

**Utah Lake Water Quality Study
Science Panel Call (Web-meeting) #12
Summary
May 21, 2020**

This document includes a list of future meetings, action items, and a brief summary of the discussions. Please review the action item list for tasks assigned to you and/or the Steering Committee in general. A list of attendees can be found at the end of the document.

Upcoming Meeting/Call	When	Suggested Agenda Items
SC Call #5	June 4	<ul style="list-style-type: none"> ○ Endorse 2 RFPs and hear/discuss SP work updates
SP Call #14 (TBC)	June 16	<ul style="list-style-type: none"> ○ Data Characterization Analysis Plan Report results and discussion, continued discussion of Calcite RFP
ISP Call	TBD (June/July)	<ul style="list-style-type: none"> ○ Rank proposals
SC Call #6	June 30	<ul style="list-style-type: none"> ○ Management goals; approve proposals (if ranking completed)
SP Call #13	TBD (July)	<ul style="list-style-type: none"> ○ TBD

I. Action Items

Meeting Summaries	Who	Due Date	Completed
1. Post background materials and presentations to Dropbox [link]	Facilitation Team	May 22	May 22
2. Share draft call summary	Facilitation Team	May 28	June 1
3. Review and share comments on summary	Science Panel	June 4	
4. Finalize call summary/post to Dropbox	Facilitation Team	June 5	
Sediment-Water Nutrient Interactions Report	Who	Due Date	Completed
5. Review materials shared by Greg and Ramesh (including the response to comments and revised Utah Lake Sediment-Water Nutrient Interactions draft final report) and share comments with Mitch	Science Panel	May 25	May 25

6. Share final SP comments on revised Utah Lake Sediment-Water Nutrient Interactions report with Greg and Ramesh (and SP)	Mitch H.	May 26	May 26
7. Review comments and submit Utah Lake Sediment-Water Nutrient Interactions Final Report to UDWQ (and SP)	Greg C. and Ramesh G.	May 29	May 27
Draft Littoral Sediment RFP	Who	Due Date	Completed
8. Share the SP-approved final version of draft RFP (minor clean-ups) with the SP	Mike P. and Kateri S.	May 26	May 28
9. Share the SP-approved final version of draft RFP (minor clean-ups) with the SC	Facilitation Team	May 28	May 29
Draft C, N, and P Budget Scope of Work	Who	Due Date	Completed
10. Share the SP-approved final version of draft Scope of Work (minor clean-ups) with the SP	Mike P. and Kateri S.	May 26	May 28
11. Share the SP-approved final version of draft Scope of Work (minor clean-ups) with the SC	Facilitation Team	May 28	May 29
Management Goals	Who	Due Date	Completed
12. Share the draft Management Goals Table with the SP following SC review and discussion	Co-chairs	TBD	May 29
13. Review Management Goals Table and share comments (if possible)	Science Panel	June 10	
Miscellaneous	Who	Due Date	Completed
14. Schedule mid-June Science Panel call	Facilitation Team	ASAP	June 1

II. Meeting Recording

Recordings of the meeting (also available on the DWQ website in the near future) can be found at the following [link](#) (password: 6X%!!&zY).

III. Key Points of Discussion

Welcome and Agenda Review

Dave Epstein, SWCA, welcomed everyone to the call and asked Science Panel Chair Mitch Hogsett whether he would like to make any opening remarks. Dr. Hogsett wished everyone a good morning, thanked them for joining the call, and expressed his well wishes for everyone during the pandemic. Mr. Epstein then went over the call agenda and ground rules of the call and went through the list of individuals participating in the call. He asked members of the Science Panel to enable their webcams, for everyone to mute their microphones while they are not speaking, and for everyone to try to focus on the conversation and avoid distractions. He pointed out that there are designated opportunities in the agenda for public comments and that members of the public should enter their comment into the text box if they wish to make a comment. Paul De Morgan, RESOLVE, explained that the Facilitation Team decided to switch the call to Zoom for the improved video quality but noted future calls might shift back to Adobe Connect in the future.

Near-term Research Projects

Dr. Mitch Hogsett provided a summary of the recent history of interactions between the sediments water nutrient interactions research team (Dr. Greg Carling, BYU, and Dr. Ramesh Goel, University of Utah) and the Science Panel. He explained that the research contract is set to finish at the end of the month and therefore they are working on finalizing the report. He went on to explain that he had compiled science panel comments on the draft final report, submitted them to the Drs. Carling and Goel, and that they had provided an updated version of the report addressing the comments the day before this call as well as a comment/response document. Dr. Hans Paerl indicated his comments on the report had been dealt with on the updated draft.

Mr. Epstein then asked the researchers whether they would like to ask any follow-up questions or clarify any of the comments provided by the Science Panel. Dr. Goel thanked the Science Panel for their comments and said that the researchers are considering publishing a manuscript. He then went over a few of the comments submitted by members of the Science Panel, asked follow-up questions to some of them, and then explained their responses to some of the other comments. A discussion ensued after several other members of the Science Panel reiterated some of their comments and/or suggestions on the draft report. The Science Panel committed to providing final comments to Dr. Hogsett by Monday, May 25 who would then compile and submit comments to the researchers by Tuesday, May 26.

RFP Development

Dr. Michael Paul, Tetra Tech, presented the background and the details of the request for proposals (RFP) that the Tetra Tech team developed for a littoral sediments research study and shared with the Science Panel prior to the call. The Science Panel agreed that the draft RFP represented their previous input and approved, by consensus, sharing the draft RFP with the Steering Committee for approval.

Dr. Paul then went over the draft work plan for the carbon, nitrogen, and phosphorus budget study. He explained that the plan is for Tetra Tech to complete this study, which is largely a compilation of existing information. The Science Panel offered a few comments related to the problem statement, suggesting inclusion of the concept of balancing inputs and outputs of nutrients, which they asked to be modified. Dr. Paul indicated Tetra Tech would make those changes to the draft Work Plan. With those edits agreed

on in concept, Science Panel approved, by consensus, sharing the draft work plan with the Steering Committee for approval.

ULWQS Framework Document and Management Goals

Dr. Paul first reminded the Science Panel of the Framework document and explained that Steering Committee members submitted numerous comments and suggested edits to the document. He briefly reviewed the Steering Committee comments and the general approach for responding to and addressing the comments. He then went on to explain the different components of the Framework (management goals, assessment endpoints, metrics, and targets). Paul De Morgan noted that after the Steering Committee first reviewed the Framework document on their March 13 call, the Co-chairs (Eric Ellis and Dr. Erica Gaddis) felt it would be useful for the Steering Committee to use the opportunity to develop a set of management goals to help inform further work of the Science Panel.

Dr. Erica Gaddis, DWQ, then explained the background of the conversations that the co-chairs (herself and Eric Ellis) had with each of the Steering Committee members. She explained that in these one-on-one conversations with Steering Committee members they discussed management goals for each of the four beneficial uses of Utah Lake. Dr. Gaddis described the draft management goals table developed based on the one-on-one conversations. The draft management goals table was not shared with the Science Panel, but Dr. Gaddis indicated it will be shared with the Science Panel in the near future. She explained that once the document is shared, the Steering Committee will be looking to the Science Panel to weigh in on the feasibility of specific metrics related to specific goals.

IV. Public Comment

Dan Potts, Salt Lake County Fish and Game Foundation, shared the following thoughts: Members have been talking about huge amounts of rain in the east, but in Utah we had numerous days of intense winds recently. The lake is likely chocolate milk today. Because sediments have come out of Provo Canyon and the Spanish Fork Canyon contributes quite a bit of mica. Because sediments are so light and flocculant, the lake can remain very turbid for a long time following wind events. The sediments in Utah Lake result in high reflectivity. This has a large effect on algal blooms. My main value is knowledge of common carp. Have raised and caught them. Other fish in the lake (walleye, pike) are not traditional warmwater fish. Bonneville CT are now gone from the lake. Walleye have become a proxy for June sucker. The lake is considered a warmwater fishery but it is kept a cold lake due to the reflectivity of the lake. White bass are now spawning. Cyanotoxins have traditionally just been an issue in the marinas.

V. Participation

Meeting Participants (Name, Organization)

Members of the Science Panel:

- Janice Brahney, Utah State University
- Mike Brett, University of Washington
- Soren Brothers, Utah State University
- Greg Carling, Brigham Young University
- Mitch Hogsett, Forsgren Associates, Science Panel Chair
- Ryan King, Baylor University

- James Martin, Mississippi State University
- Mike Mills, June Sucker Recovery Implementation Program
- Hans Paerl, University of North Carolina

Technical Consultant Staff:

- Michael Paul, Tetra Tech
- Kateri Salk-Gundersen, Tetra Tech

Members of the Public:

- Jeff DenBleyker, Jacobs
- Ramesh Goel, University of Utah
- Renn Lambert, LimnoTech (Adobe Connect)
- Dan Potts, Salt Lake Fish and Game Foundation
- David Richards, OreoHelix Ecological

Utah Division of Water Quality Staff Present:

- Scott Daly, Utah Lake Project Coordinator
- Erica Gaddis, Co-Chair, Utah Lake Water Quality Study
- Jodi Gardberg, Watershed Protection Section Manager

Facilitation Team:

- Paul De Morgan, RESOLVE
- Dave Epstein, SWCA