Water content in Sierra above average despite dry January

By Kathryn Reed

PHILLIPS STATION – Despite January producing more sunny days than snowy ones, the water content at the top of Echo Summit is greater now than it was a month ago, but percentage-wise the average has dropped.

Department of Water Resource officials were at the junction of Highway 50 and the entrance to Sierra-at-Tahoe on Friday for the monthly snow survey. Results at this location show the snow depth is 56 inches, with 24 inches of water content. The water content is 125 percent above average.

Frank Gehrke measures the water content at Phillips Station Jan. 28 as Tina Cannon Leahy records the figures. Photo/Kathryn Reed

In December, the figures were 55.9 inches for snow depth, 19 inches of water content, for a reading of 158 percent above

normal.

“January was pretty much a non-event,” Frank Gehrke, chief of the California Cooperative Snow Survey Program, said of the precipitation. He said this is typical of La Nina years. What wasn’t normal was all the wet stuff in December.

The concern is if this weather pattern continues, it could mean depleted reservoirs downstream. The snowpack in the mountains provides for about one-third of the water for all California households, industry and farms.

In South Lake Tahoe, the average precipitation for January is 1.96 inches. As of Jan. 28, the National Weather Service in Reno had recorded 0.08 inches for January. That number is likely to increase with a storm blowing in Saturday that could linger until Monday morning. It is expected to bring 2 to 4 inches of snow at lake level and 4 to 8 inches at higher elevations.

What concerns Gehrke is if most of the remainder of the water year is below average for snowfall, it could mean a faster snowmelt. Already the above average temperatures are creating streams and puddling water that is not normal for January.

“As we move into spring, there is a lot more sun angle and increased snowmelt,” Gehrke explained on this bluebird day that had the mercury in the Sierra hitting 50-plus degrees. “(This is bad) because then we won’t have the water in the spring.”

Most of the major reservoirs in California have two purposes – storing water for use and flood control.

According to the Department of Water Resources, Lake Oroville, the State Water Project’s principal reservoir, is 102 percent of average and at 67 percent of capacity; Lake Shasta, the federal Central Valley Project’s largest reservoir, is at 112 percent of average and 76 percent of capacity.

“Virtually all the major reservoirs are releasing water. The releases are mandatory by federal law. It’s based on the flood control diagram,” Gehrke said.

Even with water being let out, users of the State Water Project are expected to receive 60 percent of what they’ve requested. In 2010 users were given 50 percent of allocations. The last 100 percent allocation year was 2006. That was the same year it continued snowing well into May even thought it, too, was a La Nina year.

“California weather is characterized by extremes,” Gehrke said.

Location	Elevation	Snow Depth	Water Content	% of Long Term Average
Alpha	7,600 feet	60.6 inches	28 inches	133
Phillips Station	6,800 feet	56 inches	24 inches	125
Lyons Creek	6,700 feet	63.8 inches	28.4 inches	145
Tamarack Flat	6,500 feet	60 inches	24.4 inches	126

Source: Department of Water Resources