



## **Delta Regional Monitoring Program (RMP) Technical Advisory Committee (TAC) Meeting**

**September 20, 2016**

**12:30 – 4:30 PM**

**Central Valley Regional Board, 11020 Sun Center Drive #200, Rancho Cordova, CA**

### **Summary**

#### **Attendees:**

*TAC (and/or Alternate) members present<sup>1</sup>:*

Stephanie Fong, Water Supply (State and Federal Contractors Water Agency)

Brian Laurenson, Stormwater – Phase I (Larry Walker Associates)

Stephen McCord, TAC co-Chair (McCord Environmental, Inc.)

Mike Johnson, Agriculture (MLJ LLC)

Tim Mussen, POTWs (Regional San)

Debra Denton, Regulatory – Federal (U.S. EPA Region 9)

Tony Pirondini, POTWs (City of Vacaville)

Hope Taylor, Stormwater – Phase I (Larry Walker Associates)

Danny McClure, Regulatory – State (Central Valley Water Board)

Janis Cooke, Regulatory – State (Central Valley Water Board)

Lisa Thompson, POTWs (Regional San)

Tessa Fojut, Regulatory – State (Central Valley Water Board)

Melissa Turner, Agriculture (MLJ LLC)

Joe Domagalski, TAC co-Chair (U.S. Geological Survey)

Karen Ashby, Stormwater – Phase II (Larry Walker Associates)

Dawit Tadesse, Regulatory – State (State Water Board)

Amy Phillips, Stormwater – Phase II (El Dorado County)

#### *By phone:*

Shaun Philippart, Coordinated Monitoring (IEP/DWR EMP)

#### *Others present:*

Patrick Morris, Central Valley Regional Water Board

Thomas Jabusch, SFEI-ASC

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<sup>1</sup> Name, Representing Category (Affiliation)

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Selina Cole, Central Valley Regional Water Board  
 Rachel Kubiak, Western Plant Health Association  
 Jim Orlando, USGS  
 Yumiko Henneberry, DSP  
 Armand Ruby, Armand Ruby Consulting  
 Phil Trowbridge, SFEI-ASC  
 Marie Stillway, UC Davis AHPL  
 Josie Tellers, City of Davis (SC representative for POTWs)  
 Cam Irvine, CH2M  
 Scott Wagner, DPR  
 Dave Tamayo, Sacramento County (SC representative for Stormwater – Phase I)  
 Val Connor, GEI (SC representative for Water Supply)

1.	<p><b>Introductions and Agenda</b></p> <p>Item #8 Process for Pesticide Prioritization and Schedule was moved up before Item#7 to allow participation by TAC members who needed to leave the meeting early.</p>
2.	<p><b>Approve Draft TAC Meeting Summary (June 14, 2016)</b></p> <p>The meeting summary was unanimously approved.</p>
3.	<p><b>SC Updates</b></p> <p>TAC co-Chairs summarized the outcomes of the July 20 SC meeting.</p>
4.	<p><b>Update/Decision: Update on Monitoring Activities and Recommend ASC Technical Reports for SC Approval</b></p> <p>ASC prepared two technical reports: 1) Quality Assurance (QA) Report for Year 1 Pathogens Data, and 2) FY15/16 Pesticides Field Sampling Report. Both reports were recommended for approval, with no objections.</p> <p>The QA report for pathogens data contained no surprises and concluded that the obtained data are generally low-biased lower bound estimates. The bias is inherent in the method used (USEPA1622/23), which is the standard method for assessing source waters for drinking water treatment plants.</p> <p>The Pesticides Field Sampling Report documents field sample collection, any deviations from the field sampling procedures described in the Quality Assurance</p>

	<p>Project Plan (QAPP), and field conditions on the days of sampling. Laboratory results will be presented in another report by February 1, 2017. TAC members had several suggestions for improvements and minor revisions.</p> <p>The RMP’s Nutrient Monitoring Workshop will be held Sept. 30. The meeting is open, so any interested stakeholders contact Thomas for information.</p> <p>The QAPP was also adjusted to address logistical constraints for sampling for mercury. Samples are collected with bottles rather than flow-weighted composites.</p> <p><u>Recommendations:</u></p> <ul style="list-style-type: none"> <li>- The pathogen QA report was recommended for SC approval</li> <li>- Pesticides Field Sampling Report was recommended for SC approval with the following changes: <ul style="list-style-type: none"> <li>▪ Graph showing Delta flows and sampling days: separate graphs for Sacramento and San Joaquin rivers, to make it easier to see flows in the smaller tributaries</li> <li>▪ Consider including MWQI real-time data for comparison, at co-located stations (i.e. Hood and Vernalis)</li> <li>▪ Separate box plots for water quality parameters (water temperature etc.) at individual sites</li> <li>▪ Include corrective actions and field recommendations for QA issues and deviations from QAPP that have occurred</li> <li>▪ More explanation about deviations of sampling depth, number of QC samples for each parameter (e.g., toxicity blank samples), and hold times from those defined in the QAPP</li> </ul> </li> </ul>
<p>5.</p>	<p><b>Update: USGS High Frequency Sensor Report</b></p> <p>USGS staff provided a status update and explained the steps involved in the USGS review and publication process. The group discussed at which step in this process the final TAC review and SC approval should occur, and the timing.</p> <p><u>Recommendations:</u></p> <ul style="list-style-type: none"> <li>- Present the next revision endpoint (draft to be submitted to the next</li> </ul>

	<p>level of USGS supervisory/scientific review and response letter) for general approval at the Oct 18 SC/TAC meeting, including a summary of comments received in the USGS review and of the responses. The report will go through additional USGS review and edits after this but the substance of the report will not change.</p>
<p>6.</p>	<p><b>Information: DPR's Evaluation of Pesticide Use and Concentrations in CA's Surface Waters</b></p> <p>DPR staff provided an overview of the Surface Water Prioritization Model, which is a decision support tool for prioritizing pesticide analytes for surface water monitoring projects. The Model incorporates two processes: 1) pesticide ranking per use amounts and toxicity data, and 2) pesticide screening based on historical monitoring results, physical-chemical properties, registered use sites, and application methods. Pesticide use report (PUR) data are available for agricultural, urban (only those applied by commercial applicators), and "Right of way" uses. The model provides a scientifically defensible decision basis for prioritizing pesticides but also has limitations that users should recognize. Meeting participants pointed to some of the limitations with PUR data, including lag time (normally 2 years behind) and the lack of reporting for uses by homeowners. It was suggested that home uses could be roughly estimated from sales at the county level.</p>
<p>8.</p>	<p><b>Discussion: Process for Pesticide Prioritization and Schedule</b></p> <p>At the July 20 Steering Committee meeting, there was consensus on the need for a process to review and update the list of pesticide analytes reported by the Delta RMP. The main purpose of this agenda item was to agree on a process and a schedule for updating the Delta RMP's list of pesticide analytes. The group agreed on a planning process that would result in an updated list of pesticide analytes by April 2017, in time for inclusion in the FY17/18 Workplan. There was agreement that the process could be somewhat iterative. The following recommendations were provided and will be brought to the SC for confirmation at the October 18 SC/TAC joint meeting:</p> <p><u>Recommendations:</u></p> <ul style="list-style-type: none"> <li>- The proposed process would involve two (remote) meetings of the Pesticides Subcommittee. The charge of the subcommittee would be to</li> </ul>

	<p>develop a process for prioritization, including guidance on what type of system to use (i.e. bins vs. decision tree) as well as proposed weighting factors and/or criteria. It was agreed that a system of bins or a decision tree to group pesticides into different categories would be more useful than a straight ranking of pesticides (e.g., 1-200).</p> <ul style="list-style-type: none"> <li>- A first Subcommittee meeting, to be scheduled in October, would deal with the prioritization approach and the initial prioritization of pesticide analytes. The prioritization could be informed by the output from DPR’s SWMP model, along with factors such as preliminary Delta RMP data and other datasets, management interest (TMDLs, water quality objectives, ILRP’s prioritized analytes), expert knowledge on new pesticide use, and any relevant comments from the Independent Review Panel.</li> <li>- The second Pesticide Subcommittee meeting would be scheduled in November, with the aim of “rectifying” the initial prioritization against available analytical methods, method detection limits, and potential laboratories.</li> <li>- Stephen McCord would lead the meetings, with coordination and technical support provided by ASC.</li> <li>- The TAC would review the prioritized and “rectified” list of analytes in its December 13 meeting.</li> <li>- The SC would provide a budget range in the Oct. 2016 joint meeting, and would approve the prioritization process and prioritized (“selected”) list of analytes in its January 2017 meeting.</li> </ul>
<p><b>7.</b></p>	<p><b>Information: Update on Pyrethroids TMDL</b></p> <p>Regional Water Board staff provided an update on the Central Valley Pyrethroid Pesticides TMDL and Basin Plan Amendment and discussed a potential monitoring nexus with the Delta RMP. After a Dec. 2016 hearing, Regional Board approval of the TMDL and Basin Plan Amendment are expected in 2017. TMDL monitoring is expected to start in 2018 or 2019. The Regional Board is also proposing a general pyrethroids control program that would apply to all dischargers that are not subject to the TMDL. Monitoring related to the pyrethroids control program would be more likely to being in 2018. The regulatory documents provide language that would</p>

	<p>allow data collection through a regional or statewide program. However, the monitoring needs for TMDL implementation and the Delta RMP’s monitoring design for pesticides currently don't match up. The Delta RMP monitoring data is expected to provide some ambient water quality context for the TMDL but does not specifically represent the small urban streams listed for pyrethroid impairments or sites that are representative of certain land uses. TAC members generally agreed that there would be inherent value in having both sets of data.</p>
<p>10.</p>	<p><b>Discussion: Joint TAC-SC Meeting (October 18<sup>th</sup>) – Planning for the meeting</b>          (Discussed out of sequence. There was a logical segue from the discussion of Basin Plan Amendments to the discussion of the Management Drivers Table for the joint TAC-SC planning meeting.)</p> <p>TAC members reviewed a table of existing and upcoming policy decisions and management drivers for the upcoming joint SC/TAC planning meeting. The pyrethroids TMDL entry on the table should note that monitoring will start in 2018 or 2019. One of the upcoming priorities in the Central Valley will be a regional pilot study on contaminants of emerging concern (CECs). This issue will be discussed at the SC/TAC meeting on October 18. TAC members also commented that a few items are missing from the table: pesticide-related TMDLs, EcoRestore, and DO in the Stockton Deep-water Ship Channel</p>
<p>9.</p>	<p><b>Information: Toxicity - Update on FY15/16 Activities and Plans for FY16/17</b></p> <p>AHPL staff presented a summary of the FY15/16 toxicity results. The results are captured in a case narrative document that will be included as a Technical Appendix to the Pesticide Annual Data Summary Report. The monitoring data report is planned for February 2016. It will present the combined chemical-analytical and toxicity testing results.</p> <p><u>Recommendations:</u></p> <ul style="list-style-type: none"> <li>- The report should have a cover memo indicating that it will be a technical appendix of the FY15/16 Current Use Pesticides and Toxicity Monitoring Report.</li> <li>- TAC members have one month for comments on the report.</li> </ul>
<p>11.</p>	<p><b>Updates and wrap-up</b>          Nutrient Monitoring Planning Workshop</p>

	<ul style="list-style-type: none"> <li>- The Workshop will be held on September 30, with the main goal of developing recommendations for “no regrets” monitoring and analyses that the Delta RMP could implement</li> </ul> <p>Pesticides</p> <ul style="list-style-type: none"> <li>- The Regional Board has contracted UC Davis AHPL for a new study on the toxicity of herbicides on algae native to the Delta. The list of herbicides to study is currently being narrowed and the experimental work is expected to begin later this year.</li> </ul> <p>Supplemental Environmental Projects (SEPs)</p> <ul style="list-style-type: none"> <li>- The Regional Board is looking for funding ideas for SEPs from the Delta RMP. TAC members are encouraged to coordinate with their SC representatives and develop ideas for Delta RMP projects at different funding levels. These ideas would be discussed and prioritized at the joint meeting. Proposed activities for which there isn’t enough Delta RMP funding to be fully implemented could be proposed for upcoming SEPs.</li> </ul> <p>External Science Panel Review</p> <ul style="list-style-type: none"> <li>- Delta Science Program staff will receive the first draft of the review on Thursday, September 22. Shortly after, the External Review planning committee will meet to discuss the review and how to respond. Several members suggested adding more TAC representation on the planning committee. The suggested way forward is to a) a preliminary response by the planning committee (mainly how to provide missing information), and b) having additional technical people involved in the final response.</li> </ul> <p>Next TAC Meetings</p> <ul style="list-style-type: none"> <li>- December 13 and March 14</li> <li>- TAC members commented that TAC Meetings should be longer to allow more time for important discussions. At the December 13 meeting, there should be more time to discuss the pesticide prioritization and the external science panel review</li> </ul> <p>Action Items</p> <p><i>Nutrient Sensor Synthesis Report</i></p>
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	<ul style="list-style-type: none"> <li>- Send report including reconciled comments to TAC and SC (Joe Domagalski, by October 11)</li> </ul> <p><i>Pesticide Prioritization</i></p> <ul style="list-style-type: none"> <li>- Modify the slides for the proposed process for pesticide prioritization before including them in the Oct 18 SC/TAC meeting agenda package or sending them to the Pesticides Subcommittee (Stephen McCord, by October 4)</li> <li>- Send Doodle poll for first Pesticides Subcommittee Meeting (Thomas Jabusch, by September 22) – <i>Done</i>.</li> <li>- Add a cover page to the toxicity report that explains how it fits into the overall reporting plan (Thomas Jabusch, by December 6)</li> </ul> <p><i>Joint TAC-SC Meeting</i></p> <ul style="list-style-type: none"> <li>- Send comments on management drivers table and Section 7B (TAC) of the approved Delta RMP Charter to Phil Trowbridge (all TAC members, by October 4)</li> <li>- Prepare slides about the TAC roles and responsibilities in the Charter and share them with the TAC for review before the October 18 meeting (Stephen McCord by 10/17).</li> </ul>
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**Parking Lot**

- Vote on TAC co-chairs and confirm TAC membership at next meeting.
- Identify opportunities for Delta field experience by TAC members
- Pesticides
  - Benchmarks