

Delta RMP Stakeholder Group

Meeting Summary

August 15, 2012

Note: The list of attendees and the meeting agenda follow the meeting summary. Additional materials from the meeting (e.g., PowerPoint presentations) have been posted on the project website at: http://www.waterboards.ca.gov/centralvalley/water_issues/delta_water_quality/comprehensive_monitoring_program/index.shtml.

Another note: The summary captures the major issues presented and discussed during the meeting, but is not intended as an exhaustive record of all comments made. Where it contributes to the readability of the summary, discussion of the same issue that occurred at more than one place during the meeting is summarized together. Items on which participants expressed general agreement are indicated **in bold**, although it is important to emphasize that participants did not vote on these items. Specific commitments by State Board staff, Aquatic Science Center staff, the facilitator, or Committee members are also indicated **in bold**.

Meeting objectives

(See slides #2 and 5 in the meeting presentation posted on the project website)

The objectives of the meeting were to review the past history of the Delta RMP, summarize and respond to stakeholder comments on the June 2012 draft program plan, and discuss a development plan and governance structure for the future development and implementation of the Delta RMP.

Program history

(see slides #6 – 15 in the meeting presentation posted on the project website)

Thomas Jabusch reviewed the Delta RMP's history, highlighting key decision points in the time since the September 2008 kickoff meeting. Most importantly, the August 2010 meeting resulted in a decision to narrow the program's scope to focus initially on the NPDES program and the State Water Board's CIWQS database used to submit monitoring data electronically.

Implementation process

(see slides #16 – 20 in the meeting presentation posted on the project website)

Design principles

Ken Landau of the Regional Board summarized a set of six core design principles that emphasize expanding the program gradually over time from a smaller, more feasible scale, focusing on ambient condition at the scale of the Delta, and using targeted special studies for stressor identification and other types of causal analyses. Funding will come from a variety of sources. Ken then summarized the benefits of a phased, incremental implementation process and described three phases modeled after those in the California Water Quality Monitoring Council's Comprehensive Monitoring Strategy. Regional Board staff also noted that other programs that might be logical partners for the Delta RMP (e.g., drinking water, BDCP) are not planning on conducting monitoring for several years. He also explained that although the Regional Board staff has taken the lead in the startup phase, this role would be transitioned to another entity as the RMP develops further. He discussed the program development timeline and indicated that

the Regional Board staff is still planning to present an information item on the RMP before the Board in December. The Regional Board is committed to developing a Delta RMP. If the stakeholder-driven participatory process is not successful, then the Regional Board will use a more directive approach.

Management questions

The RMP will need an initial set of questions that guide monitoring design, have attainable answers, provide guidance for management of Delta resources. Contaminants of emerging concern (CECs) are a growing focus of the Water Boards. Delta dischargers are not currently required to monitor for pharmaceuticals and personal care products, but these contaminants will eventually need to be monitored. Ken explained that it makes more sense for an RMP to conduct such studies than to have them performed as special studies by individual dischargers.

Responses to stakeholder comments

(see slides #22 – 33 in the meeting presentation posted on the project website)

Brock Bernstein summarized comments on the June 15 draft program document and responses from the project planning team. Comments fell into 11 general categories, with comments sometimes conflicting with each another.

Need more detail

Agreed. The next draft will include detail on the program history and development in order to provide needed background and context for current efforts and will describe the phased long-term development approach. It will provide clearer rationale for whatever management questions are selected and tie these directly to design and analysis program elements. The final program document will also include much more information about data analysis methods and assessment approaches, and will emphasize the fundamental importance of data analysis, assessment, and interpretation. All monitoring and analysis methods will be described more fully, as will governance structures, decision-making processes, and funding issues.

What is the experience of other RMPs that is relevant to the Delta RMP?

All other successful RMPs in the state started small. The Bight Program began with only four large coastal POTWs, the San Francisco Bay RMP began with a very simple monitoring design, SWAMP began with a small subset of its overall scope, the Monitoring Council's initial focus was on "low hanging fruit," and the scale of several southern California watershed monitoring programs is limited by available funding. Despite their more limited start, several of these programs have successfully expanded over time, in terms of the types of habitats, constituents, and issues they address, as well as in terms of their numbers of participants.

What are the perceived benefits of other RMPs?

All established RMPs have paid important dividends for regulators, permittees, the public, and the environment. They have improved monitoring efficiency, enabled assessment and management at larger, regional scales; and defined background conditions more accurately, which has improved compliance assessment. They have also provided more credible data for broader use and helped adjust management priorities, for example, by putting compliance monitoring results into a broader context. Finally, they have helped to target actions to better achieve the greatest benefit.

Develop more detailed management questions

Examples of management questions from several other RMPs were provided for context, along with illustrations of the data products related to each question. The SWAMP framework for developing management questions defines multiple layers of increasing technical detail and specificity. As described

below, there was broad agreement that one early job of the Steering Committee will be to develop management questions for the first phase of the Delta RMP.

Use appropriate design guidelines

Both SWAMP and the Monitoring Council have described monitoring design guidelines that provide useful assistance in developing the details of the Delta RMP's monitoring design. In particular, the Monitoring Council's guidelines include a scoring metric that can be used to identify specific areas where a monitoring design needs more work. The initial draft of the program plan was reviewed by the Monitoring Council's Estuary Monitoring Workgroup and it would be useful to have the workgroup review additional drafts as well.

The proposed design will not address questions about the POD

That is correct. References to the POD in the draft program document were meant to illustrate the difficulty in assessing contaminant-related questions at the scale of the Delta and to thereby provide an example of why the RMP is needed. The POD example illustrates the importance of being better equipped to deal with future instances of Delta-wide events and improve our ability to ask and answer questions at the scale of the Delta.

The Delta RMP will increase costs

The Delta RMP is intended to improve cost effectiveness and to strive for cost neutrality in its initial phases. New sampling (e.g., the probabilistic design) would be funded by offsets to current receiving water monitoring, and supported by partnering (e.g., with IEP, SFCWA, CDFG) that will leverage discharger contributions. Future improvements to effluent monitoring efficiency could also make more resources available. Once it is established, the RMP, with its broad stakeholder group, would be an ideal candidate to receive funding from grants and other sources.

Why did the draft program plan focus on toxicity?

We understand that aquatic ecosystem health includes much more than toxicity and there are other established programs looking at other aspects of ecosystem health. However, there is a large data / information gap about contaminants and their effects at the scale of the entire Delta and that's a gap that falls within the Regional Board's area of responsibility to help fill. There are two general approaches to assessing contaminant effects: stressor-driven chemical by chemical vs. integrative indicators that measure condition. These aren't mutually exclusive but are complementary and represent two different philosophies for how to monitor. The State Water Board has been encouraging condition assessments that increase emphasis on biological indicators and is developing new biological condition assessments that are being included in water quality policies and objectives. It can be expensive, time consuming, and frustrating to look chemical by chemical, and the Regional Board is interested in pursuing monitoring approaches that provide condition assessments at the scale of the Delta. Additional guiding factors are that the Basin Plan states, "The Regional Water Board will continue to impose toxicity testing monitoring requirements in NPDES permits. The focus of ambient toxicity testing will continue to be the Delta and major tributaries." In addition, the Bay-Delta Strategic Workplan states, "...the RMP will address monitoring needs and the needs for a toxicity response program in the Delta."

Emphasize causal studies

Causal studies should be an important part of the RMP and they are related to, but distinct from, broader and longer-term condition assessment. Other established programs typically use special studies to investigate causes, sources, and/or processes, and use broader scale condition assessments to help develop hypotheses that can and then be used to target special studies. The revised program document will have a better developed section on special studies.

Clarify governance and funding

These do need much more attention and today's discussion will focus on making as much progress as possible on governance. The proposed governance structure suggested by one stakeholder has merit and will be used as a starting point (along with other suggestions in previous RMP documents) for additional discussion. Putting a working governance structure in place is key to any further progress, because decisions about program design, funding, partnering, and other aspects of the program will require a more formal decision-making process and operational structure.

Consider indicators more carefully

Any indicators used in the monitoring design will be well defined and widely accepted. Some commenters raised specific concerns about water column toxicity testing with *Hyalella*, and we have confirmed that this is one of the test species listed in the U.S. EPA manual "Methods for measuring the acute toxicity of effluents and receiving waters to freshwater and marine organisms" (2002, EPA-821-R-02-012). U.S. EPA's "Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates" (2000, EPA-600-R-99-064) provides detailed test conditions for 96-hr *Hyalella* water-only tests. In addition, laboratories performing monitoring for SWAMP have developed standard operating procedures for both *Hyalella azteca* 4- and 10-day water toxicity tests.

RMP is starting out too small

Other successful RMPs have all begun with a more restricted scope and then expanded over time. The project team intentionally proposed a smaller initial scope because taking on too much too fast runs the risk of failure from overextending the program's initial capacity. However, the initial scope of the program is up for discussion. One of the main reasons for starting with the regulatory programs (NPDES, MS4, Irrigated Lands) is that offsets to existing monitoring could quickly provide both monetary and in-kind resources to start the program. In addition, the fact that the Regional Board has direct control over these monitoring programs means that adjustments can be made relatively quickly and without extensive and time consuming negotiation with other agencies. Any revisions to permit-mandated monitoring will necessarily take account of needs to maintain required permit schedules and gather data for Reasonable Potential Analyses and other regulatory requirements, and this will establish some constraints. Focusing on specific permit-mandated monitoring programs also provides opportunities to improve monitoring efficiency and establishes a clearer focus for negotiations with potential partners about cost sharing and monitoring coordination. As the Delta RMP takes shape, opportunities to identify other sources of funding will become clear, as has been the case of other RMPs.

Expectations for Phase I

(see slides #34 – 35 in the meeting presentation posted on the project website)

Brock Bernstein reviewed the expectations for Phase I. There are key elements of establishing a viable Delta RMP.

Governance

The participants agreed to focus attention on the program's governance structure because this is an essential prerequisite to agreeing on management questions, funding arrangements, or other program elements. Using the governance structure proposed by one stakeholder in the comments (see slide #38), participants focused discussion on defining stakeholders, the steering committee, the lead entity, and the technical advisory committee. Using examples from other RMPs as guidance, the participants agreed on the following.

Stakeholders

Stakeholders were defined as any organization or entity that conducts monitoring in the Delta, uses monitoring data collected in the Delta, establishes and/or implements regulations that create requirements for monitoring data, or manages monitoring efforts upstream and downstream of the Delta that provide opportunities for coordination and partnering.

Participants agreed on the following list of potential stakeholders, although further discussions may determine additional participants over time. Major categories of stakeholders include the following, although this list could grow as other entities express interest in participating:

- Permittees
 - POTWs
 - Stormwater
 - Phase I and II
 - Caltrans
 - Agriculture
 - Groups managing wetlands (TBD)
- Regulatory agencies
 - Regional Board
 - USEPA
 - Department of Pesticide Regulation
 - Department of Toxic Substances Control
- Other agencies
 - OEHHA
 - IEP as a distinct entity
 - IEP agencies as separate entities
 - Department of Water Resources
 - Department of Fish and Game
 - State Water Resources Control Board
 - National Marine Fisheries Service
 - US Army Corps of Engineers
 - US Bureau of Reclamation
 - US Environmental Protection Agency
 - US Fish and Wildlife Service
 - US Geological Survey
- State and federal water contractors
- Delta science / management organizations
 - Delta Stewardship Council
 - Delta Conservancy
 - Delta Protection Commission
- Neighboring RMPs
 - San Francisco Bay RMP
 - Sacramento River Watershed Program
 - San Joaquin River RMP
- Environmental groups (TBD)

Steering committee

Participants agreed that the Steering Committee will fulfill the core executive and management functions of the Delta RMP, including, for example, establishing partnerships, negotiating and signing contracts, defining policies and procedures, authorizing payments, accepting funding from outside sources, defining roles and responsibilities, and establishing the Delta RMP's overall direction. To the

extent that some of the functions are delegated to the RMP lead entity, the Steering Committee would retain oversight responsibility.

Participants also agreed that Steering Committee members will include those parties who contribute either cash or in-kind support to the Delta RMP, along with the Regional Board and USEPA. All Steering Committee members will be on an equal footing, with no distinction between those providing cash vs. in-kind support. Steering Committee members will represent the management perspective of their entity, with technical input provided by the Technical Advisory Committee (see below). **Participants agreed on the following list of potential Steering Committee seats**, which must be confirmed through further discussion with the entities involved:

- POTWs
 - Separate membership for two or three subgroups to be defined through further discussion
- Stormwater
 - Phase I communities
 - Phase II communities
 - Caltrans
- Agriculture
 - San Joaquin County and Delta Water Quality Coalition
 - Sacramento Valley Water Quality Coalition
- IEP
- State and federal water contractors
- Regional Board
- USEPA

This would result in a Steering Committee of 11 or 12 members (depending on the number of POTW subgroups), a workable size. It would also be useful to look at the structure of steering committees for the San Francisco Bay RMP, the Mercury TMDL, and CV-SALTS for additional ideas. The Steering committee could be expanded as additional programs (e.g., wetland management entities with waste discharge requirements) join the RMP.

RMP lead entity

There is a need for an operational lead to implement the monitoring program, manage day-to-day activities, act as the fiscal agent, and act as staff to the Steering Committee. All other effective RMPs have such a lead entity, which range from NGOs, to joint powers authorities, to consulting companies. Two options were suggested for the Delta RMP, the Aquatic Science Center (ASC) and the Coalition for Urban Rural Environmental Stewardship (CURES). Academic institutions are another possibility but they were not considered viable because of contracting and administrative impediments. While the final decision on a long-term lead entity will be up to the Steering Committee, **the participants agreed to continue using ASC in the interim** because of its existing contracting relationship with the Regional Board and its past history with the project.

Technical advisory committee

Participants agreed on the need for a technical advisory committee (TAC) that would include a core set of members that could be added to as specific needs arose. The core TAC should be about the same size as the Steering Committee and be recruited from the Steering Committee and stakeholder member entities and should include a mix of expertise as well as a cross-section of member entity categories. The core TAC would also be responsible for forming specialty subgroups as needed to address specific issues and recruit topical technical experts for guidance. Membership on the TAC will be on a volunteer basis. While the details of the TAC's role will be defined by the Steering Committee, participants agreed that one key responsibility will be to ensure the quality of the Delta RMP's data, data analyses, and products.

Next steps

Next steps include:

- Follow up with potential stakeholders to determine their interest and identify stakeholder committee members
- Complete draft list of Steering Committee seats and confirm with participants
- Identify Steering Committee members
- Define procedure for seating the Steering Committee
- Build a targeted library of documentation from other RMPs to guide the participants and the Steering Committee through the initial steps of formally establishing the Delta RMP and defining membership and roles of all committees
- Convene first Steering Committee meeting, targeted for late September
- Draft charters for the committees, outlining roles and responsibilities, as well as advisory and decision-making functions

Attendees

Name	Organization
Karen Ashby	Larry Walker Associates
Adam Ballard	CA Dept. Fish and Game
Brock Bernstein	Consultant – Aquatic Science Center
Valentina Cabrera	US Environmental Protection Agency
Gail Cho	CA Dept. Fish and Game, Water Pollution Control Lab
Val Connor	State and Federal Contractors Water Agency
Linda Deanovic	UC Davis
Matt Dekar	US Fish and Wildlife Service
Joe Domagalski	US Geological Survey
Brian Exberger	Veolia Water – Rio Vista
Lori Gabriel	Veolia Water – Discovery Bay
Karen Gehrts	CA Dept. Water Resources
Rainer Hoenicke	Aquatic Science Center
Thomas Jabusch	Aquatic Science Center
Ken Landau	Central Valley Water Board
Jason Lofton	Sacramento Regional County Sanitation District
Chris McAuliffe	Veolia Water – Rio Vista
Stephen McCord	McCord Environmental, Inc.
Dave Melilli	City of Rio Vista
Jeff Miller	Aqua Science
Anke Mueller-Solger	Delta Stewardship Council / Interagency Ecological Program
Vyomini Pandya	Sacramento Regional County Sanitation District
Tony Pirondini	Central Valley Clean Water Agency / City of Vacaville
Meghan Sullivan	Central Valley Water Board
Hope Taylor	Larry Walker Associates
Melissa Turner	Michael L. Johnson LLC
Lori Webber	State Water Resources Control Board

**Delta Regional Monitoring Program
Meeting**

15 August 2012
9:00 a.m. – 3:30 p.m.
CVRWQCB Office
11020 Sun Center Drive #200
Rancho Cordova, California 95670

Objective

Determine the trajectory and next steps for the program implementation.

Agenda

Part I – 9:00 a.m. to 10:15 a.m.

Part I is intended to provide an overview of the work and outcomes to date and set the stage for the discussion.

- I. Introductions, desired meeting outcomes, and agenda overview

Meghan Sullivan, Central Valley Water Board

- II. How we got to where we are now

Thomas Jabusch, Aquatic Science Center

- III. RMP implementation process – trajectory and timeline

TBD, Central Valley Water Board

- IV. Summary of Comments & Responses

Brock Bernstein, Independent Consultant

Break – 10:15 a.m. to 10:30 a.m.

Part II – 10:30 a.m. to 3:30 p.m. Moderated by ***Brock Bernstein***

Part II will review and discuss specific issues and related decisions and decision points, with the goal of determining a path forward for resolving them.

- I. Expectations and decision points for pilot program and beyond

TBD, Central Valley Water Board

- II. Management Questions

- III. Governance Structure

LUNCH – 12:00 p.m. to 1:00 p.m.

- IV. Implementation approach, budget, and long-term sustainability

- V. Design guidelines

- VI. Summary and take home messages