

**Utah Lake Water Quality Study: Stakeholder Process
Joint (Steering Committee and Science Panel) Meeting #1
Meeting Summary
May 31, 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
ULWQS Steering Committee Meeting #4	<i>Wednesday, June 13 9:00 a.m. to 4:00 p.m.</i>	○ Discuss and strive to finalize goals/objectives and initial set of key questions

I. Action Items

Meeting Summaries	Who	To be Completed by
1. Share draft Meeting Summary for the May 31 Joint Meeting #1	Facilitation Team	COMPLETED
Meeting Follow up	Who	To be Completed by
2. Share slides presented during meeting	Facilitation Team	COMPLETED (see link below)
3. Share information with the Science Panel including: water quality data, Phase 1 Report, bibliography, and Assessment Report	Facilitation Team/DWQ	COMPLETED
June 13 Steering Committee Meeting	Who	To be Completed by
4. Share draft agenda for the meeting	Facilitation Team	Monday, June 11
5. Develop draft set of questions to initiate discussion during meeting	co-chairs/DWQ	Wednesday, June 13
August 9 Joint Meeting #2	Who	To be Completed by
6. Develop agenda and list of presentations	SC/Facilitation Team	TBD
7. Identify and reach out to presenters	SC/Facilitation Team	TBD
Public Engagement Plan	Who	To be Completed by

8. Develop proposed ULWQS Public Engagement Plan	DWQ	Wednesday, June 13
Additional Information	Who	To be Completed by
9. Submit a 1-paragraph bio for each Steering Committee member	Steering Committee Members and Alternates	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/pk79goc9rv73/>. 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. In addition, a 'recording agenda' is attached at the end of the summary which also provides the timestamps for when each session begins in the webinar recording.

III. Key Points of Discussion

Introduction and Agenda Review

Participants were welcomed to the first joint meeting of the Utah Lake Water Quality Study (ULWQS) Steering Committee (SC) and Science Panel (SP) by facilitator Paul De Morgan of RESOLVE. Mr. De Morgan went over the meeting agenda, the documents handed out, and solicited comments or questions on the agenda from the participants, but none were raised. He also explained that one of the goals of the meeting was to generate a list of key questions related to the ULWQS that may come out of each of the individual presentation given during the meeting.

ULWQS Steering Committee Co-chairs Eric Ellis and Erica Gaddis welcomed everybody and expressed their appreciation for everyone's presence at the meeting and participation in the Study.

Foundation - Setting Presentations

A series of presentations were made addressing topics identified by the Steering Committee. At the conclusion of each presentation the group engaged in a facilitated discussion focused on questions and identification of key questions related to the ULWQS. The presentations from the meeting are available on the DWQ ULWQS website at the following address:

<https://deq.utah.gov/legacy/destinations/u/utah-lake/steering-committee-meetings.htm>

- Introduction to Conceptual Mapping
 - Presentation - *Scott Daly (DWQ)*
 - Mr. Daly described the idea of conceptual mapping, provided examples from other studies and suggested how conceptual mapping may be an important step in moving forward with the ULWQS.
- Establishing Nutrient Criteria in Lakes: Associated Vocabulary and Concepts
 - Presentations – *Chris Bittner, UDWQ; Jeff Ostermiller, UDWQ; and Tina Laidlaw, USEPA*

- The presenters described the procedural and scientific steps involved in establishing nutrient criteria in compliance with the Clean Water Act.
 - Key Questions: What do fully protected beneficial uses look like for Utah Lake?
- Water Management of Utah Lake
 - Presentation – *Jared Manning, Utah Division of Water Rights*
 - Mr. Manning gave an overview of the water rights associated with Utah Lake and answered questions about the feasibility of ensuring minimum water levels in Utah Lake.
- Public Health Issues Related to Utah Lake
 - Presentation – *Nathan LaCross, Utah Department of Health*
 - Mr. LaCross gave a brief overview of *E. coli* and a more detailed overview of cyanobacteria (blue-green algae) and the public health concerns associated with harmful algal blooms (HABs).
 - Key questions: What are the risks associated with secondary water use during a HAB event?
- Shallow Lake Ecology
 - Presentation – *Soren Brothers, Utah State University*
 - Dr. Brothers shared thoughts on shallow lake ecology and the functioning of shallow lakes. The concepts of shallow lake ecology and the “natural functioning” of these lakes were applied to Utah Lake and how the lake may have functioned historically.
 - Key questions: Are we trying to steer Utah Lake back to some previous condition? Should the turbid state be accepted or should a potential clearwater state be pursued?
- Applying the Principles of Shallow Lake Ecology to the Recovery of an Endangered Fish: a brief history of the June Sucker Recovery Implementation Program
 - Presentation – *Chris Keleher, Utah Department of Natural Resources*
 - Mr. Keleher described the history of the June sucker and the June sucker recovery program. He described the details of the projects currently underway to recover June sucker and how they may impact the ecology of the lake.
- Recreation Value and Economic Impacts of Utah Lake
 - Presentation – *Eric Ellis, Utah Lake Commission; and Nick von Stackelberg, UDWQ*
 - Mr. Ellis described the economic impacts that HAB events have on Utah Lake and the local economy. Mr. von Stackelberg gave an overview study that the Utah Division of Water Quality did to evaluate the benefits of excess nutrient reductions.
 - Key questions: Should the SC consider having another cost-benefit analysis done related to the ULWQS.
- Results and Implications of the Phase I ULWQS Report (Scott Daly)
 - Presentation – *Scott Daly, UDWQ*
 - Mr. Daly provided an overview of Phase I of the ULWQS and the data collection effort DWQ has undertaken on Utah Lake. He explained that DWQ is finishing the draft report and aims to share it with the SC/SP in the near future.

Discussion of Key Questions for the ULWQS

Members of the Steering Committee and Science Panel each shared their thoughts on goals of the ULWQS and specific topics or concepts that they would like to have more information on to move forward with the study.

IV. Public Comments

Two members of the public signed up to speak during the public comment period:

Dr. David Richards (Oreo-Helix Consulting) presented on the importance of midges (chironomids) and mollusks in Utah Lake and the need to incorporate them into the study. He suggested some of the papers he has written describing his research on Utah Lake would be useful for the Science Panel to review.

Susan Sims (Utah Native Plant Society) described her concern that native plants are not being taken into account in the approach to the ecology of Utah Lake. She urged the Steering Committee consider the importance of wetlands and the need for revegetation in and along the lake. She suggested that qualified botanists need to be involved in the study.

V. Participation**Meeting Participants (Name, Organization – Stakeholder Interest)****Primary Steering Committee Members Present (Name, Organization – Stakeholder Interest):**

- David Barlow, Timpanogos Special Service District – POTW
- Craig Bostock (Alternate), Utah County Health Department – Public Health
- Chris Cline (Alternate), US Fish and Wildlife Service – Fish and Wildlife
- Eric Ellis, Utah Lake Commission – Co-Chair
- Erica Gaddis, Utah Division of Water Quality – Co-Chair
- Heidi Hoven, Audubon Society – Conservation and Environment
- Chris Keleher, Utah Division of Natural Resources – Recreation, Fishing and Sovereign Lands
- Jay Montgomery, Utah County Stormwater Association – Stormwater
- Jay Olsen, Utah Department of Agriculture and Food – Agriculture
- Mike Rau (Alternate), Central Utah Water Conservancy District – Water Management of Utah Lake
- Dennis Shiozawa, Brigham Young University – Academic
- Garrett Smith – Utah Water Ski Club – Recreation
- Brad Stapley, Springville City – Municipal
- Jesse Stewart, Salt Lake City Department of Public Utilities – Agriculture/Water Rights/Water Users
- Neal Winterton, City of Orem – Municipal

Alternate Steering Committee Members Present (Name, Organization – Stakeholder Interest):

- Laura Ault, Division of Forestry, Fire and State Lands – Recreation, Fishing and Sovereign Lands
- Juan Garrido, Springville City – Municipal
- Jim Harris, Utah Division of Water Quality – Water Quality
- Jon Hilbert, Jordan Valley Water Conservancy District – Water Management of Utah Lake

- David Land, Timpanogos Special Service District – POTW
- Dave Norman, Lehi City – Municipal

Science Panel Members

- Janice Brahney – Utah State University
- Mike Brett – University of Washington
- Soren Brothers – Utah State University
- Greg Carling – Brigham Young University
- Jereme Gaeta – Utah State University
- Mitch Hogsett – Forsgren Associates
- Ryan King – Baylor University
- Hans Paerl – University of North Carolina (by phone)
- James Martin – Mississippi State University
- Theron Miller – Wasatch Front Water Quality Council

Members of the Public:

- Rebecca Andrus
- Ted Balling (by phone)
- Ariel Calmes (by phone)
- Mike DeVries (by phone)
- Mark Illum (by phone)
- Julie Kinsey (by phone)
- Nate LaCross
- Tina Laidlaw
- Renn Lambert (by phone)
- David Maiorano (by phone)
- Jared Manning
- Dan Potts
- David Richards
- Daniel Riddle (by phone)
- Susan Simms
- Jake Summers (by phone)
- Wade Tuft (by phone)
- Randy Zollinger

State of Utah Staff Present:

- Carl Adams, Utah Division of Water Quality
- Chris Bittner, Utah Division of Water Quality
- Scott Daly, Utah Division of Water Quality
- Jeff Ostermiller, Utah Division of Water Quality

Facilitation Team:

- Paul De Morgan, RESOLVE
- Dave Epstein, SWCA