/>	

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Task	Date Created	Due Date	Assigned To	Status	Complete	Comments
119 Adam to contact Metropolitan Water District of Southern California (Met), the State Water Contractors (SWC) or the Association of California Water Agencies (ACWA) to inquire about their interest in joining the Delta RMP. Also possibly Sacramento Source Water Protection Program.	04/11/18	05/30/18	Adam Laputz	✓	✓	Email reminder sent 7/2/2018. SWC has said no, Adam to contact others.
120 Adam to contact the Delta Science Program (DSP) to see if they are interested in a seat on the Steering Committee. If they are interested, should products SC to represent... Science? Research?	04/11/18	05/30/18	Adam Laputz	✓	✓	Email reminder sent 7/2/2018. Adam has tried contacting Reiner.
121 Adam to request Gita Kapahi to continue working with us as a facilitator for the TAC into next year. If she is not available, to investigate other alternatives.	04/11/18	05/30/18	Adam Laputz	✓	✓	
122 Coordinating Committee Meeting on June 7, 2018					<input type="checkbox"/>	
123 Debbie agreed to talk to her technical advisors about the issues with the toxicity lab to ensure that we are adequately dealing with concerns about past data and are able to move forward with seeking approval of a plan for the upcoming year.	06/07/18	06/28/18	Debbie Webster	✓	✓	
124 Send pesticides monitoring proposals to our expert advisors	06/07/18	06/28/18	Matthew Heberger	✓	✓	
125 Confirm whether Melissa Turner is still willing and able to give a presentation about ILRP monitoring	06/07/18	06/28/18	Matthew Heberger	✓	✓	
126 Add information on population to Matt's spreadsheet of Delta RMP contributors and their amounts.	06/07/18	06/28/18	Selina Cole	✓	✓	
127 Consider organizing special meeting of SC delegates to discuss pesticides proposals between June 25 and July 3	06/07/18	06/28/18	Debbie Webster	✓	✓	
128 Call the Army Corps today and remind them that they need to make their \$50K contribution promptly. They are under an MOU to pay within 15 days.	06/07/18	06/07/18	Matthew Heberger	✓	✓	
129 Coordinating Committee Meeting on Oct 6, 2018					<input type="checkbox"/>	
130 Propose a deadline on our Data Management and Quality Assurance SOP, check with Melissa Morris that it's acceptable.	10/06/18	10/15/18	Matthew Heberger	✓	✓	Ms. Morris confirmed that "Yes, if the updates meet the requirements of a QAPP for the new sections, we can keep the conditional approval going as long as needed to complete the SOP."
131 Provide an update on the Data Management and Quality Assurance SOP document to the Steering Committee.	10/06/18	10/29/18	Matthew Heberger	✓	✓	Update scheduled for Joint Meeting on 10/29.
132 Patrick to write a 1-2 page memo explaining why DWR is in the program; their participation is required in 3 different permits covering barriers, eco-restore, etc. Include in this memo the current participant categories, e.g. stormwater, wastewater, regulatory-state, etc.	10/06/18	10/15/18	Patrick Morris	✓	✓	
133 Send a note to the Steering Committee: Ask members whether they have any changes to the Charter?	10/06/18	10/08/18	Matthew Heberger	✓	✓	
134 Consider a change to the Charter so that the TAC does not require co-chairs.	10/06/18	10/15/18	Matthew Heberger	✓	✓	Agendized for 10/29 meeting.
135 Consider allowing alternates for the Steering Committee chairs.	10/06/18	10/15/18	Matthew Heberger	✓	✓	Agendized for 10/29 meeting.
136 Invite Mike Wackman and Stephen McCord to future Coordinating Committee Meetings.	10/06/18	10/29/18	Matthew Heberger	✓	✓	
137 Send calendar invitations for planned meetings	10/06/18	10/15/18	Matthew Heberger	✓	✓	
138 Coordinating Committee Meeting on March 6, 2019					<input type="checkbox"/>	
139 Matt to speak with Melissa Morris at State Board/OIMA to find out if there are any remaining concerns with toxicity testing procedures.	03/06/19	03/15/19	Matthew Heberger	✓	✓	
140 After this, Matt to communicate with the SC what procedures the data management and QA team at SWAMP have agreed to follow.	03/06/19	03/31/19	Matthew Heberger	✓	✓	Matt H. gave an update to the SC on this item at the 2019-04-23 Teleconference meeting.
141 Verify that SWAMP has a process in place for correcting errors we may find in the data after it is uploaded.	03/06/19	03/31/19	Matthew Heberger	✓	✓	
142					<input type="checkbox"/>	
143 Informal Action Items					<input type="checkbox"/>	
144 Add to the next finance memo: "thank account" style statement that shows, at a glance how much money we have, how much we are expending, and how much in savings.		04/15/18	Matthew Heberger	✓	✓	Added to the 2018 Q1 Finance Memo. Requesting feedback on the format.
145 Send twice yearly roster updates to RBS staff to update on the website. This is an appendix to the Charter	05/15/18	07/31/18	Matthew Heberger	✓	✓	Request by Selina Cole
146 Send twice yearly roster updates to RBS staff to update on the website. This is an appendix to the Charter	05/15/18	12/31/18	Matthew Heberger	✓	✓	Sent 2018-10-29
147 Send twice yearly roster updates to RBS staff to update on the website. This is an appendix to the Charter	05/15/18	07/31/19	Matthew Heberger	●	<input type="checkbox"/>	
148 Send twice yearly roster updates to RBS staff to update on the website. This is an appendix to the Charter	05/15/18	12/31/19	Matthew Heberger	●	<input type="checkbox"/>	
149 Consider updates to 2 sections of the charter. How data is managed and when it is released, and Conflict of Interest.	06/18/18	10/01/18	Matthew Heberger	✓	✓	Request by Greg Gearheart. We have not received a specific proposal for what changes to make. Current understanding is that the Data Management Subcommittee is looking into these issues and will make recommendations.
150 Ask subcommittees whether there are projects or reports that would benefit from feedback from our science advisors	07/19/18	08/31/18	Matthew Heberger	✓	✓	Placed on the agenda for the Pesticides Subcommittee
151 Respond in writing to Melissa Turner's comments on the FY16/17 Pesticides data and QA memo	08/13/18	08/31/18	Don Yee	✓	✓	

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Task	Date Created	Due Date	Assigned To	Status	Complete	Comments
152	05/07/18	07/07/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Notification sent via email as it was not ready in time for the SC meeting in July. Poster presented at BDSC, Sept 10 -12.
153	05/16/18	10/15/18	Patrick Walsh	✓	<input checked="" type="checkbox"/>	
154	07/20/18	08/31/18	Adam Laputz	✓	<input checked="" type="checkbox"/>	Adam informed Matt in Sept 2018 that this conversation took place. Central Valley Board staff should follow up with Contra Costa County if their stormwater discharge permit will be modified to require their participation in the Delta RMP.
155	05/01/18	01/31/19	Matthew Heberger	●	<input type="checkbox"/>	
156	10/23/18	06/30/19	Delta RMP SC	●	<input type="checkbox"/>	Bring to the SC at a future meeting. See file Google Drive\Delta RMP\Delta RMP Documents\Fundamental Documents\Communication Plan\Communications Plan Potential Update 2018-10-23.txt
157	11/15/18	03/31/19	Greg Geahrheart	●	<input type="checkbox"/>	From a meeting with Greg on Nov 15. He proposed this to help clarify common issues and pitfalls that crop up with collaborative monitoring projects around the state. The state allows dischargers to participate in these programs, and they are a form or regulatory relief. In return, there should be a set of minimum standards around quality assurance, timeliness of reporting, etc.
158	11/15/18	02/28/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Training held on Jan 7, 2019.
159	11/15/18	09/30/19	Amy Franz	●	<input type="checkbox"/>	Unfunded task which requires a significant effort. Planning to include funding request into next fiscal year's workplan. Update April 2019: There are unused funds in the FY18-19 budget, and I have asked our data services team to work on this document. To include in the agenda package for the next TAC meeting and/or SC meeting.
160	11/15/18	12/31/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
161	11/15/18	02/15/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Matt has reminded agency staff about this twice.
162	11/15/18	03/31/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Proposal: plan for 2 review periods for most documents, especially important ones. A single review period should suffice for things such as meeting summaries, memos, etc. There will be a draft > comments > final draft > comments > final. After each of the 2 rounds of review, a response to comments will be issued, compiling the major comments and suggested edits into one document, and with a brief explanation of how the authors responded to the comment. This document will exclude minor comments, comments about formatting, grammar, spelling, style, etc.
163	11/15/18	03/31/19	Matthew Heberger	●	<input type="checkbox"/>	To discuss at the next meeting of the ad hoc committee on governance.
164	12/19/18	01/15/19	Dan Riordan, Dave Tamayo, Debbie Webster, Greg Geahrheart, Patrick Morris, Rebecca Franklin, Selma Cole, Stephanie Hiestand	✓	<input checked="" type="checkbox"/>	As a result of an ad hoc subcommittee on governance, charged with examining how votes are allocated and how new SC seats are created. To be discussed at a follow-up meeting on Jan 31.
165	03/22/19	03/28/19	Cam Irvine, Melissa Turner	✓	<input checked="" type="checkbox"/>	
166	03/22/19	04/05/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
167	03/11/19	03/29/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
168	03/11/19	03/29/19	Matthew Heberger	●	<input type="checkbox"/>	Emailled Wes this question again on 5/2, awaiting reply. I believe he did not immediately know the answer and was checking with Office of Sponsored Programs and San Jose State University.
169	03/11/19	03/29/19	Matthew Heberger	●	<input type="checkbox"/>	Update APR 2019: Have discussed this issue with Coordinating Committee. Our preference is to use State Board funds to contract with Moss Landing Marine Laboratory for mercury monitoring. Will be part of the workplan creation, but should have a strawman proposal for Coordinating Committee in advance.
170	03/11/19	03/29/19	Adam Laputz, Patrick Morris	●	<input type="checkbox"/>	Previously, the thinking was that we were putting a lot of resources into Hg monitoring in support of the Mercury TMDL, which had a strict deadline for information that could be considered in the ruling, and then we would drop down to a lower level of surveillance monitoring. However, we are now looking at the possibility of dropping down to a lower level of surveillance monitoring as a condition of their CWA Section 401 Certifications for wetland restoration projects. They were allowed to drop certain monitoring activities as a result, and are contributing to the Delta RMP instead. And one of the key concerns of these projects is that mercury in wetland sediment could be remobilized and/or methylated (converted to its more toxic organic form). Therefore, it is appropriate that we direct more resources to this area.
171					<input type="checkbox"/>	

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Task	Date Created	Due Date	Assigned To	Status	Complete	Comments
172 <input type="checkbox"/> Pesticides Subcommittee Action Items					<input type="checkbox"/>	
173 <input type="checkbox"/> Pesticides Subcommittee Meeting on 4/18/2018					<input type="checkbox"/>	
174 <input type="checkbox"/> Matt to work with Jim Orlando on budget and logistics for field sampling (by May 15).	04/18/18	05/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
175 <input type="checkbox"/> Matt to work with GIS specialists and statistician Aaron on developing the appropriate sample frame and then doing the GRTS draw (by May 7).	04/18/18	05/07/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
176 <input type="checkbox"/> ASC staff to finalize proposals (including costs). Matt to send draft proposals to the subcommittee (by May 18).	04/18/18	05/18/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
177 <input type="checkbox"/> Subcommittee members to send feedback to be sent via email unless something critical comes up and a member suggests a meeting is necessary (by May 25)	04/18/18	05/25/18	Pesticides Subcommittee	✓	<input checked="" type="checkbox"/>	
178 <input type="checkbox"/> Revised proposal to be included in TAC agenda package for June 12 meeting (by June 4).	04/18/18	06/04/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
179 <input type="checkbox"/> TAC members to fill in the decision grid ranking questionnaires for the 2 proposals during the week before and after the TAC meeting. Matt will compile the results of the ranking and distribute to the TAC. An additional short followup phone meeting will be scheduled if necessary and requested by TAC members.	04/18/18	06/04/18	TAC members	✓	<input checked="" type="checkbox"/>	
180 <input type="checkbox"/> Matt to schedule another subcommittee meeting for June to discuss issues related to the sampling program, toxicity testing with Ceriodaphnia, and any other items of interest. (by May 28)	04/18/18	05/20/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Since most of the issues in play were related to toxicity, and fairly technical, we convened a meeting of an ad hoc toxicity working group. This group met on .
181 <input type="checkbox"/> Pesticides Subcommittee Meeting on 8/1/2018	08/01/18			✓	<input type="checkbox"/>	
182 <input type="checkbox"/> Share Deliares contract with the Pesticides Subcommittee (so they can see timeline and deliverables)	08/01/18	08/03/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
183 <input type="checkbox"/> Consider putting a discussion of human health impacts of contaminants on the agenda for the Fall Joint Meeting	08/01/18	10/01/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	This recommendation came out of a discussion at the Pesticides Subcommittee where we were reacting to a newspaper article on the use of glyphosate in the Delta. The TAC was decidedly less enthusiastic about this idea when we discussed it on 9/21.
184 <input type="checkbox"/> Plan a presentation about GRTS for the next meeting of the Pesticides Subcommittee on 8/28.	08/01/18	08/22/18	Aron Melwani	✓	<input checked="" type="checkbox"/>	
185 <input type="checkbox"/> Research the issue of GRTS sample draw along polylines vs. in polygons, perform a brief literature review, speak to experts and advisors, and come back to the group with options at our next meeting	08/01/18	08/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
186 <input type="checkbox"/> Share DPR's criteria for storm sampling with the group.	08/01/18	08/15/18	Cam Irvine	✓	<input checked="" type="checkbox"/>	
187 <input type="checkbox"/> Add Alisha Wenzel to the list of people to be informed regarding TIEs.	08/01/18	08/15/18	Patrick Morris	✓	<input checked="" type="checkbox"/>	
188 <input type="checkbox"/> A subset of subcommittee members agreed to help draft relevant sections of the QAPP related to toxicity	08/01/18	08/21/18	Cam Irvine	✓	<input checked="" type="checkbox"/>	
189 <input type="checkbox"/> Pesticides Subcommittee Meeting on 8/28/2018					<input type="checkbox"/>	
190 <input type="checkbox"/> Create a series of maps for the subcommittee, showing channels classified by depth (e.g. 2m, 3m, 4m)	08/28/18	09/05/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
191 <input type="checkbox"/> Create 2-3 different "GRTS draws" demonstrating the effect of unequal probabilities	08/28/18	09/05/18	Aron Melwani	✓	<input checked="" type="checkbox"/>	
192 <input type="checkbox"/> Run queries against the DPR PLUR database on common almond pesticides, to determine when they are applied in the Delta	08/28/18	09/08/18	Scott Wagner	✓	<input checked="" type="checkbox"/>	
193 <input type="checkbox"/> Ask SFEI QA officer about whether he would support forgoing field dupes for toxicity testing	08/28/18	09/08/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
194 <input type="checkbox"/> Clarify whether SWAMP will pay for field duplicates for water toxicity tests through its contract with AHP-L, or whether funding for field dupes would have to come out of Delta RMP funds.	08/28/18	09/08/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Rate of field duplicates of 5%. Only results in 3 additional env. samples per year, not a large additional expense.
195 <input type="checkbox"/> Pesticides Subcommittee Meeting on 9/13/2018					<input type="checkbox"/>	
196 <input type="checkbox"/> Revise the analyte list in the Quality Assurance Program Plan (QAPP) based on new information from Jim Orlando	09/13/18	09/25/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
197 <input type="checkbox"/> send committee members Google Earth (KML) files of the sample frame (waterways classified as deep/shallow), and the points generated by GRTS, so that each member can review in "high def" by zooming in.	09/13/18	09/18/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
198 <input type="checkbox"/> Include a brief writeup in our sampling plan explaining why we chose the 2.5 m depth cutoff (balance between deep/shallow, ecological significance, looked right based on members knowledge of the Delta).	09/13/18	09/28/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
199 <input type="checkbox"/> Toxicity Work Group Meeting on 9/13/2018					<input type="checkbox"/>	
200 <input type="checkbox"/> Marie to double check whether her lab can report biomass as an additional endpoint without incurring additional expense or running atoul of their contract with SWAMP.	09/13/18	10/01/18	Marie Stillway	✓	<input checked="" type="checkbox"/>	Marie confirmed that her lab can report biomass at no additional expense.
201 <input type="checkbox"/> Share working draft of the QAPP with subcommittee members	09/13/18	09/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
202 <input type="checkbox"/> Send a reminder of how to access files on the Technical Advisory Committee (TAC) workspace website.	09/13/18	09/30/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Detailed instructions for how to access Delta RMP data are here: https://sites.google.com/a/dfs.org/delta-rmp/data-access
203 <input type="checkbox"/> AHP-L to send revised data to SWAMP where C. dubia tests were terminated at the wrong time.	09/13/18	10/15/18	Marie Stillway	✓	<input checked="" type="checkbox"/>	Marie confirmed that she sent revised results to Brian Ogg at the State Water Board in the last week of Sept 2018.

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Task	Date Created	Due Date	Assigned To	Status	Complete	Comments
204	09/13/18	10/01/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
205	09/20/18	10/01/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
206	09/25/18				<input type="checkbox"/>	
207	09/25/18	11/09/18	Erwin Roex	✓	<input checked="" type="checkbox"/>	Sent these documents to Erwin Roex, Pl.
208	09/25/18	11/09/18	Erwin Roex	✓	<input checked="" type="checkbox"/>	Erwin Roex has corresponded about this with Debra Denton and Joe Domagalski.
209	09/25/18	09/30/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
210	09/25/18	10/15/18	Erwin Roex	✓	<input checked="" type="checkbox"/>	
211	09/25/18	09/30/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Here is an article about the project where SFEI digitized and uploaded dozens of "legacy" datasets to the Regional Data Center and CEDEN. Since these data are all in CEDEN, they were included in the download by Deltares scientists. https://www.sfei.org/news/completed-deduce-delta-environmental-data-understanding-california-estuary#sthash:ChfGJw65.0pts Emailed on Oct 5.
212	09/25/18	10/07/18	Xuyang Zhang	✓	<input checked="" type="checkbox"/>	
213	09/25/18	10/15/18	Erwin Roex	✓	<input checked="" type="checkbox"/>	
214	09/25/18	10/07/18	Danny McClure	✓	<input checked="" type="checkbox"/>	
215	09/25/18	10/15/18	Erwin Roex	✓	<input checked="" type="checkbox"/>	Shortly after the meeting, Joe Domagalski confirmed that all 3 were included.
216	09/25/18	10/07/18	Joe Domagalski	✓	<input checked="" type="checkbox"/>	
217	09/25/18	10/15/18	Danny McClure	✓	<input checked="" type="checkbox"/>	
218	09/25/18	11/09/18	Erwin Roex	✓	<input checked="" type="checkbox"/>	Include description in next deliverable.
219	09/25/18	10/15/18	Melissa Turner	✓	<input checked="" type="checkbox"/>	Email reminder sent in Oct 10, 2018
220	09/25/18	10/10/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	According to the CEDEN "Chemistry Data Submission Guidance Document," the Result field may be blank. It says nothing about inserting negative values. Project scientists should look at the corresponding values in the field ResQualCode. For information on possible values and their meaning, see: http://ceden.org/CEDEN_Checker/Checker/DisplayCEDENLookUp.php?List=ResQualLookUp
221	09/25/18	10/10/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Completed a few references via internet search. Emailed research team to ask for other suggestions. Seems best reference is a highly-cited textbook from 2001 by Posthuma et al. Sent to Technical Advisory Committee and Pesticides Subcommittee with a suggestion to begin with Chapters 1 and 16.
222	09/25/18	09/30/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	I confirmed that this is in fact required in their contract. It states that, at a minimum, the investigators shall compare observed pesticide concentrations to appropriate benchmarks.
223	09/25/18	10/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Update Oct 16: Erwin has requested postponing this meeting, since they have had trouble compiling the "definitive" database. (Changes keep being made to the toxicity data.)
224	09/25/18	09/30/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Emailed the research team information and links to CARI and NHD, two GIS datasets of surface water features.
225	09/25/18	10/25/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Rescheduled at the request of Erwin Roex. The toxicity data is still not finalized, so they cannot finalize their database and begin their analyses.
226					<input type="checkbox"/>	
227	02/26/19	03/15/19	Matthew Heberger	●	<input type="checkbox"/>	
228	02/26/19	03/05/19	Jim Orlando	✓	<input checked="" type="checkbox"/>	
229	02/26/19	04/30/19	Marie Stillway	●	<input type="checkbox"/>	

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Task	Date Created	Due Date	Assigned To	Status	Complete	Comments
230	02/26/19	03/31/19	Matthew Heberger	●	<input type="checkbox"/>	
231	02/26/19	03/10/19	Matthew Heberger	●	<input type="checkbox"/>	
232	02/26/19	03/15/19	Amand Ruby	✓	<input checked="" type="checkbox"/>	Email reminder sent on 3/6/19.
233					<input type="checkbox"/>	
234					<input type="checkbox"/>	
235					<input type="checkbox"/>	
236	04/25/18	05/10/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
237	04/25/18	05/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
238	04/25/18	05/31/18	Amy Franz	✓	<input checked="" type="checkbox"/>	
239					<input type="checkbox"/>	
240					<input type="checkbox"/>	
241	05/02/18	01/15/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	To be included in the next Finance Update and at subsequent SC meetings. It became clear that the "spotlight reports" are not serving the needs of the group, who wish to have greater insight into project progress. Update Oct 2018: To be included in the next quarterly finance report. Now that we have created a thorough "waterfall" Gantt Chart for the entire project, we will report on "% Complete" and "% of Budget Spent" for tasks and subtasks in future quarterly reports.
242	05/02/18	07/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	I reminded Selina about this and she no longer remembered what this was.
243	07/02/18	12/31/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	Implementing this new policy beginning in FY18/19. In the past, we re-allocated funds among subtasks at the request of the Finance Committee. At the time, they preferred that we "move \$2,000 from Task 1A to 1B" rather than simply going overbudget on one task and staying under on another. From our point of view, either practice is acceptable, although the former is simpler.
244					<input type="checkbox"/>	
245					<input type="checkbox"/>	
246	09/25/18	10/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
247	02/26/19	03/15/19	Nutrients Subcommittee members	✓	<input checked="" type="checkbox"/>	ASC staff provided comments. I do not know how many other subcommittee members were in touch with Brian, but they received reminders to do so.
248	02/26/19	03/10/19	Russ Brown	✓	<input checked="" type="checkbox"/>	I haven't seen anything from Russ, but we just got to the point we could make the calcs; we had problems with vendor-provided code for processing the nitrate data. I will contact Russ when I get back to the office.
249	02/26/19	03/15/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
250	02/26/19	03/15/19	Nutrients Subcommittee members	✓	<input checked="" type="checkbox"/>	
251	02/26/19	03/15/19	Janis Cooke	✓	<input checked="" type="checkbox"/>	
252					<input type="checkbox"/>	
253					<input type="checkbox"/>	
254					<input type="checkbox"/>	
255	08/22/18	08/31/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
256	08/22/18	10/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
257	08/22/18	10/15/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
258	08/22/18	10/26/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
259	08/22/18	01/30/19	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
260	08/22/18	08/31/18	Dawit Tadesse	✓	<input checked="" type="checkbox"/>	Confirmed 23-August 2018 the QAPP should be developed as an individual plan
261	08/22/18	08/31/18	Brian Laursen	✓	<input checked="" type="checkbox"/>	Link sent via email on 22 August 2018.
262	08/22/18	08/31/18	Dawit Tadesse	✓	<input checked="" type="checkbox"/>	Reports sent via email on 23 August 2018

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Task	Date Created	Due Date	Assigned To	Status	Complete	Comments
263 Update the CEC subcommittee on progress regarding the SEP policy amendment and development of the SEP proposal.	08/22/18	09/30/18	Patrick Morris	✓	<input checked="" type="checkbox"/>	Patrick gave an update at the CEC meeting in Dec 2018.
264 <input type="checkbox"/> CEC Subcommittee Meeting 10/10/2018					<input type="checkbox"/>	
265 Prepare a proposed schedule (Gantt chart) with interim deliverables and opportunities for input for the CEC Subcommittee to review before inclusion in the agenda package for the SC/TAC Joint Meeting	10/10/18	10/16/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
266 Work with Brian Laurensen on a report out for the SC/TAC Joint Meeting	10/10/18	10/21/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
267 Obtain letters of support for the CEC Prop 1 grant proposal	10/10/18	10/21/18	Matthew Heberger	✓	<input checked="" type="checkbox"/>	
268 CEC Subcommittee Meeting 2/24/2019					<input type="checkbox"/>	
269					<input type="checkbox"/>	
270 <input type="checkbox"/> Chlorophyll Intercalibration Work Group Action Items					<input type="checkbox"/>	
271 Invite Stephanie Smith from YSI to participate in our study by attending meetings and/or reviewing documents	03/15/19	04/05/19	Liz Stumpner	✓	<input checked="" type="checkbox"/>	
272 Add the grab sample results to the time series plots	03/16/19	03/25/19	Matthew Heberger	●	<input type="checkbox"/>	
273 If you have ideas or suggestions for additional analyses, please send them to Matt	03/17/19	03/29/19	WG members	✓	<input checked="" type="checkbox"/>	
274 Create a project page on the Delta RMP Workspace website for project files and documents	03/18/19	03/29/19	Matthew Heberger	●	<input type="checkbox"/>	
275 Inquire about the availability of the DWR vessel, the Sentinel	03/19/19	03/29/19	Mike Dempsey	✓	<input checked="" type="checkbox"/>	
276 Ask Raphael Kudela, UC Santa Cruz, to participate in the study	03/20/19	04/10/19	Dave Senn	✓	<input checked="" type="checkbox"/>	
277 Remind labs to fill out the survey about their methods	03/21/19	03/29/19	Liz Stumpner	✓	<input checked="" type="checkbox"/>	
278 Send Matt the names and contact information for the 3 new labs that agreed to participate in the study	03/22/19	03/29/19	Liz Stumpner	✓	<input checked="" type="checkbox"/>	
279 Find out which lab Jim Cleern uses	03/23/19	03/29/19	Liz Stumpner	●	<input type="checkbox"/>	
280 Contact Dr. Anke Mueller-Solger and ask whether she has any information or analysis to contribute to our study	03/24/19	03/29/19	Dave Senn	●	<input type="checkbox"/>	
281					<input type="checkbox"/>	