


The Great Salt Lake

INFORMATION SHEET


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 The Utah Geological and Mineral Survey
 is a division within
 the Department of Natural Resources

The Southern Pacific Railroad causeway was built in 1959 and breached in 1984. 60% of the lake area is south of the Southern Pacific Railroad causeway, and the majority of fresh water enters the south half.

The Great Salt Lake contains over 4.5 billion tons of salt. A million tons of salt per year were produced between 1980-1986.

Salt content of the lake varies from 9% to 28%. Early 1990 percentages:

- north half: 18%
- south half: 9%

The oceans average 3%.

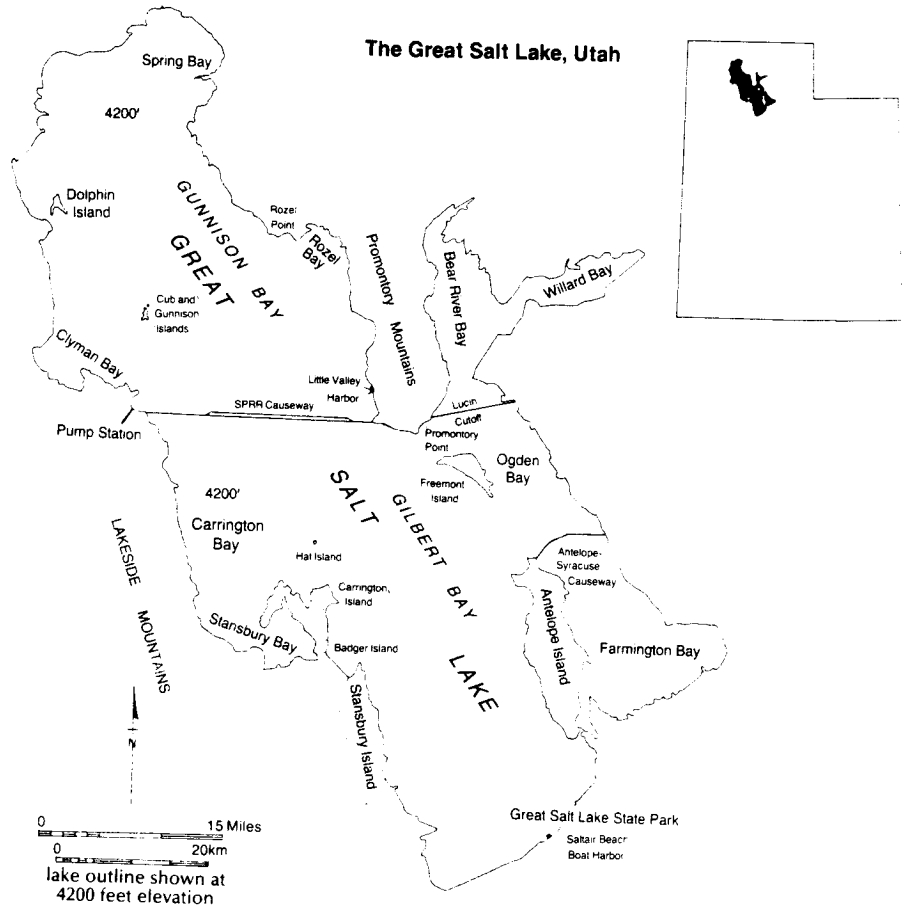
At least 10 knots of wind are required for 12 hours to create a major seiche wave.

The pumping of Great Salt Lake water to the West Desert began in 1987 to alleviate flooding. 2.7 million acre-feet were pumped. Pumps were shut down on June 30, 1989.

The lake is the remnant of the freshwater Lake Bonneville which covered the valley between 10,000 to 30,000 years ago and left visible shorelines.

Freshwater sources: Bear River, Weber River, Jordan River, Ogden River, springs and precipitation

Resources: sodium chloride (table salt), potassium and sodium sulfates, magnesium, chlorine gas, magnesium chloride brine, brine shrimp and eggs.



For current level information call U.S. Geological Survey, Water Resources Division.

Low levels on record: 1963

High levels on record: 1873, 1986, 1987

Surface elevation at low level: 4191.30 feet (1277.52 m)
 at high level: 4211.85 feet (1283.79 m)

Volume minimum: 8.685 million acre feet (10.7 billion m³)
 maximum: 30.46 million acre feet (37.5 billion m³)

Acres covered at low level: 610,200 acres (246,900 ha) (in 1963)
 at high level: 1.472 million acres (595,700 ha) (in 1986)

Area covered at low level: 953 square miles (2470 km²) (in 1963)
 at high level: 2300 square miles (5957 km²) (1870s and 1980s)

Maximum depth at low level: 25 feet
 at high level: 45 feet

Islands	Approximate area	Maximum elevation
Antelope	23,175 acres	6596 ft.
Badger	6 acres	4225 ft.
Carrington	1767 acres	4727 ft.
Cub	—	—
Dolphin	60 acres	4275 ft.
Egg	—	4211 ft.
Fremont	2945 acres	4995 ft.
Gunnison	163 acres	4492 ft.
Hat (Bird)	22 acres	4275 ft.
Slansbury	22,314 acres	6645 ft.