

Drought Impact Types -

A = Agricultural - Soil Moisture, Range conditions

H = Hydrological - Water Supplies, Streamflow, Groundwater

Drought Alert - Governor's Drought Advisory Committee strongly encourages local officials to convene local drought committees.

Severe Drought - Local officials should have local drought planning efforts underway or should reconvene the local drought committee at the earliest opportunity.

For recommended responses, see the Montana Drought Plan



http://nris.mt.gov/drought/

According to the National Weather Service Montana Great Falls Forecast Office, provisional precipitation totals as of January 26 for the month indicate that generally the western, south-central, and central divisions are average to above average, and the north-central, northeastern, and southwest divisions range from well below to near average with exceptions. According to the Montana Climate Atlas (Caprio & Nielsen 1992) precipitation at valley elevation locations around the state ranges from around 0.50 to 1.00 inch with the exception of Kalispell where over 1.50 inches is expected. "The season of strong Chinooks is well underway as Arctic incursions increase. When Arctic incursions are more frequent, up slope wind flow causes heavy snowfall on the leeward slopes."

This occurred following a month of very little snowfall when between January 17 and 19, a storm left snowfall totals up to 30 inches in the mountains and up to a foot at valley elevations in the central area of the state. Temperatures had plunged into the single digits for much of the state but moderated into highs in the 40F range by the week of the 23rd. As of January 26, Helena was 413 percent of normal with 1.28 inches for the month or 142 percent of normal for the Water Year, October 1, 2011 to date.

According to the NRCS Snow Survey, Snotel sites in the mountains showed increases in snow water equivalent (SWE) of the snowpack of between 10- and 20-percent between January 18 and the 25th nearly statewide. The Headwaters Mainstem of the Missouri showed a SWE for its mountain snowpack of 109%; the Lower Missouri of 99%; Lower Yellowstone 99%; The Tongue 127%; Bitterroot 94%, but the Missouri headwaters only 78% following the event.

NOAA's Climate Prediction Center (CPC) January 5 ENSO Update reported that "Collectively, the ongoing oceanic and atmospheric conditions reflect the continuation of weak to moderate La Nina." The report goes on to call for increased chance for below average temperatures over the western and north-central U.S. with above average precipitation favored across the northern tier of states. Montana tends to experience cooler, and to a lesser degree, wetter winters during La Nina events.