Water content of Sierra snow above average

By Kathryn Reed

PHILLIPS STATION – The Sierra snowpack is 400 percent better than it was a year ago.

The measurement taken today in the field near the road leading to Sierra-at-Tahoe has the snow depth at 54.7 inches and the water content 16.3 inches, making it 136 percent of average.

In December 2014 those numbers were 21.3 inches of snow, the equivalent of 4 inches of water and 33 percent of average.

"The problem we've had in the past years is it starts out OK and then it shuts off," Frank Gehrke with the California Department of Water Resources said of the storms.



Frank Gehrke takes a reading on the water content on Dec. 30 near Sierra-at-Tahoe. Photo/Kathryn Reed

Dec. 30 was the first of five manual snow surveys for the season. And while it was encouraging that there was snow on the ground compared to April when it was a dry field that **Gov**. **Jerry Brown** walked through to highlight the dire drought conditions, there is no guarantee the snow will keep falling. It was so bad last spring that the May survey didn't even happen because it was bone dry.

This location near Echo Summit is doing better than the statewide average of 10.2 inches of water, or 105 percent of the Dec. 30 average.

Gehrke noted the light, powdery snow he was trudging through is fabulous for skiing, but it's not the kind of white stuff that interests hydrological officials. They want more Sierra cement, with more water than air in the snow.

When asked about the forecast, Gehrke in his usual pragmatic demeanor said, "Those are just predictions."

He noted that the full effect of the El Nino would be felt in the latter part of the winter.

The key for reservoir storage is for the moisture to come in the form of snow and not rain. This is so the spring runoff will fill those holding basins that provide drinking and irrigation water for municipalities and farmers throughout California. The snowpack in normal years supplies about 30 percent of California's water needs.

The main reservoirs after four years of drought are well below normal for this time of year. Lake Oroville has 1 million acre-feet, which is 29 percent of its 3.5 million acre-foot capacity and 47 percent of its historical average on Dec. 30. Last year it was at 62 percent average. Lake Shasta has 1.4 million acre-feet, 31 percent of its 4.55 million acre-foot capacity and 51 percent of its historical average. In December 2014 it was 41 percent of its total capacity and 66 percent of the Dec. 30 average.