

Nutrients STAG (Stakeholder Technical and Advisory Group)

July 13, 2015

Meeting Summary

Note: The list of attendees follows the meeting summary. The Central Valley Water Board has developed a webpage for the Nutrient Research Plan project, which can be found at: http://www.waterboards.ca.gov/centralvalley/water_issues/delta_water_quality/delta_nutrient_research_plan/index.shtml Additional materials from the STAG meeting (e.g., agenda, presentations, background documents) have been posted to the project website at: http://www.waterboards.ca.gov/centralvalley/water_issues/delta_water_quality/public_involvement_stag_meetings/index.shtml. The summary captures the major issues presented and discussed during the meeting, though they are not intended as an exhaustive record of all comments made. Rather the summary is intended to provide participants and other interested parties with a general description of topics addressed and different perspectives on those topics, as well as to record commitments and decisions made by the Group and its members.

Meeting Objectives

- Review and adopt the revised STAG Charter and Governance
- Update STAG on status of Cyanobacteria Science Work Group progress and products
- Update STAG on status of other Science Work Groups on progress and products
- Discuss overall process and progress on current efforts in developing the nutrient research plan
- Discuss schedule and decide next steps

1 Introduction and Announcements

Information was provided on an upcoming August 28, 2015 project progress meeting of the USDA Agricultural Research Service funded Area-wide Pest Management Project *“Improved Control of Water Hyacinth, Brazilian Waterweed, Arundo, and Associated Pests in the Sacramento-San Joaquin Delta”* Meeting information can be found in the agenda or on the Delta Nutrient Research Plan STAG website under the July 13 meeting materials section.

2 Update on Drinking Water Effort

An Ad Hoc group made of members of the Central Valley Drinking Water Policy self-organized to evaluate knowledge about the effects of nutrients on drinking water. The group has held two meetings and will schedule a third shortly. Their intention is to work in parallel with the other Science Work Groups to produce a white paper by this fall that could inform development of the nutrient research strategy. Key issues related to drinking water include increased plankton that contribute to taste and odor problems, reduce filtration effectiveness, and affect pH, among others. Unlike the other work groups that focus only on the Delta, the drinking water group is addressing issues and areas outside the Delta.

Commitments:

- ✓ The group will schedule additional meetings and work toward delivering a white paper in the fall.

3 Finalize and Adopt the Charter and Governance Document

Brock Bernstein reviewed the previous revisions to the draft Charter and Governance documents and the late proposed revisions.

Discussion:

The Charter describes the overall process, with more specific detail on the activities of the Science Work Groups included in the charge for each group. A concern was raised that several parties with disparate perspectives (i.e., State and Federal Contractors, Dept. of Water Resources, Bureau of Reclamation) included in the Water Supply interest group of the STAG could be problematic in the future if the STAG is faced with decisions on contentious issues. However, parties agreed that the current arrangement is workable for the present.

Discussion resulted in the following agreements on revisions to the Charter:

- Make the modification shown in the presentation slide to the language about sloughs on p. 6 of the charter, 2nd paragraph under section 5.0, to clarify that dissolved oxygen concerns are related to 303(d) listed sloughs and other water bodies, not all sloughs
- Change the description of the drinking water work group in the 2nd paragraph under section 5.0 on p. 6 to show that it is not a follow-on effort but instead is operating in parallel with the other work groups
- Note that products from the drinking water work group (e.g., white paper) would be subjected to the same review process as products of the other work groups
- Add “and related products” to box at top of the process diagram (Figure 1)

Discussion then resulted in the following agreements to the Governance document:

- The reference to a quorum on p. 2 should be expanded to include the definition of a quorum as 50% of the STAG interest groups. This is the definition used by the Delta RMP Steering Committee. The quorum will be established as the first order of business at each STAG meeting and will be considered to persist through the entire meeting, even if members leave the meeting
- The quorum will be used only when a vote of the STAG members is required
- Following an update on the recent work of the Administrative Subcommittee, STAG members agreed to add language to the Administrative Decisions section on p. 2 as described on the Governance Revision 1 meeting slide
- Revise the language relating to Policy/Science/Resource Decisions on p. 2 as suggested on the Governance Revision 2 meeting slide to remove the existing contradiction and to clarify the respective roles of Board staff and Board members

Outcomes:

- ✓ The STAG adopted the Charter with proposed revisions as final.
- ✓ The STAG adopted the Governance and Ground Rules with proposed revisions as final.

Commitments:

- ✓ Board staff will revise the Charter and Governance and Ground Rules based on the proposed changes discussed at the July 13 STAG meeting.
- ✓ A standing item for the Admin Subcommittee will be added to future agendas so they can update the STAG on issues discussed with them and Board staff

4 Status of Cyanobacteria Work

Chris Foe reviewed the process and products of the Cyanobacteria Science Work Group.

Discussion:

Chris emphasized the Work Group's acceptance of the white paper and their consensus on the findings. Although the white paper itself has been finalized and the Work Group's efforts are concluded, STAG members may submit additional comments on the white paper that will be included as an appendix. The knowledge gaps document, intended as a companion document to the white paper, is not yet complete because it was not included in the contracts for the first two white papers. It is targeted for completion in August. Draft knowledge gaps were presented in Table 2, which has not yet been prioritized and will be distributed to the STAG for review and comment. This will be addressed at the next STAG meeting, with particular attention to the motivating management questions. A knowledge gaps summary will be included as an integral part of the remaining white papers for the Modeling and Nutrient Concentrations, Forms and Ratios Work Group efforts. Data gaps will provide a starting point for defining needs for future research. Discussion of knowledge gaps and monitoring needs highlighted institutional gaps in responsibility for managing and responding to human health risk. The State Water Board is working with the Office of Environmental Health Hazard Assessment and Public Health to develop guidelines.

A key finding is that blooms are initiated by factors such as water temperature, clarity, and residence time, rather than by nutrients. The factors that terminate blooms are uncertain. The ability to model bloom dynamics will be one issue considered by the modeling work group. Additional items raised during the meeting could be included in the knowledge gaps document, which is still being developed.

The efforts of the Cyanobacteria Science Work Group were evaluated to assess whether the process for other work groups should be adjusted to improve transparency and effectiveness. Work group members attending the STAG meeting stated that the process was open and productive and they believe the issues were thoroughly examined. If budget allows, Chris Foe will consider asking leaders of future work groups to personally present the work group findings to the STAG. Some participants emphasized the importance of direct interaction between scientists (work groups) and managers (STAG) as work groups' findings are being evaluated. Options discussed included STAG attendance at work group meetings, asking work group leaders to present their findings to the STAG, and encouraging work group members to attend the STAG meeting at which their issue is being discussed. STAG members were encouraged to review the table of management questions and knowledge gaps in more detail to ensure that their priority management questions are included.

Products of the individual work groups will be assembled and synthesized into a final research plan. The original schedule was to produce the nutrients research plan by December 2015 but this has been pushed back to early 2016.

Outcomes:

- ✓ The STAG accepted the Cyanobacteria White Paper "Factors affecting Growth of Cyanobacteria with Special Emphasis on the Sacramento-San Joaquin Delta" as a final work product of the Cyanobacteria Science Work Group.

Commitments:

- ✓ STAG members will send any additional comments on the white paper to Christine Joab

	<p>to be included in the white paper as an appendix. ✓ Board staff will post the knowledge gaps tables on the website so that STAG members can review and evaluate the management questions.</p>
<p>5</p>	<p>Status of Other Science Work Groups</p> <p>Chris Foe reviewed the membership list, schedules and charges for the remaining work groups.</p> <p>Discussion:</p> <p><u>Macrophyte Science Work Group:</u></p> <p>Membership in the Macrophytes Science Work Group changed. Judy Drexler was unable to participate and Diane Engle and Jeff Cornwell were added based on recommendations from the STAG. Work Group will convene second meeting July 23 to discuss the revised white paper and response to comments and begin to discuss and develop the information data gaps.</p> <p><u>Modeling Science Work Group:</u></p> <p>This group convened their first meeting on June 24 and discussed the white paper outline and Charge. The white paper is anticipated to be completed by October 2015. No information gaps document will be prepared for this work group as the white paper will include the recommendations from the Science Work Group members.</p> <p><u>Nutrient Concentrations, Forms and Ratios Science Work Group:</u></p> <p>Planning is underway to hold a joint workshop in the fall on nutrient forms and ratios with the San Francisco Board's effort in San Francisco Bay. Plans for the workshop will be discussed with the Administrative Subcommittee and brought to the STAG for review and decision.</p> <p>The central challenge for the nutrients forms and ratios work group is to determine why different research groups are getting different results. Recommendations for future research will focus on studies to identify and resolve the source(s) of these disagreements. The State and Federal Contractors Water Agency (SFCWA) and the San Francisco Regional Water Board will contribute to funding this work group. The facilitator and white paper author have not yet been decided.</p> <p>Overall, reasonable progress is being made but the process is somewhat behind its original schedule.</p> <p>Outcomes: None</p>
<p>6</p>	<p>Discussion with STAG on Process and Progress</p> <p>Chris Foe reviewed the overall goals and objectives for the nutrient research plan and then queried the STAG for their input and recommendations on our overall scientific and stakeholder process and progress.</p> <p>Discussion:</p> <p>Administrative Subcommittee provided recommendations on how we can improve the process:</p> <ul style="list-style-type: none"> · More frequent, shorter meetings with increased focus on smaller number of tasks · Invite White Paper authors to provide a presentation to the STAG

	<p>The STAG and interested parties also had suggestions on how to improve the process:</p> <ul style="list-style-type: none">· Host a few webinars in place of in-person meetings (more efficient and reduces audio problems associated with large meeting rooms)· STAG members attend the Science Work Group meetings to better understand the process and provide immediate input into the work group product· STAG expressed interest in the opportunity to weigh in on the Science Work Group products before they are final; they suggested:<ul style="list-style-type: none">○ Email interaction between STAG and SWG on work products○ Authors of White Papers provide a presentation to the STAG○ One or two SWG members attend the STAG meeting to answer STAG questions <p>Chris pointed out that time and resources are the constraints in trying to have more STAG and SWG interaction. Most of the SWG members are not paid for participating in the SWG, and they are limited in the amount of time they can allocate to this effort.</p> <p>Outcomes:</p> <ul style="list-style-type: none">✓ Ask the white paper authors of the Modeling SWG and the Nutrient Concentrations, Forms and Ratios Work Group to provide a presentation to the STAG✓ Encourage STAG members to attend SWG meetings✓ Encourage SWG members to attend STAG meetings <p>Commitments:</p> <ul style="list-style-type: none">✓ Continue to look for additional ways in which the STAG can interact more with SWG members
7	<p>Wrap Up</p> <p>Chris Foe suggested a STAG meeting be scheduled for next month to present the final Cyanobacteria Information Gaps document, a process to prioritize management questions, and to discuss the revised Macrophyte White Paper with Response to Comments and the draft Macrophyte Information Gaps document.</p>

Record of Decision for the Delta Nutrient Research Plan STAG

Number	Date	Decision	Type	Yes	No	Abstain
2015-1	07/13/15	The STAG adopted the Charter Document – Process to Develop a Delta Nutrient Management Strategy as final.	Consensus			
2015-2	07/13/15	The STAG adopted the Governance Principles and Ground Rules document as final.	Consensus			
2015-3	07/13/15	The STAG accepted the Cyanobacteria White Paper “Factors affecting Growth of Cyanobacteria With Special Emphasis on the Sacramento-San Joaquin Delta” as a final work product from the Cyanobacteria Science Work Group.	Consensus			

Attendees

Staff	Agency
Chris Foe	Central Valley Regional Water Board
Christine Joab	Central Valley Regional Water Board
Brock Bernstein	Facilitator

Stakeholder and Technical Advisory Group (STAG) - Interest Group Members:

Attendance	STAG members	Agency	Representing	Position
Present	Terrie Mitchell	Sacramento Regional County	Large POTWs	Primary
	TBD		Large POTWs	Alternate
	Debbie Webster	Central Valley Clean Water Assoc.	Small POTWs	Primary
	TBD		Small POTWs	Alternate
Present	Dalia Fadl	City of Sacramento	MS4	Primary
	Kyle Ericson	City of Sacramento	MS4	Alternate
Present	Renee Pinel	Western Plant Health Assoc.	Irrigated Agriculture	Primary
	TBD			Alternate
	Amrith Gunasekara	CA Dept. Food and Agriculture	Agriculture Agencies	Primary
	Mark Cady	CA Dept. Food and Agriculture	Agriculture Agencies	Alternate
	Kirk Wilbur	California Cattlemen	CAFOs	Primary
	TBD		CAFOs	Alternate
Present	Lynda Smith	Metropolitan Water District S. CA	Water Supply	Primary
	Rachel Pisor	CA Dept. Water Resources	Water Supply	Alternate
Present	Elaine Archibald	CA Urban Water Agencies	Drinking Water	Primary
Present	Laura Young (P)	Santa Clara Valley Water District	Drinking Water	Alternate
Present	Paul Bedore	Port of Stockton	Waterways	Primary
Present	Leandro Ramos	CA State Parks – Boating &	Waterways	Alternate
Present	Stephen Louie	CA Dept. Fish and Wildlife	Resource Mgmt	Primary
	TBD		Resource Mgmt	Alternate
	Eddie Lucchesi	Mosquito & Vector Control Assoc.	Mosquito Abatement	Primary
	David Smith	Mosquito & Vector Control Assoc.	Mosquito Abatement	Alternate
Present	Jon Rosenfield (P)	The Bay Institute	Environmental NGOs	Primary
	Jennifer Clary	Clean Water Action	Environmental NGOs	Alternate

A blank under Attendance category indicates individual was absent from the meeting
(P) indicates participated remotely via WebEx / phone

Other Interested Parties:

Other participants	Agency
Tania Brenes	MLJ-LLC
Steve Camacho	State Water Resources Control Board
Linda Dorn	Sacramento Regional County Sanitation District
Diana Engle (P)	Larry Walker Associates
Stephanie Fong	State and Federal Contractors Water Agency

STAG Meeting Summary
July 13, 2015

Tom Grovhaug	Larry Walker Associates
Tom Hall (P)	EOA, Inc.
Yumiko Henneberry	Delta Stewardship Council - Delta Science Program
Brian Laurenson (P)	Larry Walker Associates
G. Fred Lee (P)	G. Fred Lee & Associates
Tim Mussen	Sacramento Regional County Sanitation District
Vijay Sundaram	Stantec
Ted Swift (P)	California Department of Water Resources
Lisa Thompson	Sacramento Regional County Sanitation District
Elizabeth Yin (P)	Larry Walker and Associates

(P) indicates participated remotely via Webex / phone