## Montana Drought Status by County - September 2011 Daniels Sheridan Glacier Toole Liberty Lincoln Hill Flathead Valley Blaine **Phillips** Roosevelt Pondera http://drought.mt.gov Richland Chouteau Teton Lake Sanders Map Key McCone **WWWY** Continental Divide Cascade Fergus Dawson Garfield **Drought Impact Type** Lewis Judith Missoula & Clark Prairie\* Basin **Drought Status** Powell September 2011 Meagher Go/den Valley Musselshell Wheatland Fallon Rosebud Moist Custer Ravalli Deer odge Silver No Drought Yellowston Sweet Gallatin Grass Slightly Dry Big Carter Powder Horn Moderately Dry River (Drought Alert) Madison Beaverhead Carbon Severely Dry (Severe Drought) Extremely Dry

**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 (NWS) Weather / Precipitation Summary for August 2011, "Very warm and dry conditions prevailed throughout August, until the last day. Temperatures across the state averaged about 1.5 F degrees. This was the 29th warmest August, and was the warmest since 2003." Precipitation averaged below normal in August with widely-scattered pockets of above average rainfall the report notes.

Montana County Drought Status Climate Summary

The September 1, 2011 NRCS Surface Water Supply Index indicated that over 30 of 52 river basins remain in its Extremely Wet category, down from nearly 50 as of August 1. The remaining basins were split nearly evenly between the Moderately and Slightly Wet categories, indicating the warm temperatures and below average precipitation seen over parts of the state over the past 40 days.

According to the Agricultural Statistics September 19 Crop-Weather Report topsoil was rated 20 percent adequate, 53 percent short, and 27 percent very short. Subsoil moisture was rated 41 percent adequate, 45 percent short, and 13 percent very short. "Spring wheat harvest progressed to 83 percent with continued reports of drought and grasshopper damage." Winter wheat planting is at 25 percent but dry soils are delaying seeding and raising concern. Range and pasture feed conditions are 35 percent fair, 35 percent good, and 14 excellent.

According to NOAA's September 8, 2011 ENSO update, "La Nina conditions have returned and are expected to gradually strengthen and continue into the Northern Hemisphere winter 2012." La Nina episodes have a tendency to bring cooler and wetter weather to Montana from fall into early spring. La Ninas have occurred over 4 of the past 5 winters: 2007-2008; 2008-2009; 2010-2011; and now forecasted for 2011-2012. The winter of 2009-2010 saw an El Nino, ENSO's positive phase. Current Climate Prediction Center long-lead climate maps for January-February- March indicate cooler and wetter conditions statewide.