

Utah Lake Water Quality Study: Stakeholder Process
Steering Committee Meeting #2
Meeting Summary
January 23, 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 as well as the flipchart notes taken during the meeting (Attachment A).

Upcoming Meeting/Call	When & Where	Suggested Agenda Items
ULWQS Steering Committee Meeting	Tuesday, Feb. 27 9:00 a.m. – 12:00 p.m.	<ul style="list-style-type: none"> ○ Standing up SP cont. ○ Information needed to proceed ○ Assessment report
ULWQS Steering Committee Meeting	Monday, Mar. 12 1:00 p.m. – 4:00 p.m.	<ul style="list-style-type: none"> ○ SP decision or interaction (TBD) ○ Goals/questions to share with SP
ULWQS Steering Committee Meeting	Thursday, Apr. 12 1:00 p.m. – 4:00 p.m.	<ul style="list-style-type: none"> ○ TBD; might be a joint SC/SP meeting depending on progress/schedule

I. Action Items

Action Items – Science Panel Nominations	Who	To be Completed by
1. Review state procurement rules regarding Science Panel membership and potential to compete for studies emerging from Research Plan	UDWQ	COMPLETED
2. Develop proposed Science Panel nominating process (including updated criteria)	UDWQ/Facilitation Team	COMPLETED
3. Review proposed process and share comments	Steering Committee	COMPLETED
4. Pending prior item, initiate nominating process	Facilitation Team	COMPLETED
5. Submit nominations for Science Panel	Steering Committee	Tuesday, Feb. 20
6. Share ‘package’ of Science Panel nominees with SC for review in preparation for next meeting	Facilitation Team	Tuesday, Feb. 20
Action Item – SC and SP Operating Principles	Who	To be Completed by
7. Edit the draft SC Operating Principles and share (redline version) with Steering Committee	Facilitation Team	COMPLETED

8. Review revised draft Steering Committee Operating Principles and share comments and/or proposed edits	Steering Committee	COMPLETED
9. Share updated draft Steering Committee Operating Principles (post Steering Committee review)	Facilitation Team	Friday, Feb. 16
10. Develop draft Science Panel Operating Principles for review in preparation for next meeting	Facilitation Team	Friday, Feb. 16
Action Item – Additional Information	Who	To be Completed by
11. Share written public comments provided at Meeting #2	UDWQ	COMPLETED
12. Identify ~5 key papers for Steering Committee consideration (as a starting point for subsequent Steering Committee discussion of information needs and appropriate mechanism)	UDWQ	Friday, Feb. 9
13. Update UDWQ ULWQS stakeholder list – add names from public that have attended meetings (and make other modifications as needed)	UDWQ	COMPLETED
14. Review the ULWQS stakeholder list, check that it is current and make any necessary edits	Steering Committee	Friday, Feb. 16
15. Share draft Stakeholder Assessment report with Steering Committee	Facilitation Team	Friday, Feb. 16
16. Provide information on website access to ULWQS materials (meetings; background; etc.)	UDWQ	COMPLETED
17. Create publically available contact list for Steering Committee primary and alternate members (check with members on information to be shared)	UDWQ	Friday, Feb. 16
18. Create proposed approach to presenting background information during a joint Steering Committee and Science Panel meeting	UDWQ/Facilitation Team	Friday, Feb. 23
19. Develop language for the different phases (Phase 2 and 3) and key scope aspects (criteria; sources; attainability; and implementation planning)	UDWQ	Friday, Feb. 23
20. Create document providing brief background information on all Steering Committee members and alternates for public awareness	UDWQ	Friday, Feb. 23

21. Share draft public engagement white paper	Facilitation Team	Friday, March 23
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II. Meeting Recording

A recording of the meeting (via YouTube) is now available on the DWQ website:

[\[https://deq.utah.gov/locations/U/utahlake/steering-committee.htm\]](https://deq.utah.gov/locations/U/utahlake/steering-committee.htm).

III. Key Points of Discussion

Participants were welcomed to the second meeting of the Utah Lake Water Quality Study (ULWQS) Steering Committee (SC) by meeting facilitator Paul De Morgan of RESOLVE. One of the Co-Chairs, Eric Ellis, Director of the Utah Lake Commission, introduced himself along with alternate co-chair Jim Harris, Assistant Director of the Division of Water Quality. Primary co-chair Erica Gaddis, Director of the Utah Division of Water Quality, arrived at 11:00 am, replaced Jim Harris at the table, and introduced herself.

Paul De Morgan, RESOLVE facilitator, provided the group with an overview of the meeting objectives: review the stakeholder process document and address any questions; introduce proposed operating procedures for Steering Committee approval; explore aspects of interest-based negotiations theory and application to this effort; continue discussion of Steering Committee goals and objectives and continue building a common platform of understanding for the overall effort; and initiate efforts to stand up the Science Panel (SP) and confirm next steps. Mr. De Morgan mentioned the public comment sign-in sheet and the sign-up process to provide public comments at the end of the meeting. Each Steering Committee member briefly introduced themselves and the stakeholder group that they represent.

Stakeholder Process Document (Steering Committee/Science Panel “Charter”)

Scott Daly of the Utah Division of Water Quality (UDWQ) gave an overview presentation of the process for the Utah Lake Water Quality Study (ULWQS) outlined in the Utah Lake Water Quality Study Stakeholder Process (Charter) document. While this was not new information and the Charter had been shared previously with the Steering Committee (SC), this was the first time that the Charter had been reviewed with the group. Mr. Daly described how the SC will work together with UDWQ, the Utah Lake Commission, and the Water Quality Board and reviewed Figure 2 (pg. 11), which depicts the process for the adoption of an in-lake nutrient standard for Utah Lake. He made one important clarification that the final box (outlined in a dotted line) in the lower right corner of the diagram depicts the UDWQ as an intermediary between the Steering Committee and the Water Quality Board; however, he clarified that UDWQ would not modify the SC findings before they are passed along to the Water Quality Board. He explained that the SC will need to engage with their stakeholders as they build partnerships in order to identify numeric criteria that will ultimately be approved by the Environmental Protection Agency (EPA).

During the overview presentation of the Charter document a series of questions and comments were brought up by SC members:

- In response to a question about whether similar projects have been done elsewhere, Mr. Daly responded that similar projects were successfully completed by UDWQ on Willard Spur and the Great Salt Lake where a similar arrangement of a steering committee and science panel guided the completion of the projects. Mr. De Morgan offered that the project approach could be considered a joint fact-finding effort (similar to many undertaken around the country) and the

Steering Committee may want to consider attempting to bring together the various institutions involved in water quality research on Utah Lake to pool information and resources.

- In response to an individual raising his hand in the public seating section of the room, Mr. De Morgan explained that the members of the public are asked to use the Public Comment period during Steering Committee meetings to convey thoughts to the group. The public is welcome to channel questions and comments through the SC member(s) that best represents their interest(s) or reach out to the Co-Chairs.

Introduction to Proposed Operating Principles

Paul De Morgan introduced and presented a draft set of Operating Principles for potential adoption by the SC. The document is consistent with the content of the Charter but includes additional content relevant to the day-to-day operation of the SC. The SC expressed their interest in adopting the Operating Principles as their own, once a series of edits have been made. The Facilitation Team committed to creating a redline version for review by the SC.

During Mr. De Morgan's presentation of the Operating Principles, the following discussion occurred:

- In response to a question about replacing alternate SC members that fail to participate in the ULWQS, Mr. Daly suggested that the intention of the Charter was for each primary SC member to have one alternate (the same alternate) throughout the ULWQS. If the alternate continually fails to attend meetings, the primary representative could suggest a replacement that would need to be approved by DWQ. It was noted that the alternates receive all communications sent to the SC.
- A discussion took place among the SC in response to the suggestion in the Operating Principles that the SC can decide to create work groups to tackle specific tasks during the ULWQS and SC members expressed their thoughts on who should be eligible to participate in work groups. One SC member asked whether alternate SC members could participate in work groups, which sparked a conversation about who should be eligible to participate in work groups. It was suggested that the SC should have discretion to decide who would be involved in specific work groups. Additionally, while work groups could seek the help of individuals from outside of the SC, the work groups should only be composed of SC members. Additionally, there was discussion regarding the potential value of work groups to help alleviate the work load placed upon the SP. Given that the SP would be largely voluntary, there is some concern that the SC might ask them to do too much and work groups may be able to alleviate some of this work load. Mr. De Morgan offered that the Facilitation Team would draft a redline version of the Operating Principles that would include greater detail about the potential composition of work groups and how they might interact with the SC and SP.
- There was a discussion around the processes outlined for decision making within the SC and the process of submitting recommendations to the Water Quality Board. There was a lengthy discussion of the proposed details defining decision making in the Operating Principles and the distinction between "procedural" and "substantive" recommendations. There were some differing ideas among the SC regarding how decisions (including minority opinions) should be passed from the SC to the Water Quality Board. Again, Mr. De Morgan suggested that the Facilitation Team could draft alternate language to tailor the Operating Principles to reflect the SC discussion. SC members appeared to agree this is something they would be interested in and the Facilitation Team should present an updated version for their review.

Introduction to Interest-based Negotiations

Mr. De Morgan presented a primer on Interest-based Negotiations that was based in part on the book *Getting to Yes*. While not all of the principles presented in the primer apply perfectly to the ULWQS SC, the concepts are generally applicable and could be helpful to the SC. He presented the three dimensions of success (substance, relationships, and process) and stated that if one is not conscious of all three dimensions, a solution/agreement reached by the group may be difficult to implement. The basic concepts of interest-based negotiation are:

1. Focus on interests
2. Understand best alternative to a negotiated agreement (BATNA)
3. Consider multiple options
4. Use objective criteria and standards to persuade
5. Elevate options that provide joint gain
6. Build implementable agreements

There were no questions or comments in response to this presentation.

Continuation of an Overview of Designated Beneficial Uses and Phases 2 and 3 of the ULWQS

As a continuation of the presentation given by Scott Daly (UDWQ) during Meeting #1, Erica Gaddis (UDWQ) presented a 2-page summary document [*Scope of Utah Lake Study: Site Specific Standards and Implementation*] created by UDWQ to clarify the functioning of the Clean Water Act and provide some context for Phases 2 and 3 of the ULWQS. This was distributed to the SC and the public at the meeting. Dr. Gaddis explained that UDWQ is mandated by the EPA to designate beneficial uses of all water bodies in Utah based on the actual uses that they provide for. She specified that all water bodies are required by the EPA to have wildlife and recreational beneficial uses. The state of Utah added agriculture and drinking water uses, although designation of these beneficial uses is not required for all water bodies. Dr. Gaddis explained that UDWQ has a one million dollar grant from the Water Quality Board to complete the whole project. She stated that it would be important to leverage other funds available and join forces with other groups involved in Utah Lake-related research.

During Dr. Gaddis' presentation, a series of questions were raised and a discussion ensued. The main questions and discussion points are listed below:

- In response to a question regarding the potential beneficial use change from 2B to 2A in Utah Lake, Dr. Gaddis explained that the beneficial use designation and numerical criteria for *E. coli* would change to reflect the actual recreational use of Utah Lake that includes primary contact recreation. She continued to explain that the state is attempting to solve the *E. coli* problem, given that the *E. coli* issue appears to be fairly localized in certain areas of the lake. A follow-up comment from the SC suggested it is important to differentiate the process of potentially changing the beneficial use from 2B to 2A from the scope of the ULWQS. Dr. Gaddis reaffirmed this sentiment and the group agreed it would be important to publicize the distinction in public engagement efforts. The change in beneficial use and the *E. coli* numeric criteria are somewhat unrelated to the ULWQS objectives, although it was pointed out that there may be indirect connections between nutrients and *E. coli* concentrations.
- An additional question regarding the change from 2B to 2A and how it will affect the lake closure/warning signage utilized by the Utah Health Department was briefly discussed before Mr. De Morgan clarified that the Charter of the ULWQS specifies a focus on the role of nutrients in supporting Utah Lake's beneficial uses. Given that there is no nutrient criteria for beneficial uses, the change from 2B to 2A is somewhat unrelated to the ULWQS.

- A discussion ensued regarding whether or not the SC should work solely on Phase 2 of the ULWQS and Phase 3 should commence only after in-lake nutrient criteria are established. Dr. Gaddis explained that the standard process is to wait to explore implementation (Phase 3) until after the criteria is established (Phase 2) and UDWQ's initial plan was to wait to begin Phase 3 until Phase 2 is completed. The implementation of the in-lake nutrient criteria is not scheduled until the year 2030 and cost and feasibility analyses are generally done as close to actual implementation as possible so that the analyses reflect current conditions. However, Dr. Gaddis stated that if the SC so desired, it could be possible to blend Phase 3 into Phase 2.
- Dr. Gaddis went on to explain that the goal of the study is to identify in-lake nitrogen and phosphorus standards, which would result in algae concentrations that reflect the desires and needs of the public and aquatic life. A follow-up question asked who would pay for achieving that nutrient concentration and whether it would be possible to target a lower concentration if it proved to be more cost-effective. This question, along with follow-up comments, represented a sentiment that a cost analysis would be an important component of Phase 2. One SC member expressed that cost information is necessary in order to define "what the lake is now." At a minimum, it was suggested that the SP will want to define (and quantify) the current sources of nutrients in the development of nutrient criteria. Dr. Gaddis expressed a concern for using too much of the project budget on cost analyses, particularly when cost analyses are only relevant for a couple of years after they are completed.
- In response to a question about how input nutrient loads would be regulated, Dr. Gaddis explained that while the in-lake nutrient criteria would be a concentration, the inputs would be regulated as loads and calculations of resulting in-lake concentrations would be based on a determined lake volume. Given that some inputs are seasonal and concentrations may vary, focusing on loads would be more appropriate.
- As a follow up to the question of whether Phase 3 should commence during Phase 2, it was suggested that the SC should be part of both Phase 2 and Phase 3 though it would involve a longer time commitment by the SC. Going around the table, all SC members expressed their willingness to extend their participation an additional 2 to 3 years beyond the initial 3-year commitment. However, several SC members expressed their approval of the UDWQ process to wait to explore implementation until the target (concentration) is established. Additionally, a concern that factoring the feasibility of implementation into the process of establishing nutrient criteria could lead to the misinterpretation of results and scientific information.
- Mr. De Morgan commented that the SP could help to answer "what the lake is now," but posed the question of whether primers (presentations) on the legal and management constraints (and possibly other items) are necessary first. One responder clarified that while legal and management constraints could potentially change, ecological constraints do not change and therefore a primer on shallow lake ecology may be the most pressing. It was suggested that the SP may also benefit from the various "primers" presented to the SC to address knowledge gaps and establish a common knowledge base.
- Some expressed the sentiment that it is important to provide clear direction to the SP so the questions they are charged with are focused in order to avoid going down "rabbit holes."
- In response to a question regarding the availability of widely-accepted documents relevant to the ULWQS that would not need to be vetted by the SC/SP prior to review, Dr. Gaddis responded that UDWQ is preparing a summary report of existing information, although it will not be a peer-reviewed document. It was suggested that the SC might charge the SP with evaluating existing information and rating the credibility of each document. However, first the criteria for credibility would need to be established. At the suggestion of one member, Dr.

Gaddis agreed that UDWQ could create a select list of publications (~5) as a priority list of documents for review by the SC. There was support for this idea.

- The SC agreed that they have a pretty good idea of the list of questions that they want to SP to answer; however, they recognize that not all of the questions can be identified now. There was agreement that it would be prudent for the SC to move to seat the SP as soon as possible.

Initial Discussion on Standing up the Science Panel

Scott Daly, UDWQ, gave a short presentation on the SP, its purpose, objectives and duties, the list of disciplines that should be represented, and the criteria for membership. The list of expertise (taken from the Charter document) includes:

- Limnology
- Biogeochemistry
- Phycology
- Nutrient cycling
- Hydrodynamic modeling/hydrology
- Water quality modeling
- Aquatic ecology
- Fisheries management
- Water quality criteria development
- Wetland science

The criteria for SP membership was presented and the slides will be made available on the UDWQ website. Additionally, the criteria for membership will be explicitly laid out in a nominations process document to be created by the Facilitation Team/UDWQ and shared with the SC. Summaries of questions and discussions are provided below:

- It was pointed out that toxicology may be a discipline that is missing from the list of expertise to be represented on the SP. Additionally, it was pointed out that as the project moves into the implementation phase, both engineering and economics would be areas of expertise that could be extremely beneficial to the SP. However, it was pointed out that this expertise may not need to be a part of the SP and an engineer and economist could be contracted to support the efforts of the project on an “as needed” basis.
- An extensive discussion ensued regarding the criteria for SP membership, including the terms “unbiased” and “independent.” The term “objective” was suggested in place of “unbiased” and the SC agreed that it is the more appropriate term. There was significant confusion regarding what “independent” means and where the peer-review process fits into the SP and work products that come out of the SP. An initial suggestion that “independent” means that candidates for the SP could not be affiliated with the organizations represented on the SC. However, given that this would theoretically remove all scientists from USU and BYU due to their affiliation with the Academic SC members, the group agreed to use the language: “objective and preferably independent” to allow for the potential consideration of candidates affiliated with the organizations represented on the SC. This change in the criteria language will allow the SC to generate a larger list of qualified candidates to achieve the best SP possible. Mr. De Morgan suggested that one way to include qualified individuals on the SP who are closely affiliated with the SC (e.g., UDWQ) would be for them to serve as Ex Officio SP members. As Ex Officio members, they would be able to work together with the SP, but they would not be

granted a vote in decisions or recommendations to be made by the SP. Steering Committee members seemed to be interested in this as an option to consider.

- Additional discussion ensued regarding the eligibility of SP members to perform contracted scientific work during the ULWQS. Comments were made regarding potential conflict of interest for SP selecting the contractor to perform such work and whether state procurement rules might dictate who would be eligible. UDWQ committed to researching state procurement rules.
- There appeared to be some confusion over the “recent peer-reviewed publications” criteria presented in Mr. Daly’s presentation. Some SC members seemed to think that this referred to a peer-review process for products that come out of the SP and there may need to be some clarification on the subject. This would be clarified in the SP nominations process document to be created by the Facilitation Team and UDWQ following this meeting.

IV. Public Comments

At the end of the meeting there was a short public comment period for members of the public to share brief perspectives with the Steering Committee. Three individuals provided comments:

Dan Potts (Salt Lake Fish and Game Foundation) referenced the comments he made at the end of Meeting #1 and stated that he is unencumbered and willing to be involved in the ULWQS as either a SC or SP member.

Susan Sims (Conservation Chair for the Utah Native Plant Society) expressed a concern that the ULWQS is not actively communicating with state agencies involved in planning and development projects adjacent to Utah Lake and in the Utah Lake watershed. There is potential for destruction of riparian vegetation and wetland areas adjacent to the lake that would occur prior to 2030 when implementation of the nutrient criteria would need to be completed. She stressed the need for communication between the state agencies and the counties to avoid these potential impacts to Utah Lake.

David Richards (Oreo Helix Consulting/Wasatch Front Water Quality Council) mentioned that if scientists from the Netherlands are the most qualified shallow lake ecologists, that maybe they could participate in the SP via Go To Meeting. This may be more feasible and would cut down on the cost of bringing them out to Utah for meetings.

V. Participation

Meeting Participants (Name, Organization – Stakeholder Interest):

- Jon Adams, Timpanogos Special Service District – POTW
- Gary Calder, City of Provo – 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
- Heidi Hoven, Audubon Society – Conservation and Environment
- Chris Keleher, Utah Department of Natural Resources – Recreation, Fishing and Sovereign Lands
- Jay Montgomery, Utah County Stormwater Association – Stormwater
- Jay Olsen, Utah Department of Agriculture and Food – Agriculture
- Dennis Shiozawa, Brigham Young University – Academia
- Garrett Smith, Utah Lake Water Ski Association – Recreation

- Brad Stapley, Springville City – Municipal
- 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
- Gerard Yates, Central Utah Water Conservancy District – Water Management of Utah Lake

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

- Laura Ault, Division of Forestry, Fire and State Lands – Recreation, Fishing and Sovereign Lands
- David Barlow, Timpanogos Special Service District – POTW
- Craig Bostock, Utah County Health Department - Public Health
- Sam Braegger, Utah Lake Commission – Utah Lake Commission
- Chris Cline, US Fish and Wildlife Service – Fish and Wildlife
- Todd Frye, Bonneville Sailing Club – Recreation
- Juan Garrido, Springville City – Municipal
- Jim Harris, Utah Division of Water Quality – Water Quality
- Dave Norman, Lehi City – Municipal
- Cory Pierce, Spanish Fork City – Municipal
- Mike Rau, Central Utah Water Conservancy District – Water Management of Utah Lake
- Travis Taylor, Utah County Storm Water Association – Stormwater

Observers Present:

- Brett Clark, University of Utah
- Chris Haight, Salt Lake County Watershed
- Jon Hilbert, Jordan Valley Water Conservancy District
- Theron Miller, Wasatch Front Water Quality Council
- Dan Potts, Salt Lake Fish and Game Foundation
- David Richards, Oreo Helix Consulting
- Susan Sims, Utah Native Plant Society

State of Utah Staff Present:

- Carl Adams, Utah Division of Water Quality
- Scott Daly, Utah Division of Water Quality

Facilitation Team:

- Paul De Morgan, RESOLVE
- Dave Epstein, SWCA

Attachment A

**Utah Lake Water Quality Study Steering Committee
Flipchart Notes
January 23, 2018**

SCOPE COMPONENTS:

- Criteria: Development of in-lake nitrogen and phosphorus criteria (concentration) that are supportive of Utah Lake’s designated uses (recreation; aquatic life; agriculture).
- Sources:
 - load and where we have influence
- Implementation:
 - planning
- Attainability (Cost):
 - estimates; cost/benefits

PHASES:

- Phase 1 |-----|
- Phase 2 |-----|
- Phase 3 |-----|

STEPS:

1. Set foundation of understanding
2. Identify the questions for Science Panel
 - Criteria
 - Sources
 - Implementation
 - Cost attainability
3. Agree on prioritization with Science Panel (recognizing timeline, budget)