

**Utah Lake Water Quality Study
Science Panel Meeting #10
Summary
January 23, 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
ULWQS Science Panel (Call #11)	<i>March 3, 2020 (9:00-11:00 a.m. Mountain)</i>	<ul style="list-style-type: none"> ○ Seek final approval of Uncertainty Guidance, Framework, and Strategic Research Plan
ULWQS Science Panel (Meeting #7)	<i>March 23-24, 2020 (Tentative – efforts to assess other options underway)</i>	<ul style="list-style-type: none"> ○ Develop draft summer 2020 RFPs as described in approved SRP; discuss model development; update on near-term research projects; initiate SP Charge progress report
ULWQS Science Panel (Call #12)	<i>2-hr. call between March 30 and April 3 (Tentative – dependent on when meeting scheduled)</i>	<ul style="list-style-type: none"> ○ Seek SP approval of RFPs

I. Action Items

Progress on action items for this call (and prior events) can be reviewed using the following Smartsheet tool: <https://app.smartsheet.com/sheets/6pcjmP76Vfp8vwpmWV9P9r5JWrwXJ66648v5CF51>

Meeting Summaries	Who	Due Date	Completed
1. Post background materials and presentations to Dropbox [link]	Facilitation Team	January 29	January 29
2. Share draft meeting summary	Facilitation Team	January 29	January 29
3. Review and share comments on summary	Science Panel	February 5	
4. Finalize meeting summary/post to Dropbox	Facilitation Team	February 6	
Science Panel Technical Support	Who	Due Date	Completed
5. Send out survey to re-prioritize research ideas	Tetra Tech	January 24	January 27

6. Respond to research idea prioritization survey	Science Panel	January 31	
TSSD Research Proposal	Who	Due Date	Completed
7. Share updated research proposal with the Science Panel	TSSD Team	March 12	
Atmospheric Deposition	Who	Due Date	Completed
8. Share updated atmospheric deposition sampling proposal	WFWQC/Theron Miller	February 14	
9. Review and provide comments on WFWQC atmospheric deposition sampling proposal to Mitch Hogsett	Science Panel	February 28	
10. Compile comments and share with SP in advance of SP meeting	Mitch Hogsett	March 13	
Science Panel Schedule	Who	Due Date	Completed
11. Send out calendar invitations for March call and meeting	Facilitation Team	January 28	January 28
12. Send out Doodle polls for April – May calls and meetings	Facilitation Team	February 7	
Miscellaneous	Who	Due Date	Completed
13. Distribute Auburn University article to SP and SC (link)	Facilitation Team	January 29	January 29

II. Meeting Recording

A recording of the meeting (also available on the DWQ website in the near future) can be found at the following link: <http://resolv.adobeconnect.com/px1282l8a611/>. Please use the video scroll bar along the bottom of the recording window to find the appropriate time in the webinar recording for the session you would like to watch. There are bookmarks in the 'Events Index' on the left side of the screen identifying each session.

III. Key Points of Discussion

Welcome and Agenda Review

Paul De Morgan, RESOLVE, welcomed everyone to the call and listed the Science Panel members, project team members, and other participants listening in on the call. Mr. De Morgan also provided an overview of the meeting agenda.

Science Panel Prioritization of Key Information/Research Needs to Address Initial Charge

Mike Paul, Tetra Tech, summarized where the Science Panel is in the process of developing their Strategic Research Plan (SRP). Dr. Paul referenced the prioritized list of research ideas that the Science Panel developed during the December 10 meeting, where there was strong agreement among the panelists for the highest research idea priorities. He explained that the next step would be for each Science Panel member to re-evaluate the prioritization (re-rank) of research ideas in a survey he would be emailing out in the coming days. Dr. Paul and Scott Daly, DWQ, will then follow-up with each member of the Science Panel during one-on-one phone calls in February to help the Tetra Tech team finalize the draft Strategic Research Plan (by the end of February).

To tie the discussion of the Strategic Research Plan with the Timpanogos Special Service District Research (TSSD) research proposal, Mr. De Morgan briefly reviewed the Initial Charge document (from the Steering Committee to the Science Panel) and noted that the Science Panel had been asked, coming out of the December 10-11 Science Panel meeting, to consider whether/how the TSSD proposal and research ideas could help answer the Initial Charge questions.

Timpanogos Special Service District Research Proposal

Science Panel Chair Mitch Hogsett summarized the comments from various members of the Science Panel on the TSSD research proposal. He reviewed the compilation of comments received by five of the Science Panel members.

Jeff DenBleyker, Jacobs, reiterated that the TSSD team aims to improve the understanding of nutrient response in Utah Lake while also pursuing a long-term solution for TSSD. He explained that they do not want to derail or divert the activities or trajectory of the Science Panel but would like to find ways to work together if it makes sense. Mr. DenBleyker indicated they are now looking at more of a soft start to the study in 2020, focusing on the development of methodology, and waiting for a full deployment of limnocorrals in 2021.

Mr. De Morgan provided a summary of the interactions between Timpanogos Special Service District (TSSD), Mr. DenBleyker (TSSD's consultant), and the Science Panel including recent conversations between the TSSD team, Science Panel chair Mitch Hogsett, Scott Daly, UDWQ, and Mr. De Morgan. He explained that this group discussed several potential arrangements for Science Panel engagement in the TSSD proposal and study and were proposing the Science Panel engage with TSSD. Specifically, TSSD would solicit input and feedback on iterations of the research plan from the Panel and would also provide updates and have discussions with the Panel about the results as they emerge. The members of the Science Panel expressed their support for this arrangement, recognizing that the upcoming discussions and decisions around the Strategic Research Plan could impact the arrangement. Mr. De

Morgan noted that if Ex Officio members are interested in bidding on the TSSD project that they will need to recuse themselves from the future proposal development-focused discussions.

Atmospheric Deposition of Nutrients to Utah Lake

Mitch Hogsett went over the comments and recommendations provided by Dr. Gay, one of the third-party independent reviewers of the atmospheric deposition work products. Dr. Hogsett did not read all of the comments provided by Dr. Gay, but he mentioned several that provided specific recommendations for the design of atmospheric deposition samplers and duration of studies. He also summarized the meeting he, Janice Brahney, and Mike Brett participated in with Dr. Gay, as well as Wasatch Front Water Quality Council (WFWQC) and UDWQ representatives, where additional comments were discussed.

Science panelist Theron Miller provided an update on the WFWQC atmospheric deposition research plan. He also highlighted some of the comments provided by Dr. Gay and stated that an updated version of the WFWQC plan will be available in 2-3 weeks. He discussed one specific comment from Dr. Gay that there is no agreed upon protocol for dry deposition, which may be the dominant form of deposition to Utah Lake. Dr. Miller stated that the WFWQC is continuing to operate 1-2 of their existing samplers for comparison with new samplers. He explained that new samplers are under development and should be ready in March.

Mr. De Morgan summarized Dr. Miller's update and suggested that after the updated research plan is provided to the Science Panel, Dr. Hogsett could compile Science Panel comments on the plan to send to Dr. Miller. Mr. De Morgan suggested that the WFWQC work plan could potentially be discussed on the March 3 call or the March 23-24 meeting.

Science Panel Schedule – February-May

Dave Epstein, SWCA, went over the upcoming meeting schedule for the ULWQS including calls and meetings of both the Science Panel and the Steering Committee, the tentative agenda items for each, and the rough dates for the completion of project milestones such as the Strategic Research Plan and the RFPs for specific research products.

IV. Public Comment

Dan Potts, Salt Lake County Fish and Game Association, made a comment on limnocorrals: past attempts to do this have failed due to the wind and the fetch of the lake. Any enclosure will introduce its own artifacts

Bees are generally found in the South end of the lake, likely from orchards. Bigger concern is midges, which could be found everywhere and beyond 45 ft above the ground.

Wondering about any follow-up from the article from Auburn University on HABs that was sent out. The Facilitation Team noted they had intended to send the article out to the Steering Committee in December as requested but would check and make sure to send it to both the SC and the SP.

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
- Theron Miller, Wasatch Front Water Quality Council
- Mike Mills, June Sucker Recovery Program

Technical Consultant Staff:

- Michael Paul, Tetra Tech

Members of the Steering Committee:

- Eric Ellis, Co-Chair, Utah Lake Commission
- Rich Mickelsen, Timpanogos Special Service District

Members of the Public:

- Zach Aanderud, Brigham Young University
- David Austin, Jacobs
- Jeff DenBleyker, Jacobs
- Mark Illum, IM Flash
- Renn Lambert, LimnoTech
- Dan Potts, member of the public

Utah Division of Water Quality Staff:

- Scott Daly, Utah Lake Project Coordinator
- Jodi Gardberg, Watershed Protection Section Manager

Facilitation Team:

- Paul De Morgan, RESOLVE
- Dave Epstein, SWCA