



WATER DISTRIBUTION AND SHEPHERDING

2024 GREAT SALT LAKE POLICY SUMMARIES

The Great Salt Lake Strike Team analyzed ten policy options and created summaries for each. The strike team does not endorse individual policies but rather evaluated the most-discussed options to address Great Salt Lake.

Policy summaries fall into four categories:

Water Shepherding 

Economic Incentives 

Agriculture Optimization 

Engineered Options 

Water shepherding ensures that water conserved within the Great Salt Lake Basin flows to Great Salt Lake. Measurement infrastructure and distribution accounting models are needed to ensure that water that becomes available through the water rights change application process flows to the lake without being depleted before it gets there.

IMPORTANCE OF WATER SHEPHERDING

- **Without a way to “shepherd” water past intervening users, efforts intended to dedicate water to the Great Salt Lake could be easily undermined.** However, upon approval of an appropriate change application, the State Engineer can deliver the dedicated water to Great Salt Lake via river commissioners, accurate measurements, and distribution accounting models.
- **Accurate quantification of depletions is critical to any change application that contemplates delivering water to Great Salt Lake.** To avoid impairing downstream water users, the quantity of water available for delivery to Great Salt Lake through the change application process is most likely limited to the amount of water depleted (or consumed) under the previous use.
- **Delivering the dedicated water requires accurate measurement, robust accounting models, and timely adjustments.**
- **Enhanced measurement infrastructure within the Great Salt Lake watershed is imperative for the State Engineer to deliver the dedicated water.** It is also critical for a shared understanding of water use and distribution among all stakeholders within the basin.

PROGRESS ON ACHIEVING WATER SHEPHERDING

- **Legislation** - During the 2023 general session, the Legislature passed SB 277, allowing producers to file a change application on “saved water” resulting from an agriculture water optimization project.
- **Analysis** - The State Engineer has entered into a cooperative agreement with Utah State University to conduct a Measurement Infrastructure Gap Analysis within the Great Salt Lake watershed to identify areas where additional measurement and telemetry is needed to meet these requirements.
- **Investment** - To address immediate needs, the Legislature appropriated \$300,000 in 2022 to install additional measurement and telemetry infrastructure within the Great Salt Lake watershed.

WHAT IS NEEDED

- **Distribution accounting models** - The State Engineer has developed distribution accounting models on select river systems to facilitate water delivery according to the respective water rights—including any prospective saved water under an optimization project. There is a need for further refinement of the existing models, including incorporating real-time data and developing additional models where none currently exist.
- **Additional water measurement infrastructure** - Additional water measurement infrastructure is needed to improve and optimize the State Engineer’s ability to deliver dedicated water and provide required data to the existing and prospective distribution accounting models. The current gap analysis undertaken by the State Engineer and Utah State University will identify areas where additional diversion measuring devices, river gages, and telemetry are needed to facilitate the accurate and transparent water distribution within the Great Salt Lake watershed.
- **Diversion measurement devices** - Pending the gap analysis results, the state would benefit from new funds for installing and maintaining diversion measurement devices, river gages, and telemetry infrastructure within the Great Salt Lake watershed.



For more information on policy summaries, please scan the QR code above or visit: <https://gardner.utah.edu/great-salt-lake-strike-team/policy-summaries/>