



Delta RMP Technical Advisory Committee Meeting

Thursday, September 21, 2017; 10:00 am – 4:00 pm

Sunset Maple Room, Regional San, 10060 Goethe Road, Sacramento, CA

Remote Access:

Phone number: (415) 594-5500 Access Code: 943-326-397#

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

Agenda

#	Agenda Item and Desired Outcomes	Attachments	Start & Lead
1	Introductions and Agenda Review and agree on agenda and desired outcomes.		10:00 Stephen McCord
2	Decision: Approve TAC Meeting Summary for June 13, 2017 meeting and confirm/set future TAC meeting dates <u>Upcoming Scheduled Meetings</u> <ul style="list-style-type: none"> ● Joint TAC/SC meeting: Oct 24, 2017, Park Tower Building, 2nd Floor Conference Room, 980 Ninth St., Sacramento, CA 95814 ● Dec 21, 2017, Regional San. ● TAC March 2018 meeting date? Please bring your calendar. <u>Desired outcome:</u> <ul style="list-style-type: none"> ● Approve TAC meeting summary ● Confirm future TAC/SC meeting dates 	Draft TAC Meeting Summary from June 13, 2017	10:05 Stephen McCord
3	Information: Steering Committee Update TAC co-Chair will summarize the July 28, 2017 SC meeting including the decisions and action items. <u>Desired Outcome:</u> <ul style="list-style-type: none"> ● Inform TAC regarding SC decisions and activities. ● Explain the rationale and context for agenda items below. 	Draft SC Meeting Summary from July 28, 2017	10:10–10:20 Joe Domagalski Matthew Heberger

<p>4</p>	<p>Technical Subcommittee and Monitoring Updates Brief update on subcommittee and monitoring activities <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>Table: Samples collected and schedule of planned sampling events</p>	<p>10:20 – 10:45 Mercury: Stephen McCord Nutrients: Janis Cooke</p>
<p>5</p>	<p>Decision: Recommendation on Year 1 Pesticides Data Report ASC has produced a final draft of the Year 1 data report, incorporating comments from several reviewers. We are seeking a recommendation from the TAC to the SC to approve and publish the report. <u>Desired Outcome:</u></p> <ul style="list-style-type: none"> ● Recommendation from TAC to SC to approve and publish the report. 	<p>Draft Report: <i>Annual Monitoring Report FY 2015–16 – Pesticides</i>, version 1.5</p>	<p>10:45 – 11:00 Matt Heberger</p>
<p>6</p>	<p>Discussion: Decision Grid for Ranking Monitoring Proposals The Coordinating Committee has directed an ad-hoc Working Group and the TAC to continue developing a “decision grid,” or a set of criteria for ranking proposed monitoring designs. This process is intended to highlight the proposals’ strengths and weaknesses, and identify areas where changes are needed to make the monitoring respond more effectively to the Delta RMP’s management and assessment questions. It is also intended as way to better communicate the TAC’s findings to the Steering Committee, and will be used by the SC to help decide what projects to fund. The goal is to use the decision grid at an upcoming meeting to rank proposed monitoring plans for pesticides and CECs. <u>Desired Outcome:</u></p> <ul style="list-style-type: none"> ● Agreement on the elements in decision grid that documents the TAC’s views on the strengths and weaknesses of monitoring proposals. ● Agreement on a process for continued development of pesticides monitoring proposals, including whether existing proposals should be (a) dropped from further consideration, or (b) modified to better fulfill the program’s objectives. 	<p>Document: <i>Decision Grid for Evaluating Monitoring Programs</i></p>	<p>11:00 – 12:00 Brian Laursen Matt Heberger</p>
<p></p>	<p>Lunch</p>	<p></p>	<p>12:00 – 1:00</p>

<p>7</p>	<p>Recruiting Science Advisors</p> <p>The FY17/18 Workplan includes \$10,000 to pay honoraria and travel for 2–4 independent science advisors. The advisors would be selected by the Steering Committee with input from the TAC and would commit to a 3– to 4–year term. Having advisors work with the Program over multiple years is efficient because they will become familiar with the Program and be able to help with adaptive management and review technical reports. The Bay RMP uses this approach to have ongoing, independent peer review of plans and final reports.</p> <p><u>Desired Outcome:</u></p> <ul style="list-style-type: none"> • Agreement on the areas in which we would like outside advisors (e.g. pesticides, toxicity, statistics). • Suggestions for individuals in these subject areas. 		<p>1:00 – 1:30 Matt Heberger</p>
<p>8</p>	<p>Information: Nutrients Synthesis Reports</p> <p>ASC recently completed drafts of two key nutrients synthesis reports that were planned in FY16/17. We are not asking for a recommendation to approve the reports at this time. The authors are currently working on incorporating feedback from several members of the Nutrients Subcommittee. These revisions do not affect the overall conclusions of the report, and we wished to also give the TAC ample time to review and discuss these reports.</p> <p><u>Desired Outcome:</u></p> <ul style="list-style-type: none"> • Feedback on the draft reports; send comments or suggested edits to ASC by October 5. 	<p>Presentations:</p> <p>Task 1: <i>Assessment of Nutrient Status and Trends in the Delta in 2001–2016: Effects of drought on ambient concentrations and trends.</i></p> <p>Task 2: <i>Delta RMP FY 2016–17 Nutrients Synthesis: Modeling to Assist Identification of Temporal and Spatial Data Gaps for Nutrient Monitoring.</i></p>	<p>1:30 – 2:30 Phil Trowbridge</p>
<p>9</p>	<p>Planning for the <i>Pulse of the Delta</i></p> <p>The Delta RMP Communications Plan calls for producing an Annual Monitoring Report as well as the interpretive report, The Pulse of the Delta. “The vision for the Pulse of the Delta is to make the wealth of available information on water quality in the Delta accessible to water quality managers, decision-makers, scientists, and the public.” The Steering Committee will plan the scope, allocate funding, and decide when to publish a Pulse of the Delta and its theme. We wish to solicit input and brainstorm content ideas with the TAC.</p> <p><u>Desired Outcome:</u></p> <ul style="list-style-type: none"> • Input on the audience, themes for the Pulse of the Delta • Recommendations for features articles and, possibly, co-authors 		<p>2:30 – 3:00 Matt Heberger</p>
	<p>Break</p>		<p>3:00 - 3:15</p>

10	<p>Planning for the October 24, 2017 Joint TAC-SC Meeting Every fall, the joint meeting is a chance to assess the program’s goals and priorities and engage in long-range planning.</p> <p><u>Desired outcomes:</u></p> <ul style="list-style-type: none"> • “Plus/Delta” style suggestions on the agenda • Suggestions for what to cover 	Draft Agenda Outline for the 10/24 Meeting	3:15 – 3:45 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	3:45–3:50 Matthew Heberger
12	<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 		3:50–4:00 Stephen McCord Joe Domagalski
	Adjourn		4:00

Parking Lot of Potential Future Agenda Items:

1. “Delta Renewed” presentation
2. Bay Delta Live portal demo
3. Presentation on Passive Samplers
4. Presentation on DWR’s Regional Salinity Modeling project
5. Field work experience / monitoring site visits
6. Methods for Seeking Consensus

Meeting Materials for Item 4

Past Monitoring Events			
Date	Monitoring Element	Frequency	Comments
Aug 22-23, 2016	Mercury (water) - quarterly	Quarterly	
Aug 22-23, 2016	Mercury (fish) - annual	Annually	
Sept 13, 2016	Mercury (fish) - annual	Annually	
Nov 14-15, 2016	Mercury (water) - quarterly	Quarterly	
Feb 28, 2017	Mercury (water) - quarterly	Quarterly	
April 25, 2017	Mercury (water) - quarterly	Quarterly	
FY17/18 sampling dates will be set by the Mercury subcommittee at a future meeting.			
Jul 28, 2015	Pesticides	Monthly	
Aug 18, 2015	Pesticides	Monthly	
Sep 23, 2015	Pesticides	Monthly	
Oct 21, 2015	Pesticides	Monthly	
Nov 10, 2015	Pesticides	Monthly	
Dec 15, 2015	Pesticides	Monthly	
Jan 19, 2016	Pesticides	Monthly	
Feb 17, 2016	Pesticides	Monthly	
Mar 7, 2016	Pesticides	Monthly	
Apr 19, 2016	Pesticides	Monthly	
May 18, 2016	Pesticides	Monthly	
Jun 15, 2016	Pesticides	Monthly	
Jul 13, 2016	Pesticides	Monthly	
Aug 17, 2016	Pesticides	Monthly	
Sep 20, 2016	Pesticides	Monthly	
Oct 18, 2016	Pesticides	Monthly	Default sampling date
Nov 14, 2016	Pesticides	Monthly	Default sampling date
Dec 16, 2016	Pesticides	Monthly	Deviated from default sampling date to capture major runoff event
Jan 9, 2017	Pesticides	Monthly	Deviated from default sampling date to capture major runoff event

Feb 28, 2017	Pesticides	Monthly	Deviated from default sampling date because some of the sites were inaccessible
Mar 14, 2017	Pesticides	Monthly	Default sampling date
Apr 25, 2017	Pesticides	Monthly	Default sampling date
May 16, 2017	Pesticides	Monthly	Default sampling date
Jun 13, 2017	Pesticides	Monthly	Default sampling date
At present, there is no approved plan for sampling pesticides in FY17/18, therefore no sampling is scheduled.			
April 6-8, 2015	Pathogens	Monthly	Default sampling date
May 4-6, 2015	Pathogens	Monthly	Default sampling date
June 1-3, 2015	Pathogens	Monthly	Default sampling date
July 6-7, 2015	Pathogens	Monthly	Default sampling date
Aug 3-5, 2015	Pathogens	Monthly	Default sampling date
Sept 7-9, 2015	Pathogens	Monthly	Default sampling date
Oct 5-7, 2015	Pathogens	Monthly	Default sampling date
Nov 2-4, 2015	Pathogens	Monthly	Default sampling date
Dec 7-9, 2015	Pathogens	Monthly	Default sampling date
Jan 4-6, 2016	Pathogens	Monthly	Default sampling date
Feb 7-9, 2016	Pathogens	Monthly	Default sampling date
March 7-10, 2016	Pathogens	Monthly	Default sampling date
April 4-7, 2016	Pathogens	Monthly	Default sampling date
May 2-5, 2016	Pathogens	Monthly	Default sampling date
June 6-8, 2016	Pathogens	Monthly	Default sampling date
July 5-7, 2016	Pathogens	Monthly	Default sampling date
Aug 1-3, 2016	Pathogens	Monthly	Default sampling date
Sept 6-8, 2016	Pathogens	Monthly	Default sampling date
Oct 3-5, 2016	Pathogens	Monthly	Default sampling date
Nov 7-9, 2016	Pathogens	Monthly	Default sampling date
Dec 5-7, 2016	Pathogens	Monthly	Default sampling date
Jan 9-11, 2017	Pathogens	Monthly	Default sampling date
Feb 6-8, 2017	Pathogens	Monthly	Default sampling date
March 6-8, 2017	Pathogens	Monthly	Default sampling date

No further pathogens monitoring planned by the Delta RMP.			
Planned Monitoring Events			
Date	Monitoring Element		Comments
Sept 19-21, 2017	Nutrients High-Frequency Cruise (3 consecutive days)		First of 3 planned sets of 3-day cruises
The 3-day high-frequency cruise will be chosen in collaboration with the nutrients subcommittee at a future meeting			

Meeting Materials for Item 6

Delta Regional Monitoring Program Proposal Review Process (Revised Draft, September 8, 2017)

PURPOSE

This Proposal Review Process document describes a structured study evaluation and communication tool between the Delta Regional Monitoring Program (RMP) Steering Committee (SC) and Technical Advisory Committee (TAC). This is a process for the TAC 1) to receive direction from the SC, 2) for determining consensus and documenting dissent, and 3) for utilizing a “decision grid” approach to assist with proposal review and communication between the TAC and SC. It is intended that the implementation of this process will enable clear communication between the SC and TAC, as facilitated by the Coordinating Committee, and consistent with the Delta RMP [Charter](#).

OVERVIEW

The SC directs the TAC to develop and evaluate proposed monitoring and assessment programs. The TAC selects co-chairs to facilitate meetings and direct the discussion of important issues, with support from the Delta RMP Implementing Entity (Aquatic Science Center). The Delta RMP Coordinating Committee is comprised of the Steering Committee Co-chairs, Delta RMP facilitator, and one representative from the Central Valley Regional Water Quality Control Board, and facilitates communications between the SC and the TAC. As necessary, the proposal process may include the Coordinating Committee to facilitate communication.

In addition to SC direction, Delta RMP members and external stakeholders can propose monitoring programs to the Steering Committee.

The TAC reviews and recommends “monitoring” proposals for Delta RMP funding, which forms the basis of the annual monitoring workplan. “Monitoring” in this context includes regular (status and trends) field measurements and sample analyses, as well as special studies.

BACKGROUND

This decision grid approach was developed based on key components of the Delta RMP Charter, experience to-date within the TAC implementing direction from the SC, and comments from the Delta Science Program external review.

TAC Charter

The Delta RMP [Charter](#) specifies the expected role and responsibilities of the TAC (emphasis added):

*“The TAC makes recommendations to the SC based on technical evaluation of proposed or existing program elements. **The TAC provides technical recommendations with options and justifications based on the priorities and resource allocations set by the SC.** The SC then considers TAC recommendations in formulating their decisions. Recommendations should be reached through consensus. In the event that the TAC representatives cannot come to consensus on a recommendation, **majority and minority opinions should be reported to the SC** (See Section 7.B.6 for more details on the TAC decision-making process).”*

The Charter does not include detailed TAC governance and rules for decision-making, but instead relies on consensus building within the TAC and clear communication with the Coordinating Committee and the SC.

Example Action Items from Steering Committee

At the May 3, 2017 SC meeting, the SC directed the TAC to provide the following information on previously provided pesticide program options:

*“...pros/cons of the two approaches, slides showing **how data from the proposed approaches would be interpreted to answer management questions**, and how the costs of the Delta RMP might change with external funding for certain aspects of the projects...”*

While this action item was an issue-specific SC request (pesticide program development), it is illustrative of a typical request for technical program development. Since the TAC does not currently have a robust and widely understood review process, this document is intended to provide a starting point to improve transparency and organization of the TAC review and evaluation. Communication between the TAC and SC should be clear and provide sufficient information to evaluate technical and funding considerations consistent with the Delta RMP Charter and membership needs.

Delta Science Program External Review

The Delta Science Program coordinated and funded an external review of the Delta RMP monitoring planning documents in 2016 and 2017. The external reviewers generally found that the proposed monitoring components were insufficient to address the RMP Management Questions described in the Charter and generally lacked clear evaluations of how data collected would be interpreted to answer the Management Questions. Many of the stated technical shortcomings are addressed in this document.

Proposal Review Process

This Proposal Review Process document outlines the process by which proposals will be solicited, reviewed and vetted to allow for the TAC to provide recommendations to the SC for future monitoring designs and/or studies. External stakeholders, the TAC, or the TAC subcommittees (e.g., nutrients, pesticides, mercury) can propose monitoring components and/or proposals for consideration by the SC in response to priorities that are determined by the SC. The TAC will evaluate proposals using the consistent process outlined in this document and then inform the SC on recommendations and their rationale so that the SC can make funding decisions and approve proposals. A standardized review process will allow the TAC to make recommendations based on consistent and agreed-upon criteria. Dissenting opinions will also be provided to the SC.

The evaluation criteria may change based on input from the SC, but they are intended to:

1. Support consistent, transparent, and technically defensible evaluations,
2. Provide a process for the TAC to follow, and
3. Enable clear communications and be responsive to the direction received from the SC.

The stepwise process is shown in **Figure 1** and relies on guidance from the SC both in proposal solicitation and pre-proposal review and a technical review performed by the TAC.

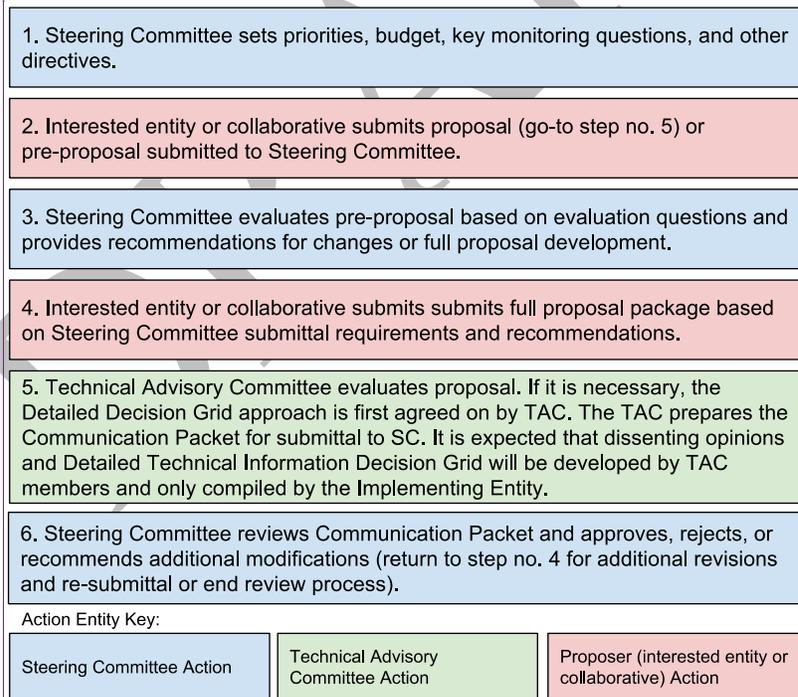


Figure 1. Proposal Review Process Steps

Commented [A1]: TAC should consider or consult with SC on the correct evaluation questions. It may be helpful to prepare a template pre-proposal form.

PROPOSAL SOLICITATION

The Charter does not distinguish types of study (i.e., special studies or status and trend studies) or provide specific priorities; these are instead set by the SC. The SC provides guidance for study priorities, budget considerations, key management questions that must be addressed and any other considerations that would narrow the focus of potential proposals. For instance, considerations may include whether the proposal should focus on longer term status and trends or shorter term special studies.

Evaluation criteria, including a list of required elements, should be developed and well understood prior to soliciting proposals from the TAC or external parties. This will help guide the proposal development and also will allow the TAC to evaluate the proposals in an efficient and consistent manner. **Attachment A** includes a list of general Evaluation Criteria that can be refined by the SC to address specific priorities and focus. The criteria can be customized (e.g., a specific management question listed as a priority to be answered). The same Evaluation Criteria should be used to give guidance to both the entities developing the proposals and to the TAC when reviewing the proposals and providing technical recommendations back to the SC.

STEERING COMMITTEE GUIDANCE AND PRE-PROPOSAL REVIEW

The SC may choose to solicit pre-proposals outlining the required elements of a full proposal. The SC may review pre-proposals and provide feedback on study suitability and recommendations to consider in preparing a full proposal. The optional pre-proposal SC review is intended to identify general concerns and focus the proposal on SC membership needs. SC members may consult with TAC representatives to interpret or evaluate technical issues in the pre-proposal. The following general questions should be used to guide pre-proposal review:

1. Is the monitoring clearly addressing priority DRMP management and assessment questions?
2. Does the proposal adequately describe how the results will be presented and interpreted?
3. Does the monitoring duplicate other existing activities?
4. Is there urgency to conducting the monitoring, such as to inform planned policies or regulations? Is there enough lead time to generate the information needed to support upcoming decisions?
5. Do the monitoring components need to be completed in a certain order relative to (and contingent upon) other activities?
6. Does the monitoring need more planning before being implemented?
7. Is the pre-proposal within the allocated budget?

TECHNICAL ADVISORY COMMITTEE REVIEW

Full proposals will be reviewed by the TAC based on evaluation criteria pre-determined by the SC using the **Attachment A** Evaluation Criteria as a starting point. The Summary Recommendations Decision Grid is a required TAC end product and the Detailed Assessment Grid is an optional evaluation developed by the TAC. The TAC prepares a discussion of consensus recommendations, dissenting opinions, and any requests for clarification from the SC.

Commented [A2]: TAC and SC should consider the scope of these review questions. It may be helpful to simplify these questions so that less technical evaluation is required and the pre-proposal is not a high effort. A template pre-proposal could also be generated.

Decision Grids

The Summary Recommendations Decision Grid (see **Attachment B** template) is the primary communication tool that is intended to be more standard, though it may be modified by SC direction. The Summary Recommendations Decision Grid is a framework to ensure consistency among reviewers and assist with communication back to the SC. The Summary Recommendations Decision Grid will be prepared by the TAC as an executive summary of the TAC findings in the areas of evaluation.

The Detailed Assessment Grid (see **Attachment C** template) can be customized through agreement by the TAC to provide more detail and consider 1) Specific Evaluation Criteria and 2) Scoring / Rating. Depending on the type of proposals, there may be a desire to use a straight forward scoring system, or it may be determined by the SC to use subjective rating terms such as "Meets Criteria", or it may suffice to use (+) and (-) notations to indicate acceptability. Comments, including differing opinions, on how proposals meet each element of the evaluation can also be included in the decision grid. The TAC will determine how the Detailed Assessment Grid will be populated prior to the initiation of the review.

It is expected that TAC members are responsible for preparing any dissenting opinion materials for the Implementing Entity to compile. TAC members are responsible for preparing technical elements of the Detailed Assessment Grid.

Commented [A3]: Need to determine if scoring is required and how it would be done. Could also be done on the Summary Decision Grid

TECHNICAL ADVISORY COMMITTEE RECOMMENDATIONS

While the goal of the TAC is to provide consensus recommendations to the SC, this will not always be possible. For this reason, the following guidelines should be adhered to during the TAC evaluation:

- SC may be asked to clarify its priorities and policy issues identified during the program development or review process.
- When consensus cannot be reached by the TAC on what monitoring to recommend, discuss and document differing interpretations or opinions.
- TAC message points and dissenting opinions are vetted through the TAC prior to distribution to the SC.

Recommendations would be provided to the SC in a communication packet along with the specific recommendations from the TAC, references, any dissenting points of view, and additional narrative discussion, as necessary. The Communication Packet will include the following:

1. Summary of Consensus Recommendations, Dissenting Opinions, and Requests for Steering Committee Clarification [1-2 page compilation of key messages]
2. Summary Recommendation Decision Grid [required]
3. Detailed Assessment Grids [optional, format decided by TAC]

Attachment A. Evaluation Criteria for Decision Grids

Potential evaluation criteria fall into three categories: 1) Management and Assessment Questions, 2) Technical Foundation, and 3) Budget, Priority, Coordination and Other Considerations. The SC will give guidance on whether some criteria have more importance than others, whether or not some criteria can be given more weight, and/or whether some criteria are not applicable.

The listed evaluation criteria are important for various reasons but may not be comprehensive. There is flexibility in this process for the SC to add new (or change) evaluation criteria for the Summary Recommendations Decision Grid and the TAC to decide on elements or the need for the Detailed Assessment Grid. Evaluation criteria should be reviewed and refined prior to soliciting and reviewing proposals. The SC can communicate priorities and offer guidance to the TAC in its review process by 1) selecting pre-proposals that address SC priorities and 2) providing the TAC with refined evaluation criteria.

I. Management and Assessment Questions

Management questions are set by the SC, and the TAC may propose assessment questions as testable study components to help answer the management questions. Assessment questions are included as part of the [Monitoring Design Summary](#) (revised June 2015); however, these may change over time depending on study needs and to build toward addressing the management questions. Prior to soliciting proposals, the Management and Assessment Questions should be prioritized by the SC to give guidance to both the entities submitting a proposal and the TAC members reviewing the proposals.

- A) Is the proposal responsive to the Charter **management and assessment question(s)** prioritized by the SC?
- 1) **Status and Trends.** Is there a problem or are there signs of a problem?
 - a) Is water quality currently, or trending towards, adversely affecting beneficial uses of the Delta?
 - b) Which constituents may be impairing beneficial uses in subregions of the Delta?
 - c) Are trends similar or different across different subregions of the Delta?
 - 2) **Sources, Pathways, Loadings, and Processes.** Which sources and processes are most important to understand and quantify?
 - a) Which sources, pathways, loadings, and processes (e.g., transformations, bioaccumulation) contribute most to identified problems?
 - b) What is the magnitude of each source and/or pathway (e.g., municipal wastewater, atmospheric deposition)?
 - c) What are the magnitudes of internal sources and/or pathways (e.g. benthic flux) and sinks in the Delta?
 - 3) **Forecasting Water Quality Under Different Management Scenarios**
 - a) How do ambient water quality conditions respond to different management scenarios?
 - b) What constituent loads can the Delta assimilate without impairment of beneficial uses?
 - c) What is the likelihood that the Delta will be water quality-impaired in the future?
 - 4) **Effectiveness Tracking**

Commented [A4]: These questions are replicated in the decision grids. It may be more useful to provide more narrative discussion of the assessment and remove the specific questions.

- a) Are water quality conditions improving as a result of management actions such that beneficial uses will be met?
- b) Are loadings changing as a result of management actions?
- B) Does the proposal adequately state and support **assessment questions**? For example:
 - 1) Are the assessment questions testable or otherwise provide an outcome threshold that can be measured against?
 - 2) Does the proposal adequately demonstrate how the results will be presented and interpreted? [see proposed process diagram]

II. **Technical Foundation**

The technical foundation of the proposal is evaluated based on how well the proposed study answers the management and assessment questions. This evaluation is based on the USEPA [Data Quality Objectives](#) guidance, which can be used as a reference for this evaluation. This includes both the assessment of data quality, geographic and temporal characterization, and how well understood the proposed tool “outcomes” are. The following are the evaluation criteria that may be modified by the SC to appropriately evaluate different types of proposed studies and are the basis for the Summary Recommendation Decision Grid. The Detailed Decision Grid is also based on these criteria, and may be modified based on mutual agreement by the TAC.

- A. Are monitoring objectives clearly defined?
- B. Are the data sources and information inputs clearly stated?
- C. Is the **geographic scope** of the study well defined? Does the study characterize conditions within the Delta, tributaries into the Delta, or only a smaller assessment area?
- D. Is the **temporal scope and resolution** of the study well defined? Does the study clearly define the conditions of interest (e.g. high flows)? Can the results of the study be used to evaluate trends over the timescale of interest or target magnitude of change?
- E. Is the analytical approach adequately described and developed?
- F. **How well established and understood are the monitoring tools?**
 - i. Does the study employ standard analytical methods? How well tested are the methods?
 - ii. How well are outcomes from monitoring tools linked to environmental effects?
 - iii. Are effect thresholds known that reliably characterize beneficial use impairment?
 - iv. How well are effect end points linked to impacts on beneficial uses – if not, are required additional studies to provide such linkage well articulated?
- G. Are measurement quality objectives clearly stated to ensure that data collected are of sufficient quality and quantity to support the study objectives?
- H. Does the proposal clearly state how the data will be collected?

III. **Budget, Priority, Coordination, and Other Considerations**

- A) Does the proposal meet the **budget** specified by the SC?
- B) **Priority/timeliness** - Is there urgency to conducting the monitoring, such as to inform planned policies or regulations?
 - 1) Does the monitoring respond to a stated SC priority?

Commented [A5]: We need to provide some additional detail on these assessments, especially if scoring is determined as necessary.

Commented [A6]: The Steering Committee should provide some additional guidance on how this should be addressed. For example, SCCWRP has used method levels to describe stages of method development and appropriate uses for that data.

- 2) Is there enough lead time to generate the information needed to support upcoming decisions?
 - 3) Do the monitoring elements need to be completed in a certain order relative to (and contingent upon) other ongoing or future activities?
 - 4) Can the monitoring be coordinated with other efforts to increase data power or reduce overall study cost or duration?
- C) Will the study build upon, add to, and/or compliment other studies conducted by the Delta RMP?
- D) Do the monitoring objectives incorporate consideration of **regulatory program requirements** (TMDLs, Waste Discharge Requirements, Basin Plan monitoring and surveillance, etc.)?
- E) Can the study leverage external studies and resources for added efficiency or additional priority benefits?
- F) Is the monitoring plan complete or is **additional information necessary** before the study could be implemented?

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Attachment B. Summary Recommendation Decision Grid Template

Evaluation Criteria	Score	Comments
II. Management / Assessment Questions		
A. [Relevant Management questions listed here as directed by the Steering Committee or as appropriate for the proposed study]		
B. Are the assessment questions testable or do they otherwise provide an outcome threshold?		
C. Does the proposal adequately describe how the results will be presented and interpreted?		
III. Technical Foundation		
A. Are monitoring objectives clearly defined?		
B. Are the data sources and information inputs clearly stated?		
C. Is the geographic scope of the study well defined? Does the study characterize conditions within the Delta, tributaries into the Delta, or only a smaller assessment area?		
D. Is the temporal scope and resolution of the study well defined? Does the study clearly define the conditions of interest (e.g. high flows)? Can the results of the study be used to evaluate trends over the timescale of interest or target magnitude of change?		
E. Is the analytical approach adequately described and developed?		
F. How well established and understood are the monitoring tools?		
G. Are measurement quality objectives clearly stated to ensure that data collected are of sufficient quality and quantity to support the study objectives?		
H. Does the proposal clearly state how the data will be collected?		
IV. Budget, Priority, Coordination, and Other Considerations		
A. Does the proposal meet the budget specified by the SC?		

Commented [A7]: Need to develop more information on how to fill this out

Commented [A8]: Need to refer directly to DQOs

Commented [A9]: See comment above regarding Steering Committee guidance

Evaluation Criteria	Score	Comments
B. Priority/timeliness - Is there urgency to conducting the monitoring, such as to inform development of planned policies or regulations?		
C. Will the study build upon, add to, and/or compliment other studies conducted by the Delta RMP?		
D. Do the monitoring objectives incorporate consideration of regulatory program requirements (TMDLs, Waste Discharge Requirements, Basin Plan monitoring and surveillance, etc.)?		
E. Can the study leverage external studies and resources for added efficiency or additional priority benefits?		
F. Is the monitoring plan complete or is additional information necessary before the study could be implemented?		

Scoring Example: Each criterion could be scored on a scale of 1-3 based on the following criteria:

- 1 – Adequately addresses the scoring criterion
- 2 – Partially addresses the scoring criterion
- 3 – Does not address the scoring criterion

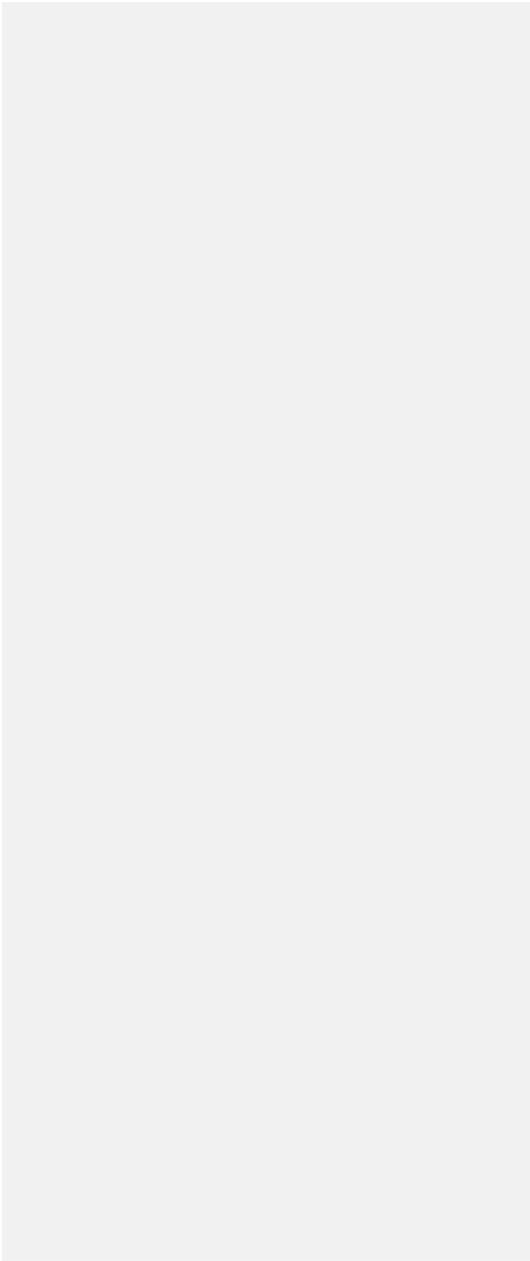
DRAFT

Commented [A10]: Stoplight type approach rather than scoring? Need to resolve scoring approach.

Attachment C. Detailed Assessment Grid Template

[Cam Irvine to provide detailed version]

DRAFT



DETAILED PROPOSAL EVALUATION CRITERIA (DISCUSSION DRAFT)

Evaluation Criteria	Comments/ Proposal Score ¹
I. Management / Assessment Questions	
Links to Management Action(s)	
A. Management Questions (DRMP Charter)²	
1. Is there a problem or are there signs of a problem? [Consider - Will the proposed study allow the DRMP to determine the extent to which pesticides contribute to toxicity in the Delta?]	
a. Is water quality currently, or trending towards, adversely affecting beneficial uses of the Delta?	
b. Which constituents may be impairing beneficial uses in subregions of the Delta?	
c. Are trends similar or different across different subregions of the Delta?	
2. Sources, Pathways, Loadings, and Processes. Which sources and processes are most important to understand and quantify? [Consider - Will the proposed study allow a better understanding of the spatial/temporal distribution of currently used pesticides identified as likely causes of toxicity in the delta?]	
a. Which sources, pathways, loadings, and processes (e.g., transformations, bioaccumulation) contribute most to identified problems?	
b. What is the magnitude of each source and/or pathway (e.g., municipal wastewater, atmospheric deposition)?	
c. What are the magnitudes of internal sources and/or pathways (e.g. benthic flux) and sinks in the Delta?	
3. Forecasting Water Quality Under Different Management Scenarios	
a. How do ambient water quality conditions respond to different management scenarios?	
b. What constituent loads can the Delta assimilate without impairment of beneficial uses?	
c. What is the likelihood that the Delta will be water quality-impaired in the future?	
4. Effectiveness Tracking	
a. Are water quality conditions improving as a result of management actions such that beneficial uses will be met?	
b. Are loadings changing as a result of management actions?	
B. Assessment Questions³	
Status and Trends	

Commented [IC1]: This table is intended to be a starting point for the TAC to develop a consistent approach for evaluating DRMP proposals. After refining this template, it would serve as a detailed example for any DRMP study proposal evaluation. The table should be consistent with the summary matrix, sufficient for any review while recognizing that specific line-items may not be necessary/relevant to all proposals, and with flexibility to be revised as needed. This draft includes content from various drafts and discussions and pesticide-specific details (e.g., Assessment Questions) could be replaced with the appropriate content for other TAC subcommittees.

Commented [IC2]: These Management and Assessment Questions are copied directly taken from the DRMP Charter. Proposals can be evaluated based on how well they support the DRMPs ability to address them, but note that not all of the MQs and AQs may be need to be addressed by any/all proposals.

¹ Scoring Example: Each criterion could be scored on a scale of 1-3 based on the following criteria: 1 – Adequately addresses the scoring criterion, 2 – Partially addresses the scoring criterion, 3 – Does not address the scoring criterion

² Is the proposal responsive to the Charter management and assessment question(s) prioritized by the SC? Consider – what information is needed to answer these Management Questions and if tools are currently available. Note that not all Management Questions may be relevant or need to be addressed by any/all proposals.

³ Assessment Questions from the DRMP QAPP (2016). Example provided for pesticides. Note that not all Assessment Questions may be relevant or need to be addressed by any/all proposals.

Evaluation Criteria**Comments/ Proposal Score¹**

1. To what extent do pesticides contribute to observed toxicity in the Delta? ⁴

- 1.1. Which pesticides or degradates have the highest potential to be causing toxicity in the Delta and therefore should be the priority for monitoring and management?
 - a. If samples are toxic do detected pesticides explain the toxicity?
 - b. If samples are not toxic do detected pesticide concentrations exceed other thresholds of concern, e.g., water quality objectives or Office of Pesticide programs aquatic toxicity benchmarks)?
- 1.2. What are the spatial and temporal extents of lethal and sublethal aquatic and sediment toxicity observed in the Delta?
 - a. Do aquatic or sediment toxicity tests at targeted sites indicate a toxic response?
 - b. If answer to A is yes, which other toxicity indicators should guide monitoring and management of pesticides in years 2+?

2. What are the spatial/temporal distributions of concentrations of currently used pesticides identified as likely causes of observed toxicity?

- 2.1 Which pesticides have the highest risk potential based on DPR's risk prioritization model and should be included in chemical analyses?
 - a. Is the list of pesticides included in USGS pesticide scan sufficient for Delta RMP monitoring design?
 - b. Are methods available to monitor pesticides with high-risk potential not included in USGS pesticide scan?
- 2.2. How do concentrations of the pesticides with the highest risk potential vary seasonally and spatially?

Sources, Pathways, Loadings, & Processes

1. What are the principal sources and pathways responsible for aquatic and sediment toxicity observed in the Delta?
2. What are the fates of prioritized pesticides and degradates in the environment?
 - 2.1. Do physical/chemical properties of priority pesticides, application rates and processes, and ambient conditions influence the degree of toxicity observed?
3. What are the spatial/temporal use patterns of priority pesticides?

Forecasting & Scenarios

1. How do pesticide concentrations respond to different management scenarios?
2. What current use pesticide loads can the Delta assimilate without exceeding water quality criteria established to protect beneficial uses?
3. How will climate change affect concentrations and/or loadings of pesticides and impacts to aquatic species?

Effectiveness Tracking

1. Are pesticide-related toxicity impacts decreasing over time?

C. Does the proposal adequately demonstrate how the results will be presented and interpreted? [see proposed process diagram]

⁴ Consider – what information is needed to answer these Assessment Questions and if tools are currently available.

Evaluation Criteria	Comments/ Proposal Score ¹
D. Does/how does the proposal address or contribute to a body of data that could be used to answer Management Questions and Assessment Questions in the future (if not all addressed initially)?	
II. Technical Foundation	
A. Are the Data Quality Objectives (DQOs; EPA 2006) clearly defined? (External PR Comment)	
<ol style="list-style-type: none"> 1. State the Problem 2. Identify the Goals of the Study 3. Identify Information Inputs 4. Define the Boundaries of the Study 5. Develop the Analytical Approach 6. Specify Performance or Acceptance Criteria 7. Develop the Plan for Obtaining Data 	
B. Geographic Scope	
<ol style="list-style-type: none"> 1. Is the location selection rationale given and do these stations support the study objectives? 2. Is the geographic scope of the study well defined? 3. Does the study characterize conditions within the Delta, tributaries into the Delta, or only a smaller assessment area? 4. Does the proposal aim to characterize conditions in the Delta (as a whole) or at fixed stations? (External PR Comment) 	
C. Temporal Scope and Resolution	
<ol style="list-style-type: none"> 1. Is the temporal scope and resolution of the study well defined? 2. Does the study clearly define the conditions of interest (e.g. high flows)? 3. Can the results of the study be used to evaluate trends over the timescale of interest or target magnitude of change? 4. Program reliability and variability would be quantified over long term (External PR Comment) 	
D. Sampling	
<ol style="list-style-type: none"> 1. How do the sampling methods fit on the 'established methods' spectrum and how does that affect data interpretation and usability for decision making or answering study objectives? 2. Do the sample collection or analysis methods introduce any known or potential bias (e.g. cross sectional composites vs. side bank grabs, sample collection in the non-target points of the hydrograph, etc.)? 3. Are there data to be considered (e.g., controls or reference samples) when interpreting results? 	
E. Analysis	
<ol style="list-style-type: none"> 1. How do the analytical methods fit on the spectrum of 'established methods'? 2. Are data expected to be sufficiently reliable and reproducible for answering study objectives and/or for decision making? 	

Commented [IC3]: Methods don't need to be standard, but I expect we want to understand data usability. Rankings on the SCCWRP methods usability chart could be used to answer this questions in a standard format, if adopted for use by the SC in consultation with the TAC.

Evaluation Criteria	Comments/ Proposal Score ¹
3. Statistical design – is there sufficiently robust coverage for a strong statistical evaluation that will detect changes over time? (External PR Comment)	
F. Interpretation	
1. How well are outcomes from monitoring tools linked to environmental effects? 2. Are effect thresholds known that reliably characterize beneficial use impairment? 3. How well are effect end points linked to impacts on beneficial uses – if not, are required additional studies to provide such linkage well articulated? 4. How well are effect end points linked to management decisions? 5. Proposal addresses reproducibility and reliability of program (External PR Comment)	
III. Budget, Priority, Coordination, and Other Considerations	
A. Does the proposal meet the budget specified by the SC?	
1. Is the budget met? 2. Is the proposed study scalable (workable with increased or decreased funding)? 3. Is the proposed study modular (expandable to include other studies (e.g., CECs, biomarkers, or tissues) if funding is available?	
B. Priority/timeliness	
1. Does the monitoring respond to a stated SC priority? 2. Is there urgency to conducting the monitoring, such as to inform development of planned policies or regulations? 3. Is there enough lead time to generate the information needed to support upcoming decisions? 4. Do the monitoring elements need to be completed in a certain order relative to (and contingent upon) other ongoing or future activities? 5. Can the monitoring be coordinated with other efforts to increase data power or reduce overall study cost or duration?	
C. Will the study build upon, add to, and/or compliment other studies conducted by the Delta RMP?	
1. Are there links to relevant current programs (e.g., pyrethroid control program)? (External PR Comment) 1. Is there a connection with current SPOT sampling locations? 2. Are there links to MS4 permittee sampling?	
D. Do the monitoring objectives incorporate consideration of regulatory program requirements (TMDLs, Waste Discharge Requirements, Basin Plan monitoring and surveillance, etc.)	
E. Can the study leverage external studies and resources for added efficiency or additional priority benefits?	
F. Is the monitoring plan complete or is additional information necessary before the study could be implemented, interpreted, or completed?	

Meeting Materials for Item 10



Delta RMP Joint Technical Advisory and Steering Committee Meeting

October 24, 2017 9:30 am – 4:30 pm

Delta Stewardship Council Building
980 9th Street, 2nd Floor, Room A
Sacramento, CA

DRAFT List of Discussion Topics/Agenda Items

1. Decision matrix applied to pesticides and CEC monitoring proposals
2. Process for setting fees, particularly for MS4 Phase 2 participants
3. Revisions to the Delta RMP Charter
4. Planning budget for FY18/19 and onwards – set priorities for each of the focus areas (pesticides, nutrients, mercury)
5. Funding for Contaminants of Emerging Concern (CEC) projects, to be led by Josie Tellers
6. Visualization of Delta RMP pesticide data with Tableau software, to be led by Greg Gearhardt

Meeting Materials for Item 11

Delta RMP Action Items Stoplight Report

Key to Status Colors:

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

Yellow indicates a deliverable is due within 90 days.

Red indicates a deliverable that is overdue.

	Primary	Meeting Date	Deliverable	Assigned To	Due Date	Status	Comments
1	SC Action Items 7/28/2017	07/28/17	Finalize the 5/3/2017 SC Meeting Summary and post to the program website	Matthew Heberger	08/10/17	Complete	
2	SC Action Items 7/28/2017	07/28/17	Check on how TAC meetings are staffed and determine whether ASC hours are warranted	Matthew Heberger	10/01/17		
3	SC Action Items 7/28/2017	07/28/17	Revise the charter to require Finance Committee approval for switching money between tasks. Up to \$5,000 at discretion of the Implementing Entity, more than \$5,000 shall require FC approval, and more than \$25,000 shall require approval by the Steering Committee.	Matthew Heberger	10/01/17		Draft charter language to be voted on in October
4	SC Action Items 7/28/2017	07/28/17	OIMA staff to prepare a visualization of Delta RMP pesticides/toxicity data using Tableau, to include various water quality standards, benchmarks and thresholds for aquatic toxicity...	Greg Gearhart	10/24/17		
5	SC Action Items 7/28/2017	07/28/17	For the Decision Grid for ranking monitoring proposals, consider (1) assigning points, (2) assigning weights, and (3) adding something related to statistical expertise in the experimental design.	Matthew Heberger	09/10/17		
6	SC Action Items 7/28/2017	07/28/17	Provide comments on the Year 1 Pesticides Data Report by end of August. Any suggestions that are interpretive in nature will NOT be included in this report, but rather forwarded to the authors of the forthcoming Interpretive Report.	Steering Committee	08/31/17	Complete	
7	SC Action Items 7/28/2017	07/28/17	Put together SEP proposal for CEC monitoring	Matthew Heberger	11/30/17		Presumably this has to happen after the Regional Board has articulated its CEC policy more clearly. There are currently planning meetings going on to come up with a strategy with the POTW and MS4 communities.
8	TAC Action Items from 6/13/2017	06/13/17	Draft and distribute for review "Highlights" with the most important outcomes (action items, recommendations, etc.) of the meeting that would be presented to the Steering Committee.	Stephen McCord	06/30/17	Complete	Stephen was on vacation and unable to give this update. Joe D. gave the standard TAC update.
9	TAC Action Items from 6/13/2018	06/13/17	Set 12/12/17 meeting location and announce to TAC	Matthew Heberger	07/14/17	Complete	
10	TAC Action Items from 6/13/2019	06/13/17	Review the revised pesticides data report and submit any final comments by June 30 to Thomas Jabusch (ASC). Email the TAC (delta-rmp-tac@sfei.org) if you have major concerns that would prevent recommending to the Steering Committee that the report be approved	TAC members	06/30/17	Complete	
11	TAC Action Items from 6/13/2020	06/13/17	Send out the next version of the FY15/16 Pesticides Data Report when any remaining comments and edits are incorporated, including both "clean" and "tracked changes" versions	Thomas Jabusch	07/10/17	Complete	
12	TAC Action Items from 6/13/2021	06/13/17	Convene a meeting of the Pesticides Subcommittee for the week of July 12	Matthew Heberger	07/07/17	Complete	

	Primary	Meeting Date	Deliverable	Assigned To	Due Date	Status	Comments
13	TAC Action Items from 6/13/2021	06/13/17	Develop a "strawman" set of options for the report, including staffing and cost	Matthew Heberger	07/07/17	Complete	
14	TAC Action Items from 6/13/2021	06/13/17	Work with the permittees subgroup to further develop the evaluation criteria, and distribute it to TAC members for comments/editing	Brian Lauerson	06/25/17	Complete	
15	TAC Action Items from 6/13/2021	06/13/17	esticides Subcommittee: Discuss the draft evaluation criteria	Matthew Heberger	07/12/17	Complete	
16	TAC Action Items from 6/13/2021	06/13/17	With Brian Laurenson (LWA), compile optional processes for the TAC to make consensus decisions	Matthew Heberger	08/31/17	Complete	
17	SC Action Items 5/3/2017	05/03/17	Finalize the 1/26/2017 SC Meeting Summary and post to the program website	Matthew Heberger	05/11/17	Complete	
18	SC Action Items 5/3/2017	05/03/17	Determine the date and location for the Fall 2017 Steering Committee meeting and send invitation to the SC	Matthew Heberger	05/25/17	Complete	Set for Oct 24
19	SC Action Items 5/3/2017	05/03/17	Update the Financial Memo with minor edits	Matthew Heberger	05/11/17	Complete	
20	SC Action Items 5/3/2017	05/03/17	Send out revised draft Fact Sheet to the SC to review with deadline for comments	Matthew Heberger	05/11/17	Complete	
21	SC Action Items 5/3/2017	05/03/17	Finalize minor portions of the FY17/18 Workplan that require changes in response to input received at the meeting and the decision of the Steering Committee	Matthew Heberger	05/15/17	Complete	Pesticides question still outstanding.
22	SC Action Items 5/3/2017	05/03/17	Present the SC with information from the TAC related to the pesticides proposals: TAC meeting summary, pros/cons of the two approaches, slides showing how data from the proposed approaches would be interpreted to answer management questions, and how the costs of the Delta RMP might change with external funding for certain aspects of the projects	Matthew Heberger	07/21/17	Complete	The TAC requested additional guidance on how to evaluate competing proposals, and has begun a process for developing this, with the approval of SC co-chairs.
23	SC Action Items 5/3/2017	05/03/17	Prepare a revised scope and budget for the CUP/Toxicity Year 1-2 Interpretative Report that includes synthesis of readily available information in the Delta, not just Delta RMP data	Matthew Heberger	07/21/17	Complete	
24	SC Action Items 5/3/2017	05/03/17	Regarding the Chlorophyll-a Intercalibration Study for FY17/18, provide Gregg Gearheart with the specifics about how partner agencies can participate	Thomas Jabusch	05/31/17	Complete	
25	TAC Action Items from 3/14/2017	03/14/17	Reserve meeting room for 9/21 TAC meeting; send email invitation	Matthew Heberger	05/31/17	Complete	
26	TAC Action Items from 3/14/2017	03/14/17	Follow up with SFWCA and SWAMP regarding contribution matching funds to support the chlorophyll sensor intercalibration effort	Thomas Jabusch	03/24/17	Complete	
27	TAC Action Items from 3/14/2017	03/14/17	Look into whether a Delta RMP HABS monitoring project would be eligible for Water Board grant funding	Thomas Jabusch	03/31/17	Complete	Talked to R. Breuer: Answer: Probably not at this point. Very limited funding allocated to another project for Delta satellite surveillance and response. Another complication is the closing of WPCL. There is currently no lab to do the analyses.
28	TAC Action Items from 3/14/2017	03/14/17	Revise Pesticides proposal 1 to include only one site, Sacramento River at Hood	Debra Denton	03/31/17	Complete	
29	TAC Action Items from 3/14/2017	03/14/17	Revise pesticide proposal 2A with the trends option for a longer list of pesticides from the DPR model (remove other options) and add draft site selection criteria. Make sure the planning budget is sufficient for 3 meetings between July 1 and September 30	Thomas Jabusch	03/31/17	Complete	

	Primary	Meeting Date	Deliverable	Assigned To	Due Date	Status	Comments
30	TAC Action Items from 3/14/2017	03/14/17	In nutrients proposal package, increase the funding listed for FY18/19 for the chlorophyll intercalibration study to indicate that we are embarking on a multi-year effort and list other likely collaborators: USGS, SWAMP, DWR, NMS, Bay RMP, SFCWA	Thomas Jabusch	03/31/17	Complete	
31	TAC Action Items from 3/14/2017	03/14/17	Prepare high-level summary of TAC-recommended proposals for nutrients, Hg, and pesticides. To include the following topics: 1) Management Drivers Addressed, 2) Assessment Questions Answered, 3) External Review Comments Addressed, 4) Data Quality Objectives/Null Hypothesis	Thomas Jabusch	04/15/17	Complete	Add abstracts to each proposal with this information.
32	TAC Action Items from 3/14/2017	03/14/17	Prepare memo on power analysis for Pesticide Proposal 2 to share with interested TAC members, including caveats related to using a priori estimates of variance	Matthew Heberger	04/01/17	Complete	
33	TAC Action Items from 3/14/2017	03/14/17	Schedule a pesticide subcommittee meeting for the 2nd week of April to discuss: data evaluation process and QAPP for Proposal 1, site selection criteria for Proposal 2, target analytes for Proposal 2, bullets on pros/cons of TAC recommendation to SC	Thomas Jabusch	03/25/17	Complete	
34	TAC Action Items from 3/14/2017	03/14/17	Ask Regional Board staff to figure out if dropping Pesticide Proposal 3 will reduce the total revenue for FY17/18 (because Ag coalitions may reduce their contribution).	Matthew Heberger	03/31/17	Complete	
35	TAC Action Items from 3/14/2017	03/14/17	Send draft CUP report to TAC as a Word document	Thomas Jabusch	03/17/17	Complete	
36	TAC Action Items from 3/14/2017	03/14/17	Schedule a webinar to present and discuss the Current Use Pesticides draft report	Thomas Jabusch	03/24/17	Complete	
37	TAC Action Items from 3/14/2017	03/14/17	Schedule a webinar to present CD3 visualization, data download and metadata	Matthew Heberger	04/15/17		We have decided to move this to July so that it can be included in the FY17/18 budget. (This was requested by participants, but not included in prior budgets.)
38	SC Action Items 1/26/2017	01/26/17	Finalize the 10/18/16 Meeting Summary and post to the website	Matthew Heberger	02/03/17	Complete	
39	SC Action Items 1/26/2017	01/26/17	Determine the location for the 7/28/17 meeting and send an invitation to the SC	Matthew Heberger	02/03/17	Complete	
40	SC Action Items 1/26/2017	01/26/17	Confirm whether Delta RMP measurement methods for mercury and ancillary parameters are compatible with other programs, to ensure that the data we collect can be readily combined with data collected by others.	Thomas Jabusch	02/28/17	Complete	Thomas has talked to USGS and MLML and confirmed that the data collection and analysis methods are the same, and there is no concern with comparing and combining mercury data.
41	SC Action Items 1/26/2017	01/26/17	Add an agenda for the next SC Meeting on the Communications Plan and access to preliminary/provisional data. Use the technical powerpoints presented as a case study.	Philip Trowbridge	04/30/17	Complete	Topic added to list of items for next SC meeting.
42	SC Action Items 1/26/2017	01/26/17	ASC to discuss with State Board (Greg Gearheart and Janis Cooke) on developing options for HABS monitoring. Questions include: where does the Delta RMP fit in, how might we complement other programs, what kind of options are there for projects in the FY17/18 budget or SEP funds? ASC to work with Greg Gearheart (State Board) on this.	Thomas Jabusch	02/28/17	Complete	
43	SC Action Items 1/26/2017	01/26/17	Nutrients subcommittee to discuss HABS at a future meeting, and to come up with options to present to the SC	Thomas Jabusch	02/28/17	Complete	

	Primary	Meeting Date	Deliverable	Assigned To	Due Date	Status	Comments
44	SC Action Items 1/26/2017	01/26/17	Organize a debrief meeting with State Board staff, USGS, and ASC to develop lessons learned which might make the CEDEN upload easier next time.	Matthew Heberger	02/28/17	Complete	Meeting is scheduled for 3/6/17.
45	SC Action Items 1/26/2017	01/26/17	ASC will look into hiring administrative staff to perform certain roles, such as invoicing, taking meeting notes.	Matthew Heberger	02/28/17	Complete	We have contacted Ms. Daphne Orzalli, who has confirmed her interest and given us a quote for professional services at \$40/hour. The finance committee will discuss the pros and cons at their next meeting.
46	SC Action Items 1/26/2017	01/26/17	Beginning July 2017, all financials will be reported for current fiscal year only. Remaining funds from prior years will be rolled over to the current year.	Matthew Heberger	07/31/17	Complete	We have looked into this issue and discussed it with our accountant and financial manager and concluded we can make a seamless transition without any issues. Framework presented to Finance Subcommittee on 4/25/2017, and approved.
47	SC Action Items 1/26/2017	01/26/17	Prepare a memo for the next SC meeting with options for setting fees with pros and cons	Philip Trowbridge	04/30/17	Complete	Slides discussing the options and preferred alternative were prepared for the May 3 meeting but the discussion was tabled and will be presented on July 28.
48	SC Action Items 1/26/2017	01/26/17	Create a 1- to 2-page factsheet about Delta RMP to help with fundraising. Describe the purpose, accomplishments, and benefits.	Matthew Heberger	03/31/17	Complete	Draft factsheet to be presented at the May 3 Steering Committee meeting.
49	SC Action Items 1/26/2017	01/26/17	Convene a meeting of the Revenue Subcommittee.	Val Connor	04/30/17	Complete	The Revenue Committee has met and is planning future meetings.
50	SC Action Items 1/26/2017	01/26/17	Send a PDF of the nutrients presentations and links to the	Matthew Heberger	02/01/17	Complete	
51	SC Action Items 1/26/2017	01/26/17	Revise the response to the External Review Committee. Committee members to submit proposed language to ASC. Following revisions, ASC will re-send the response to the SC showing the edits in track changes. SC members will have one week to respond. If no comments are received, the letter will be finalized and sent to the reviewers.	Matthew Heberger	02/03/17	Complete	
52	SC Action Items 1/26/2017	01/26/17	Schedule a meeting between Planning Committee and the Independent Reviewers for March.	Yumiko Henneberry	02/10/17	Complete	
53	SC Action Items 1/26/2017	01/26/17	Develop new text for Attachment 3 (the flowchart) to be discussed at the fall SC-TAC meeting.	Matthew Heberger	09/30/17		At the Jan 26, 2017 meeting, it was discussed that the flowchart had served a useful purpose at the beginning of the program, allowing dischargers and regulators to come to a common understanding of how data collected by the program would (and would not) be used. However, it no longer reflects current policy or procedures. Water Board staff suggested replacing it with a couple of paragraphs.
54	SC Action Items 1/26/2017	01/26/17	Accept approved edits and post new Charter to website.	Matthew Heberger	02/28/17	Complete	
55	SC Action Items 1/26/2017	01/26/17	Put on the agenda for a future SC meeting: How we will be interacting with the Delta Science Program, especially as it regards the findings of the recent report State of Bay-Delta Science, 2016, which concerns us directly.	Philip Trowbridge	02/01/17	Complete	Item added to agenda item parking lot.

Primary	Meeting Date	Deliverable	Assigned To	Due Date	Status	Comments
56 SC Action Items 1/26/2017	01/26/17	Put on the agenda for a future SC meeting: CEC workshop and State Board CEC Guidance.	Philip Trowbridge	02/01/17	Complete	Item added to agenda item parking lot.

Delta RMP Deliverables Stoplight Report

Delta RMP Deliverables Scorecard Report

Key to Status Colors:

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

Yellow indicates a deliverable due within 90 days.

Red indicates a deliverable that is overdue.

Project	Primary	Deliverable	Assigned To	Due Date	Status	Comments
1 Delta RMP (FY15/16)	CUP Monitoring	Annual Monitoring Report for FY15/16 CUP Monitoring	Thomas Jabusch	02/28/17	Complete	Data need to be uploaded to CEDEN by 2/1/17.
2 Delta RMP (FY15/16)	Pathogens Study - Year 2	Sample Collection and Data Management of Year 2 Pathogens Data	Amy Franz	07/31/17	Complete	Data from BioVir and Eurofins. Formatting, transcribing field collection information, performing QA/QC review, and uploading field and analytical results to SFEI's RDC database and replicating to CEDEN. Expected to be complete by June 15, 2017.
3 Delta RMP (FY15/16)	Pathogens Study - Year 2	Quality Assurance Report on Year 2 Pathogens Data	Don Yee	07/31/17	Complete	QAQ report. Funded from Data Management budget.
4 Delta RMP (FY16/17)	Governance	Financial Subcommittee report and conference call	Philip Trowbridge	01/05/17	Complete	
5 Delta RMP (FY16/17)	Governance	Steering Committee Meeting #3 and Summary	Philip Trowbridge	01/26/17	Complete	
6 Delta RMP (FY16/17)	Nutrients Synthesis	7A1.1 Synthesis Report - Additional data analyses	Thomas Jabusch	01/31/17	Complete	
7 Delta RMP (FY16/17)	Program Management	FY17/18 Annual Workplan and Budget	Philip Trowbridge	02/10/17	Complete	Draft for Finance Subcommittee sent 4/19/17. Final by 6/30/16.
8 Delta RMP (FY16/17)	Program Management	Updated Monitoring Design	Philip Trowbridge	02/15/17	Complete	Deliverable not relevant for this fiscal year. Following the External Review, the Monitoring Design is expected to need a major revision, which is more than was planned for FY16/17. Minor revisions, such as updating the target analyte lists, would be a waste of effort at this point. The update to the Monitoring Design will have its own budget line for FY17/18.
9 Delta RMP (FY16/17)	Nutrients Synthesis	7A1.3 Synthesis Report - Prepare synthesis report	Thomas Jabusch	02/28/17		Draft report has been distributed to the Nutrients Subcommittee, which will be reviewing it at a meeting in August.
10 Delta RMP (FY16/17)	Governance	TAC Meeting #3 and Summary	Thomas Jabusch	03/15/17	Complete	
11 Delta RMP (FY16/17)	Nutrients Synthesis	7B2.3 Modeling and Synthesis of Modeling Results - Run simulations	Marianne Guerin	04/30/17	Complete	By 4/30/16: Final model simulation results and output
12 Delta RMP (FY16/17)	Nutrients Synthesis	7B2.4 Nutrients - Analyze and synthesize model output data	Thomas Jabusch	05/04/17	Complete	This analysis has been completed and incorporated in the draft Synthesis Report.
13 Delta RMP (FY16/17)	Governance	Steering Committee Meeting #4 and Summary	Matthew Heberger	05/05/17	Complete	
14 Delta RMP (FY16/17)	Nutrients Synthesis	7C3.1 Nutrients- Statistical Modeling	Thomas Jabusch	05/31/17		We are cooperating with Marcus Beck of USEPA Office of Research and Development, who has submitted a manuscript with his analysis.
15 Delta RMP (FY16/17)	Governance	TAC Meeting #4 and Summary	Matthew Heberger	06/14/17	Complete	

	Project	Primary	Deliverable	Assigned To	Due Date	Status	Comments
16	Delta RMP (FY16/17)	Quality Assurance	QAPP Update	Thomas Jabusch	06/14/17		As of 9/11/2017, ASC staff are working to resolve comments and suggestions made by the SWAMP QA officer.
17	Delta RMP (FY16/17)	Communications	Technical Workshop / summary memorandum of findings	Philip Trowbridge	06/30/17	Complete	SC decided not to hold a technical workshop in FY16/17.
18	Delta RMP (FY16/17)	CUP Monitoring	6. Field Sampling Report for FY16/17 CUP Monitoring	Philip Trowbridge	09/29/17		
19	Delta RMP (FY16/17)	CUP Monitoring	6. Data Management of FY16/17 CUP Data	Amy Franz	12/31/17		Expecting electronic data delivery from USGS' Denver lab in October 2017.
20	Delta RMP (FY16/17)	CUP Monitoring	6. Quality Assurance Report for FY16/17 CUP Monitoring	Don Yee	12/31/17		
21	Delta RMP (FY16/17)	CUP Monitoring	6. Permit Compliance Data for ILRP	Amy Franz	02/01/18	Complete	No longer required per agreement with Regional Board.
22	Delta RMP (FY16/17)	CUP Monitoring	6. Annual Monitoring Report for FY16/17 CUP Monitoring	Thomas Jabusch	02/28/18		The SC voted on 7/28 that this was no longer necessary, and that funds for this task should be reallocated to the Interpretive Report.
23	Delta RMP (FY16/17)	Mercury	8. Mercury YR1 report summarizing fish and water analyses	Thomas Jabusch	12/03/18		