



For Immediate Release

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Hole in Mountain SNOTEL Rebuilt in New Location

Reno, Nevada – Dec. 13, 2016 – Hole in Mountain SNOTEL, south of Wells, Nevada in the East Humboldt Mountains, was rebuilt in a new location and brought back online on October 20, 2016. The weather station had not reported data since it was destroyed by an avalanche on December 23, 2015. This was the second avalanche to hit the SNOTEL. The first avalanche was in February 1986, after which the site was rebuilt in the original location. This time, the station was moved about 450 feet south and located behind a small ridge to protect the site from future slides.

Hole in Mountain SNOTEL is one of over 850 such weather stations operated by the USDA Natural Resources Conservation Service (NRCS). SNOTEL stands for “snow telemetry”. SNOTEL stations monitor snowpack, precipitation and other climate variables across the mountainous regions of the western United States. The SNOTEL network is used to make water supply forecasts.

Water users who depend on Hole in Mountain SNOTEL should be aware that the normals for snowpack and precipitation from the original site will continue to be displayed in the [NRCS Update Reports](#) for the winter of 2017. Doing so will allow water users to compare data from the new location to the old location, and to other nearby SNOTEL sites. Typically, percentages for nearby sites are similar in a given area. By comparing percentages it is possible to gain an understanding of how similar the new location is to the old one. If Hole in Mountain’s percentages depart from nearby sites, this would indicate that the new location has different characteristics than the original location.

As of mid-December it appears the new location is accumulating more snow than the original site. The December 13, 2016 update report (below) shows that the snowpack is 215% of median while most nearby sites with similar elevation are between 98 and 153% of median. The new location is in a topographic depression surrounded by aspen trees. It appears snow is drifting into that depression, resulting in a higher percentage than nearby sites. The water year to date precipitation percentage for Hole in Mountain is slightly less than nearby SNOTEL sites. This is in part due to installation after the start of the water year. The water year to date precipitation in the update report does not include early October precipitation which totaled 1.7 to 3.1 inches at nearby SNOTELs through October 19th. Also, precipitation gages are less apt to collect drifting snow than snow pillows; this is due to the gage opening being well above the snow surface.

As this winter progresses, snow surveyors will make snow tube measurements at both the old and new sites for further comparison. Our hope is that these measurements will allow us to develop a relationship between the two locations and adjust the normals for 2018.

Water users should keep these things in mind when using Hole in Mountain data to make decisions. For questions or further explanation please contact Jeff Anderson at (775) 857-8500 ext. 152.

Nevada SNOTEL Snow/Precipitation Update Report							
Based on Mountain Data from NRCS SNOTEL Sites							
Provisional data, subject to revision							
Data based on the first reading of the day (typically 00:00) for Tuesday, December 13, 2016							
Basin Site Name	Elev (ft)	Snow Water Equivalent			Water Year-to-Date Precipitation		
		Current (in)	Median (in)	Pct of Median	Current (in)	Average (in)	Pct of Average
CLOVER VALLEY & FRANKLIN RIVER							
Corral Canyon	8440	3.8	3.5	109	8.8	6.2	142
Dorsey Basin	7870	4.9	3.2	153	9.5	6.9	138
Green Mountain	8180	6.5	4.4	148	9.2	7.0	131
Hole-in-Mountain	7900	8.6	4.0	215	10.5	8.6	122
Pole Canyon	7700	4.8	N/A	-	10.4	N/A	-
Lamoille #3	8025	3.9	4.0	98	8.8	6.9	128
Basin Index (%)		145			131		

December 13, 2015 Snow and Precipitation Update Report.

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Photo 1: Hole in Mountain SNOTEL in its new location. The site is tucked behind a small ridge about 450ft south of the original location. This new location will keep future avalanches from impacting the site. Photo taken October 2016.



Photo 2: Damaged observed at Hole in Mountain SNOTEL after avalanche. The SNOTEL shelter, which houses the site's electronics, was swept 200 feet downhill of its foundation. Photo taken January 2016.



Photo 3: Damaged observed at Hole in Mountain SNOTEL after melt-out. The avalanche bent over the brown precipitation gage and instrument tower. The snow pillow which weighs the snowpack is the white object under the tower. Photo taken June 2016.