

Utah Lake Water Quality Study: Stakeholder Process
Steering Committee Meeting #4
Meeting Summary
June 13, 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/Science Panel Joint Meeting #2	<i>Thursday, August 9</i> <i>9:00 a.m. to 4:00 p.m.,</i> <i>CUWCD DACWTP</i>	<ul style="list-style-type: none"> ○ Foundation presentations ○ Finalize goals, objectives, work plan

I. Action Items

Meeting Summaries	Who	To be Completed by
1. Share draft Meeting Summary for the June 13 SC Meeting #4	Facilitation Team	Friday, June 26
Meeting Follow up	Who	To be Completed by
2. Share copy of public comments received at the meeting	Facilitation Team	Friday, June 26
3. Provide comments on the Charge document	Steering Committee	Monday, July 2
4. Develop revised Charge document and share with SC	DWQ	TBD
5. Share revised Charge document with SP	Facilitation Team	Monday, July 2
6. Revise Scope and Phases document with language stating that cost is not a factor in nutrient criteria development	DWQ	Friday, June 29
Public Engagement Plan	Who	To be Completed by
7. Share proposed plan with SC	DWQ	Friday, June 29
8. Develop a list/summary of SC accomplishments to date	co-chairs/DWQ	Friday, June 29
File Sharing	Who	To be Completed by

9. Develop Dropbox architecture and share link with SC Members	Facilitation Team	Friday, June 29
August 9 Joint Meeting #2	Who	To be Completed by
10. Develop a meeting Agenda, work with potential presenters	Facilitation Team	TBD
Additional Information	Who	To be Completed by
11. 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/p01pwjjuq6z/>. Please use the video scroll bar along the bottom of the recording window to find the appropriate time in the webinar recording for the portion of the meeting you would like to watch. There are bookmarks in the 'Events Index' on the left side of the screen identifying each part of the meeting. 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 fourth meeting of the Utah Lake Water Quality Study (ULWQS) Steering Committee (SC) 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 stressed that an important part of the process is to see to learn about the perspectives of others and encouraged members of the SC to listen and try to consider differing perspectives.

ULWQS Steering Committee co-chairs Eric Ellis and Erica Gaddis welcomed everybody and expressed their appreciation for everyone's presence at the meeting. Eric Ellis encouraged everyone to speak up and contribute to the meeting. Dr. Erica Gaddis reminded the group of all the work that has yet to be completed and the importance of today's meeting to come up with a clear direction for the study.

All members of the Steering Committee (primary and alternate representatives) introduced themselves in addition to the members of the public present at the meeting.

Objectives of Defining Nutrient Criteria

ULWQS co-chair Dr. Erica Gaddis explained the importance of understanding the phases of the study to achieving the goals of the study. Ms. Gaddis raised the question of whether a cost – benefit analysis

needs to be undertaken during Phase II of the study. While members of the SC stressed the importance of considering cost when discussing nutrient reduction efforts, Ms. Gaddis clarified that the Clean Water Act specifies that cost should not be considered as a factor in establishing nutrient criteria. There was general agreement from the SC that it would not make sense to pursue a cost-benefit study at this juncture of the project, given the challenge of estimating costs without knowing what the nutrient criteria will be. However, the possibility of pursuing a cost-benefit study would be revisited as the Steering Committee gets close to identifying nutrient criteria for Utah Lake.

A discussion of the importance of establishing clear goals for the ULWQS ensued and each member of the SC shared their perspective on goals for the study.

Key Scientific Questions (Charge Questions) the ULWQS Needs to Address

The SC reviewed and discussed the draft Charge document that had been provided by the co-chairs. While the Charge document included a long list of questions to be answered during different phases of the study, the discussion focused in on the first page and the high-level questions that should be presented to the Science Panel (SP) for them to work on answering. Additionally, there was significant discussion of 2 potential states for the lake; clear water macrophyte-driven, or turbid and phytoplankton-driven, and whether it is feasible for Utah Lake to move to a clear water macrophyte-driven state. Comments and suggestions from the SC were noted for potential modification of the main Charge questions during the lunch break.

ULWQS Public Engagement Plan

Christine Osborne from the Utah Division of Water Quality made a presentation to the group on a 3-month plan for public engagement related to the ULWQS. She referenced the Public Engagement White Paper (developed by the Facilitation Team), which will serve as the foundation of the actual public engagement plan to be implemented. Ms. Osborne committed to having a draft initial Public Engagement Plan ready for distribution in 2 weeks' time.

Key Scientific Questions the ULWQS Needs to Address (continued)

Following the lunch break, co-chair Dr. Erica Gaddis presented the revised list of questions for the SP to work to answer. A discussion ensued around these updated questions, the potential to add to the list of questions and potential next steps. It was clarified that Phase I of the study did not do a thorough job of summarizing all known information related to Utah Lake and therefore a contractor will be hired (ASAP) to perform this literature review and summary.

Foundation Setting Topics (Agenda for Next Meeting)

Facilitator Paul De Morgan presented the list of potential foundation setting topics to be presented on at the August 9 Joint Meeting. There was limited discussion around these topics and a group of topics was agreed upon. The group discussed the possibility of a tour of Utah Lake during the August 8-9 SP and Joint meetings. Additionally, Mr. De Morgan mentioned a new system for file sharing that would utilize Dropbox as a file storage system for the Study.

IV. Public Comments

Two members of the public (Dan Potts and David Richards) signed up to speak during the public comment period. Additionally, one individual (Juhn-Yuan Su) provided multiple comments in the chat box of the Adobe Connect web meeting.

Dan Potts (Salt Lake Fish and Game Foundation/Utah Anglers Coalition) commented that Utah Lake currently reflects a significant portion of the solar energy that it receives due to the high turbidity of the water. If the lake were to become clearer, more solar energy would be absorbed by the lake, which could influence the fish community and result in diel dissolved oxygen swings. He suggested that the SC take this into consideration.

Dr. David Richards (Oreo-Helix Consulting) mentioned that there was a harmful algal bloom in Provo Bay this week and a very narrow channel filled up with algae. He described how the middle of the channel is clogged with the algae and small zooplankton but the water along the edges remains clear due to the phragmites and the presence of large zooplankton. If anyone is able, they could go down to observe this.

1. Written Public Comments

- Dr. David Richards submitted five public comment cards that are summarized below:
 - Are highly invasive, nasty carp considered Early Life Stages for protection?
 - As an ecologist working on Utah Lake it is obvious that nutrient reduction will act synergistically with other restoration activities.
 - Potential switch from algae domination to SAV domination and a high level of nutrients could increase cladophora type algae.
 - Utah Lake is a reservoir and not a lake and should be managed that way.
 - The Clean Water Act mandates the protection and propagation of fish and shell fishes. Utah Lake has a unique mollusk assemblage that needs protection
- Dan Potts submitted a public comment card referring to the edits he made on the Charge document.
- Juhn-Yuan Su submitted a couple of comments in the chat window of the Adobe Connect web meeting:
 - Juhn-Yuan Su: Regarding Question 3(b) on carp removal, I am NOT sure if the carp removal is implemented for remediating water quality. Based on what I had heard regarding carp removal, this effort was done simply for improving the conditions of the June Sucker species in Utah Lake. I am NOT sure if the carp removal process may significantly impact particular water quality constituents though this characteristic can be studied. Please correct me if I am wrong about this.
 - Juhn-Yuan Su: "Do we want to commission a cost-benefit study now?" My comment regarding that question involves that this characteristic depends on whether possible solutions have already been developed for addressing such issues with Utah Lake. I think that the solutions should consider the implementation of nutrient load reductions (e.g.,

BMP applications for stormwater, WWTP, etc.), which I seem to not be sure about what will the "cost-benefit study" be implemented upon.

- Steering Committee Recreation Representative Garrett Smith was not present at the meeting but submitted the following comment via email:
 - One question I have is: If the lake loses 50% of the water due to evaporating and as the lake gets more shallow it gets worse, Is it worth trying to bring all the water in the southwest part or goshen bay into the main body of the lake to make it deeper by creating a dike so on lower water years keeping that water in the main lake body?

Additional Steering Committee Discussion

Following the Public Comment period, a member of the Steering Committee nominated Dr. David Richards to replace Dr. Sam Rushforth on the Science Panel (SP). This resulted in some discussion among the SC questioning whether there is a need to add an additional scientist to the SP and if so, whether there should be another nomination period where other individuals could be nominated? The discussion ended with the co-chairs committing to draft a memo summarizing the history (including the nominations process) and current state of the SP. This memo might be shared with the SP to solicit their input as to whether there is a need for an additional member of the SP.

V. Participation

Meeting Participants (Name, Organization – Stakeholder Interest)

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

- David Barlow, Timpanogos Special Service District – POTW
- Gary Calder, Provo City – Municipal
- Eric Ellis, Utah Lake Commission – Co-Chair
- Erica Gaddis, Utah Division of Water Quality – Co-Chair
- Jason Garrett, Utah County Health Department – Public Health
- Juan Garrido, Springville City – Municipal
- 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
- Jesse Stewart, Salt Lake City Department of Public Utilities – Agriculture/Water Rights/Water Users
- George Weekley, US Fish and Wildlife Service – Fish and Wildlife
- 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
- Jim Harris, Utah Division of Water Quality – Water Quality
- Jon Hilbert, Jordan Valley Water Conservancy District – Water Management of Utah Lake
- Nancy Mesner, Utah State University – Academic (via Adobe Connect)
- Cory Pierce, Spanish Fork Public Works – Municipal

Members of the Public:

- Mark Illum (Adobe Connect)
- Sarah Hinnert (Adobe Connect)
- Mitch Hogsett
- Julie Kinsey (Adobe Connect)
- Mike Mills
- Renn Lambert (Adobe Connect)
- Dan Potts
- David Richards
- Juhn-Yuan Su (Adobe Connect)
- Randy Zollinger

State of Utah Staff Present:

- Carl Adams, Utah Division of Water Quality
- Christine Osborne, Utah Division of Water Quality

Facilitation Team:

- Paul De Morgan, RESOLVE
- Dave Epstein, SWCA