Great Salt Lake Advisory Council

8th Annual Report to the Utah State Legislature Natural Resources Appropriations Subcommittee February 2018



"The Great Salt Lake Advisory Council is playing a vital role in helping to balance the many important uses of the Great Salt Lake. Now is the time to ensure this valuable natural treasure is protected for future generations."

- Governor Gary Herbert



Great Salt Lake Advisory Council

BACKGROUND

The Great Salt Lake Advisory Council ("Council") was established by House Bill 343 in the 2010 session of the Utah State Legislature. Council members were appointed by Governor Herbert, with consent of the Utah Senate, in June 2010. Governor Herbert kicked off the initial Council meeting on June 30, 2010.



Fourth grade students visit the Great Salt Lake Shorelands Preserve. More than 15,000 students have learned about the Lake's ecology through The Nature Conservancy's Wings and Water Program. © Charles Uibel

Duties of the Great Salt Lake Advisory Council

Legislation creating the Great Salt Lake Advisory Council identifies five specific "duties" of the Council:

- 1) ADVISE the governor, the Department of Natural Resources ("DNR"), and the Department of Environmental Quality ("DEQ") "on the sustainable use, protection, and development of the Great Salt Lake" ("GSL") "in terms of balancing: (i) sustainable use; (ii) environmental health; and (iii) reasonable access for existing and future development."
- 2) ASSIST the Division of Forestry, Fire and State Lands ("FFSL") in its statutory responsibilities for the Great Salt Lake (i.e. to prepare and implement a comprehensive management plan, initiate and publish studies of the lake, coordinate activities of DNR divisions with respect to the lake).
- **3) RECOMMEND** appointments to the GSL technical team and utilize technical support from that team.
- **4) ASSIST** DNR and DEQ and their boards in their responsibilities for the Great Salt Lake.
- 5) **REPORT** "annually" to the Natural Resources Appropriations Subcommittee "on the council's activities."

2017 Tasks and Activities of the Great Salt Lake Advisory Council

During 2017, the Great Salt Lake Advisory Council addressed all five of its primary work plan tasks and objectives, as follows:

- 1) ADVISE The Council briefed and advised the Executive branch, including meetings with representatives of the Governor's Office, Agency Directors, and Department and Agency managers.
- **2) ASSIST** The Council met frequently with officials of the Utah Division of Forestry, Fire and State Lands to assist in and provide support for the Division's statutory responsibilities and priorities.
- 3) **RECOMMEND** The Council adopted and shared recommendations regarding GSL research priorities, strategies and options to address GSL water supply and elevation, funding of Phragmites control, completion and implementation of the Integrated Water Resource Management model, and other priorities.
- 4) ASSIST The Council worked with both the Utah Department of Natural Resources and the Utah Division of Water Quality on Great Salt Lake issues ranging from water supply to water elevation, from non-native invasive plants to research priorities, from water management to water quality, and on numerous other issues.
- 5) **REPORT** The Council prepared and provided its 7th Annual Report to the Utah State Legislature Natural Resources, Agriculture, and Environmental Quality Appropriations Subcommittee.

The Council further fulfilled its statutory responsibilities to advise, assist, recommend, and report by holding five (5) formal meetings in 2017, with briefings, updates, reports, discussions, and counsel on topics including salinity management, water resource modeling, invasive species, lake elevation, GSL research, and other GSL-related topics. The major 2017 Council activities are summarized, below.



Great Salt Lake water levels are in a long-term decline, threatening lake industries, aquaculture, recreation, conservation and other uses. The Council is compiling strategies to address low lake levels and to secure water for GSL. ©Don Leonard

Policy Focus: Water for Great Salt Lake

"Sustainable use, protection and development" of GSL are impacted by fluctuations in its surface elevation. In 2016 the surface elevation of GSL declined to modern historic lows. Elevation cycles are trending towards lower overall lake levels, seriously impacting lake-related commercial activities, human health and air quality, wildlife populations, and overall health of the lake's ecosystem.

In 2017 the Council commissioned a report with seventy-two (72) potential strategies to maintain and/or increase the surface elevation (water level) of GSL. The strategies comprise submissions from a wide range of individuals and organizations. They consist of coordination, environmental, legal, operational, policy, and structural practices that, if implemented, could potentially deliver greater quantities of water to GSL. During 2018 the Council will prioritize the strategies for possible implementation.

Research Focus: Research Database

In 2017 the Council prepared a GSL Research Database to identify and prioritize current research topics related to GSL. Research needs related to the lake far exceed currently available research dollars. Consequently, the Council determined it would be useful to compile a list of current research topics, then prioritize those topics (as high, medium, or low priority), in an attempt to direct limited research resources to the highest priority research needs.

The Council had previously achieved success with a similar project in 2012 which resulted in most of its then-high priority projects being funded. The Council used the same methodology for its 2017 Research Database project, and anticipates that it will also provide insight into research topics and priorities, and attract funding to priority topics.

Funding Focus: Phragmites Control

Non-native Phragmites has a significant negative impact in the GSL ecosystem. Phragmites reduces native wetlands and associated species, limits use by native wildlife, excludes favorable forage and nesting plant species, traps sediments, and limits lake access for recreation, research, and search and rescue. The Council has participated in numerous briefings, discussions, tours, and other investigations regarding Phragmites, resulting in the Council position that eradication of Phragmites from the GSL ecosystem is a priority.

Last year the Council played a key role, along with the Utah Division of Forestry, Fire and State Lands, in support of funding for Phragmites control. During the 2017 session, the Utah State Legislature appropriated \$500,000 for Phragmites control. The Council supports continuing funding at that level in the 2018 session.

Program Focus: Integrated Water Resource Management

In 2014 the Council helped initiate a process that led to the development of the Integrated Water Resource Management (IWRM) model. Its purpose is to better understand how variables like water management decisions influence GSL elevation, salinity, and the overall ecosystem. Essential components of the model were completed in 2017 using funds appropriated by the legislature.

The model is housed within the Utah Division of Water Resources, which oversees its maintenance in consultation with an advisory team with representatives from the Council and several agencies. IWRM key components are complete, but additional refinements are necessary. The final version will accommodate new data sets as they become available, and will include a simplified player version and a more technical model.



The brine shrimp industry harvests millions of eggs annually which are sold worldwide as a food source for aquaculture. Like other lake activities, this unique industry depends upon maintaining the health of Great Salt Lake. ©Don Leonard

Great Salt Lake Advisory Council Summary of 2017 Council Meetings



The Great Salt Lake contributes \$1.3 billion annually to Utah's economy, with recreational uses (birdwatching, wildlife viewing, hunting, sailing, camping, bike riding, hiking, photography and others) being important components. © www.standard.net

January 4, 2017 — Davis County Administration Building

- Consider Future Role of Advisory Council with Integrated Water Resources Management Model
- Presentation on Promontory Landfill by Promontory Resources
- Report on Causeway Breach Monitoring by United States Geologic Survey
- Review of Utah Water Strategy by Water Strategy Advisory Team
- Preparation for 2017 Legislative Session by Council Members and Staff
- Approval of Great Salt Lake Advisory Council Annual Report by Council Members
- Discussion of Great Salt Lake Advisory Council 2017 Areas of Focus by Members of the Council

March 8, 2017 — Davis County Administration Building

- Report on Council Membership by Subcommittee and Discussion by Members of the Council
- Update on Council Projects on Research Data and on GSL Water Supply by Council Members
- Legislative Session Report on Funding for Phragmites Control by Council Subcommittee and Division of Forestry, Fire and State Lands
- Report on Great Salt Lake Marina Project by Division of State Parks
- Presentation on Behrens Trench Project by Compass Minerals

July 12, 2017 — Central Davis Sewer District Building

 Review by SWCA Environmental Consultants and Discussion by Council Members of Draft Council Report on Water for Great Salt Lake

- Presentation of Draft Great Salt Lake Research Database Report by SWCA Environmental Consultants and Acceptance by Council Members
- Consider Future Scope of Work on Integrated Water Resources Management Model by CH2M Hill

September 13, 2017 — Antelope Island State Park Visitor Center

- Briefing on Antelope Island State Park and on Great Salt Lake State Park by Utah Division of Parks and Recreation
- Report on Sovereign Lands Management Account by Utah Division of Forestry, Fire and State Lands
- Presentation of Revised Council Report on Great Salt Lake Water Supply Strategies and Discussion of Prioritization of Strategies by Advisory Council

November 8, 2017 — Davis County Administration Building

- Update on Great Salt Lake Salinity Committee by Utah Division of Forestry, Fire and State Lands
- Update on Integrated Water Resource Management Model by Utah Division of Forestry, Fire and State Lands
- Report on Status of Promontory Landfill Application Process by Utah Division of Forestry, Fire and State Lands
- Council Review of Final Report on Water for Great Salt Lake, Adoption of Consensus Strategies by Advisory Council, and Plan for Ranking Strategies by Council Members

Great Salt Lake Advisory Council

Chair

Don Leonard

Vice-Chair

Dave Livermore

Box Elder County

Commissioner Jeffrey Scott

Davis County

Commissioner Randy Elliott

Salt Lake County

Carlton Christensen

Tooele County

Dan Tuttle

Weber County

Commissioner

Kerry Gibson

Municipal Government

Tom Ward

Conservation Interests

Dave Livermore

Migratory Bird Protection Areas

Jeff Richards

Extractive Industry
Todd Bingham

Aquaculture

Don Leonard

Publicly Owned Treatment Works

Leland Myers

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