



Facts About Lake Tahoe

<i>Features</i>	<i>Metric unit</i>	<i>English unit</i>
Maximum depth (second deepest in the U.S.)	501 m	1,645 ft
Average depth	305 m	1,000 ft
Maximum diameter (north-south)	57 km	22 mi
Minimum diameter (east-west)	31 km	12 mi
Surface area	495 km ²	191 mi ²
Average surface elevation (above sea level)	1,897 m	6,225 ft
Highest peak (Freel Peak)	3,320 m	10,891 ft

The Lake Tahoe Basin was formed by geologic block (normal) faulting about 2 to 3 million years ago. A geologic block fault is a fracture in the Earth's crust causing blocks of land to move up or down. Uplifted blocks created the Carson Range on the east and the Sierra Nevada on the west. Down-dropped blocks created the Lake Tahoe Basin in between. Some of the highest peaks of the Lake Tahoe Basin that formed during this process were Freel Peak at 10,891 ft (3,320 m), Monument Peak at 10,067 ft (3,068 m) (the present Heavenly Valley Ski Area), Pyramid Peak at 9,983 ft (3,043 m) (in the Desolation Wilderness), and Mt. Tallac at 9,735 ft (2,967 m).

Snow, rain, and streams filled the southern and lowest part of the basin, forming the ancestral Lake Tahoe. Modern Lake Tahoe was shaped and landscaped by the scouring glaciers during the Ice Age (the Great Ice Age began a million or more years ago). Many streams flow into Lake Tahoe, but the lake is drained only by the Truckee River, which flows northeast through Reno and into Pyramid Lake in Nevada.

Lake Tahoe is the **second deepest lake** in the United States and the tenth deepest in the world, with a maximum depth measured at 1,645 ft (501 m), average depth of 1,000 ft (305 m). † Crater Lake in Oregon is the deepest lake (1,949 ft or 594 m) in the United States. **Please Note** that the depth of Lake Tahoe changes every day as the lake level changes. The deepest measurement from the 1998 bathymetric survey was 1,637 ft

(499 m) deep. The depth of Lake Tahoe depends on the height it is measured from; some measurements use sea level as a base reference, others use different points of reference. The appropriate reference, or datum, for Lake Tahoe's depth is still being debated. Therefore the measured depth of a lake is only preliminary data and may change.

Lake Tahoe is about 22 mi (57 km) long and 12 mi (31 km) wide and has 72 mi (116 km) of shoreline and a surface area of 191 mi² (495 km²). The floor of the Lake Tahoe Basin is at an elevation of about 4,580 ft (1,396 m), which is lower than the surface of the Carson Valley to the east! With an average surface elevation of 6,225 ft (1,897 m) above sea level, Lake Tahoe is the highest lake of its size in the United States.

The water in Lake Tahoe could cover a flat area the size of California 14 in (36 cm) deep. This amount of water is enough to supply everyone in the United States with 50 gallons of water per day for 5 years. The amount of water that evaporates from the surface of Lake Tahoe every year could supply a city the size of Los Angeles for 5 years.

The water temperature near the surface generally cools to 40 to 50°F (4.5 to 10°C) during February and March and warms to 65 to 70°F (18 to 21°C) during August and September. Below a depth of 600 to 700 ft (183 to 213 m), the water temperature remains a constant 39°F (4.0°C).

Lake Tahoe has a water clarity of about 100 ft (30 m) deep. Factors contributing to its clarity include the following:

- 40 percent of the precipitation that falls into the Lake Tahoe Basin lands directly on the lake.
- Remaining precipitation drains through granitic soils, which are relatively sterile and create a good filtering system.

Information on this page was gathered from † <http://www.fs.fed.us/htnf/laketaho.htm> and † <http://water.usgs.gov/pubs/FS/FS-100-97/>. Please see these sites for more in-depth information.

† This link opens in a new window.

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Last Modified: Thursday, 28-Feb-2002 16:39:38 PST

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