



# Technical Advisory Committee Meeting Summary

Friday, June 29, 8:30 am – 11:00 am  
Phone/Online

## Attendees:

<b>TAC Members</b>	<b>Representing</b>	<b>Affiliation</b>	<b>Position</b>
Anderson-Abbs, Bev	Regulatory-State	State Water Resources Control Board	member
Cole, Selina	Staff, TAC alternate	Central Valley Regional Water Quality Control Board (CVRWQCB)	alternate
Denton, Debra	Regulatory-Federal	US Environmental Protection Agency (EPA)	member
Domagalski, Joseph	TAC Co-Chair	U.S. Geological Survey	co-chair
Heberger, Matthew	Staff	Aquatic Science Center (ASC)	staff
Irvine, Cam	POTW	Robertson-Bryan Inc.	alternate
Johnson, Michael	Agriculture	MLJ-LLC	alternate
Laurenson, Brian	Stormwater	LWA	member
McClure, Daniel	Regulatory-State	CVRWQCB	member
McCord, Stephen	TAC Co-Chair	McCord Environmental	co-chair
Mussen, Tim	POTW	Regional San	member
Phillips, Amy	Stormwater	El Dorado County	member
Turner, Melissa	Agriculture	MLJ-LLC	member
Taylor, Hope	Stormwater	LWA	alternate

## 1. Welcome and Introductions

Our facilitator Gita Kapahi was on vacation, so co-chair Stephen McCord led the meeting. The objective for the meeting was to review proposed monitoring designs for pesticides and toxicity for Water Year 2019. The TAC is an advisory body, does not hold official votes, and there are no requirements for a quorum in the Charter.

## 2. Pesticide Monitoring Proposal Discussion

Matt gave a brief overview of the summary of rankings submitted by TAC members. The questionnaires were filled out by 12 members. One respondent only filled in one of the two questionnaires; this could have biased results, but Matt analyzed the results both with and without this individual response, and it did not make an appreciable difference.

Co-chair Stephen McCord gave a high-level summary of the competing proposals: both designs have limitations; there are concerns among some TAC members about both the rotating basin AND the fixed site monitoring. The main concerns are well documented in the narrative summary that will be provided to the Steering Committee (SC). This summary includes all of the numeric responses to the survey questions, and all of the responses from the free-form text fields. No attribution is given for any of the text responses.

- The two proposals are essentially near variants of one another. The questions was raised as to whether this responsive to the Steering Committee's stated desire for options?  
Reply: the Pesticides Subcommittee chose the 2 existing options from among half a dozen alternatives at a meeting in March, led by our facilitator. [In addition, the two options were presented to the SC at its May 11 meeting, and there was no disapproval at the time.]
- Rotating basin does not return to any given site for 3 years. Any follow-up on exceedances would have to be done through a special study, and is not funded by the current proposal.

Overall, most TAC members expressed a preference for option B, the hybrid design that includes monitoring at 2 fixed sites. Three out of 11 TAC members present preferred Option A but all could "live with" and still support Option B.

**Action Item:** Add the following as a disadvantage for Option B: It will takes more time and money to complete the study.

One TAC member noted that Water Quality Criteria are described by an exceedance frequency, and is concerned that Option A (rotating basin) does not give evidence for this, and therefore may not be useful in creating a 303(d) listing, or management plans. Nor would it help us to identify problems in a specific reach, since we would only be sampling it once or twice.

It was agreed that we are limited by funding, and we would like more money for monitoring pesticides in the future.

## Thresholds

The language around the thresholds was (intentionally) imprecise, as we deferred this important item (choice of water quality benchmarks or thresholds) to the interpretive report.

**Action Item:** Add more info to the proposal about what the Interpretive Report will tell us and how this could affect the analysis of the data and guide future monitoring designs (adaptive management).

## Chironomus toxicity testing

In general, use of this organism is useful, classified as “for research purposes” rather than for the purpose of regulation. There is a risk of the SC “line-item vetoing” testing with *Chironomus* due to uncertainty and doubt over the reliability of the results. Some SC members would like reassurance that the results will not be used in unanticipated ways. It was suggested that we get a definitive answer from SQAMP QA Officer Melissa Morris. New method documents or “measurement quality objectives” (MQOs) will be approved soon. State Board is planning a discussion with EPA about whether there will be flags attached to these data and how it will affect its use by regulators. See action item below.

*Chironomus* and *Hyalella* are currently listed as approved “alternate” test organisms by the EPA. Our memo has the potential to confuse SC members, as it states that *Chironomus* is a long-standing test organism, but at the same time the methods are still up in the air.

Debbie Webster and CVCWA have tentatively offered to help fund sending split samples to other toxicity labs to confirm whether the results are consistent and repeatable. There was spirited debate on the utility of split samples, and whether it is even appropriate. There is a danger in doing the study poorly and creating more uncertainty and doubt. One TAC member asserted that there is no need for such a study, as long as our lab is doing the method correctly and maintaining all the right records. On the other hand, it was noted that the SCCWRP’s *Hyalella* intercalibration study produced a lot of useful findings. Labs were using different methods. There were many minor differences. The study helped bring this out and move the field forward.

## Additional Details Needed, QAPP Update to be a large effort

Several important details have been left open-ended, to be developed in the future. Matt noted that SFEI scientists typically draft a proposal that outlines a monitoring program, and then develop a detailed “sampling and analysis plan” after funding is approved, for example choosing the specific monitoring sites for a probabilistic design. This is appropriate because this takes time and money that would not be well spent in the proposal stage. Because the Delta RMP has a detailed Quality Assurance Program Plan (QAPP), it is appropriate to add these details to this document. These details are important discussions, should not be left to the last minute. It was agreed that ASC should set dates for when these discussions will take place, and communicate this plan to the SC.

## Action Items

- Find out how Chironomus toxicity data will be flagged in CEDEN and what implications that has for use by regulators (Bev Anderson and Melissa Morris, by 7/12/2018)
- Schedule meetings of the Pesticides Subcommittees and Toxicity Workgroup for July and August (Matt, by 7/12/2018).
- Send a track changes version to TAC members to show exactly what changed (Matt H, by 7/1/2018).
- TAC members with any additional comments, especially any dissenting opinions (TAC members, by 7/1/2018)
- Stephen McCord to send his “talking points” about the proposal to TAC members for review (by 7/10/2018).
- Distribute slide presentation about the proposal to TAC members (Stephen and Matt, by 7/12/2018).