

**Utah Lake Water Quality Study
Steering Committee Meeting #6
Meeting Summary
December 11, 2018**

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 & Where	Suggested Agenda Items
TBD	TBD	○ Updates on ongoing efforts

I. Action Items

Meeting Summaries	Who	Due Date	Date Completed
1. Share draft Meeting Summary	Facilitation Team	December 19	December 19
2. Review and share comments on summary	SC members	December 28	
3. Finalize summary and post to Dropbox	Facilitation Team	January 2	
Data and Information Sharing	Who	Due Date	Date Completed
4. Upload the Phase 1 presentation from SC Meeting #6 to Dropbox	Facilitation Team	December 19	December 19
5. General clean-up of Dropbox, ensure all files have been uploaded (including materials handed out at the meeting)	Facilitation Team	December 21	
Public Engagement	Who	Due Date	Date Completed
6. Update the one-page public engagement summary and upload to Dropbox	Sam Braegger; Facilitation Team	December 19	December 19
7. Make Public Engagement a standing item on Steering Committee meeting agendas	Facilitation Team	Ongoing	
Provo Regional WWTP	Who	Due Date	Date Completed
8. Erica, Brad, and Gary discuss the alternatives associated with the new plant and share an update with the SC	Erica, Brad, and Gary	ASAP	

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/p2lerwmvkoje/>. 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

Meeting Facilitator Paul De Morgan, RESOLVE, welcomed everyone to the meeting and invited the co-chairs to make opening comments. Erica Gaddis, ULWQS Steering Committee Co-Chair, expressed her appreciation for the presence of all Steering Committee members. She explained that there has been significant work taking place over the past months that has now set the stage for the study to embark into the real science. Sam Braegger, ULWQS Steering Committee Co-Chair alternate (to Eric Ellis), introduced himself and stated that he looks forward to working together with folks more closely.

Mr. De Morgan then asked each of the Steering Committee members, the DWQ staff, and the members of the public to introduce themselves. Following these introductions, Mr. De Morgan went over the agenda and the documents distributed to the members of the Steering Committee. He indicated the Facilitation Team will make sure the updated version of the binder TOC and the other documents handed out (SC OP, Modeling memo, contact list) are available in the Dropbox folder.

Final ULWQS Phase 1 Report

Scott Daly, UDWQ, went over the ULWQS Phase 1 Report and the five different Task work elements included in the report. The tasks included: 1) Stakeholder Development; 2) Data and Information Management; 3) Water Quality Assessment and Analysis; 4) Source and Nutrient Load Analysis; and 5) Model Selection and Development.

Mr. Daly summarized the updates made to the Phase 1 report. He added that LimnoTech completed a literature review of Utah Lake – the take-home message from the review was that the available literature is not specific enough to help answer the questions that the SC/SP generated. Mr. Daly explained that numerous enhancements to the Utah Lake Data Explorer have been made by UDWQ in response to comments made by the Science Panel. Partnerships between UDWQ and WFWQC and Rushforth are contributing data to the tool. He explained that an additional nutrient summary has been included in the report in response to SP comments.

Mr. Daly went over several recommendations UDWQ received related to the Phase 1 Report.

- a) Data management and compilation: improve partner coordination and data sharing. UDWQ is having weekly meetings with WFWQC to work on collaboration and data sharing. They are working on data import tools to improve the quality of data and the metadata associated with the data.
- b) The Phase 1 report was lacking continuous flow data and now flow is being monitored on tributaries. Mr. Daly explained that continuous flow monitoring is now being done on the tributaries to Utah Lake.

A question regarding the availability of the Phase 1 Report and the slides presented by Mr. Daly was raised. Mr. Daly explained that the Phase 1 Report has already been uploaded to the Dropbox folder and that his slides would be uploaded following the meeting.

Mr. Daly presented some data related to measures of the trophic state index. He explained that there is correlation between the concentrations of phosphorus and chlorophyll a, indicating that both phosphorus and chlorophyll a can be used as indicators of lake trophic state. To the contrary, he explained that Secchi depth is not a reliable indicator of trophic state given the influence of sediment on turbidity in the lake.

Mr. Daly mentioned the University of Utah modeling effort and the Science Panel's effort to ensure the model will be useful for the ULWQS. A question from a member of the Steering Committee regarding the composition of the modeling team was raised. Mr. Daly noted Michael Barber, Sarah Hanners, Brett Clark, Steve Burian, and Ramesh Goel comprise the modeling team.

A member of the Steering Committee asked how accurate the available flow data is and whether there is a sense of how much water comes into the lake from the various water sources. Mr. Daly explained that a water budget was created in a 2008 report that is assumed to be fairly accurate. Additionally, it is expected that the modeling effort will include an estimate of a water budget for Utah Lake.

ULWQS Public Engagement Plan

Christine Osborne was initially scheduled to provide an update on the Public Engagement Plan but was not able to attend the meeting. Therefore, Scott Daly, UDWQ, and Sam Braegger, Utah Lake Commission (ULC), gave a presentation in her place. Mr. Braegger explained that he was enthusiastic to participate in the presentation given that the Utah Lake Commission would be involved in implementing public involvement/engagement.

Mr. Daly explained that when the Facilitation Team was hired SWCA developed a public engagement white paper. UDWQ then developed a public engagement plan, although no comments from the SC have been received.

Mr. Daly explained that a one-page bullet list of public engagement items has been developed from the draft Public Engagement Plan. He explained that the ULC sends out monthly updates on communications to encourage partners to re-post or spread the information. He added that the ULC recommends setting up a similar protocol for the ULWQS public engagement efforts, as it could help to expand the reach of the messaging.

A Steering Committee member asked whether the one-page bullet list was available in the Dropbox folder. Mr. De Morgan explained that it was not currently available but that it would be uploaded to Dropbox following the meeting.

Ms. Gaddis, co-chair, clarified that the draft Public Engagement Plan had been developed by UDWQ and suggested it might be helpful to integrate some of the ULC public engagement strategies and protocols into the draft plan. She suggested Mr. Braegger should be put in touch with the various social media outreach coordinators affiliated with each of the organizations represented on the Steering Committee.

A roster was passed around so the members of the Steering Committee could provide the contact information for social media outreach staff affiliated with their organizations.

Mr. Braegger suggested that the Steering Committee develop some pre-approved messages related to the ULWQS that could be shared via social media. Additionally, he suggested that a single, central location for information related to the ULWQS would be most effective to avoid the spread of misinformation and to develop consistency and reliability.

A member of the Steering Committee expressed some concern that there would be multiple opposing views on the information related to the ULWQS and that it may be necessary to share alternate views. Mr. De Morgan responded recognizing that this could be an issue, but that the pre-approved messages from the Steering Committee would be foundational basic information that would be agreed upon.

Mr. Braegger went on to state that the ULC is interested in participating more in local community events. He suggested that additional events or opportunities for the public to engage and learn more about the ULWQS could be organized. Mr. Braegger solicited input from the Steering Committee on who should be the source of information related to the ULWQS. Several members of the Steering Committee expressed support for the ULC and UDWQ serving as the two sources of information. Ms. Gaddis suggested that public engagement and outreach messaging should be kept as a standing item on the agendas for future ULWQS Steering Committee meetings. Mr. De Morgan stated that it could be kept as a standing item.

Recent Efforts Related to Conflicts of Interest

Ms. Gaddis, co-chair, provided a summary of events that transpired in the past two months related to the Science Panel Operating Principles and potential conflicts of interest for Science Panel members and the contract work related to the ULWQS. Ms. Gaddis explained that the co-chairs thought they had handled this potential issue in the initial development of the Operating Principles; however, it turned out that there was more to be done. In their response to the technical consultant scope of work, one of the organizations that submitted a proposal that included a colleague of one of the Science Panel members. After reviewing the definition of “independent” as it related to the independent members of the Science Panel, Ms. Gaddis explained that additional language needed to be added to the Operating Principles to ensure that the process of reviewing proposals would follow state procurement rules. She explained that the text added to the Operating Principles described that independent members of the Science Panel with a conflict of interest would need to recuse themselves from the proposal review process and would need to create a professional firewall with their colleague and ensure that all ULWQS-related communications are through official Science Panel channels.

A member of the Steering Committee asked whether the Steering Committee will see requests for proposals (RFPs) or will be involved in the development or review of RFPs. Mr. De Morgan responded that the Steering Committee will see final RFPs, but their role is not to comment on the development of RFPs as that is the responsibility of the Science Panel. He thanked the Steering Committee and UDWQ for flagging these issues related to conflict of interest and for bearing with the Facilitation Team through this process. He explained that this is a learning process and that we may learn even more during the next RFP development process.

Update on Science Panel Activities

Scott Daly, UDWQ, explained that as UDWQ worked through the Science Panel Operating Principles with the Science Panel members they realized the Science Panel would need some assistance to complete their tasks. A scope of work was developed and was advertised to eight firms that had been pre-screened by UDWQ (shared with the SC in late September). UDWQ engaged the independent members of the Science Panel to review the proposals and solicited their input before UDWQ made the decision to select the Tetra Tech team led by Dr. Michael Paul.

Mitch Hogsett introduced himself as the Chair of the Science Panel and an engineer working in the Utah Lake watershed for 10 years. Mr. Hogsett explained that in reviewing the two proposals the independent Science Panel members felt that while both were strong, Tetra Tech was more qualified with knowledgeable staff and significant experience in the area of numeric criteria development. He proceeded to go over the basics of Tetra Tech's Work Plan presented to the Science Panel during a December 5 call. Mr. Hogsett shared Tetra Tech's tentative approach to completing the eight tasks UDWQ identified in the scope of work. He described Tetra Tech's proposed schedule for completing the tasks and he presented the concept of an Exploratory Research Plan that would be developed in time for field studies to take place during the summer of 2019.

Mr. Hogsett then went on to present some thoughts on the initial charge questions that the Steering Committee had developed for the Science Panel. He provided his thoughts on sources of information that the Science Panel may be able to draw upon to generate answers to these questions.

A member of the Steering Committee informed the group that several municipalities in the Provo area are considering developing a regional wastewater treatment facility to replace the existing plant in Provo. The plant could conceivably discharge into Provo Bay, directly to Utah Lake, or the water could be reused. Input from the Steering Committee and possibly the Science Panel was solicited to help consider the potential impacts to the water balance and ecology of Utah Lake. A discussion ensued, and several members of the Steering Committee commented on the potential impacts of this new plant and the possibility of engaging the Science Panel. Mr. De Morgan suggested that the members of the Steering Committee that represent the municipalities considering the development of the new wastewater treatment facility meet with Ms. Gaddis to discuss the situation and how best to convey information to the Steering Committee and Science Panel.

ULWQS Schedule Moving Forward

Mr. Daly stated that the majority of the work to be done in the immediate future pertains to the Science Panel and the technical consultant. He explained that UDWQ is expecting to receive an updated Work Plan from Tetra Tech, which should set the stage for upcoming Science Panel meetings. Mr. Daly asked the Steering Committee about their opinion on necessary level of involvement and the upcoming meeting schedule for the group. One member of the Steering Committee suggested the group meet in early 2019 and again in the spring. This suggestion seemed to be well-received by the group.

IV. Public Comments

David Richards, Oreo Helix Consulting: If the City of Provo decides to move the water from Provo Bay it will change Provo Bay ecologically. The Bay may end up drying up in dry years. Cyano HABs will change as part of the major ecologically change.

V. Participation

Members of the Steering Committee:

- Sam Braegger, Utah Lake Commission – Co-Chair (alternate to Eric Ellis)
- Gary Calder, Provo City – Municipal
- Erica Gaddis, Utah Division of Water Quality – Co-Chair
- Jason Garrett, Utah County Health Department – Public Health
- Heidi Hoven, National Audubon Society – Conservation and Environment
- Chris Keleher, Utah Department of Natural Resources – Recreation, Fishing and Sovereign Lands
- Rich Mickelson, Timpanogos Special Service District – POTW
- Jay Montgomery, Utah County Stormwater Association – Stormwater
- Dave Norman, Lehi City – Municipal (alternate to Neal Winterton)
- Jay Olsen, Utah Department of Agriculture and Food – Agriculture
- Dennis Shiozawa, Brigham Young University – Academia
- Garrett Smith, Utah Water Ski Association – Recreation
- Brad Stapley, Springville City – Municipal
- Jesse Stewart, Utah Lake Water Users Association – Ag/Water Rights/Water Users
- George Weekley, US Fish and Wildlife Service – Fish and Wildlife
- Gerard Yates, CUWCD – Utah Lake Management

Alternate Members of the Steering Committee:

- David Barlow, Timpanogos Special Service District – POTW
- Jon Hilbert, Jordan Valley Water Conservancy District – Ag/Water Rights/Water Users
- Mike Rau, Central Utah Water Conservancy District – Water Management of Utah Lake
- Ella Sorenson, National Audubon Society – Conservation and Environment
- Travis Taylor, Utah County Public Works – Stormwater

Members of the Public:

- Jeff Denblyker, Jacobs
- Mitch Hogsett, Forsgren Associates, ULWQS Science Panel
- Julie Kinsey, EPA (Adobe Connect)
- Renn Lambert, Limnotech (Adobe Connect)
- Mike Mills, June Sucker Recovery Implementation Program
- David Richards, Oreo Helix
- Juhn Yuan Su, University of Utah (Adobe Connect)

Utah Division of Water Quality Staff:

- Scott Daly
- Jodi Gardberg

Facilitation Team:

- Paul De Morgan, RESOLVE
- Dave Epstein, SWCA