

December 1, 2022

Jordan River Governing Board

Great Salt Lake



Ben Stireman | Sovereign Lands Program Administrator
Utah Department of Natural Resources - Division of Forestry, Fire and State Lands

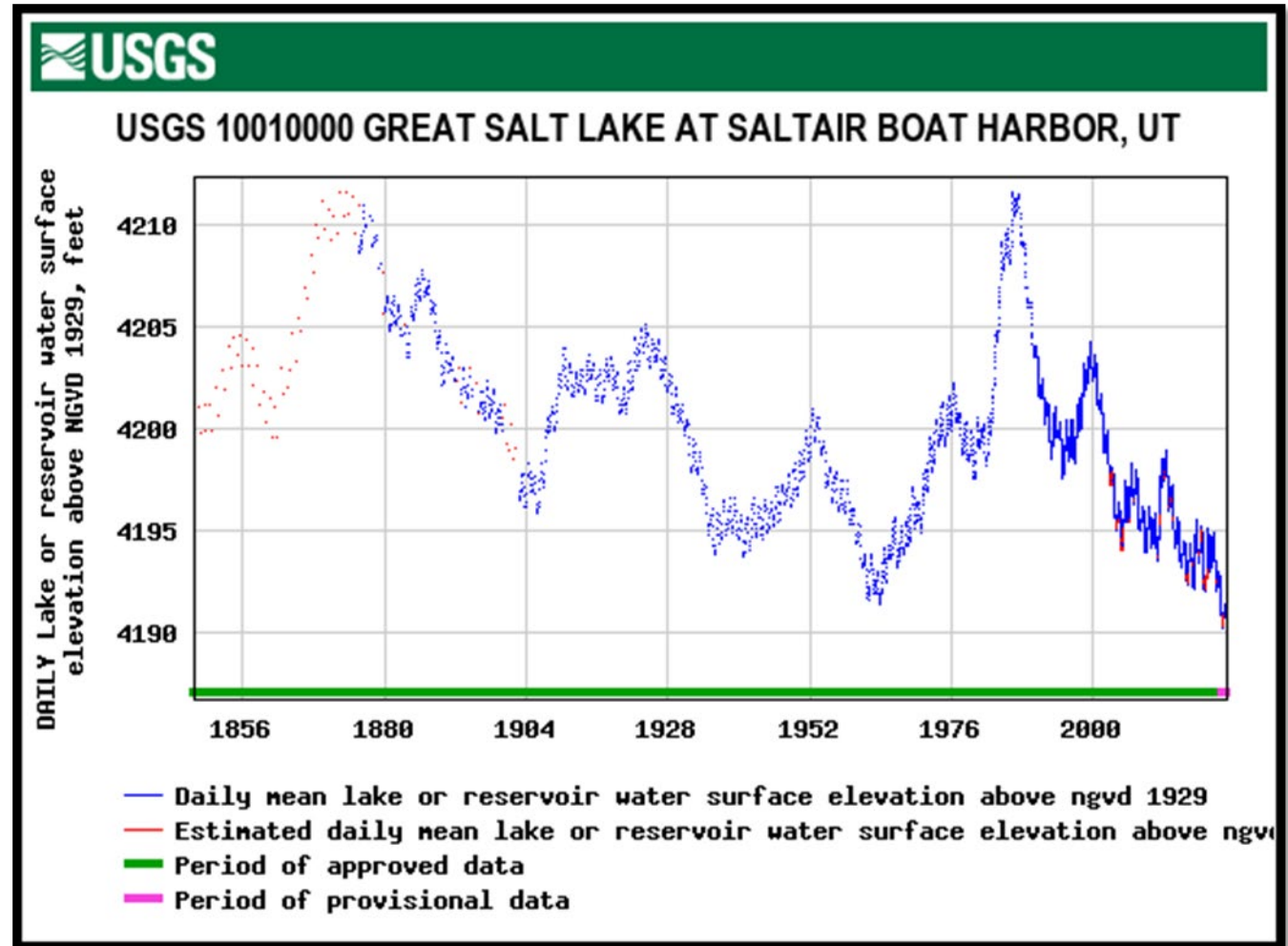


Lithium



Great Salt Lake Elevations

- Today – 4,188.8
- Max – 4,211.6
- Min – 4,188.6
- Measuring since 1847
- Previous historic low – 4,191.35 (October 1963)





GREAT SALT LAKE ELEVATION

1986



2000



2022



RECORD HIGH

4211.65 FEET



AVERAGE

4202.2 FEET



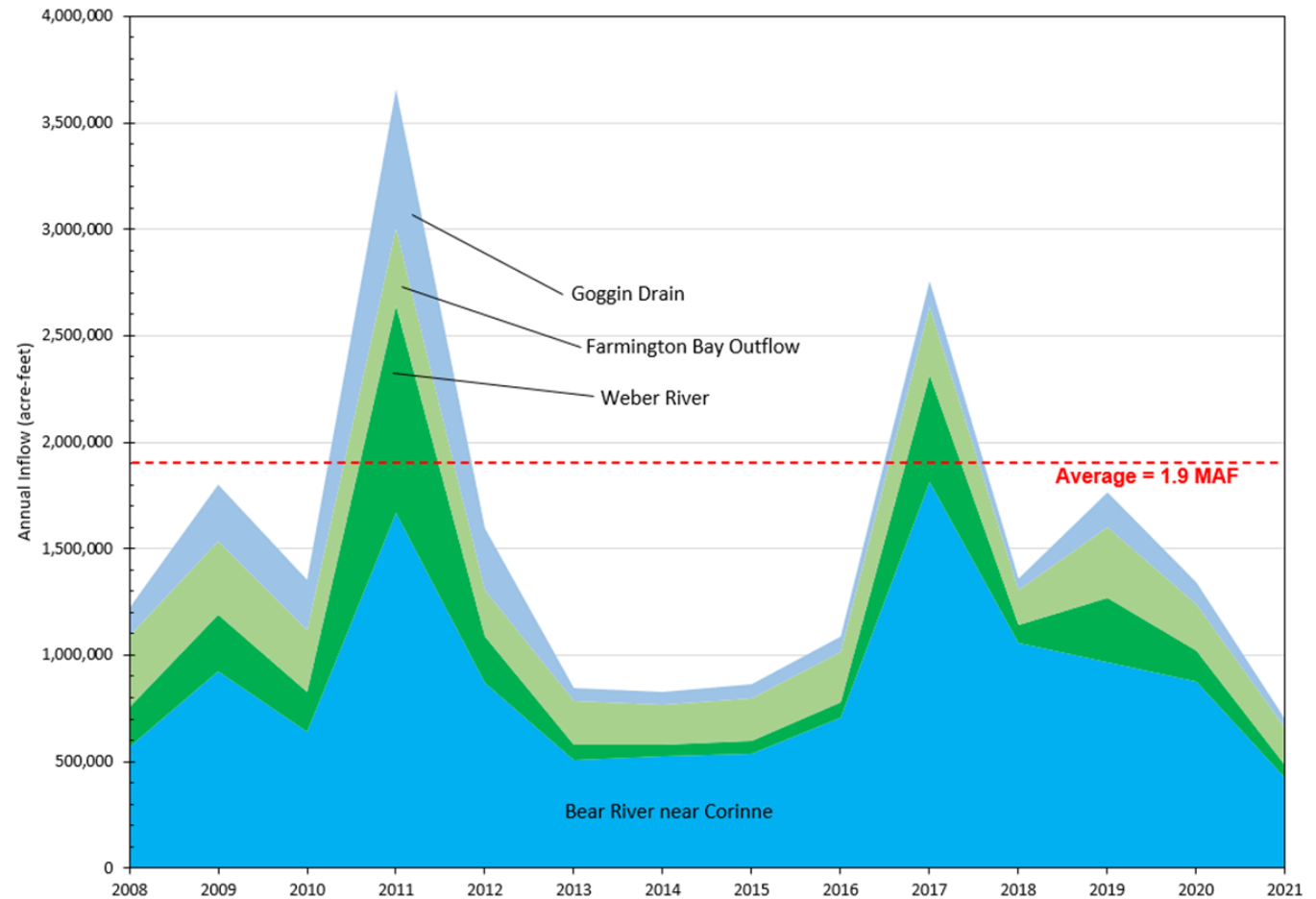
RECORD LOW*

4188.9 FEET

*AS OF OCTOBER 2022

Great Salt Lake Inflows

- Bear River – 63%
 - 1,056,000 acre-feet
- Jordan River – 16%
 - 558,000 acre-feet
- Weber River – 11%
 - 410,000 acre-feet
- Average – 1.9 MAF
- 777,200 MAF in 2022 water year



Importance of Great Salt Lake



Ecological Significance of Great Salt Lake

- 10 million birds visit GSL annually
- Critical link in Pacific Flyway for over 330 bird species
- 80% of Utah's wetlands
- Microbialite structures



Estimated Total Economic Impact

Statistic	Direct Economic Effect	Indirect Economic Effect	Induced Economic Effect	Total Economic Effect
<u>Total Economic Output (millions of 2010 \$)</u>				
Recreation Sector	74.6	27.8	33.5	135.8
Industrial Sector (Mineral)	685.2	217.7	227.9	1,130.8
Aquaculture (brine shrimp eggs)	33.9	8.0	14.8	56.7
<i>TOTAL ALL SECTORS</i>				<i>1,323.3</i>
<u>Total Labor Income (millions of 2010 \$)</u>				
Recreation Sector	25.7	9.2	10.8	45.7
Industrial Sector	168.3	67.1	73.7	309.2
Aquaculture (brine shrimp eggs)	12.3	3.2	4.8	20.2
<i>TOTAL ALL SECTORS</i>				<i>375.1</i>
<u>Total Employment (Full and Part-time Jobs)</u>				
Recreation Sector	1,217	236	310	1,764
Industrial Sector	1,967	1,288	2,112	5,368
Aquaculture (brine shrimp eggs)	373	63	138	574
<i>TOTAL ALL SECTORS</i>				<i>7,706</i>

Potential Impacts of A Drying Great Salt Lake

- Decrease in elevation = Increased costs
 - Extent of that cost depends on different lake levels
- Reduced lake access
- Increased salinity
- Increased dust
- Reduced snowpack
 - Lake effect snow
 - Dust on snow



Potential Costs of A Drying Great Salt Lake

- **\$1.69 – 2.17 billion in potential costs annually**
 - Lost mineral extraction: \$1.3 billion
 - Mitigation (for dust, etc.): \$192 to \$610 million
 - Lost recreation: \$81 million
 - Lost brine shrimp industry: \$67 million
 - Health costs (dust): \$7-22 million
 - Loss ski days (reduced snow): \$6-10 million



*2019, ECONorthwest

What Can Be Done?



2022 Legislation

- H.B. 410 - \$40 million for the creation of the Water Trust
- H.B. 33 - Instream flows
- H.B. 157- Sovereign Lands Revenue Amendments
- H.B. 429 - Great Salt Lake Integrated Water Assessment
- H.B. 317 - Trespassing Amendments



Great Salt Lake Funding

Project	Funding
GSL Comprehensive Management Plan Update	\$400,000
GSL Education and Outreach	\$200,000
Sovereign Lands Law Enforcement	\$140,000 (ongoing)
Sovereign Lands Operations	\$150,000 (ongoing)
Causeway breach and marina dredging	\$5 million



Causeway Breach Modification





Bstireman@utah.gov – 385.501.9052
www.ffsl.Utah.gov

