

Snowpack water content near Tahoe 158% of normal

By Kathryn Reed

PHILLIPS STATION – With snow coming down in a flurry, the water content was likely changing Tuesday during the first snow survey of the year near Echo Summit.

What a difference a year makes. In 2009 the water content was 9 inches at Phillips Station, whereas this December it came in at 19 inches. Water content, not snow depth, is what matters.



Frank Gehrke
and Maureen
Stapleton
measure the
water content
Dec. 28 near
Sierra.
Photos/Kathryn
Reed

For this location at the base of Sierra-at-Tahoe off Highway 50 the water content is 158 percent of normal. Statewide, the mountain water content is 198 percent of normal.

“What is kind of surprising is having this much snow on the ground given the fact it’s a La Nina year,” said Frank Gehrke, chief of the California Cooperative Snow Survey Program. La

Nina years tend to be drier, which Gehrke said could be the case in January and February.

But it's also true Lake Tahoe sits on the cusp of these weather phenomena, so no matter how much people forecast El Nino and La Nina years, Tahoe may do its own thing.

The abundance of moisture this fall and early winter has reservoirs downstream filling up – with some already releasing water to make room for more wet stuff. That is not the case with Lake Oroville, which is the main body of water for the State Water Project. It was last full at 3.5 million acre-feet in summer 2003.

Location	Elevation	Snow Depth	Water Content	% of Long Term Average
Alpha	7,600 feet	62.4 inches	18.4 inches	140
Phillips Station	6,800 feet	55.9 inches	19 inches	158
Lyons Creek	6,700 feet	61.2 inches	22.3 inches	189

Source: Department of Water Resources

Before Tuesday's readings the state Department of Water Resources estimated it would deliver 50 percent of requested State Water Project water in 2011. Officials expect that percentage to rise. The last 100 percent allocation year was 1996 for 25 million residents and nearly 1 million acres of farmland that depend on the canals to bring them water.

Agencies and farmers dependent on the SWP received 40 percent of allocations in 2009, 35 percent in 2008, and 60 percent in 2007.

Gehrke said it's like reading tea leaves to figure out what the season will end like. Last year it started off relatively dry and finished wet.

He said the rain earlier this month did not affect the water content, it just compacted the snow. So instead of the 55.9 inches at the site on Dec. 28, there may have been 70 inches had it not rained.

The snow content surveys are taken once a month for five months starting in December.

Usually Gehrke and whoever is helping him take seven readings in the snowfield near Sierra. With the creek about 50 feet into the meadow, only six could be taken on Tuesday.

Maureen Stapleton, general manager of the San Diego County Water Authority, was helping Gehrke on Tuesday. This was her first survey.

"I'm here to see the snow survey because of the runoff. Forecasts are so important to everyone in California," Stapleton said.

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