



**SRWP Monitoring Committee**  
**~ Meeting Summary ~**  
**Thursday, June 11, 2015**  
**10:00 a.m. – 12:00 p.m.**  
**DWR North Central Region Office**  
**3500 Industrial Blvd., West Sacramento, CA 95691**

**Facilitator:** Stephen McCord, McCord Environmental, Inc. (MEI)

**Meeting Summary by:** Holly Jorgensen (SRWP); Stephen McCord (MEI)

## **Attendees**

### In Person

Holly Jorgensen, SRWP

Stephen McCord, MEI

Christy Tanner, UC Davis

Bev Anderson, SWRCB

Yumiko Henneberry, Delta Science Program

Brian Laurenson, LWA

Mark Bettencourt, DWR

Andy \*\*, CVRWQCB

Bruce Houdesheldt, NCWA-SVWQC

Steven San Julian, DWR - MWQI

Selina Cole, CVRWQCB

Fraser Shilling, UC Davis

Alisha Wenzel, CVRWQCB

Sam Safi, Regional San

Patrick Morris, CVRWQCB

### Via Phone

Tracy Wyhlidko, City of Redding

Dennis Heiman, SRWP

Jon Marshak, SWRCB-Monitoring Council

Kelsey Cowin, SFCWA

## **I. Welcome and Introductions**

Stephen McCord reviewed the agenda and gave a quick overview of the Monitoring Committee including its history, purpose, and recent activities.

## **II. Current News and Activities**

- Alisha Wenzel (SWAMP): The Surface Water Ambient Monitoring Program (SWAMP) includes three main statewide monitoring studies: a bioassessment monitoring program that encompasses both fixed reference sites and randomly distributed (and varying) sites to track changing conditions, a bioaccumulation program that focuses on whether fish in streams, lakes and coastal areas are safe to eat, and a stream pollution trends (SPoT) program that monitors sediment contaminants and toxicity at ~15 sites in the Sacramento River Watershed.

The regional SWAMP includes the Sacramento Watershed Coordinated Monitoring Program (SWCMP), which coordinates CVRWQCB and the Department of Water Resources (DWR)

Northern Region (led by Scott McReynolds) monitoring of water quality in the Sacramento River Watershed. The SWCMP started in 2008 and currently includes 56 sites along the Sacramento River mainstem, riparian reserves, major tributaries, and 12 mid-elevation sites along key tributaries.

All data generated by DWR is uploaded to its own Water Data Library (WDL), which is difficult to access and navigate. Some of the data are entered into the SWAMP database and CEDEN depending on where the data is analyzed. Jon Marshak added that the WDL has recently been connected to the Federal Water Quality Exchange. Fraser Shilling asked about duplication and the use of a common identification method. There is a statewide effort to integrate the monitoring data with some limitations on transferability. Alisha explained that SWAMP lacks the resources to coordinate and summarize monitoring data. Consequently, no other stakeholders participate in the monitoring design, and no assessment reports have been produced.

Another ongoing program in the Sacramento River Watershed includes the Safe to Swim monitoring by local volunteers at ~170 popular swimming sites. SWAMP is also funding two projects by UC Davis (UCD): (1) sediment contamination monitoring in the Colusa Basin Drain and downstream impacts on the Sacramento River, and (2) bioassessment monitoring in Battle Creek to evaluate benefits of restoration projects. Reports should be available in September 2015.

Regional SWAMP also supports the Delta Regional Monitoring Program (RMP) with funding of upcoming toxicity testing for pesticides impacts.

SWAMP is funded through US Environmental Protection Agency (EPA) grants, NPDES permit fees, and Irrigated Lands Regulatory Program (ILRP) fees.

- Steve San Julian (DWR – MWQI): DWR's Municipal Water Quality Investigations (MWQI) program is largely funded through the State and Federal Contractors Water Agency (SFCWA). The geographic focus is on the Delta, plus as far north as Colusa on the Sacramento River. MWQI has been monitoring routinely (typically monthly) and numerous special studies for the past 30 years in support of the State Water Project. MWQI also began two years of monthly pathogen sampling for the Delta RMP in April 2015. The MWQI operates five real-time monitoring stations in the Delta. The data are available on the WDL, CEDEC, and at UCD.
- Bruce Houdesheldt (NCWA – SVWQC): The geographic scope of the Sacramento Valley Water Quality Coalition (SVWQC) includes 1.4 million acres of irrigated lands and ~100,000 acres of refuges from Dixon-Solano in Sacramento County to the Pit River Watershed. Approximately 8,700 landowners participate in the program through 13 sub-basin groups. The program now SVWQC monitors ~ 25 sites representative of agricultural irrigation drainage approximately monthly. Until 2014, the program consisted of an assessment year that included baseline monitoring (of ag pesticides, metals, toxicity, pathogens, and field parameters) followed by two years of field parameters. Since 2014, the program conducts consecutive assessment years without field parameters. Two exceedances occurring within a three-year period triggers a management plan that includes performance goals. The SVWQC coordinates with SWAMP quarterly in some areas of the watershed. Approximately 8,700 owners/operators of irrigated ag are enrolled in the program and pay ~ \$2.75/irrigated acre, of which \$0.75 is a waste discharge permit fee for SWAMP, basin planning, and Groundwater Ambient Monitoring & Assessment program. Data are uploaded to CEDEN and reports are posted on the SVWQC website.
- Stephen McCord (MEI): There is also a rice specific coalition specifically for rice growers in the Sacramento River Watershed. Christy Tanner, a UC Davis graduate student, is studying methylmercury cycling in and exports from rice fields in the Sacramento Valley. Paul Buttner is the

primary CA Rice Commission contact. Stephen McCord supports the research project through the Commission.

- Brian Laurenson (LWA): Phase I municipal separate storm sewer system (MS4) programs have been monitoring urban runoff and receiving waters and conducting control studies for over 20 years. The 2013 Phase II MS4 statewide general permit requires monitoring, but as net there is no consistent ambient monitoring being conducted by the >100 Phase II programs in the Central Valley while the permit's monitoring requirements are being revised. The Delta RMP already includes the three Phase I MS4s surrounding the Delta, and may soon include many Phase II MS4s. Some MS4s upload their monitoring data to the Storm Water Multiple Application and Report Tracking System (SMARTS).
- Tracy Wyhlidko (City of Redding Industrial Waste Division): Under its NPDES wastewater discharge permit monitoring requirements, the City monitors receiving water upstream and downstream of the outfalls for its two treatment facilities. In addition to a characterization study once per 5-year permit cycle, the city monitors for 126 priority pollutants once per year and for pH, copper and zinc, ammonia, DO conductivity, hardness, minerals, sulphate, and temperature at various intervals. The data are submitted to the California Integrated Water Quality System (CIWQS) database through the CVRWQCB. CIWQS is difficult to access and navigate. Alisha Wenzel stated that CVRWQCB continues trying to link receiving water data from CIWQS with CEDEN.
- Sam Safi (Sacramento Regional County Sanitation District): Regional San, the largest surface water discharger in CA, partnered with the Sacramento County MS4s since 1991 through the Sacramento Area Coordinated Monitoring Program (CMP) to monitor receiving water for mostly nutrients, metals, pesticides, and conventional constituents. The monitoring data (~260 events) are currently housed internally and is summarized every year in an annual report that can be found on the CMP website. Regional San is looking for a place to store the data to make it more accessible. The CMP is now dissolving as the Delta RMP assumes ambient monitoring responsibilities.
- Jon Marshak (CA Water Quality Monitoring Council): The CA Water Quality Monitoring Council (CWQMC) was established by legislation in 2006 and tasked with helping to improve water quality monitoring assessment and reporting for water quality and associated ecosystem health by fostering greater coordination. The CWQMC published a strategy in 2010 that called for forming work groups including the *CA Wetlands Monitoring Workgroup*, *CA Estuary Monitoring Workgroup*, *Safe-to-Swim Workgroup*, *Safe Drinking Water Workgroup* and the *Healthy Watersheds Partnership* to improve standardization of monitoring and assessment programs/methods and develop web portals to display resulting information. The *Data Management Workgroup* assists the theme-specific workgroups with data sharing and management, GIS and web-development issues and supported the environmental data summit paper being produced by the Delta Stewardship Council. There is also an effort to help citizen monitoring groups and others to share data and information and broaden the use of standardized and sound methods via a seminar series through the *Water Quality Monitoring Collaboration Workgroup* led by Erick Bures. The *CA Estuary Monitoring Workgroup* will produce a State of the Estuary report for the Bay-Delta in September 2015.
- Bev Anderson (SWRCB – Healthy Watersheds Partnership): The Healthy Watersheds Partnership (HWP) revised mission is to improve the way watershed health is defined, measured and managed in California. USEPA funded a watershed assessment that resulted in a final report released in October 2013. The report provides a framework to develop more robust watershed assessments and includes several maps that illustrate relative watershed conditions in the state including stream health metrics and relative vulnerability. The HWP is working to make the maps available on the

*My Water Quality* portal (Healthy Streams page) and improve the functionality of those maps. The HSP is also working on developing Statewide Integrated Assessment Report Cards by building on Regional Report card efforts, adding data sets, analysis/visualization tools, and watershed-based reports to the portal, and improving outreach and partnerships. The next HWP meeting will be held on June 23, 2015, at the CalEPA building in Sacramento.

Dennis Heiman asked if flow will be one of the parameters to determine the state of a healthy watershed and suggested that it may be the most important parameter in quantifying watershed health. Jon Marshak explained that the existing vulnerability assessment looks at increased water demand as a factor of vulnerability but stated that more could be done. Fraser Shilling explained that the report has significant limitations due to its parameters and correlations. Jon Marshak suggested that the maps needed to be ground truthed with existing monitoring data to determine accuracy and to develop assessment benchmarks and thresholds.

### **III. Portal Project Overview**

The Sacramento River Watershed Program (SRWP) has been monitoring water quality and coordinating with others monitoring in the Sacramento River since 1996. This project is an effort to support the development of a Regional Monitoring Program (RMP) for the Sacramento River Watershed and ties into all three of SRWP's program areas: public outreach and education, local watershed support, and watershed monitoring. SRWP's recent related efforts include the development of watershed health indicators for the Feather River and Lower Sacramento River Report Cards, a redesigned website, and the Roadmap project. SRWP's recent regional monitoring efforts include stakeholder meetings that resulted in an Investigation Report and Fact Sheet and most recently interviews. A *Summary of Interview Responses and Recommendations* was developed based on interview responses and suggested that the RMP functions that would benefit the vast majority of stakeholders in the Sacramento River Watershed are communication, coordination and technical support.

The Monitoring Committee listserv includes over 300 contacts. Monitoring stakeholders are exceptionally varied in this watershed, including regulated dischargers; water purveyors; federal, state and local agencies; environmental regulators; and non-profit organizations. The portal will most benefit those who participate in its development.

Three neighboring watersheds, the San Francisco Bay, the San Joaquin Valley and the Sacramento – San Joaquin Delta have RMPs. The Sacramento River Watershed constitutes the majority of water in the state and numerous monitoring efforts, but no single point of contact or reporting.

The proposed portal will provide open, online access to data, reports, and contacts and provides tools to visualize data in time and space and a forum to collaboratively identify and address issues. The portal project is a multi-stakeholder effort builds on existing programs and partnerships and any data and information added via this effort is donated back to the core technology so that all users may benefit. Several portals now exist for CA including the CA Estuaries Portal, Bay-Delta Live, My Water Quality Portals, and the San-Joaquin River Portal. These portals access numerous historical data sets, real time data, modeling results, reports, and maps.

A regional portal is stakeholder driven and focuses specifically on geographic area to highlight and address regional issues. Regional organizations like SRWP have successfully integrated efforts and should serve as a repository for data and information from other sources. The collective knowledge of watershed stakeholders will be applied to articulate management questions, access relevant information, and develop a web portal that allows users to explore and analyze regional data, answer questions about regional water quality, support multi-stakeholder collaboration to better understand water quality objectives, and operate and comply with regulatory requirements.

Key questions for stakeholders that need to be addressed to frame the current condition include:

- What questions do you have about water quality in the watershed?
- What data are you accessing now?
- How are you evaluating those data to make decisions?
- How and where are your data stored, assessed and reported?
- How do you communicate for effective coordination of monitoring?
- Where are your reports stored for access?
- What data do you want but can't find?
- How could a portal save you time & money?

Key questions for stakeholders that need to be addressed to design a useful portal include:

- What questions would be most useful/ practical regionally?
- Who should we target for use cases?
- What will be our keys to success (i.e. sustainability)?
- Are there others we should contact and include in this effort?

#### **IV. Letters of Commitment**

We want to ensure that the groups and agencies that are developing this portal are going to be the end users so that we don't develop a portal that isn't useful and/or supported by those most closely connected to monitoring activities in the watershed. Components of the letter should include a statement of support, brief description of your program or activities and how the portal will be useful, and a short narrative that includes your level of commitment including how you will participate and when. Commitment includes attending quarterly Monitoring Committee meetings, contributing knowledge and data to address key questions, reviewing website mock-ups, and developing a hosting and maintenance plan.

#### **V. Wrap-Up**

Several action items were identified during the meeting:

- Holly will distribute a template letter of commitment to stakeholders. Letters are due by July 31 for submittal to the State Board grant manager.
- The project team and other Monitoring Committee members will communicate with related stakeholders such as CWQMC subcommittees, IRWM groups, ILRP coalitions, tribal representatives, Pacific Flyway managers, and commodity groups (e.g., Almond Growers Assoc.).
- Amye Osti will begin to explore available databases for key issues and questions.
- Holly will formulate a survey instrument to begin gathering input on key questions (see list above in V. Portal Project Overview).
- The project team and other Monitoring Committee members will identify additional stakeholders.
- The next MC meeting will be held in August 2015. Holly will poll the Monitoring Committee for potential meeting dates and times. Agenda items may include:
  - Share updates, news & activities
  - Review CWQMC data management white paper
  - ID portal use cases & interests
  - ID Current Practices
  - Short-list key issues & questions