

# Montana Drought Status by County - July 2010







## Map Key

 Continental Divide

 Drought Impact Type

## Drought Status

### July 2010

-  No Drought - Moist
  -  No Drought
  -  Slightly Dry
  -  Moderately Dry (Drought Alert)
  -  Severely Dry
  -  Extremely Dry
- } (Severe Drought)

**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.

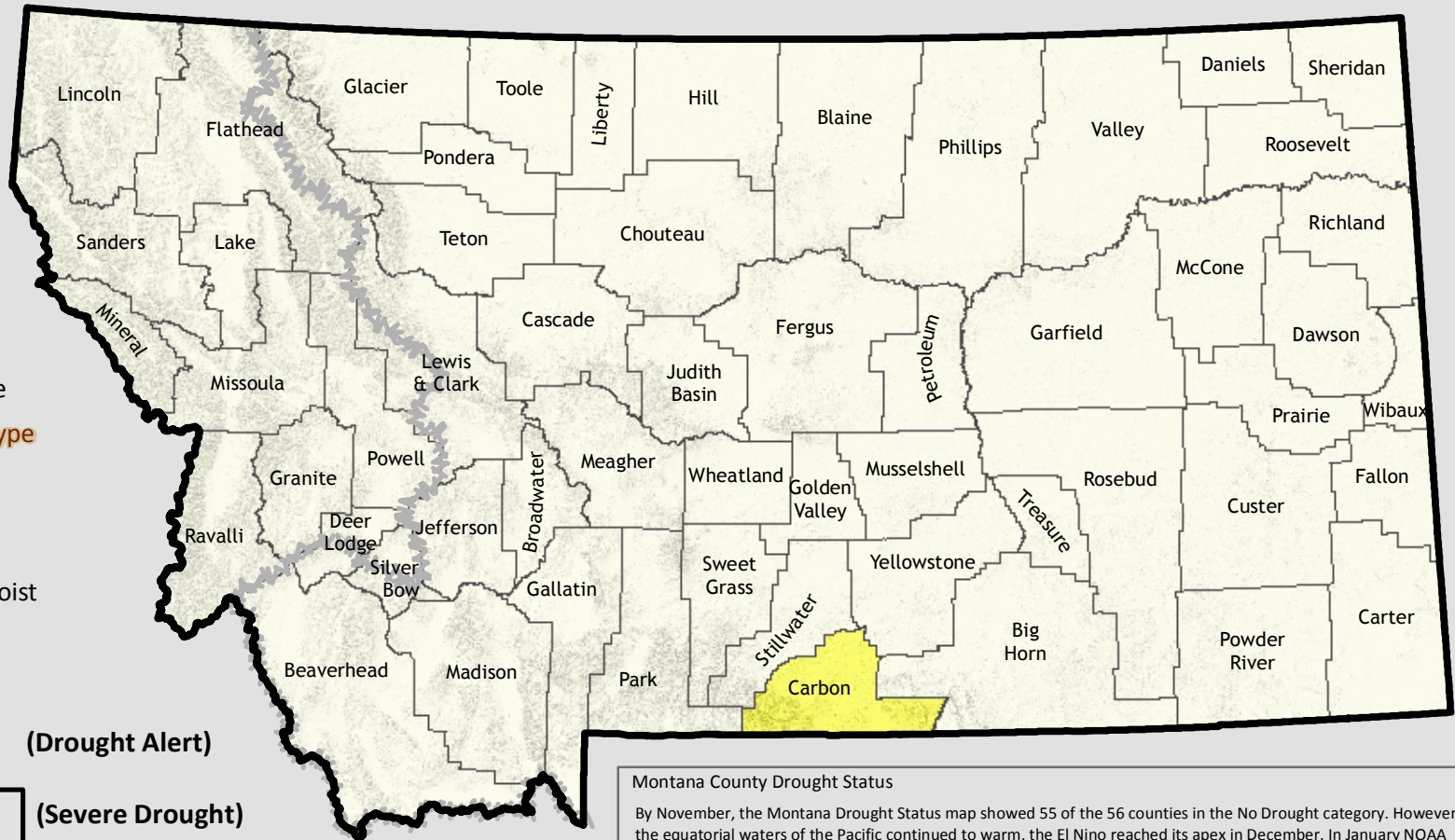
For recommended responses, see the Montana Drought Plan



<http://nr.is.mt.gov/drought/>



<http://drought.mt.gov>



## Montana County Drought Status

By November, the Montana Drought Status map showed 55 of the 56 counties in the No Drought category. However, as the equatorial waters of the Pacific continued to warm, the El Nino reached its apex in December. In January NOAA characterized the El Nino as a "strong" event. Impacts to Montana included less than normal valley and mountain precipitation. According to the National Climate Data Center, the period of November 2009 through March 2010 was the 4th driest for that period since 1895. The May 1 NRCS Montana Water Supply Outlook Report reported the snow water content of the mountain snowpack at 68 percent of average west of the Continental Divide, 71 percent for the Missouri Basin, and 68 percent for the Yellowstone River Basin. The streamflow forecast is 57 percent for the Sun, Teton, and Marias rivers and 50 percent for the Bitterroot and lower Clark Fork rivers assuming average precipitation occurring May through July.

The Big Belt, Little Belt, Bridger, Castle, Judith, Highwood, Big and Little Snowy, Bears Paw, Little Rocky, and Crazy Mountains had normal or better mountain snowpack resulting in good streamflow prospects for the Smith, Judith, and Musselshell rivers (87%) assuming normal precipitation May through July. The St. Mary and Milk rivers are forecast to have 81 and 85 percent flow through July. A large system produced from 2 to 8 snow water inches of precipitation between April 28 and May 3. The Mission and Little Belt Mountains, received over four feet of snow between the 28th and 30th alone. The lowest sea-level pressure reading in 60 years in April was measured during the height of the storm according to the Weather Service. Cooler than average temperatures and very good snow cover nearly all winter over Eastern Montana resulted in excellent soil moisture and good grazing and crop outlooks, including a May 3 winter wheat outlook of 40 bushels per acre by the Agricultural Statistics Service.

The NOAA May 6 climate forecast calls for the El Nino to continue fading into June by which time it is expected to reach the neutral phase of the ENSO cycle. Thereafter, some climate models call for the cycle to remain in its neutral phase into fall while others forecast the emergence of a La Nina, during the second half of 2010. La Nina tends to be a cool and wet phase of the ENSO cycle for Montana from late fall to spring. Montana was in a La Nina from early 2008 into fall 2009 furthering recovery from hydrologic drought dating to 2000.