Utah Lake Water Quality Study
Science Panel Call #17
Call Summary
October 28, 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 Science Panel in general. A list of attendees can be found at the end of the document.

Upcoming Meeting/Call	When & Where	Suggested Agenda Items
• SP Call #18	November 4, 2020; Zoom	○ Seek approval on responses to the Steering Committee Management Goals questions.

I.   Action Items

Meeting Summaries	Who	Due Date	Date Completed
1. Share draft meeting summary	Facilitation Team	Oct. 30	Oct. 30
2. Review and share comments on summary	Science Panel	Nov. 6	
3. Finalize summary and post to Dropbox	Facilitation Team	Nov. 9	
Approach for Responding to SC Questions	**Who**	**Due Date**	**Date Completed**
4. Update nutrient and toxin relationships memo and distribute to the SP for feedback	Tetra Tech	Oct. 30	Oct. 30
5. Develop response tables based on approach already taken and initial feedback from the SP	Tetra Tech	Nov. 2	
6. Review the memo and response table and come prepared to 'approve' on 11/4 call	Science Panel	Nov. 4	
7. Share potential approaches for assessing magnitude, duration, and frequency targets for assessment of algal bloom-related measures	Science Panel	Nov. 4	

II.   Decisions/Approvals

This section is meant to provide an overview of decisions made by the Science Panel during the call; however, no formal decisions were made during this call. Related key discussion points can be found below in the document.

III.   Meeting Recording

A recordings of the meeting (also available on the DWQ website in the near future) can be found at the following link: https://www.youtube.com/watch?v=CYmY8MHQdAQ&feature=youtu.be

IV.   Key Discussion Points

Develop Science Panel Responses to Steering Committee Questions

- Dr. Michael Paul, Tetra Tech, reviewed the questions posed by the Steering Committee to the Science Panel and an overview of the information Tetra Tech (with support from some of the Science Panel members) have compiled thus far for the SP to consider in developing responses. Dr. Paul then guided the Science Panel through an exercise to assess specific water chemistry-related measures including pH, DO, ammonia, and nitrates. Science Panel responses for these measures were recorded in a tracking table during the meeting.
- Dr. Kateri Salk, Tetra Tech, presented an update on the Tetra Tech analysis to support Science Panel evaluation of questions 2e and 2f. Dr. Salk discussed the results of the literature review and initial findings of the Utah Lake data analysis to characterize relationships between nutrient concentrations and resulting cyanobacterial abundance and toxin concentrations
  - Several Science Panel members offered comments and suggestions for improvements to the analysis. In response, Tetra Tech indicated they would address the comments, finalize the analysis, and distribute the memo for Science Panel review and comment as soon as possible.
- In recognition of the level of effort still needed to develop Science Panel responses in advance of the November 4 Science Panel web-meeting, the Facilitation Team requested feedback from the Science Panel on how they would like to proceed. The Science Panel recommended that Tetra Tech continue to assess the information at hand and develop draft responses, using the table format provided, for Science Panel review, comment, and approval. In response Tetra Tech and the Science Panel were assigned corresponding action items.

Public Involvement
- David Richards [Comment from Chat Box]: Science Panel needs to establish a-priori what the goal metric values are in the tables developed by DWQ, e.g. annual visitations, cell count number, toxin concentrations, etc. that were presented in the last SP meeting. Which many values have been populated as Targets. Then modelers can estimate potential changes to the already established metric values using different nutrient inputs from treatment facilities at differing concentrations, i.e. 1.0 mg/l or 0.1 mg/l scenarios. Model estimates should not in any way influence goal metric values. That is, we cannot set metric values post hoc. I suggest goal metric values be established well in advance of any knowledge of changes in nutrients model results. Otherwise, it will appear that the only agenda of DWQ and SP was to require treatment facilities to meet pre-established nutrient criteria.

V.   Participation

Members of the Science Panel:
- Janice Brahney, Utah State University
- Michael Brett, University of Washington
- Soren Brothers, Utah State University
- Greg Carling, Brigham Young University
- Mitch Hogsett, Forsgren Associates, Science Panel Chair
- Ryan King, Baylor University
- James Martin, Mississippi State University
- Theron Miller, Wasatch Front Water Quality Council
- Michael Mills, June Sucker Recovery Program
- Hans Paerl, University of North Carolina

Members of the Steering Committee:
- Eric Ellis, Co-Chair, Utah Lake Commission
- Erica Gaddis, Co-Chair, Utah Division of Water Quality

Members of the Public:
- Renn Lambert, Limnotech
- David Richards, Oreo Helix Ecological

Utah Division of Water Quality Staff:
- Scott Daly
- Jodi Gardberg

Technical Consultants to ULWQS Science Panel:
- Michael Paul, Tetra Tech
- Kateri Salk, Tetra Tech

Facilitation Team:
- Paul De Morgan, RESOLVE
- Dave Epstein, SWCA