

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

March 5, 2014

1:00 – 4:00 PM

**Sacramento Regional County Sanitation District Building
Sunset Maple Room
10060 Goethe Road, Sacramento, CA 95827**

Draft Summary

Attendees:

Voting TAC (and/or Alternate) members present¹:

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

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

Meghan Sullivan, Regulatory – State (Central Valley Regional Water Board)

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

Vyomini Upadhyay, POTWs (Sacramento Regional CSD)

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

Claus Suverkropp, Agriculture (Larry Walker Associates)

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

Timothy Mussen, POTWs (Sacramento Regional CSD)

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

By phone:

Tony Pirondini, POTWs (City of Vacaville)

Erwin van Nieuwenhuysse, Coordinated Monitoring (U.S. Bureau of Reclamation)

Others present:

Thomas Jabusch, SFEI-ASC

Jay Davis, SFEI-ASC

Rachel Kubiak, Western Plant Health Association

Tessa Fojut, Central Valley Regional Water Board

On phone:

Dave Senn, SFEI-ASC

1.	Introductions A quorum was established.
2.	Discussion of Agenda

¹ Name, Representing Category (Affiliation)

	<p>Joe Domagalski introduced the meeting and identified the ultimate meeting goal as forming subgroups to do the “real work” of designing the monitoring plan. The subgroups would need to get started soon due to the ambitious schedule and so that participants get to know each other and up to speed.</p> <p>There was some discussion about the expected variation in funding estimates for the different constituents, which would be expected without a predetermined budget. One concern was that subgroups or their individuals might provide high-cost monitoring proposals strategically to maximize the budget share spent on a particular constituent. Karen Ashby said she hoped the groups wouldn't come up with Cadillac versions just because they are competing for the same funds. Stephen McCord explained that the involvement of all TAC members and program staff in one or several subgroups would provide consistency among subgroups and coordination between the TAC and subgroups. He also explained the need for going into subgroups with a clean slate rather than defining cost ceilings at this point. There was a vivid discussion on the need of separating into subgroups instead of an experimental design approach by which the TAC would systematically identify the most important stressors in the Delta ecosystem. However, participants ultimately came together around the idea of designing the program with complimentary roles by SFEI, the subgroups, the TAC, and the SC.</p> <p><u>Outcome:</u></p> <ul style="list-style-type: none"> - Integration of constituent-specific monitoring designs will happen at TAC level.
3.	<p>Announcements from Committee Members</p> <p>There were no announcements.</p>
4.	<p>Roadmap and Template for Monitoring Design</p> <p>Stephen McCord walked the group through a draft template for a monitoring design to be used by each subgroup. He noted that the subgroups wouldn't be expected to fully define/design the monitoring program. The full detail of the monitoring design (power analysis, final selection of sites, etc.) would be done after the constituent-specific designs are compiled into a final monitoring plan. He reiterated several key points discussed by the Steering Committee (SC), particularly the initial focus on Status and Trends (S&T). Another key question is whether to base the design on available funding or start with a design first and then adjust to match available funding. The guidance by the SC was to try to build on the assessment questions and develop a monitoring and assessment plan that answers</p>

the most important questions first and include a range of costs.

The group discussed several edits. The edited monitoring design guidance points will be shared with the SC for informational purposes only.

There was some discussion about conceptual models, special studies, and the level of detail needed in the design template. All TAC members agreed on the need for brevity for the discussion of conceptual models, simply identifying and summarizing existing models. Karen Ashby and Stephanie Fong felt that the template would need to make a clearer distinction between guidelines and the information to be filled in. Claus Suverkropp noted that the pesticide guidance included examples that are very specific to pesticides.

Debra Denton asked to discuss the selection of sites, due to the importance of having “bread and butter” stations. She advised to include Sacramento River at Hood as an integrator site, since it is downstream of various significant sources to the Delta, such as the Colusa Drain and the Sacramento Regional Wastewater Treatment Plant. Thomas Jabusch and Stephen McCord suggested that it would be helpful to provide the proposed ambient background monitoring sites of the NPDES discharger group to the TAC.

Debra Denton pointed to the need to include cost information, which she requested to be provided as unit cost. She also pointed to the need for quality assurance/quality control (QA/QC) guidance by the TAC and to ensure that cost estimates include QA/QC.

Jay Davis suggested that it would be efficient if the subgroups would initially hammer out a broad-brush design and fully flesh out the details after review and with approval by the SC.

There was some discussion about the use of hydrologic models to inform the design. Stephen suggested that hydrologic models would be useful for two main purposes under whatever flow conditions are of interest: 1) to fingerprint where water is coming from, and 2) to predict where water goes. Modeling resources include the California Department of Water Resources (DWR) group, Jon Burau, and the Research Management Associates (RMA) Particle Tracking Model (RMATRK).

	<p>Finally, there also was discussion about the adequacy of the existing monitoring coverage for the priority constituents. Nutrients are presumably well covered by existing monitoring efforts. Joe Domagalski noted that pesticides are well covered by USGS monitoring at Freeport and Vernalis. However, samples at these stations are collected according to a pre-planned monitoring schedule, which does not specifically address stormwater. Stephanie and Claus pointed out that this gap would be a “huge hole”.</p> <p><u>Outcome:</u></p> <ul style="list-style-type: none"> - Monitoring design to focus primarily on targeted (as opposed to random) sites. Eventually, random sites and/or local intensification may be added. - Discussion of indicators will need to include matrices and sampling protocols
5.	<p>Reviews of the Information Packets for Each Priority Group of Constituents</p> <p>Stephen McCord described the information packets for each priority group of constituents as works in progress and noted that TAC members shouldn’t hesitate to inform the lead authors to correct the packets, as needed.</p>
6.	<p>Current Monitoring Information</p> <p>Thomas Jabusch provided a brief overview of the Central Valley Monitoring Directory (www.centralvalleymonitoring.org) and several additional materials provided to the TAC as informational background for planning, including the Estuary Portal’s index of monitoring programs, data sources, and reports and an ASC report Summary of Current Water Quality Monitoring in the Delta (Jabusch and Gilbreath 2010). The monitoring directory is a map-based tool that serves as a live online inventory of water quality monitoring efforts. It is not designed as a data access point. However, it does provide links to data access points and information products of individual programs, where such information has been provided. Several TAC members noted that it would be a useful tool for evaluating the feasibility of coordinating with and leveraging existing monitoring.</p>
7.	<p>Technical Subgroup Assignments</p> <p>Stephen McCord suggested that it would be good if the assessment questions would be tackled in the first meeting of each subgroup. He also noted that identifying, reviewing, and summarizing useful conceptual models would be a good early subgroup task.</p> <p>There was some discussion on how to form the subgroups. Debra Denton stated that she does not intend to fill the pesticide committee by sector interest^s. Stephen responded that the subgroups are formed with the purpose of getting things done</p>

	<p>and that it would be up to the leads to decide on their membership. He advised that excluding interested individuals from participating would ultimately turn out to be counterproductive.</p> <p>Joe Domagalski suggested that it would be good to talk about a desirable number of participants for the subgroups. Jay Davis suggested a group size of less than 10. Debra Denton commented that time efficiency would be an important factor in deciding on the size and composition of the group. Jay suggested that it would be worthwhile to have 5-6 core members in each group. With regards to the time commitment, Stephen pointed out that the subgroups are <i>ad hoc</i> and will only continue to exist as long as needed. Meghan Sullivan added that the work schedule for the subgroups would be very intense over the next several months. However, as Claus Suverkropp noted “on the positive side”, there is no commitment beyond the completion of the initial monitoring design.</p>
<p>8.</p>	<p>Communication Tools</p> <p>Thomas Jabusch provided a demo of the new website for the TAC. The website and Google groups for the TAC and each subgroup provide a platform to maintain communication among TAC and subgroup members, sharing findings, and coordinating meeting materials. The next step will be the cloning and customizing of the existing pages for each of the subgroups.</p>
<p>9.</p>	<p>Wrap-up</p> <p>Meeting rooms are available at SRCSD, LWA, the Regional Board, and CSUS/USGS.. The TAC will meet in early May</p> <p><u>Outcome:</u></p> <ul style="list-style-type: none"> - The schedule for completing a monitoring design by September was ok’d
<p>10.</p>	<p>Action items:</p> <ul style="list-style-type: none"> 9.1. Poll planning team for a prep meeting date prior to the TAC meeting (Thomas, by March 14) 9.2. Post the latest/confirmed versions on the TAC web page and share the links with the TAC of (1) the assessment questions (Thomas, done) and (2) the map of ambient monitoring sites useful for permit compliance (Stephen, by March 14). 9.3. Get the email distribution list for each subgroup from each lead, create groups for each, and share the address with each lead (Thomas, by March 14) 9.4. Ask for representative videos of Delta hydrodynamics from modelers using RMA-2 and DSM-2 (Stephen, by March 14) and USGS (Joe to ask Jon

	<p>Bureau, by ___); post the best ones on the TAC web page and share links with the TAC (Thomas, by March 17)</p> <p>9.5. Poll the TAC for a meeting date in early May, prior to the SC meeting (Thomas, by March 21)</p> <p>9.6. Produce a template table for use by/with each subgroups to compile unit costs and estimate sampling costs for monitoring design options [Stephen will share a possible starting point]; post on the TAC web page, and share the links with the TAC (Thomas, by March 31)</p> <p>9.7. Share with SC the monitoring design guidance points from the outline doc (Meghan, by April 16):</p> <p>9.8. Subgroups start on initial assignment of reviewing and refining the assessment questions, listing possible data products, and considering possible monitoring designs (all TAC subgroups, by early May)</p> <p>9.9. Clone the TAC web page for each subgroup (Thomas/SFEI-ASC, done)</p> <p>9.10. Clean up and distribute to the subgroup leads the monitoring design outline (Stephen and Joe, done)</p> <p>9.11. Clean up and distribute to the subgroup leads the ppt "kickstart" file (Stephen, done)</p>
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