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 National Water and Climate Center  
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**RECORD DECREASES IN WESTERN SNOWPACK  
 REPORTED FOR MARCH 2004**

PORTLAND, OREGON, April 7, 2004—Western United States snowpacks decreased in record amounts during March, according to the USDA Natural Resources Conservation Service (NRCS). Twenty-five percent of the 1,013 sites measured between March 1 and April 1, 2004 showed record snowpack decreases (Figure 1).

Snowpack is the lifeblood of the West and provides about 75 percent of the water supply in the West. Major sectors of the economy, such as agriculture, industry, recreation and government, also base their water management plans on NRCS water supply forecasts, climate products and drought risk assessments.”

The combination of melted snow from extremely warm March temperatures and negligible March precipitation across much of the West likely will prolong the current drought and further reduce projected water supplies in many areas, according to experts at the NRCS National Water and Climate Center (NWCC).

Most western measurement sites continue to accumulate snowpack until April 1, but record warm March temperatures hastened early snowmelt (Figure 2). Many basins lost more than 20 percent of their expected April 1 snowpack. Only the upper Columbia and upper

<b>March 2004 Snowpack Change Summary Table</b>			
State/Area	Statewide % of average SWE March 1, 2004	Statewide % of average SWE April 1, 2004	Statewide % of average SWE Change
Arizona	74	22	-51
California*	117	84	-33
Sierra/Tahoe	113	79	-34
Colorado	90	64	-26
Idaho	105	81	-25
Montana	93	78	-16
Nevada	118	64	-54
New Mexico	80	37	-43
Oregon	126	96	-30
Utah	109	70	-39
Washington	93	86	-7
Wyoming	91	71	-19
Provisional data, subject to change *Source, California Department of Water Resources SWE represents Snow Water Content			

Table 1. March 2004 Snowpack Change Summary Table

Missouri headwater basins reported snow water content increases, but even their snowpack accumulation was below normal (Table 1).

March precipitation was extremely low throughout the West (Figure 3). Most of California, Nevada, Utah, Wyoming, southern Idaho and northern Arizona received less than 30 percent of normal rainfall for the month. Only northwest Washington, southeast Arizona and southern New Mexico received above average precipitation.

Preliminary assessments of spring and summer streamflow are not encouraging and, in many areas of the West, soils are very dry due to persistent drought conditions. In Utah and parts of surrounding states, drought is entering its fifth year. Dry soils will soak up much of the remaining snowmelt like a giant sponge.

Seasonal runoff for most western streams and rivers is expected to decline between 10 to 50 percent from the March 1 forecasts. The largest declines likely will occur in the Colorado, Snake and Great basins, where the highest temperatures and the lowest precipitation amounts during March have combined to dramatically reduce seasonal snowpacks.

The NRCS Snow Survey and Water Supply Forecast Program collects data and continuously monitors snowpack in the western states each year, and from January 1 through June 1, works with the National Weather Service to forecast the amount of snowmelt runoff in the West.

Detailed, up-to-date snowpack and water supply information is available at <http://www.wcc.nrcs.usda.gov>. The USDA National Drought Council, a public-private initiative focused on drought preparedness and drought mitigation issues, provides information at <http://www.fsa.usda.gov/indc>.

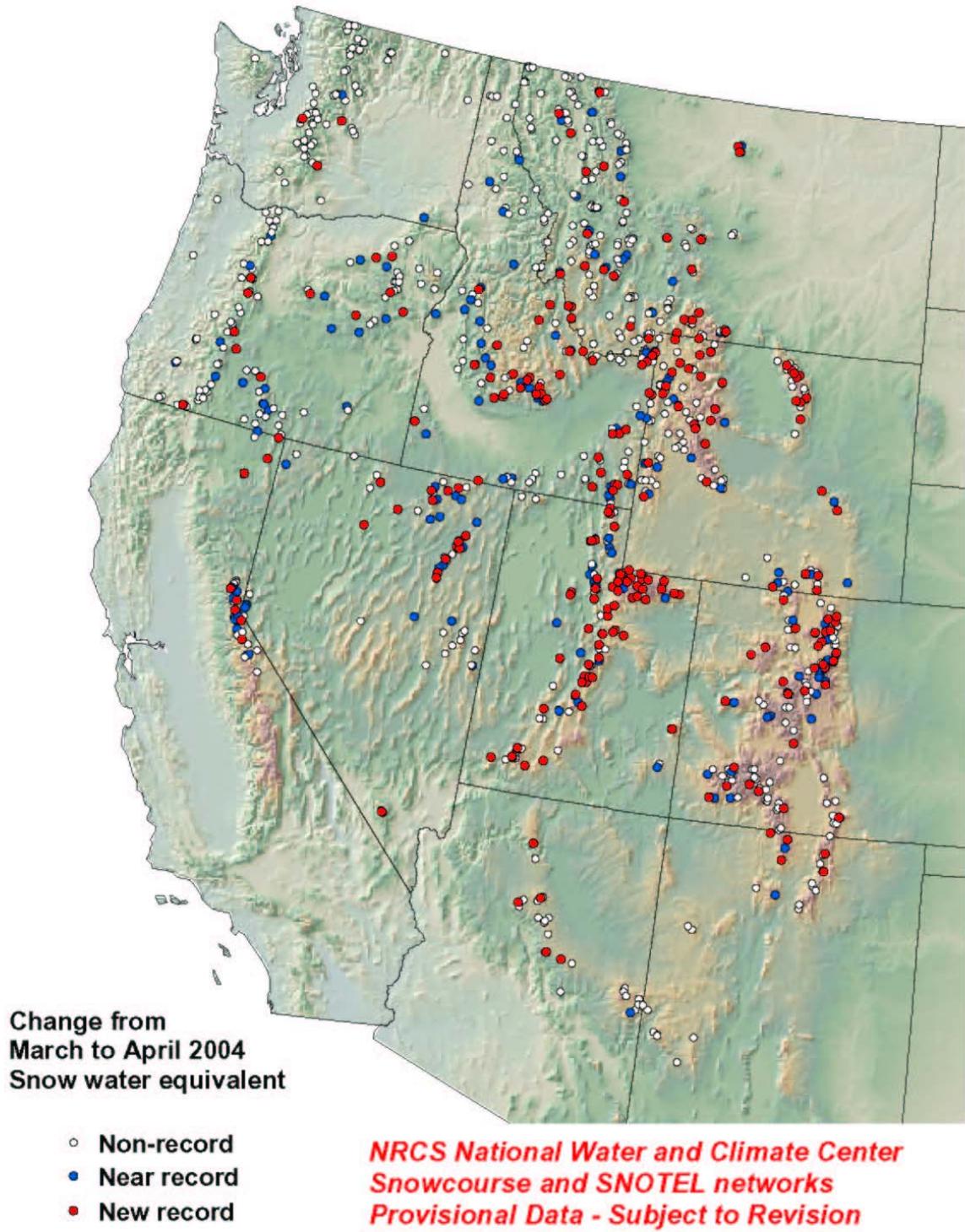


Figure 1. Record and near record one-month change in Snow Water Equivalent, March 1, 2004 to April 1, 2004.

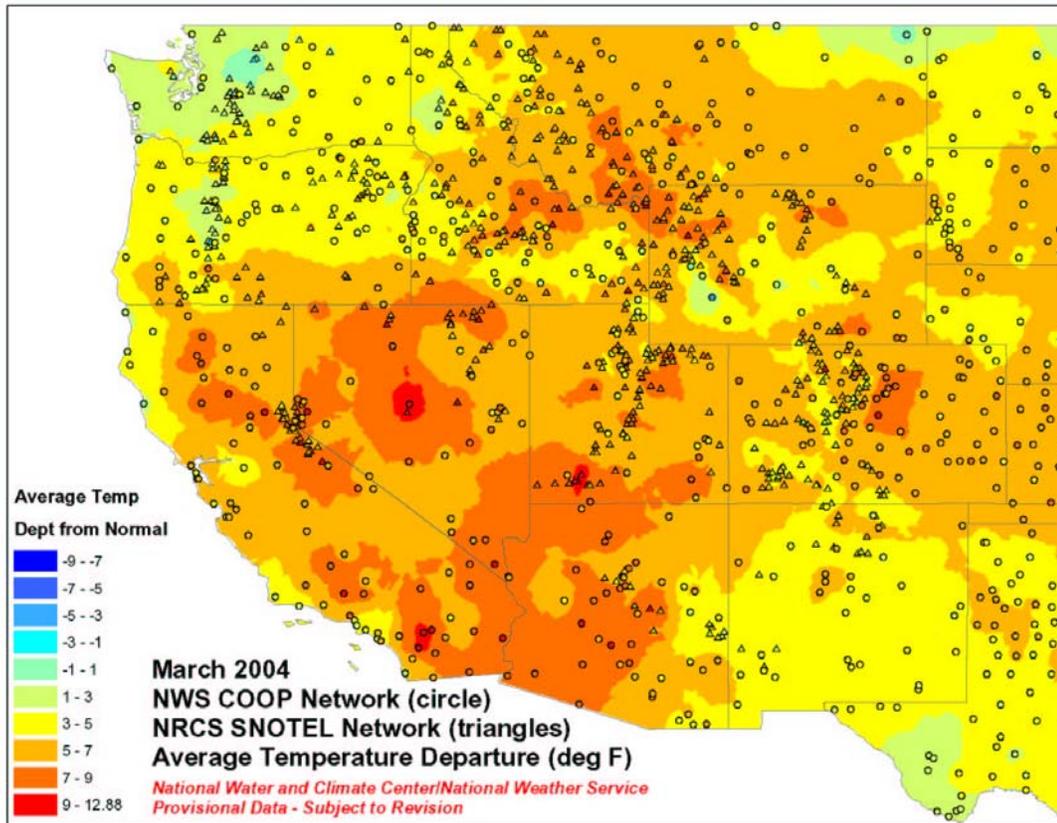


Figure 2. March Average Temperature Departures From Normal

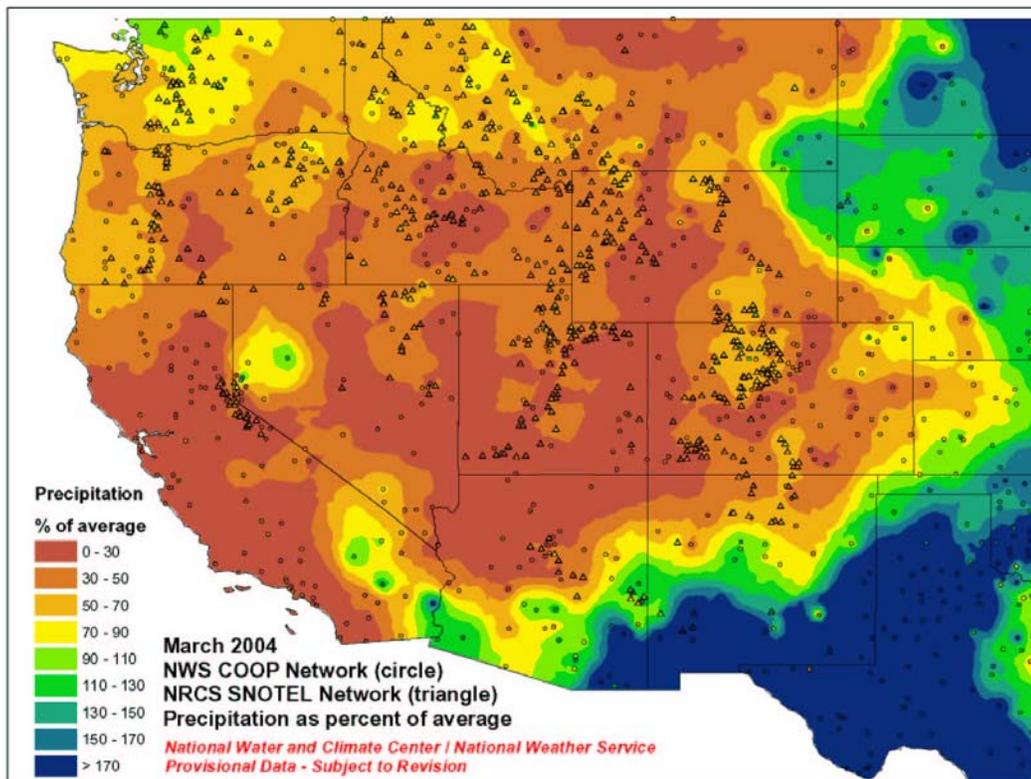


Figure 3. March Observed Precipitation