

# Great Salt Lake Advisory Council

4th Annual Report to the Utah State Legislature  
Natural Resources Appropriations Subcommittee  
February 2014



*“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.



The Great Salt Lake adds \$1.3 billion annually to Utah’s economy. In addition to mineral extraction and the brine shrimp industry, sportsmen and hunters are major users of the resource. ©Scott Baxter

## 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.”*

## 2013 Tasks and Activities of the Great Salt Lake Advisory Council

During 2013, 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, Lt. Governor’s Office, with Department Executive Directors, with Agency Directors, and with 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 shared its master list of GSL research priorities, the “Great Salt Lake Research Topics Database” – identifying and prioritizing necessary GSL research by topic, title, purpose, description, projected cost, and urgency – with the GSL technical team, and also provided input into the GSL technical team’s “hot topics” research funding priorities.
- 4) Assist** — The Council worked with both the Utah Department of Natural Resources and the Utah Department of Environmental Quality on Great Salt Lake issues ranging from non-native invasive plants to bi-directional flow, from water quality to water management, and on numerous other issues.
- 5) Report** — The Council prepared and presented its 3rd 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 2013, with briefings, updates, reports and discussions on topics including water resource modeling, invasive species, water quality standards for GSL, international saline lake issues, causeway bi-directional flow, Willard Bay oil spill and Willard Spur water quality, GSL research, and other GSL-related topics. The major 2013 Council activities are summarized below.



The brine shrimp industry harvests millions of eggs annually which are sold worldwide as a food source for aquaculture. This unique industry depends entirely on maintaining the health of the Great Salt Lake. ©Don Leonard

### Formal Comments: Utah Water Summit

On October 30, 2013, Utah Governor Gary Herbert convened a Utah Water Summit to help plan water strategy for Utah's future. Leading up to the Utah Water Summit, the Governor's office hosted eight listening sessions. At the Governor's invitation, The Council submitted formal comments regarding challenges, opportunities and recommendations for managing Utah's water supplies into the future. Specifically, these comments highlighted the role of the Council in providing advice and counsel on sustainable uses, protection and development of Great Salt Lake. They recommended the development of an Integrated Water Resources Management model for the lake in order to assure there is adequate understanding of the hydrology of the watershed to make informed decisions.

### Program & Funding Support: *Phragmites* Control

The occurrence of non-native *Phragmites* in the Great Salt Lake ecosystem continues to increase and dominates one-third of wetlands surrounding the lake. *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.

After briefings, discussions, tours and other investigation, the Council concluded that eradication of *Phragmites* from the GSL ecosystem is an important priority. The Council's conclusions are incorporated into a paper that provides an overview, addresses recent research, identifies future treatment opportunities, and conveys Council recommendations.

There is a dire need to continue to address *Phragmites* infestation around GSL. The Council supports the Division of Forestry, Fire and State Lands in its request for funding to treat *Phragmites*.

### Funding & Research Priority: Integrated Water Resources Management Model

Understanding changes in future water supply and its relationship to GSL lake level is central to sustainable economic benefits from the lake and is important to sustain critical habitat and a healthy ecosystem. A model is necessary to characterize the relationship between the flow of water and salt to the lake and economic and ecological viability. It would also provide a decision support tool for the state's lake managers.

The Council recommends development of an Integrated Water Resources Management ("IWRM") model for GSL. The Council's recommendation is summarized in a paper that provides an overview of the topic, summarizes research objectives, recommends IWRM as a research priority, identifies possible research partners, and estimates the cost and timeframe to develop such a model.

The Council is working with the Utah Division of FFSL in support of a building block request for overall model development, and with the Jordan River Farmington Bay Water Quality Council in support of a hydrologic model of Farmington Bay.

### New Priority: Great Salt Lake Water Quality

The Council has had briefings and discussions with the Utah Division of Water Quality regarding the Great Salt Lake Water Quality Strategy that includes development of numeric water quality criteria for the lake's recreation and aquatic wildlife designated uses. As a result, the Council supported funding from the Utah Water Quality Board for the initial studies to develop water quality criteria for the protection of brine shrimp and brine flies, the primary species in Great Salt Lake.



Non-consumptive recreational use of the Great Salt Lake has been increasing. Bird watchers, kyakers and tourists enjoy experiencing the lake's natural features and solitude. ©Scott Baxter

# Great Salt Lake Advisory Council Summary of 2013 Council Meetings



The Nature Conservancy offers youth programs on wetlands ecology at its 4,400 acre Great Salt Lake Shorelands Preserve. ©Stuart Ruckman

- Report on *Phragmites* Prioritization by Utah Division of Forestry, Fire and State Lands
- Update on Willard Bay Oil Spill by Utah Division of Water Quality

## August 7, 2013 — Davis County Administration Building

- Finalize Memorandum for Governor's Water Resources Task Force
- Discussion of Building Block Requests by Utah Division of Forestry, Fire and State Lands
- Briefing on Utah Division of Water Quality Willard Spur Research Program by CH2M Hill

## November 6, 2013 — Antelope Island State Park Visitor Center

- Plan and Outline February 2014 Annual Report for 2013 Activities
- Update on *Phragmites* Prioritization by Utah Division of Forestry, Fire and State Lands
- Presentation on Issues Related to Antelope Island Wildlife by Utah Division of State Parks
- Report on Status of Railway Causeway Applications by Utah Division of Forestry, Fire and State Lands
- Brief Discussion of Great Salt Lake Cyanobacteria Research

## January 9, 2013 — Department of Environmental Quality

- Review Council Activities for 2010, 2011 and 2012
- Confirm Precedence on Great Salt Lake Research Priorities List
- Approve Great Salt Lake Advisory Council 2012 Annual Report
- Approve Great Salt Lake Advisory Council Legislative Memoranda
- Discuss Great Salt Lake Issues and Policies with Executive Director of Utah Department of Natural Resources and Director of the Division of Forestry, Fire and State Lands
- Prioritize 2013 Activities of Great Salt Lake Advisory Council

## March 6, 2013 — Department of Environmental Quality

- Report and Discuss Status of Funding Proposals for *Phragmites*, Integrated Water Resources Model and Staff Support
- Approve Revised Activity Priorities for 2013
- Accept Proposal for Hosting a Workshop on Water Resource Modeling

## June 12, 2013 — Davis County Administration Building

- Integrated Water Resource Model Funding Request
- Presentation by Governor's Office on Utah Water Summit

## Great Salt Lake Advisory Council

**Chair:** Leland Myers

**Box Elder County**  
Commissioner  
Ryan Tingey

**Davis County**  
Commissioner  
Louenda H. Downs

**Salt Lake County**  
Julie Peck-Dabbling

**Tooele County**  
Dan Tuttle

**Weber County**  
Commissioner  
Jan M. Zogmaister

**Salt Lake City**  
Councilman Carlton  
Christensen

**Conservation Interests**  
David Livermore

**Migrating Bird Protection Area**  
Jeff Richards

**Extractive Industry**  
Todd Bingham

**Aquaculture**  
Don Leonard

**Publicly Owned Treatment Works**  
Leland Myers

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