Technical Advisory Committee Meeting Summary
January 17, 2019
at the Department of Water Resources, West Sacramento

Attendees:
TAC members, alternates, and staff present:

<table>
<thead>
<tr>
<th>TAC Members</th>
<th>Representing</th>
<th>Affiliation</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anderson-Abbs, Bev</td>
<td>Regulatory-State</td>
<td>State Water Resources Control Board (State Water Board)</td>
<td>member</td>
</tr>
<tr>
<td>Ashby, Karen</td>
<td>Stormwater</td>
<td>Larry Walker Associates (LWA)</td>
<td>member</td>
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<tr>
<td>DiGiorgio, Carol</td>
<td>Flood control and habitat restoration</td>
<td>Department of Water Resources (DWR)</td>
<td>member</td>
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<tr>
<td>Hoffman, Krista</td>
<td>Water supply</td>
<td>DWR</td>
<td>alternate</td>
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<tr>
<td>Irvine, Cam</td>
<td>POTW</td>
<td>Robertson-Bryan Inc.</td>
<td>alternate</td>
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<tr>
<td>Johnson, Michael</td>
<td>Agriculture</td>
<td>MLJ Environmental</td>
<td>alternate</td>
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<tr>
<td>Laurenson, Brian</td>
<td>Stormwater</td>
<td>LWA</td>
<td>member</td>
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<tr>
<td>Mussen, Tim</td>
<td>POTW</td>
<td>Regional San</td>
<td>member</td>
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<tr>
<td>Phillips, Amy</td>
<td>Stormwater</td>
<td>El Dorado County</td>
<td>member</td>
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<tr>
<td>Smith, Linda</td>
<td>Water supply</td>
<td>Metropolitan Water District</td>
<td>alternate</td>
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<tr>
<td>Turner, Melissa</td>
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<td>MLJ Environmental</td>
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<tr>
<td>Van Nieuwenhuyse,</td>
<td>Coordinated monitoring</td>
<td>Interagency Ecological Program (IEP) / US Bureau of Reclamation (USBR)</td>
<td>member</td>
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<td>Erwin</td>
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Ex-officio and staff

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<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Bean, Jessica</td>
<td>Facilitator</td>
<td>Office of Public Participation/State Water Board</td>
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<tr>
<td>Cole, Selina</td>
<td>Staff, TAC alternate</td>
<td>Central Valley Regional Water Quality Control Board (Central Valley Board)</td>
</tr>
<tr>
<td>Cooke, Janis</td>
<td>Staff</td>
<td>Central Valley Board</td>
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<tr>
<td>Morris, Patrick</td>
<td>Staff</td>
<td>Central Valley Board</td>
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<tr>
<td>Heberger, Matthew</td>
<td>Staff</td>
<td>Aquatic Science Center (ASC)</td>
</tr>
<tr>
<td>McCord, Stephen</td>
<td>TAC Chair</td>
<td>McCord Environmental, Inc. (MEI)</td>
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<tr>
<td>McClure, Danny</td>
<td>Staff</td>
<td>Central Valley Board</td>
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<tr>
<td>Mullane, Jessica</td>
<td>Staff</td>
<td>Central Valley Board</td>
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Others

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<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Chilton, Diane</td>
<td></td>
<td>Stanislaus County</td>
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<td>Henneberry, Yumiko</td>
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<td>Delta Science Plan</td>
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<tr>
<td>Lawson, Dave</td>
<td></td>
<td>Western Plant Health Association</td>
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<tr>
<td>Louie, Stephen</td>
<td></td>
<td>California Department of Fish and Wildlife</td>
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<tr>
<td>Parsa, Hamid</td>
<td></td>
<td>Mountain House Community Services District</td>
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<tr>
<td>Stillway, Marie</td>
<td></td>
<td>Aquatic Health Program Laboratory at UC Davis</td>
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1. Introductions and Agenda
Participants approved the agenda.

DWR staff were introduced as representing new “seats” for (1) flood control and habitat restoration, and (2) water supply.

Facilitator Gita Kapahi did not attend, but colleague Jessica Bean supported the meeting and will likely continue to do so for future meetings.

The list of all published reports was noted and appreciated.

2. Decision: Approve TAC Meeting Summary for September 21, 2018 TAC meeting and confirm future TAC meeting dates
The committee reviewed the upcoming meeting calendar and set the dates below for the March and June TAC meetings.

A concern was expressed regarding the status of an action item from the October Joint SC/TAC Meeting, regarding a memo from the SC co-chair on a process for resolving differences of opinion on toxicity test methods. This issue was resolved by the Toxicity Workgroup before the memo could be issued, so while not technically “done,” it has been marked as complete as the
co-chairs determined it was no longer necessary. Otherwise, the TAC approved the joint SC/TAC meeting summary (which is still pending SC approval in its next meeting).

As a clarification, it was noted that the “Stoplight Report” (agenda package pages 29–37) is a tool used for tracking the status of action items that are logged in the course of doing business or during meetings of various Delta RMP committees. These action items are separate from “contract deliverables” listed in the workplan and which are tracked on a separate sheet with its own stoplight report, also included in each agenda package.

**Upcoming Scheduled Meetings**

- Steering Committee Meeting: Friday, February 22, 2019, Regional San, Sunset Maple Room
- TAC Meeting: March 19, 2019, 10:00 – 4:00, DWR offices in West Sacramento
- TAC Meeting: June 11, 2019, 10:00 – 4:00, DWR offices in West Sacramento

**Decisions:**

- Future TAC meeting dates and locations were set for March and June.
- The TAC Meeting Summary for September 21, 2018 was approved by consensus.

**Action Item:**

- Matt Heberger (ASC): Confirm meeting room locations for the March and June meetings and forward date, time & location information to the committee.

**3. Information Item: Steering Committee Update**

Matt Heberger summarized the focused December 19, 2018 Steering Committee teleconference. The Steering Committee discussed the desired format and key messages for the *Pulse of the Delta*, the program’s flagship publication. The committee provided direction on the scope, theme, and timing of the report. The *Pulse* is scheduled for publication in Summer/Fall of 2020 in order to coincide with the next Bay Delta Science Conference that fall.

**Action Items:**


**4. Project Progress Updates**

Updates were provided from the subcommittees covering CECs (Matt Heberger), Nutrients (Janis Cooke/Tim Mussen), and Data Management (Selina Cole). The committee also discussed the following tables included in the agenda package: Past & Planned Monitoring Events, the Status of Delta RMP Datasets, and the Stoplight Report.

**CECs**

Workplan Subtask 7A, *Development of a Detailed Sampling and Analysis Plan for Contaminants of Emerging Concern (CECs)*, is in progress. Efforts to find opportunities for combining sampling
efforts with other projects have not yielded any solid results. A TAC member suggested that ASC coordinate with Central Valley Board staff implementing a study for the Nutrient Research Plan (Janis Cooke and others). There may be potential to collaborate on clam sampling. Stakeholders previously requested that the deliverable for Subtask 7B, QAPP Amendments, be revised to include development of a new standalone Quality Assurance Project Plan (QAPP) for the planned CEC pilot study (rather than amendments to the existing QAPP), which should be in place by the beginning of the next fiscal year. Matt Heberger has contacted dozens of labs (none of which can analyze for all target CECs) for quotes and is working with ASC staff scientists and subcontractors to work out final details for field sampling and lab analysis. Revised cost estimates for the CECs project should be available in 1-2 months.

**Nutrients**

The Nutrients Subcommittee has been meeting jointly with the Delta Nutrient Research Stakeholder and Technical Advisory Group (STAG). The past two meetings (November 2018 and January 2019) focused on proposal development.

Phase II of the Chlorophyll Sensor Intercalibration Study is ongoing. The two planned field deployments were completed by USGS in October prior to the federal government shutdown. Provisional data from the first deployment is available for review by interested committee members. Planning and potential funding requests for Phase III for FY19/20 are still to be discussed and finalized by the subcommittee.

The status of this last cruise needs to be updated on the Past & Planned Monitoring Events table.

The Nutrients Subcommittee is also working on a proposal for the Sacramento River Nutrient Change Study. The proposal will be requesting $150-200k from Delta RMP. Due to a tight timeline, the subcommittee may distribute this proposal by email directly to the TAC for input, rather than wait for the March TAC meeting. The next subcommittee meeting will be in February.

SFEI’s efforts to develop a nutrient cycling model for the Delta remain underway, and are addressing significant challenges.

The Sacramento River Nutrient Change Study being designed will track the effects of reduced nutrient loads from the Sacramento Regional Wastewater Treatment Plant when its new facility comes online with significantly lower nitrogen loads. Regional San will provide the study plan to the TAC for review, likely by June 2019.

**Data Management**

The subcommittee met the day before, on January 16, 2019. At the suggestion of the subcommittee, ASC has included a new summary, *Status of Delta RMP Datasets*, in the last two TAC agenda packages (page 28). A TAC member requested that staff update this table to reflect the FY16/17 Pesticides data is now published and publicly available in the USGS National
Water Information System (NWIS). The Steering Committee is expected to vote in February to publicly release these data on a California-specific platform, the California Environmental Data Exchange Network (CEDEN). The data management subcommittee is holding discussions on whether to continue putting data in CEDEN given that it is already being NWIS and should make a recommendation in the next few months.

Current Use Pesticides
Joe Domagalski assured via email that USGS still planned to conduct the next scheduled pesticides/toxicity sampling event, given that funding for their work was external to the federal budget. Samples collected from the previous event have been archived and USGS hopes that they can all be analyzed (including those analyzed at the Denver lab) within their holding time limitations.

The storm event trigger was adjusted by Jim Orlando when it was recognized that storms were impacting the Delta yet the trigger was not exceeded. The QAPP will be modified accordingly.

Mercury
Mercury field work is underway and no issues have been encountered. Moss Landing field crew monitored weather throughout November and December with no sampling either month. However, in fulfillment of the winter sampling plan they are responding to the mid-January storm and will collect water from Delta sites next week. They will keep watching the weather and rivers to determine appropriate timing for the second winter event planned.

Action Items:
Matt Heberger (ASC):

- Update the Status of Delta RMP Datasets to reflect Nutrients high frequency cruise completed in October.
- Update FY18/19 Jan-Jun Mercury Dates to 2019 on Past & Planned Monitoring Events Table.
- Coordinate with Janis Cooke on potential collaboration for clam sampling.
- Add an Errata sheet to the FY 15-16 Aquatic Toxicity Report, which has been finalized, was approved by the TAC and SC, and is publicly available, and the FY16-17 report, which has been review by the TAC.
- Confirm the continued participation of Toxicity Identification Evaluation (TIE) Committee members and forward the roster to Marie Stillway.
- Forward email from Dave Lawson on DPR Mitigation of Pesticides in CA Surface Water Pesticide Symposium scheduled for April 9 and 10.
- Add “review management & assessment questions” to the agendas of future subcommittee meetings in each focus area.

5. Delta Science Program Update
Yumiko Henneberry provided an overview of the many current science initiatives which the Delta Science Program (DSP) participates in and supports. Specifically, the DSP had reached out
to the Delta RMP Steering Committee and TAC co-chairs with a request to participate in the Social Science Task Force kick-off meeting on January 29. The Task Force aims to integrate social science concepts and research into the many ongoing research and management activities in the Delta. Stephen McCord, TAC Chair, will present about the Delta RMP. All Delta RMP participants are invited to attend. Yumiko also provided an update on the following: status of the Fall 2018 Proposal Solicitation, Grants & Fellowships, Operation Baseline Stakeholder Meeting, and the Adaptive Management Forum. The Delta Science Program will have a standing agenda item for TAC meetings going forward.

**Action Item:**
- Matt Heberger (ASC): Add Delta Science Program Update as a potential standing item on all future TAC agendas.

6. Communications with contract labs

Program staff have requested all communication with labs go through the contract manager, in order to maintain effective communications and make better use of lab staff’s time and resources. A copy of the January 7, 2019 memo sent to Delta RMP Steering Committee, TAC and Subcommittees was included in the agenda package (page 44).

7. Management Drivers related to Delta monitoring

The committee discussed the 2019 Management Drivers table. The table is intended to convey current and future drivers stemming from statewide and regional efforts. It also includes information on the nexus with Delta RMP stakeholders and priorities, as well as links and other leads for more information.

The committee recommended several revisions to the table during the discussion, but also requested it be converted to a Google Sheet and shared with committee members for additional direct input. Suggested revisions include:

- Add “science agendas” to the list of drivers.
- Agree on a framework first, begin with a few drivers that are clearly relevant, slowly add in missing elements.
- Add a comments column to identify what management and assessment questions could potentially have a nexus with each driver.
- Create columns for the management questions
- Eliminate the horizontal section dividers: Existing/Future, State/Central Valley
- Create some way to rank for relevance
- Specify the type of information needed in the comments column.

**Action Items:**
- Matt Heberger (ASC) will convert the Management Drivers table to a Google Sheet, incorporating the suggestions from the committee, and distribute to the committee.
Committee members should provide input on the new table to Matt by January 31.

Wrap Up
Action Items are as stated in the Summary.

Potential future agenda items include:

- Science Advisors Engagement Plan
- CECs QAPP and funding updated
- Nutrients updates (chlorophyll sensor intercalibration, research plan)
- Closure on the toxicity testing issues raised in late 2018.
- Deltares work update
- Adjustments to the pesticides sampling triggers and assessment questions