

# Great Salt Lake



## Drought, climate change and continued demand are threatening the lake

Great Salt Lake is the largest saline lake in the Western Hemisphere and the eighth largest in the world. The lake's ecology is an extraordinary example of the rich web of relationships between people, land, water, food and survival. The 1,700 square miles of various water environments, remote islands and shorelines, with 360,000 acres of wetlands, provide habitat for plants, brine shrimp, reptiles, amphibians, mammals, shorebirds and waterfowl.

A drying Great Salt Lake has local and regional consequences and could result in increased dust, worse air quality, reduced snow, reduced lake access, habitat loss, island bridges, more invasive plant growth and negative economic consequences to the state. By protecting the lake, we help our economy, environment, wildlife and future.

## Great Salt Lake is critical to the state of Utah economically, ecologically and environmentally

### Economy

- Contributes \$1.9 billion to Utah's economy each year
- Provides over 7,700 jobs
- Supports the ski industry, which includes another 20,000 jobs and an additional \$1.2 billion
- Produces all the primary magnesium in the U.S. and 14% of the world's supply (used in beverage cans, aircraft, computers, car parts, stadium benches and more)
- Leads the western hemisphere in the production of sulfate of potash (specialty fertilizer for high-value crops)
- Produces 40% of the world's brine shrimp eggs (essential to aquaculture production)
- New technologies are underway to extract lithium from the lake to power cars and cellphones



The lake contributes 5-10% to Utah's famous snow.

### Ecology

- 10 million migratory birds visit each year to rest, refuel and breed
- Over 330 species visit the lake during migrations each year
- 5 million eared grebes, at times half to 90% of the North American population, rely on the lake
- Over one-third of the world's population of Wilson's phalaropes rely on Great Salt Lake
- Supports 80% of Utah's valuable wetlands
- Brine shrimp and brine flies are a critical food source that help birds build up fat reserves for migration



Roughly 600,000 Wilson's phalaropes visit the lake, making it the largest staging concentration in the world.



Great Salt Lake is home to the largest breeding colony of American white pelicans west of the continental divide.

## Environment

- Lake effect snow extends ski season by 5 to 7 weeks
- Exposed lakebed creates dust that can contain arsenic and other metals, creating a potential public health hazard
- Dust can affect farm production and decrease property values
- Dust also reaches the snowpack, making it melt sooner, shortening the ski season and disrupting water supplies



Utah is the fastest-growing state in the nation. We need to use our water more efficiently to stretch the supply.



As the lake shrinks, it has exposed about 800 square miles of lakebed. Unprecedented drought has contributed to the lake's decline.

## Actions underway

All options are on the table to get more water to the lake. The 2022 legislative season saw a record number of water conservation bills and appropriations totaling nearly \$500 million, including:

- \$40 million to establish a water trust that will deliver water to the lake
- Updated water law to ensure water in Great Salt Lake is considered a beneficial use
- \$250 million to install meters on secondary irrigation systems
- Increased water conservation, including the nation's first statewide grass removal rebate program
- Weber Basin Water Conservancy District and Jordan Valley Water Conservancy District have agreed to send 30,000 acre feet to the lake to help stabilize levels
- Passed legislation that integrates land use and water planning, which will help better plan for growth and development with less water
- Cities are adopting water efficiency standards and working toward their regional conservation goals
- \$70 million in grants to promote agricultural optimization
- Developing the Great Salt Lake Watershed Integrated Water Assessment and other studies
- Working with federal and state leaders on policy and funding solutions

## Preserve and protect

Our goal is to ensure Utah's people, environment, economy and agriculture have water to thrive now and into the future. Finding that balance requires a combination of solutions, including increased conservation, improved system efficiency, agriculture optimization and strategic water projects. While finding that balance can be challenging, we are working with agencies, organizations and individuals to preserve and protect Great Salt Lake.

### Utah Department of Natural Resources

