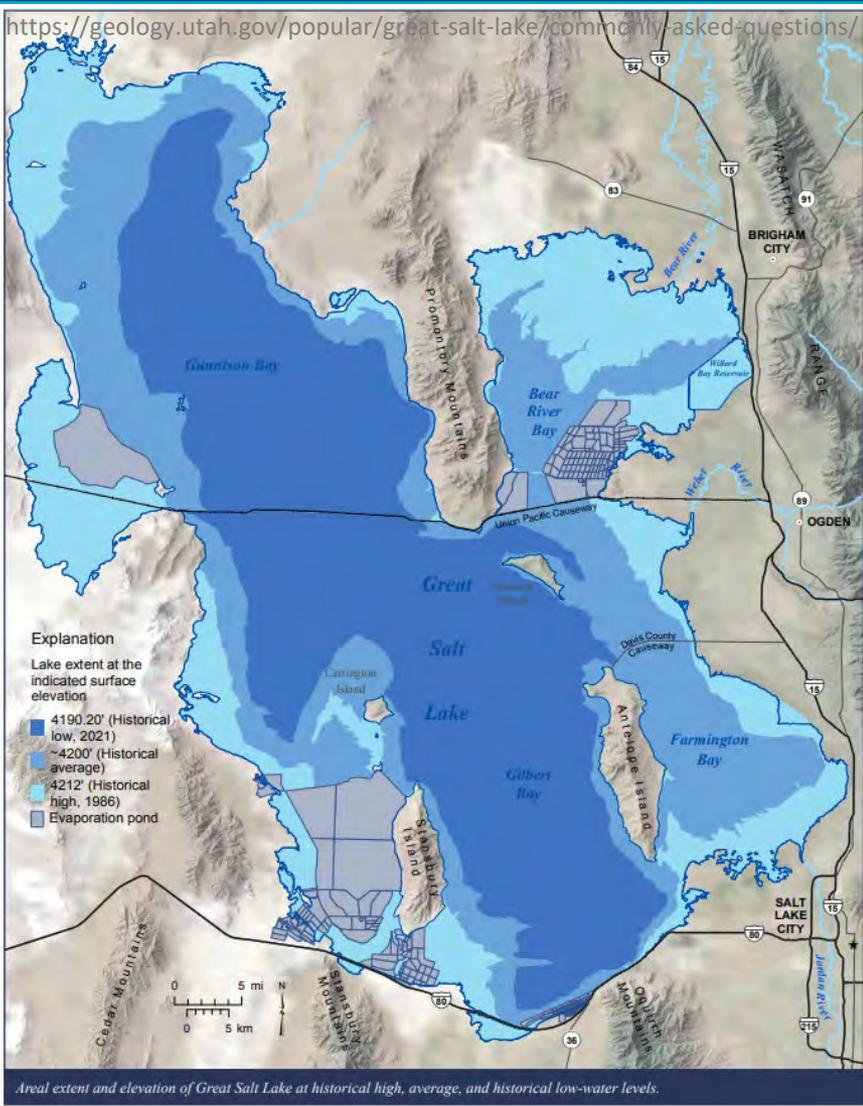


# GREAT SALT LAKE UPDATE

City Council Work Session  
*September 17, 2024*

Jesse Stewart  
Deputy Director

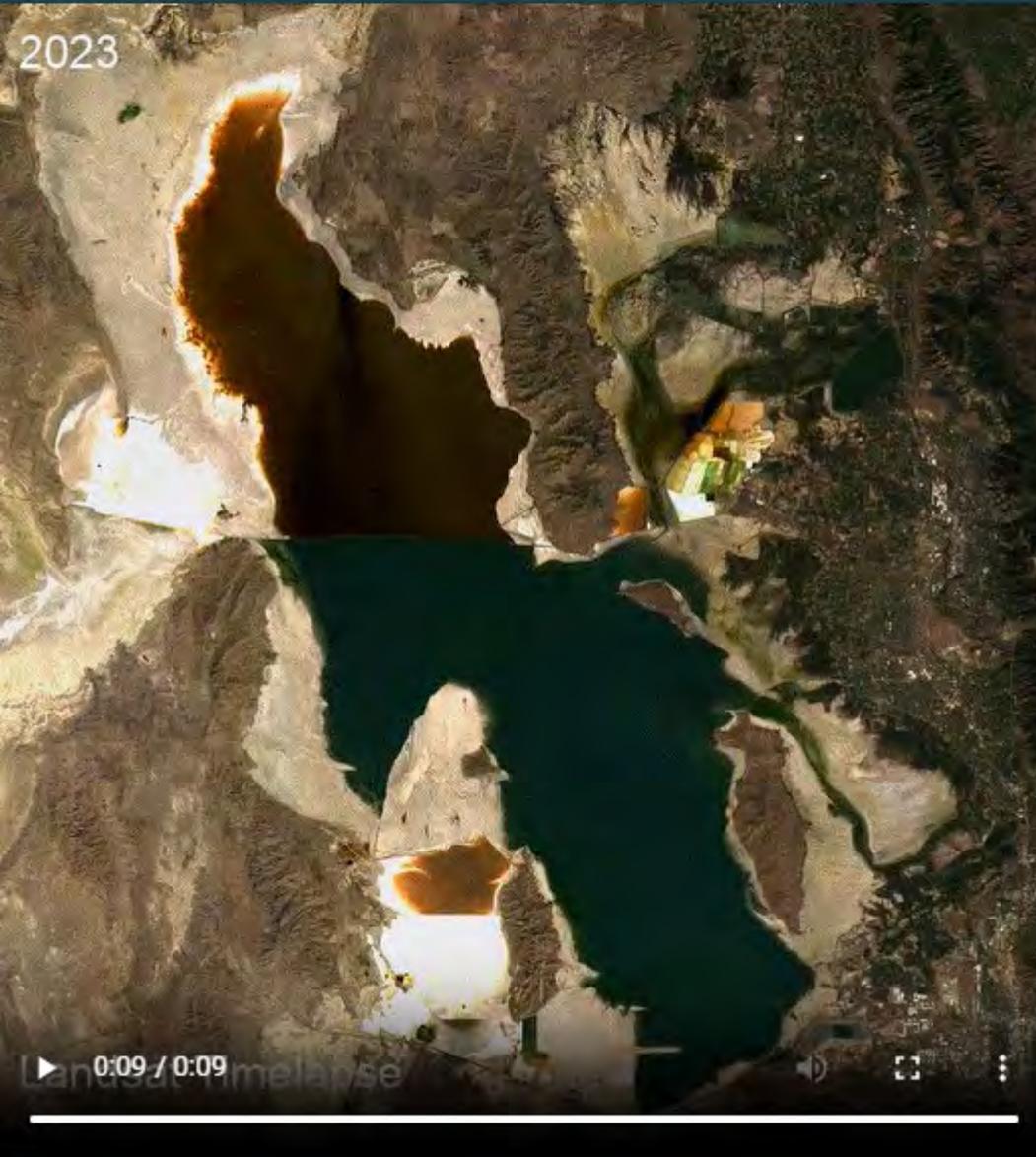


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# Lake Surface Area

1984-2023

Click on the image below to watch a time lapse of the lake.



## **SMALLEST (2022):**

**Approximately 890 square miles**

From [Half-meter topobathymetric elevation model and elevation-area-volume tables for Great Salt Lake, Utah, 2002-2016, 2023](#), U.S. Geological Survey data release.

## **LARGEST (1986-87):**

**Approximately 2,300 square miles**

From [Great Salt Lake An Overview of Change, 2002](#), Utah Department of Natural Resources Special Publication

Video is 1984 to 2023

High - 1986: 4211.6

Low - 2022: 4188.5

Target Range – 4,198 to 4,205



<https://webapps.usgs.gov/gsl/img/gsl.mp4>

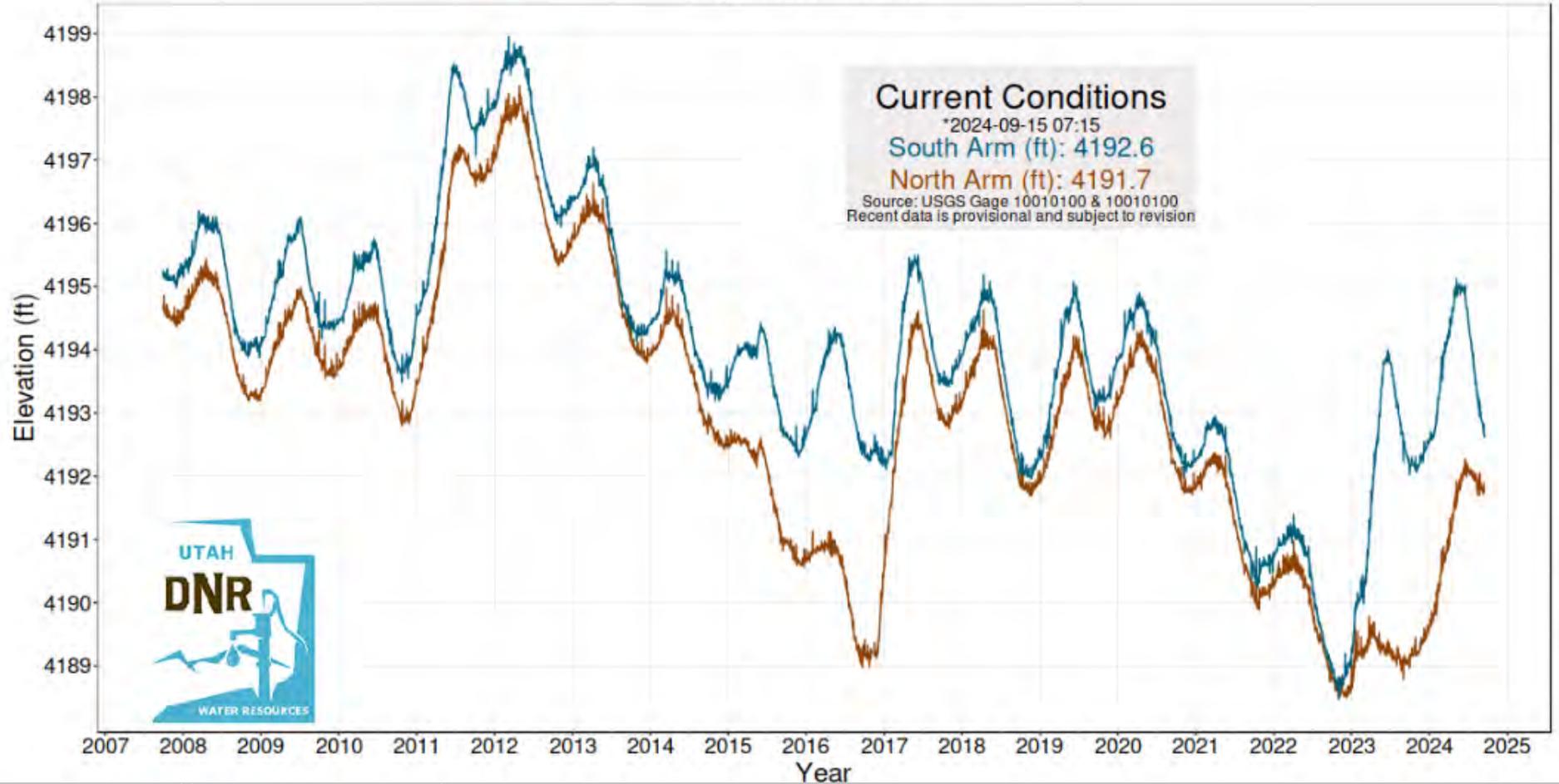


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Utilities**

# Great Salt Lake Levels

High - 1986: 4211.6  
Low - 2022: 4188.5  
Target Range - 4,198 to 4,205

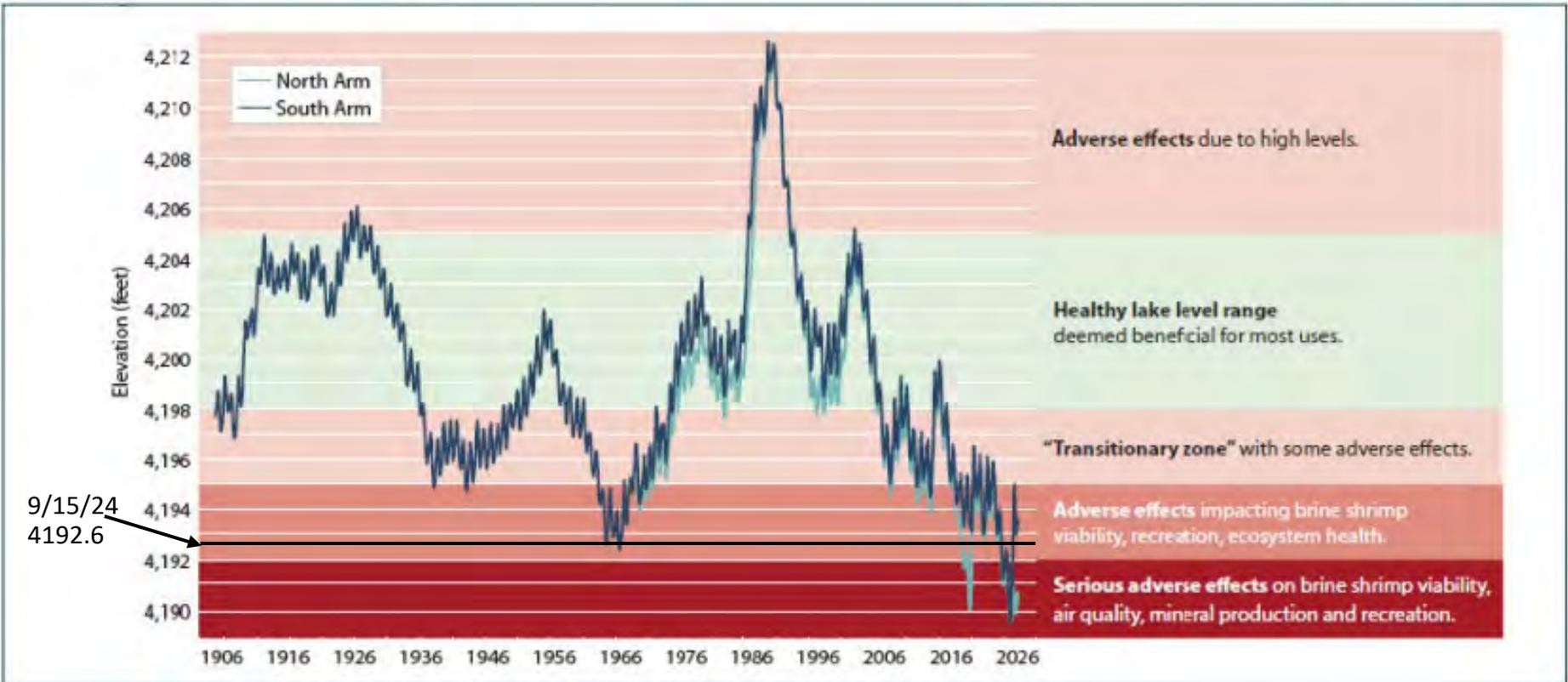
## Great Salt Lake Elevations Updated 09/15/2024



<https://greatsaltlake.utah.gov/current-conditions>



FIGURE 4: ELEVATIONS OF GREAT SALT LAKE NORTH & SOUTH ARMS WITH ELEVATION ZONES 1903-2023



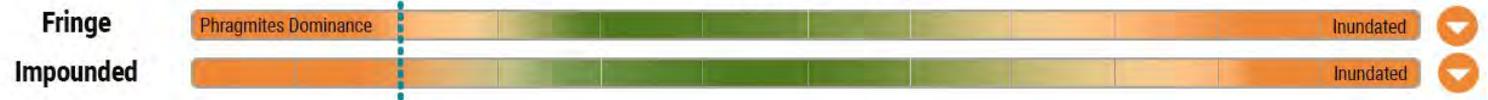
<https://greatsaltlake.utah.gov/great-salt-lake-strategic-plan-2>



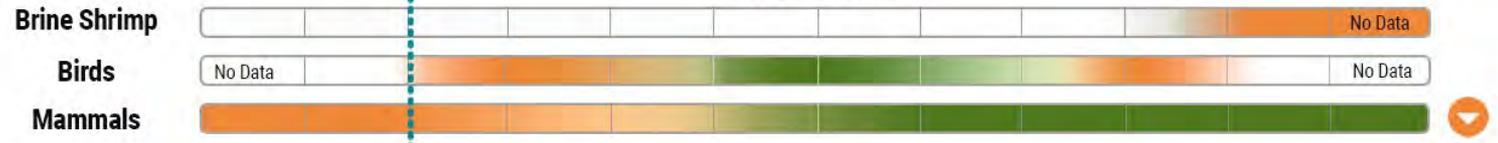
Public Utilities

Current Lake Level

### WETLANDS



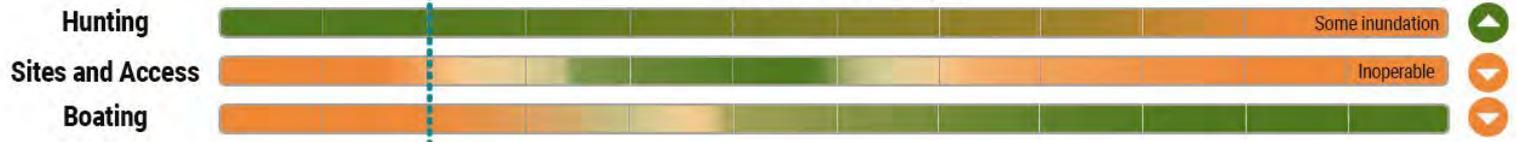
### BIOLOGY



### LAND USE



### RECREATION



### ECONOMICS



### SAFETY



Lake Elevation in feet: 4,188 4,191 4,193 4,195 4,197 4,199 4,201 4,203 4,205 4,207 4,209 4,211 4,213

Data Current as of:  
09/14/2024

### Bear, Weber, and Provo River Basins

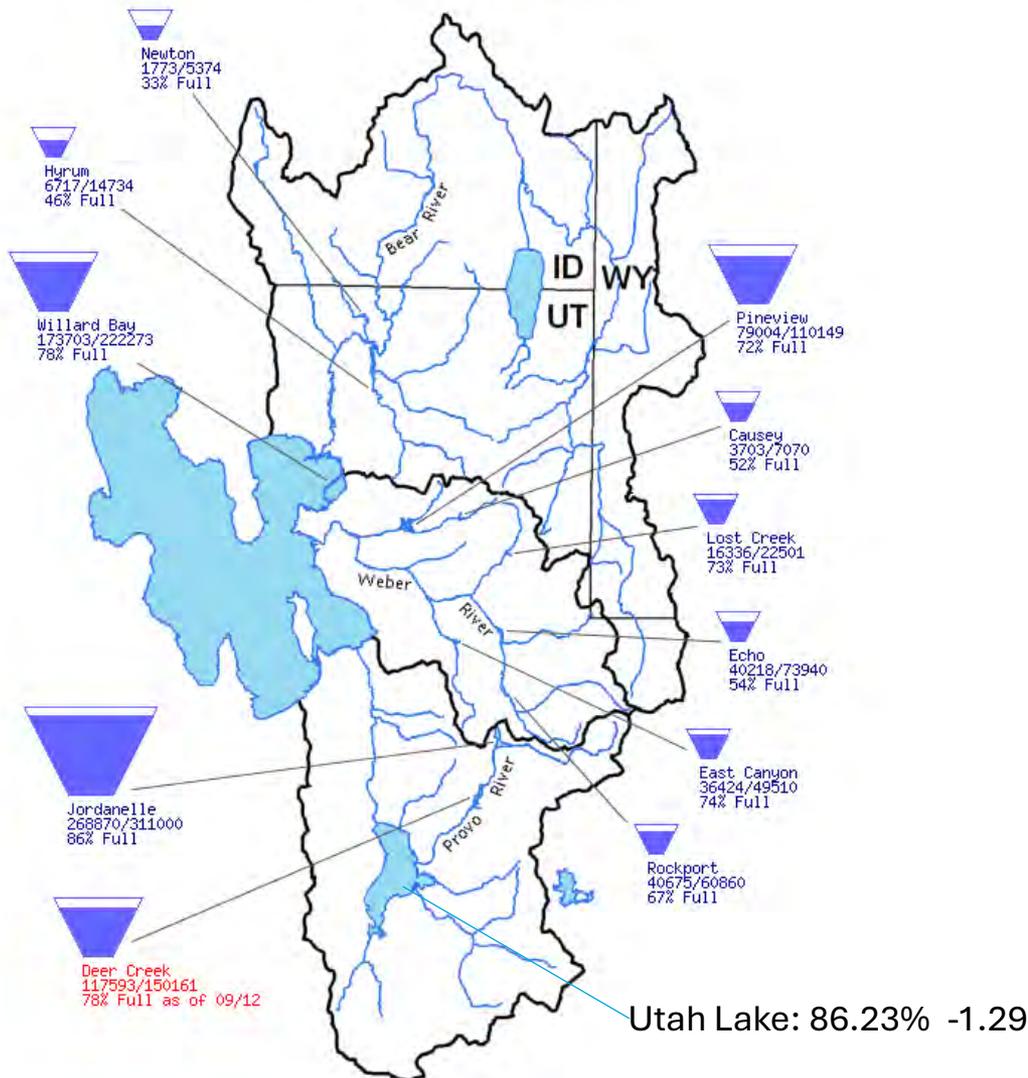
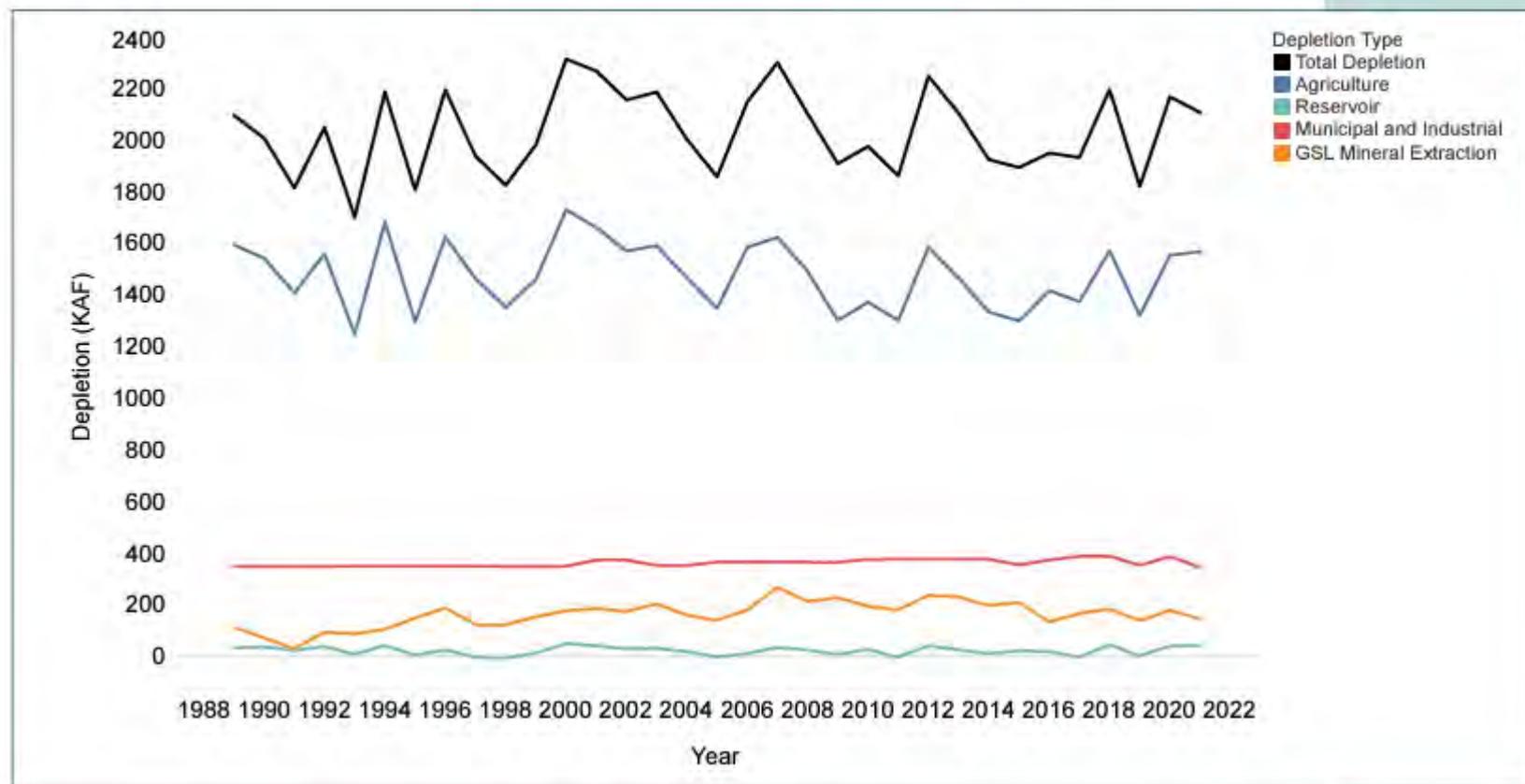


FIGURE 5: HUMAN WATER DEPLETION BY TYPE IN THE CONTEMPORARY PERIOD (1989-2021)



<https://greatsaltlake.utah.gov/great-salt-lake-strategic-plan-2>



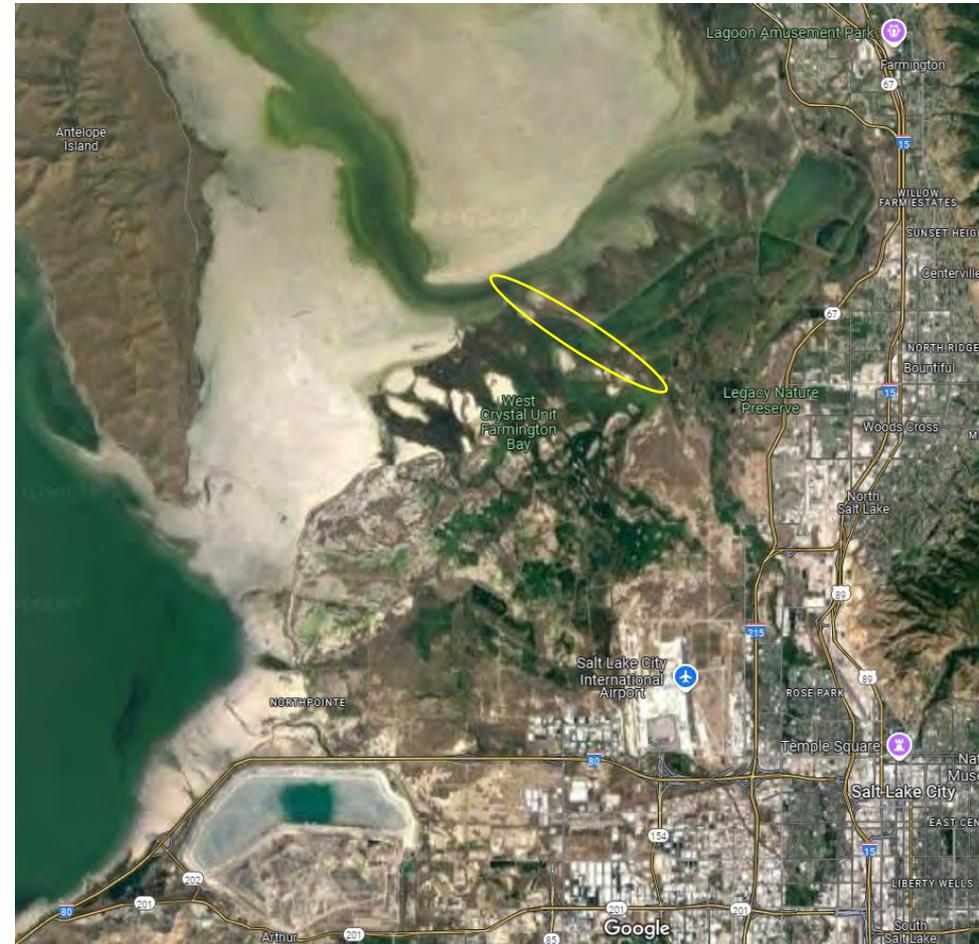
# Local, State, and Federal Priority Key Issues

- **Stakeholder Coordination**
  - Inter-State, Numerous State Divisions, local municipalities, other stakeholder groups
- **Funding Strategies**
  - Great Salt Lake Trust
- **Regional Conservation Goals**
  - Secondary Metering, Landscape Conversion Incentives, Statewide water saving devices, metering, Integrated land use planning, Growing WaterSmart, Water Banking, GSL as part water planning
- **Plans**
  - Strategic Plan, Management Plan, Cloud Seeding, Water and Air Quality, Water Flow modeling, Dust monitoring and modeling)
- **Agriculture**
  - Conservation/Optimization Efforts
- **Water Quality**
  - Salinity and geochemistry, Water inflows – surface, Ground, Bathymetric studies, Water Quality Standards
- **Wetland Management and Invasive Weed Control**
- **Water Availability**
  - Water management - Inflows, modeling, cloud Seeding, Water Banking
- **Air Quality**
  - GSL Dust Forum, studies and modeling
- **Ecosystem, Migratory birds**
- **Economy**
  - brine shrimp, mineral extraction, skiing, etc.



## Salt Lake City Efforts

- **Conservation (Municipal and Industrial)** since baseline year in 2000
  - ~25-30% reduction
  - SLC TurfTrade, CII programs, City-Water Assessment, Water Check and Water Map,
- **Dedications to Great Salt Lake**
  - Water Reclamation Effluent
- **Participation in Great Salt Lake Advisory Council**
- **Great Salt Lake Integrated Plan**
  - Laura Briefer serves in Steering Committee
  - Options to include GSL in long-term water management strategies
  - Many of the other State and Local initiatives related to GSL
- **Great Salt Lake Technical work group**
- **Water Management**
  - Public Water System Culinary Supply and Demand
  - Provo River Water Users
  - Utah Lake Water Users
  - Utah Lake Water Quality Steering Committee

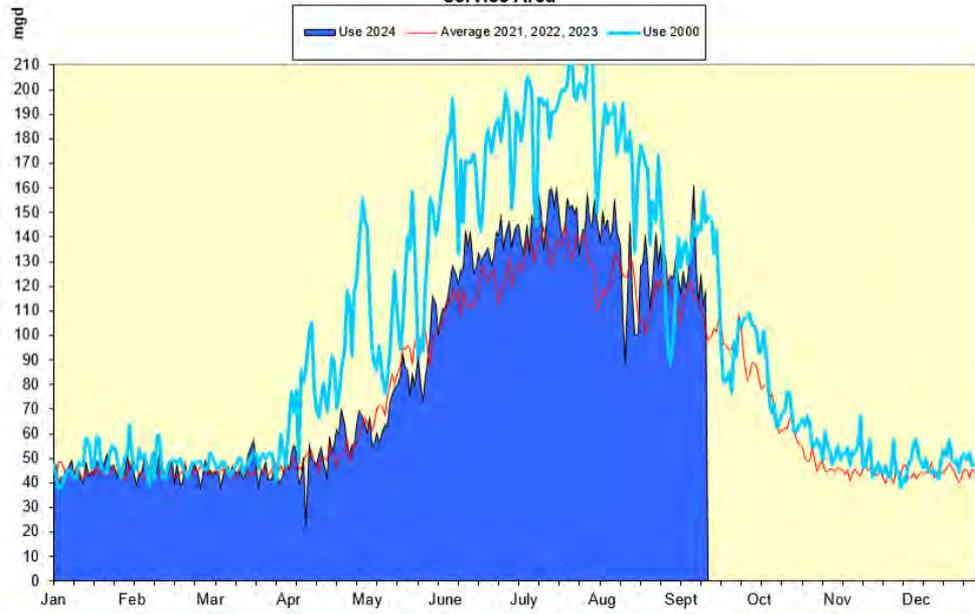


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Daily Water Use Calendar Year 2024

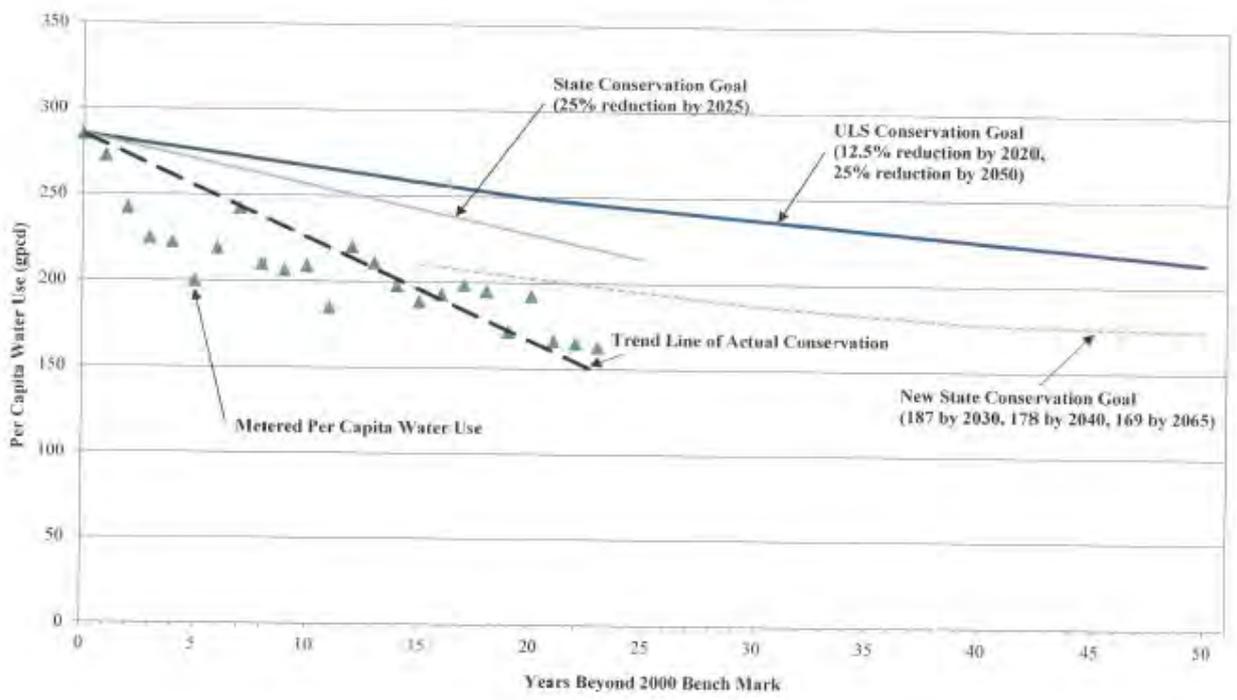
Salt Lake City Department of Public Utilities  
Service Area

Use 2024    Average 2021, 2022, 2023    Use 2000



**Figure 1 - Salt Lake City Conservation Trend**

Documentation of Conservation Performance  
Metropolitan Water District of Salt Lake & Sandy



# The Great Salt Lake

The lake is vital to the environment, ecology and economy, not just in Utah but also the western U.S.

## Protecting and Preserving the Great Salt Lake

<https://greatsaltlake.utah.gov/>



<https://greatsaltlake.utah.gov/great-salt-lake-strategic-plan-2>



# Great Salt Lake

JANUARY 15, 2024

## THE GREAT SALT LAKE STRATEGIC PLAN

SUBMITTED BY:

Brian Steed, JD, PhD  
Great Salt Lake Commissioner



Public  
Utilities

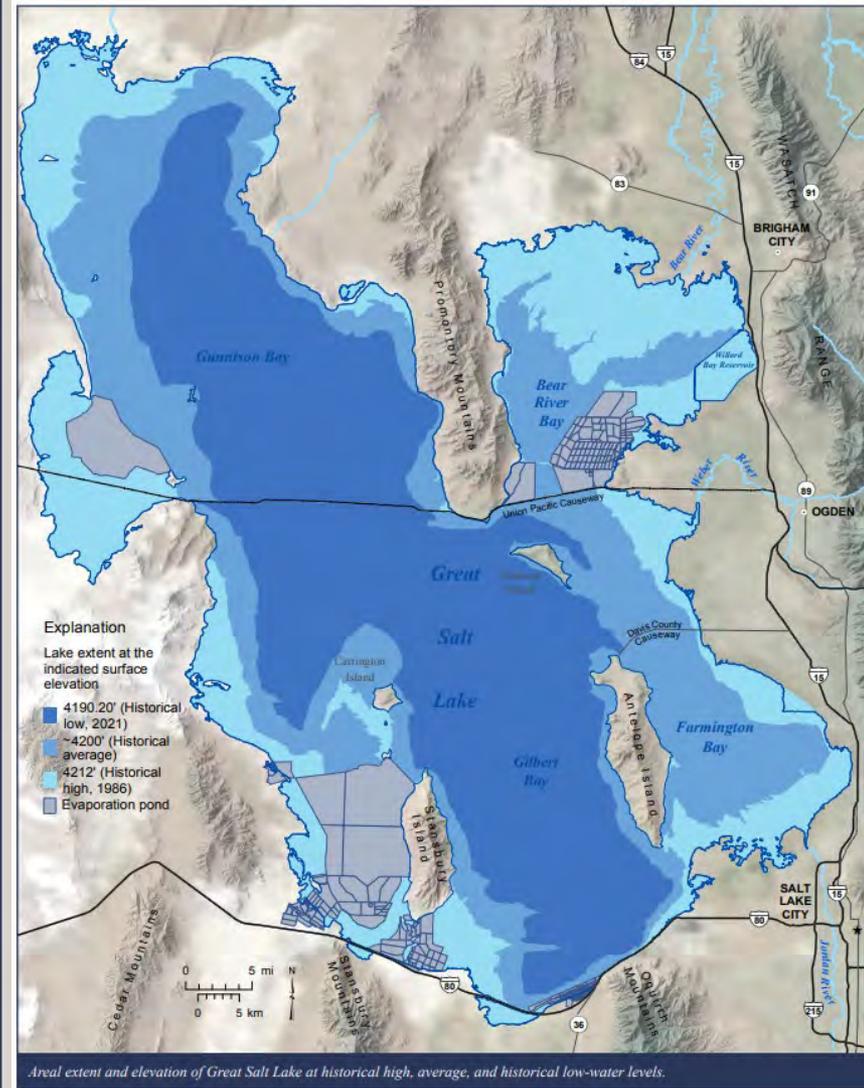
# Commonly Asked Questions About Utah's Great Salt Lake and Ancient Lake Bonneville

Second Edition



By Jim Davis, J. Wallace Gwynn, and Andrew Rupke  
Utah Geological Survey, Salt Lake City, Utah

<https://geology.utah.gov/popular/great-salt-lake/commonly-asked-questions/>



Public Utilities