

Water content in Sierra dismal, record low set for January

By Kathryn Reed

PHILLIPS STATION – Scanning the field at the base of Sierra-at-Tahoe, Frank Gehrke wonders if he needs to bring his equipment out of the vehicle.

It turns out he does need the tools. But he didn't need them to tell the story. The dry, not even muddy field spoke volumes. The Sierra has no snow.



Frank Gehrke barely found any snow to measure Jan. 3 near Echo Summit.

Photo/Kathryn Reed

No snow has many ramifications for a state that depends on its mountains to fill its reservoirs, irrigate its fields, provide winter recreation that translates into tax dollars and keeps people out of the unemployment line, and lowers the threat of fire.

The one measurement Gehrke took Jan. 3 showed a snow depth of 4 inches. But it's the water content that matters. It came in at 0.14 inches – a record low.

Gehrke has been taking snow samples near the top of Echo Summit for the California Department of Water Resources since 1987. That was the year the previous low water content record was set at 0.9 inches.

1987 was also the start of a five-year drought.

While no one wants to use the “D” word this early in the season, the lack of precipitation throughout California and Nevada last month had it going down as one of the driest Decembers on record. What Northern California has been experiencing is typical in a La Nina year.

Liquid Precipitation

Location	Dec. 2011	Dec. 2010
S. Lake Tahoe	trace	6.43 inches
Tahoe City	trace	11.40 inches
Reno	zero	1.39 inches
Carson City	zero	3.39 inches
Bridgeport	zero	4.52 inches
Mammoth	zero	13.17 inches

Driest Decembers on record

Location	Precip Total/Years
S. Lake Tahoe	trace (2011)
Reno	zero (2011, 1883, 1882, 1877, 1876, 1874)

Carson City zero (2011,2000,1989)

Mammoth zero (2011)

2011 Oct.-Dec. Precipitation Totals and Rank

Location	Precip Total/Rank
Tahoe City	3.72 inches (8th driest)
Reno	0.30 inches (5th driest)
Carson City	0.45 inches (3rd driest)

Source: *National Weather Service*

The irony is arid Southern California has received more moisture. Some areas are having an above average rainy season.

The smell of dry grass lingers in the air where the snowpack is being measured. No snowcapped peaks are evident. Mountain bikes on cars go by on Highway 50, while a few die-hard skiers turn in to take some runs at Sierra.

“We just don’t know what the future weather will be,” Gehrke said. “Last year was unexpected. It was supposed to be relatively dry.”

Instead, the winter of 2010-11 set records for snowfall in the Sierra. That’s a good thing because it filled California’s reservoirs to the point that they are higher than they were this time last year.

But Gehrke is realistic. He doesn’t believe the water content can catch up if things remain dry through February.

The National Weather Service in Reno does not see any storms on the horizon for at least the next 10 days. That means going into the next holiday weekend – Martin Luther King Jr. – it will be more manmade snow for skiers to schuss on. While resorts keep making snow, bike rental places are getting back

into the business, too, in Tahoe.

After all, it's been darn right hot out – at least for January. South Lake Tahoe hit record highs on Jan. 2 and Jan. 3. On Monday it was 59 degrees in South Tahoe, breaking the 1997 record of 50 degrees. On Tuesday the mercury crept to 58 degrees, one degree higher than the record from 1996.

The entire region is warm. Reno also hit records for the past two days. On Tuesday the high was 66, breaking the 1927 record of 57 degrees. While on Monday the high in Reno was 69, smashing the 58-degree record set in 1939.

While the moisture is nowhere in sight, the cold is returning. Expect highs to be in the 40s in the Lake Tahoe Basin by the end of the weekend with overnight lows in the teens for the weekend.

Phillips Station:

Dec. 30, 2009

- Snow Depth: 38.5 inches
- Water Content: 9 inches
- Percent of Long Term Average: 75 percent

Dec. 27, 2010

- Snow Depth: 55.9 inches
- Water Content: 19 inches
- Percent of Long Term Average: 158

Jan. 3, 2012

- Snow Depth: 4 inches
- Water Content: 0.14 inches
- Percent of Long Term Average: 1

Source: *Department of Water Resources*

