Great Salt Lake
Office of the Commissioner

Year One – Office of the Great Salt Lake Commissioner

Accomplishments and Lessons Learned

July 1, 2024

The inaugural year of the Office of the Great Salt Lake Commissioner has been dedicated to building upon the already-established work and creating a shared vision for the Great Salt Lake. The Legislature, state agencies, universities, federal and local partners and numerous stakeholder groups have been doing important work for the lake. The Commissioner's Office was established to coordinate and "quarterback" those efforts.

The Great Salt Lake Commissioner was also mandated to establish and oversee the implementation of a strategic plan for the long-term health of the lake. Governor Spencer Cox approved the Great Salt Lake Strategic Plan in December 2023 after consulting with Speaker of the House Mike Schultz and President of the Senate Stuart Adams.

The Great Salt Lake Strategic Plan lays out short-, medium-, and long-term actions for the lake and is organized under four objectives:

1. Ensuring better coordination of the 12 state agencies, five federal agencies, and the districts, municipalities, businesses and stakeholders involved with the Great Salt Lake

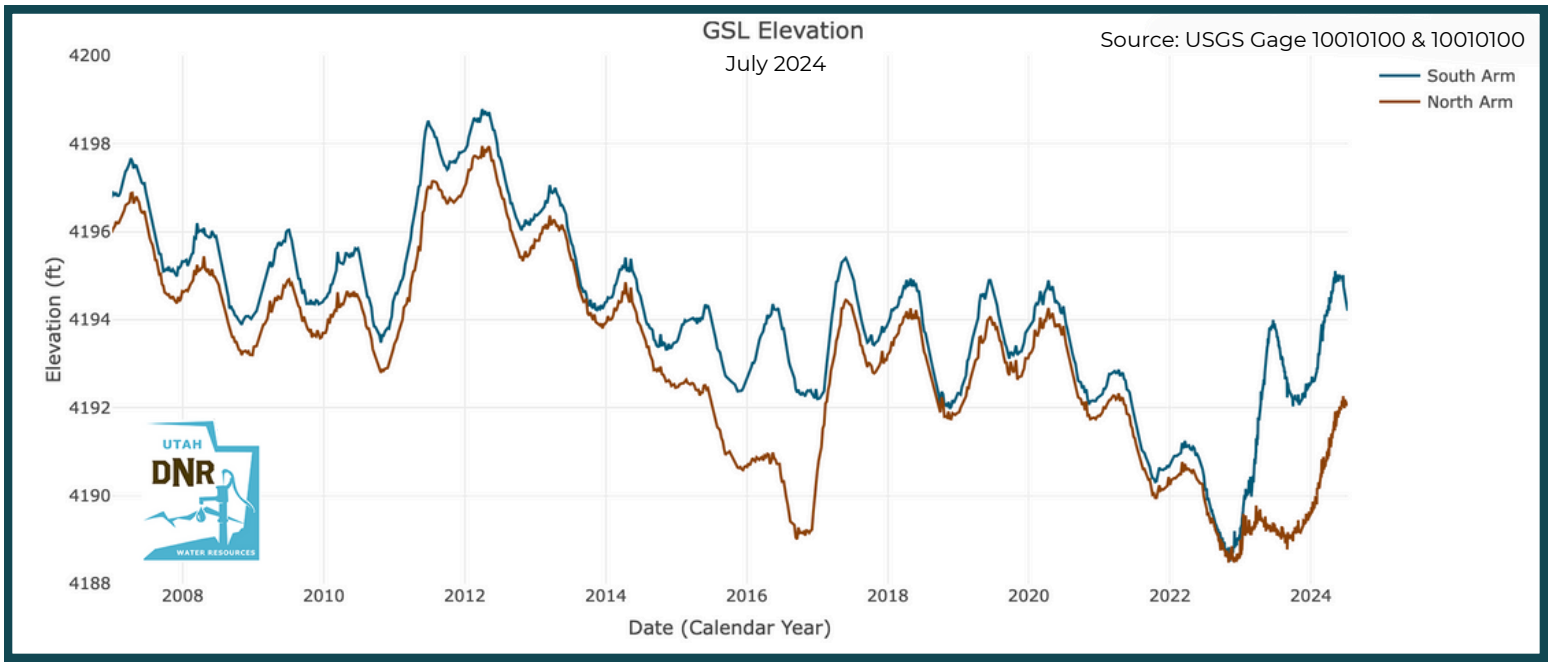
2. Ensuring decisions for the lake are based on the best available science

3. Getting more water to the lake so it rises to its healthy target range over the next 30 years

4. Protecting air and water quality

After approving the plan, the Commissioner's Office has focused on working with state and federal agencies to implement the short-term actions in the plan. Those actions are largely being carried out by the Division of Forestry, Fire and State Lands, Division of Water Resources, Division of Water Rights, Division of Water Quality, Division of Wildlife Resources, Utah Department of Agriculture and Food, the USGS, Bureau of Reclamation, Army Corps of Engineers and others. The Commissioner's Office meets regularly with each partner to coordinate and recalibrate the efforts.

The Commissioner's Office continues to meet with groups across the Great Salt Lake Basin to help them understand the current condition of the lake, discuss what still needs to be done and solicit feedback and innovative solutions. One of the most important lessons learned in the first year of the Commissioner's Office is that it takes everyone working together to get the lake back to the healthy target range and sustain it there. There isn't one solution to success. We have also learned the importance of conserving water every year. This is a cultural change that if done correctly, will help the lake, make our communities and farms more efficient and resilient and still enable continued growth. Conservation must become part of everything we do in the Great Salt Lake Basin.



Fortunately, the past two years have provided time to make the necessary changes. Two good water years have allowed the South Arm of the lake to rise six and a half feet from its historic low of 4,188.5 set in November 2022 to 4,195.2 feet above sea level in May 2024. The North Arm has also seen an increase in elevation since 2022 to 4,192.1 feet. As a result, the lake reached its intermediate target elevation (4,195.0 feet), where it has begun to transition out of adverse effects, but remains below the healthy target range of 4,198 to 4,205 feet. Lake levels have now begun to fall again. Salinity levels have also stabilized and remain at or below the target levels for brine shrimp and brine flies in the South Arm.

Two years of decent snowpack have allowed our reservoirs to fill, and in some cases exceed storage capacity. The statewide average hit 93% on July 2, 2024, with all reservoirs in the Great Salt Lake Basin at or above 90%. In 2024, water districts released approximately 700,000 acre-feet of water through the Weber and Jordan systems between January and July. A portion of the recently released water that has made it to the lake is from conserved water by water users and districts. When the conserved water left in reservoirs is spilled, it is able to make it to the lake. Because we cannot rely on this happening every year, we need to learn how to take advantage of future wet water years to get as much water as we can to the lake.

A tremendous amount of work has been done or begun over the first year to implement the Strategic Plan, including additional investments and legislation passed in 2024. While the Commissioner's Office has played a coordinating role over the past year, most of these initiatives were carried out or initiated by other agencies or partners.

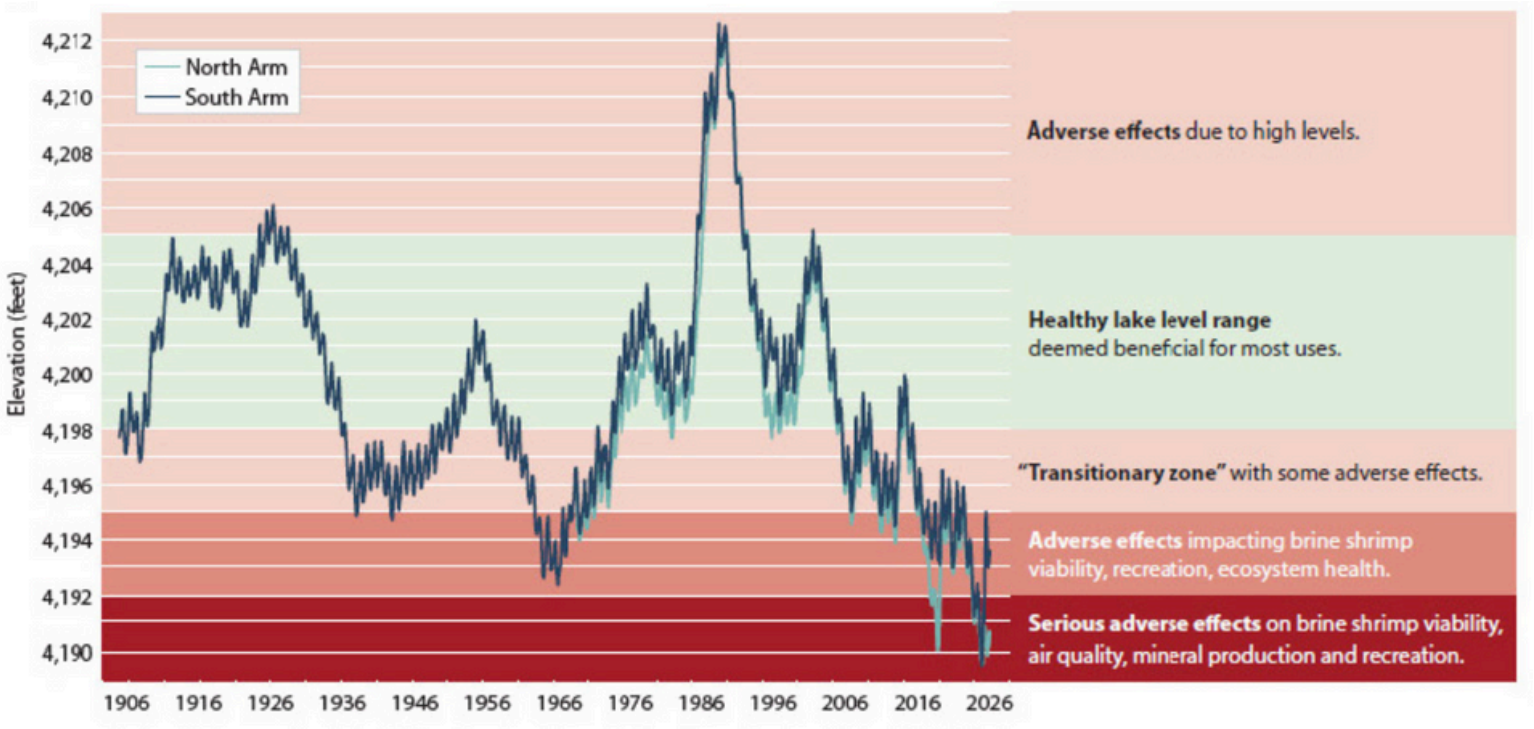
Better coordination

- Frequently held interagency meetings with the Division of Water Resources and state and federal officials.
- Regular coordination and communication with water conservancy districts.
- Met with conservation districts throughout the basin to seek their input and worked closely with the Utah Department of Agriculture and Food to facilitate those meetings.
- Invested in a unified water data platform that all state agencies and universities can use to collaborate and share information.
- Great Salt Lake Sentinel Landscape designation announced by the U.S. Department of Defense.

Basing decisions on the best available science

- The Division of Water Resources finalized the initial work plan for the Great Salt Lake Basin Integrated Plan, began developing the basin-wide modeling tool and initiated several studies, including research on municipal, industrial and agricultural conservation, which will help inform future water management decision-making.
- The Great Salt Lake Strike Team released a 2024 Great Salt Lake Data and Insights Summary and Policy Summaries.
- Investment in groundwater studies to better understand how much groundwater flows into the Great Salt Lake.
- Investment in science related to brine flies and shorebirds.
- Utah State University conducted a water measurement and gauge gap analysis in the Great Salt Lake Basin for the Division of Water Rights.
- Initiation of the revision of the Great Salt Lake and Utah Lake Comprehensive Management Plans led by the Division of Forestry, Fire and State Lands.
- The Division of Forestry, Fire and State Lands supported studies related to water and salt balance and transfer between the North and South Arms of the lake, groundwater contributions, lithium recharge, PM10 dust emissions, estimation tool, a shorebird survey, and a study to investigate the die-off of submerged aquatic vegetation in Great Salt Lake wetlands.
- The Utah Geological Survey published an interim report on the lithium resource in the Great Salt Lake and is completing another report that expands upon it. The updated report will include resource estimates for magnesium, potassium and past lithium withdrawals.

- The Utah Geological Survey coordinated an effort to collect bathymetric lidar data over a 50-square-mile area on the west side of Antelope Island in June 2023 and evaluated the data to determine best practices for collecting additional data in the future. A contract is now in place with a lidar company to collect additional data in the second half of 2024 and 2025.



Getting water to the lake

- Worked with water conservancy districts on releases of stored water during the winter, including estimating approximately 700,000 acre-feet of the amount of water that was released through the Jordan and Weber systems.
- Met with water rights holders across the basin to discuss the importance of conserving, dedicating and delivering saved water to the lake through a variety of market-based tools like split season and seasonal leases.
- The Great Salt Lake Watershed Enhancement Trust completed baseline water transactions for 54,000 acre-feet for the lake and completed a five-year strategy.

Protecting air and water quality

- Hosted a Great Salt Lake Dust Forum with academics and managers to discuss dust research and management needs and made plans for project collaboration.
- The Division of Water Quality initiated the development of a salinity limit for the lake in coordination with the Commissioner's Office and the Division of Forestry, Fire and State Lands.

2024 Legislation

HB 453 *Great Salt Lake Revisions (Rep. Snider, Casey)* The most substantive Great Salt Lake legislation of the 2024 session that creates incentives for mineral companies to enter into voluntary agreements with the state related to water depletion and mineral extraction. The State Engineer is directed to develop a water distribution plan for the lake, and the Division of Water Quality is directed to develop salinity limits for permits on the lake.

SB 18 *Water Modifications (Senator Sandall, Scott)* Clarifies the definition of saved water involving both decreases in depletion and diversion. This is a crucial step to make it easier to conserve water, dedicate it and deliver it to the lake.

HB 11 *Water Efficient Landscaping Requirements (Rep. Owens, Doug)* Limits the amount of overhead sprinklers that can be used on new government buildings in the Great Salt Lake Basin.

HB 280 *Water Related Changes (Rep. Snider, Casey)* Creates a new, unified water infrastructure planning and prioritization process that includes conservation, amongst other criteria.

Legislative Investments

Since 2023, the Legislature has provided numerous appropriations to fund specific actions for the lake. Many of these investments will help the state move forward with implementing actions in the Strategic Plan.

State funding directly for the Great Salt Lake:

- **$5M** – Great Salt Lake Basin Integrated Plan
- **$400,000** one-time – Great Salt Lake Comprehensive Management Plan update
- **$1.5M** ongoing – Office of the Great Salt Lake Commissioner
  - **$1M** – Implementation of the Great Salt Lake Strategic Plan
  - **$20M** – Exploring ways to get water to the lake
- **$1M** ($500K each) – Great Salt Lake berm engineering and salinity management planning
- **$1M** ongoing and **$1M** one-time – Improvements to Great Salt Lake water measurement and metering
- **$40M** – Great Salt Lake Watershed Enhancement Trust (wetland restoration and securing water rights for the lake)
- **$170,600** – Great Salt Lake Split-Season Lease Project
- **$800,000** – Great Salt Lake Water Distribution Management Plan

Statewide funding for water conservation, wetland restoration, or endangered species that include the Great Salt Lake Basin:

- **$200M** – Secondary Water Metering
- **$276M** – Agricultural Water Optimization
- **$2M** one-time – Endangered Species Act investments
- **$2M** – Invasive species eradication around the Great Salt Lake and Utah Lake
- **$1.5M** – Utah Lake Study (how water from Utah Lake benefits the Great Salt Lake)
- **$3M** ongoing and **$5M** one-time – Water-wise landscaping
- **$600,000** – Utah Growing Water Smart