Public Engagement Communication Plan
Utah Lake Water Quality Study

Research

1. Background

Utah Lake is one of the largest, natural freshwater lakes in the western United States and a popular spot for fishing, swimming, boating, sailing, and waterskiing in Utah.

The lake currently contains elevated levels of nitrogen and phosphorus. These nutrients impact water quality and create conditions that can lead to harmful algal blooms (HABs). Blooms, in turn, can lead to low dissolved oxygen levels, elevated pH, and the production of cyanotoxins.

Utah Lake is the receiving body for wastewater treatment plant effluent, industrial discharges, stormwater discharges, and nonpoint source runoff. These point and nonpoint discharges can increase nutrient levels in the lake. Rapid population growth and urban expansion within the watershed are likely to exacerbate this situation.

The Division of Water Quality (DWQ) initiated the Utah Lake Water Quality Study in 2015 to evaluate impairments in Utah Lake, develop tools and models for making water-quality decisions, and incorporate past, current, and future stakeholder/partner work on the lake into planning efforts.

The goal of the study is the development of nitrogen and phosphorus criteria that are protective of the lake's designated beneficial uses. Stakeholder outreach and public involvement are critical to the success of this effort. Collaborative decision-making with engaged stakeholders is essential to the robust planning and implementation needed to protect and improve Utah Lake's water quality.

Phase 1 of the Utah Lake Water Quality Study set a foundation for successful public engagement. Early involvement by interested members of the public in the planning process, integration of interested and affected parties into the process, commitment to soliciting and including public input, and seating stakeholders on an equal basis with officials and technical experts created a collaborative climate of cooperation.

2. Situation Analysis

Collaboration during Phase 1 built goodwill among stakeholder representatives, but effective public engagement in Phase 2 is especially critical given the technical complexity and differing stakeholder interests involved in the development of Utah Lake water-quality criteria.

Good scientific communication will be particularly important during Phase 2. The highly technical nature of numeric nutrient criteria development will require messaging that is accessible to the lay public yet maintains the appropriate level of scientific precision. Public engagement must include outreach and participation, which will require dialogue between project organizers, stakeholders, and the public.

Perceived personal and economic ramifications of new water-quality standards may create challenges. Productive external and internal dialogue will require stakeholders to establish and maintain trust, counter misinformation and false beliefs, tailor information to audiences, and promote two-way conversation among all stakeholders. Effective public engagement will be critical to the success of the Utah Lake Water Quality Study. Benefits include:

- Improved community understanding of Utah Lake management and conservation issues
- Public support for the process and the outcome of the study through:
    - Frequent and effective two-way communication between the Steering Committee and the public
    - Process transparency that creates trust and increases the legitimacy/credibility of state agencies and study partners
    - Access to community skills and knowledge
    - Broad ownership of decisions to create support and sustainability of study outcomes
- Decision-making processes that consider the needs of multiple stakeholders yet remain mindful of the key study objectives

3. Core Problem and Opportunity

Core problem: Significant potential exists for limited public participation due to competition for time and attention from other issues. Disgruntled stakeholders who wish to derail the process could also pose a threat to the successful implementation of study findings.

Core opportunity: Effective, sincere two-way dialogue with stakeholders and members of the public can increase public participation and develop productive relationships with disgruntled stakeholders, many of whom are uncertain about the ramifications of use decisions/changes arising out of the study.

Action Planning

1. Goal and Objectives

Goals

1. Utah Valley residents and interested stakeholders are positively engaged in the Utah Lake Water Quality Study process
2. Utah Valley residents and interested stakeholders are supportive of study outcomes and their implementation.

Objectives

1. Increase public and stakeholder awareness of the study by 30 percent in 2018.
2. Increase the frequency of progress reports on Utah Lake research to the public and stakeholders by 50 percent from July 2018 to July 2019.
3. Increase opportunities to encourage public participation and solicit public opinion by 25 percent from July 2018 to July 2019.
4. Improve efforts to manage misinformation and remove barriers to change by 40 percent from July 2018 to July 2019.

2. Key Audiences and Messages

Key audiences - external

1. Local residents (Utah Valley)
2. Utah Lake users
3. Recreation groups
4. Conservation groups
5. Businesses dependent on lake-based recreation
6. Water/sewer ratepayers
7. Local governments
8. State legislators
9. Local conservation districts
10. Agriculture
11. Water users (secondary water users, irrigation/canal companies)

Key Audiences - Internal

1. Utah Lake Commission
2. DEQ-Division of Water Quality
3. Local health department (Utah County Health Department)
4. Publicly Owned Treatment Works (POTWs)
5. Utah Department of Agriculture and Food
6. U.S. Fish and Wildlife Service
7. Stormwater associations
8. Division of Wildlife Resources/Department of Natural Resources
9. Utah State Parks/ Department of Natural Resources

Secondary Audiences

1. Academia
2. U.S. Forest Service
3. U.S. Bureau of Reclamation
4. U.S. Bureau of Land Management
5. National Park Service

Primary messages

1. The Utah Lake Water Quality Study uses science and stakeholder collaboration to find solutions to the water-quality challenges facing Utah Lake. *(Results)*
2. The Steering Committee values the diverse perspectives of Utah Lake stakeholders and encourages their input throughout the study process. (*Emotion)*
3. The Utah Lake Water Quality Study uses an inclusive, transparent process that relies on sound science and public input. *(Process)*

Secondary Messages by Primary Message

1. *The Utah Lake Water Quality Study uses science and stakeholder collaboration to find solutions to the water-quality challenges facing Utah Lake.*
    - The Division of Water Quality (DWQ) is developing site-specific nitrogen and phosphorus criteria to protect and improve the water quality in Utah Lake.
    - The study will provide DWQ with the information it needs to develop numeric nutrient criteria that are protective of the lake's designated beneficial uses for recreation, agriculture, and aquatic life.
    - DWQ scientists gathered data during Phase 1. Work included:
        - Data compilation
        - Evaluation of in-lake water-quality conditions

    - Evaluation of nutrient sources entering the lake from the surrounding watershed
    - Development of water-quality models
- Phase 1 public outreach set forth a collaborative process with engaged stakeholders to guide scientific analyses and regulatory decision making.
- The Study's Steering Committee consists of stakeholder representatives from a diverse group of organizations.
- The Steering Committee selected a Science Panel of researchers with special expertise in nutrient issues to review data and research findings.

2. *The Steering Committee values the diverse perspectives of Utah Lake stakeholders and encourages their input throughout the study process.*
    - The Steering Committee charter contains the following guidance for public engagement:
        - Encourage ongoing collaboration and communication among the private sector and citizens working to protect and improve Utah Lake.
        - Provide a platform for diverse perspectives and ideas.
        - Consider feedback, comments, and recommendations from stakeholders and the public during the process.
    - The Utah Lake Water Quality Study includes a robust public engagement plan to ensure ongoing, two-way communication between the Steering Committee, stakeholders, and members of the public, along with regular opportunities for public input.

3. *The Utah Lake Water Quality Study uses an inclusive, transparent process that relies on sound science and public input.*
    - Steering Committee meetings are open to the public, and the meeting schedule is posted on the DEQ website.
    - Steering Committee members will address public concerns and stakeholder expectations during meetings.
    - Steering committee members will solicit input directly from stakeholders and stakeholder groups.
    - The Steering Committee will assess gaps in public engagement or stakeholder involvement and remedy these gaps.
    - The Science Panel, a neutral entity responsible for interpreting scientific information and advising the Steering Committee, is also charged with engaging with the public during meetings.
    - The Steering Committee will convey scientific findings to stakeholders and the public in a prompt manner.

- DWQ will make scientific information available on the DEQ website and update information in a prompt and timely manner.
- DWQ will capture public and stakeholder feedback at key points in the process and make this information available on the DEQ website.

4. Strategies and Tactics

Strategy 1: Integrate Steering Committee members with stakeholder groups to conduct outreach and relay input from their constituents and the general public.

Tactic 1: Train Steering Committee members in outreach methods.

Tactic 2: Prepare email templates that members can use to keep in touch with their constituents, gather public input, and address concerns.

Tactic 3: Work with the DEQ Communications Office and Utah Lake Commission to craft messages on overall project objectives as well as specific messages related to an individual component of the process.

Tactic 4: Identify the methods and timing members use to keep in touch with their constituencies and adjust these methods if necessary to ensure the effectiveness of public outreach and engagement by committee members.

Strategy 2: Engage target audiences with an interest in Utah Lake through public education and outreach to facilitate and encourage public involvement in the study process.

Tactic 1: Develop web-based and print information that is accessible to the lay public yet maintains the appropriate level of scientific precision.

Tactic 2: Hold informal open houses to answer questions and collect feedback. (*Target audiences: public, stakeholder groups, state and local government officials, and media)*

Tactic 3: Hold pop-up events at popular recreation locations at Utah Lake. (*Target audience: specific stakeholder groups)*

Tactic 4: Host a booth at community events to educate the public about water-quality issues at Utah Lake, record their feedback, and encourage involvement in the study process. (*Target audiences: public, nearby landowners, community members)*

Tactic 5: Allocate time at Steering Committee meetings for questions and comments from the public. (*Target audiences: public and stakeholders)*

Tactic 6: Make the DEQ Utah Lake Water Quality Study webpages the primary information hub for the study. (*Target audience: all interested parties)*

Tactic 7: Link stakeholder websites to DEQ Utah Lake Water Quality Study website to ensure broader outreach to stakeholder groups. (*Target audience: specific stakeholder groups)*

Tactic 8: Issue press releases at critical points in the process. DEQ Communications Office can assist the Steering Committee with press releases. (*Target audiences: public, stakeholder groups, government officials, media)*

Tactic 9: Develop proactive social-media campaigns via Facebook and Twitter to reach stakeholders, media, and the interested public. The Utah Lake Commission and DEQ both have established followings on social media and can spearhead social-media campaigns. Create a Utah Lake Water Quality Study Facebook page and schedule Facebook Live events. (*Target audience: all interested parties)*

Tactic 10: Offer field trips to the media, stakeholders, and members of the interested public. (*Target audiences: stakeholder groups, government officials, members of the media)*

Tactic 11: Develop online surveys to gauge interest and provide a convenient way for stakeholders and members of the public to provide input. (*Target audiences: stakeholder groups, ratepayers, recreationists)*

Strategy 3: Develop consistent messaging for general and specific target audiences to ensure all interested parties receive regular and reliable materials that meet their information needs.

Tactic 1: Identify general questions/concerns members of the public and stakeholders have about Utah Lake. Questions may include:

- What is the current condition of Utah Lake?
- What is being done to improve the water quality on Utah Lake?
- Why does Utah Lake have harmful algal blooms?
- Has the lake always had this problem, or is it a new problem?
- What effect do nitrogen and phosphorus have on the lake?
- What are the sources of nitrogen and phosphorus? How do we know?
- Why is DWQ developing numeric nutrient criteria?
- How will water-quality standards impact water users? Will rates increase?
- How will numeric nutrient criteria improve the lake?

Tactic 2: Craft language to disseminate key messages identified by the Utah Lake Commission and DWQ.

- Announcements of major updates during the study process (e.g., completion of documents from Science Panel, identification of data gaps, research underway with descriptions, etc.)
- Information about innovative research currently taking place on the lake
- Major findings and/or improvement projections
- Timeline for the Utah Lake Water Quality Study as well as potential benchmarks along the way
- Representation of special interest categories along with Steering Committee contact information so stakeholders/members of the public can interact with their representatives
- Meeting schedule and locations to ensure public involvement

Tactic 3: Survey Steering Committee members to determine the information wanted/needed by their stakeholders.

Tactic 4: Compile any additional questions/concerns and craft messages to answer these questions/concerns by stakeholders, members of the public, and the media. (DEQ can help craft messages).

Tactic 5: Provide messages to the Steering Committee for review/editing/refinement.

Tactic 6: Provide these messages to members of the Steering Committee and communications team members for various stakeholder groups to ensure consistency.

5. Calendar

Below is a suggested timeline of public-engagement activities (SWCA). This timeline can be adjusted in response to available resources and public engagement needs.

Public Engagement Strategy	2018			2019				2020			
	Spring	Summer	Fall	Winter	Spring	Summer	Fall	Winter	Spring	Summer	Fall
Open houses											
Pop-up events											
Community events											
Steering Committee meetings											
Project website											
Stakeholder group websites											
Press releases											
Social media											
Field trips											
Printed materials (e.g., direct mailers)											
Public surveys											

6. Evaluation

Evaluation Criteria and Tools

1. **Increase public and stakeholder awareness of the study by 30 percent in 2018.**

   Criteria
   Public and stakeholder awareness of the study, its purpose, its timeline, and opportunities for input and participation has increased by 30 percent from June through December 2018.

   Tools
   1. Review of weekly analytics of Utah Lake Commission and DEQ social media platforms and analysis of comments and questions generated by posts and Facebook Live events
   2. Review of weekly analytics of Utah Lake Water Quality Study web pages
   3. Review of news stories to gauge understanding of/interest in the study
   4. Feedback from Steering Committee members via short, quarterly surveys regarding stakeholder questions, comments, and any perceived change(s) in their understanding of the study and its purpose.

2. **Increase the frequency of progress reports on Utah Lake research to the public and stakeholders by 50 percent from July 2018 to July 2019.**

   Criteria

   Scientific findings from the Science Panel along with any lake-associated research will be made available to the public with greater frequency, i.e., 50 percent more often between July 2018 and July 2019.

   Tools

   1. Posts of research findings on the DEQ Utah Lake Water Quality Study web pages as soon as practicable following peer and/or Science Panel review.
   2. Posts of preliminary research findings or study updates on the DEQ Utah Lake Water Quality Study web pages as soon as practicable following peer and/or Science Panel review.
   3. Posts of study parameters and results of the Phase 1 portion of the study on the DEQ Utah Lake Water Quality Study web pages in plain language in an easy-to-navigate format
   4. Posts on social media platforms containing scientific information including current understanding of lake conditions as short, educational pieces.

5. Posts of final study reports by researchers as they become available.

3. **Increase opportunities to encourage public participation and solicit public opinion by 25 percent from July 2018 to July 2019.**

Criteria

The Steering Committee increases opportunities for stakeholders and interested members of the public to participate in the study process and provide comments/feedback by 25 percent from July 2018 to July 2019.

Tools

1. Announcements of Steering Committee and Science panel meetings on the DEQ website and social media platforms
2. Collection of email addresses for online surveys
3. Short social-media surveys
4. Steering Committee outreach to the stakeholder groups they represent using email templates

4. **Improve efforts to manage misinformation and remove barriers to change by 40 percent from July 2018 to July 2019.**

Criteria

Address misinformation immediately and work with stakeholders to assess and remove barriers to change by 40 percent from July 2018 to July 2019.

Tools

1. Immediate responses to public comments/questions on social media
2. Immediate responses to news stories that contain misinformation
3. Media availabilities as needed to discuss the study, particularly if misinformation about the goals/purpose/transparency of the study is increasing

    Stakeholder-specific open houses to listen to concerns, provide impartial responses to concerns, and solicit suggestions for solutions to actual or perceived problems