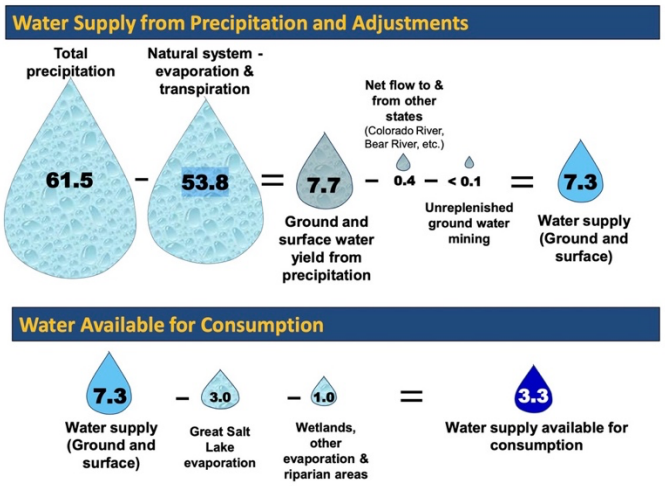
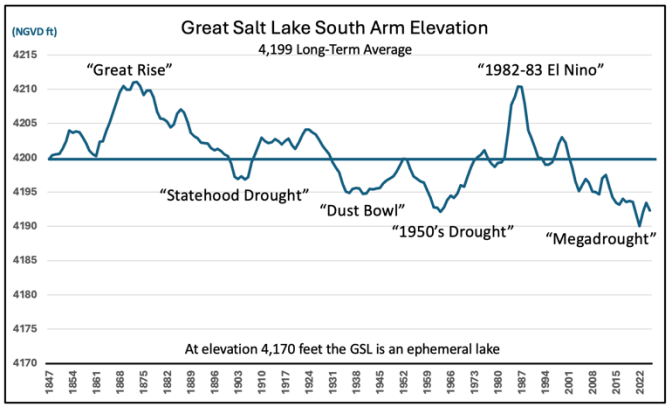
Great Salt Lake Accounting

The Great Salt Lake's elevation is determined by precipitation, natural evapotranspiration, human managed depletions and evaporation. During drought periods, the lake's surface area decreases and salinity increases, reducing evaporative losses on the lake. This lower tax comes with tradeoffs: smaller wetlands, larger exposed playa, and adverse aesthetic and economic effects. Actions that reduce human depletions can reasonably maintain the lake in the 4,192-4,195 range. Returning to the 4,196-4,200 range requires reversion to 30-year climate averages and reductions in human depletions.

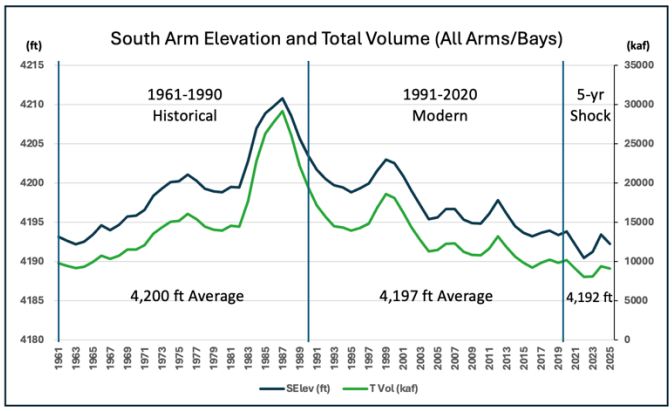
Utah's Water Supply (in millions of acre-feet)



Sequences of very wet years and very dry years drive large changes in lake elevation



Megadrought and 2021-2025 Climate Shock are the primary drivers of the record low levels



Great Salt Lake Accounting Ledger (Utah)

Component	Baseline	30-Year	5-Year
Available Supply	4000	3500	3200
Depletions	-1600	-1600	-1600
Lake Inflow	2400	1900	1600
Lake Precip	1400	1100	700
Evap & Mineral	-3800	-3100	-2500
Net Balance	0	-100	-200

Units: average kaf/year; excludes Idaho and Wyoming

Why the Lake Doesn't Vanish

Elev	Inflow	Precip	Evap	Net
4200	2400	1400	-3800	0
4196	1900	1100	-3000	0
4192	1600	700	-2300	0

Units: kaf/year. As the lake falls, surface area shrinks and evaporation declines, shifting to a lower operating floor

30-year Rolling Gap to Close → 4,192-4,198

Elev	Lake Vol	Refill Gap	Flow Gap	Tot Gap
4192→4198	8862→13291	148	300	448
4198	13291	0	300	300

Units: vol in kaf; gaps in kaf/yr. Flow gap = 2200−1900

8-year Olympic Gap to Close → 4,192-4,198

Elev	Lake Vol	Refill Gap	Flow Gap	Tot Gap
4192→4198	8862→13291	554	300	854
4198	13291	0	300	300

Units: vol in kaf; gaps in kaf/yr. Flow gap = 2200−1900

Depletions (2020-2024)

Basin / State	Agriculture	M&I	Mineral
Bear / Wyoming	113	3	—
Bear / Idaho	571	4	—
Bear / Utah	423	55	—
Weber / Utah	238	175	—
Jordan / Utah	62	257	—
Utah Lake / Utah	145	147	—
GSL Terminal	—	—	136
Total	1,552	641	136

Units: kaf/yr, 2020–2024 average. Source: 2026 Strike Team (sector totals); Utah Water Budget Model (basin allocation)

Bankability: Evaluating Water Actions for the Great Salt Lake

Not all water that is saved reaches the lake. In the Great Salt Lake system, water is diverted, used, returned, and reused as it moves downstream. A reduction at the point of use does not automatically translate into increased inflow to the lake. What matters is whether that water survives the system and arrives at the lake as net inflow. Bankability is the difference between water that is reduced—and water that shows up at the lake.

Purpose

Support development of water conservation, leasing, and donation proposals that are legally sound, operationally realistic, and impactful.

Four Principles

1. Climate sets ceiling—management sets floor
Climate determines long-term water availability. Human use determines how low system goes.

→ Conservation matters most in **how it affects the floor**, not the ceiling.

2. Conservation ≠ water to the lake.
Water savings only reach the lake if they are not:

- reused upstream
- stored in reservoirs
- or reallocated to other users

→ The key question: **Where does saved water go?**

3. Not all water is equal—location and timing

- Near-lake actions → higher likelihood of reaching the lake
- Upstream actions → more likely to be absorbed within the system
- Wet vs. dry years → different outcomes

→ Impact depends on **where and when**.

4. Evaluate every action on two dimensions

- **Legality:** Can it be done within the water rights system?
- **Bankability:** Does it reliably produce water that reaches the lake?

→ Strong proposals perform well on both.

Quick Evaluation Framework

For any proposed action (M&I conservation, ag optimization, leasing, gifting):

1. Source
Where is the water coming from?

2. Pathway
What would happen to this water without the action?

3. Timing
Does it produce water in dry years, wet years, or both?

4. Bankability
What portion is likely to reach the lake?

Action Type	Bankability
Terminal system reductions	High
Near-lake leasing / donation	High
Upstream ag optimization	Variable / Lower
M&I outdoor conservation	Moderate
M&I indoor conservation	Low (booked)

Example: North Point Donation
20.7 kaf diversion right was donated for the lake.

- Proximity: Near-lake
- Control: Defined routing
- Durability: Permanent reduction
- Bankable component ~8.8 kaf/year

Conclusion: High confidence in consistent annual benefit of 8-9 kaf across varying conditions.

Key Takeaway

Bankable water savings can establish a durable operating floor for the lake. The question is not just how much water is conserved. It is how much actually reaches the lake—and when.