## Montana Drought Status by County - October, 2009 DANIELS SHERIDAN GLACIER LIBERTY TOOLE LINCOLN HILL BLAINE FLATHEAD VALLEY ROOSEVELT PONDERA PHILLIPS RICHLAND CHOUTEAU SANDERS TETON LAKE MCCONE PETROLEUM CASCADE FERGUS GARFIELD DAWSON WIBAUX Map Key LEWIS JUDITH AND CLARK MISSOULA BASIN **MYMY** Continental Divide PRAIRIE WHEATLAND Drought Impact Type BROADWATER POWELL MEAGHER ROSEBUD GRANITE FALLON **LREASURE** JEFFERSON **Drought Status** DEER CUSTER RAVALLI LODGE October 2009 YELLOWSTONE SILVER SWEET STILMAR BOW GRASS GALLATIN No Drought - Moist CARTER BIG POWDER HORN No Drought RIVER BEAVERHEAD MADISON PARK CARBON Slightly Dry Moderately Dry (Drought Alert) **Montana County Drought Status** Severely Dry By April, all of the counties west of the Divide were ranked as No Drought. Topsoil moisture was low for the western (Severe Drought) Hi-Line counties due to below average precipitation although subsoil moisture was adequate generally. Mountain snowpack runoff occurred on time in most basins of the state with flow peaking around May 20, but have since begun Extremely Drv to fall off somewhat sharply to seasonal levels. May was very dry at valley elevations and ended the month as the tenth driest May for Montana in over 100 years of record-keeping according to the National Climate Data Center. Precipitation **Drought Impact Types** - **A** = Agricultural - Soil Moisture, Range conditions for the Crop Year, which began April 1 through May 31 was the 24th driest such period since 1895. See: http://www.ncdc.noaa.gov/oa/climate/research/prelim/drought/st024dv00pcp.html **H** = Hydrological - Water Supplies, Streamflow, Groundwater The Drought Advisory Committee heard May 21 that the outlook for state and federal reservoirs remained very good with **Drought Alert** - Governor's Drought Advisory Committee strongly encourages local be necessary to avoid below average streamflow into July. Mountain rain and snow showers occurred from early to mid-June. About 25 percent of the mountain snowpack remains. 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://drought.mt.gov/

no shortfalls for water users anticipated for the 2009 use season. According to NRCS, average precipitation for June will

Extension agents are, for the most part, reporting good subsoil moisture with the topsoil layer drier until the wet event of June 6-10 when the moisture needs of emergent range and crops was met in much of the state. The outlook for dryland farming and livestock grazing remains good especially across the southern tier and throughout much of the east-central region. The NRCS June 1, 2009 Surface Water Supply Index shows most of the state's 52 river basins as Average to Moderately Wet with a few exceptions in the northwest corner.

The June 6, 2009 El Nino / Southern Oscillation (ENSO) status discussion from the Climate Prediction Center (CPC) concluded that the La Niña (cool phase) dating to early 2008 had ended and that it now appears that conditions consistent with an El Nino event appear to be developing. An El Nino generally means warm and dry winter climate conditions for Montana.