

Montana Weather/Precipitation Summary

June 1-15 2006 By NOAA's National Weather Service Great Falls Montana

The first half of Montana has brought somewhat typical weather for June. There have been some cool spells, along with some heat. Record high temperatures were set on the 2nd at scattered locations across eastern Montana. Hardin peaked at 96°F during this warm period. Precipitation has fallen across most of the state, except the south central and southeast. Severe weather has accompanied the precipitation with wind gusts as high as 96 mph in Dawson county on the 14th, which caused considerable damage. Severe weather has occurred on 4 of the first 15 days of the month, with strong winds and large hail accompanying the storms. Large hail fell with some of the storms on the 14th, up to the size of grapefruits. A storm that settled over western and central Montana on the 7th-11th dropped heavy rain. Rainfall as high as 4 inches was reported in the Cascade area. This produced flooding and washed out roads. The regular winds returned after this storm system, and produced wind gusts to 50 mph over much on north central Montana on the 15th. Cooler temperatures also returned. Clover Meadow dropped to 20°F on the 15th, for the lowest temperature for this period.

Figure 1 shows the change in the weather pattern and the distribution of rainfall of early June. Even with the rain, some areas of extreme northeast, extreme southeast, extreme south central and the northern Rockies region remain somewhat dry (Figure 2b).

The peak wind in May was 89 mph at Logan Pass on the 8th. Thunderstorms on the 25th produced an 86 mph gust north of Monarch. After a cool start, temperatures rebounded with the warming of mid-month, so that the statewide average temperatures were slightly above normal.

Month's summary information (to date):

High Temperature	96°F at Hardin	Greatest Precip	4.02" at Zortman
Low Temperature	20°F at Clover Meadow		
Warmest Ave Temp	60.8°F at Glendive	Peak Wind Gust	89 mph at Logan Pass
Coollest Ave Temp	42.1°F at Cooke City		
Range of Temp Departures	+0.5°F at Livingston to +3.8°F at Glendive	Highest Ave Wind	12.8 mph at Havre

For the water-year, precipitation totals remain close to or above normal across the state. The driest areas are the south central, and along the Rocky Mountain Front. The area around Cut Bank is also on the dry side. Temperatures for the water year are also a bit above normal. They range from around 1°F above normal west of the divide, to 7°F above normal along the North Dakota border.

**Historical Rank of Precipitation (inches)
for the Current Month and Water Year to Date**

Location	Jun 1-15	% of Norm	Oct1 – Jun 15	% of norm	Years
Baker	1.00	79%	8.23	120%	7
Billings	0.28	30%	9.55	92%	96
Bozeman	2.13	177%	11.04	113%	64
Butte	2.45	237%	10.81	138%	111
Cut Bank	0.57	46%	3.22	47%	97
Dillon	1.48	167%	7.36	125%	65
Glasgow	0.75	68%	6.83	112%	105
Great Falls	3.98	355%	15.02	159%	114
Havre	1.60	168%	7.11	105%	126
Helena	2.47	271%	10.59	157%	128
Jordan	1.42	112%	8.52	139%	7
Kalispell	3.25	283%	14.36	118%	112
Lewistown	2.95	201%	14.16	129%	110
Livingston	1.42	127%	9.85	95%	101
Miles City	0.48	40%	9.65	116%	129
Missoula	2.03	235%	13.82	143%	124
Mullan Pass	4.50	331%	41.31	142%	65
Wolf Point	2.72	200%	6.80	114%	8
Glendive	1.13	88%	10.39	134%	103
Sidney	0.65	46%	9.91	124%	65
BZN-MSU	1.97	138%	15.83	120%	126

Rankings and Percentiles are 1=driest, higher numbers=wetter.

For an automated version of this chart, updated daily, go to <http://www.wrh.noaa.gov/tfx/dx.php?wfo=tfx&type=&loc=products&fx=PCPNTOTALS>

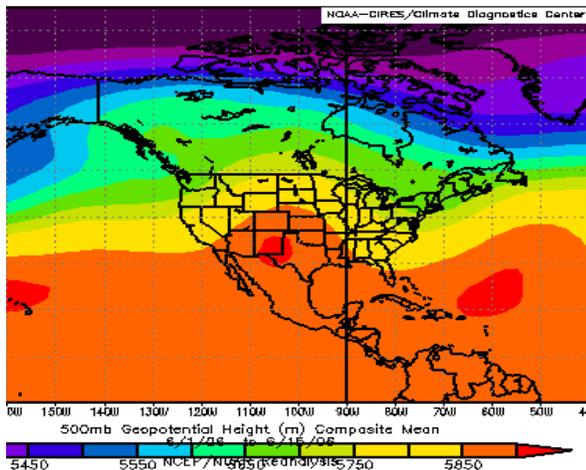


Figure 1a. Mean flow at 500 millibars (~18,000 ft), (a) June 1-15 2006. The mean flow for the first half of June was close to the long-term mean.

Figure 1a. June 1-15 2006 Mean 500 mb flow

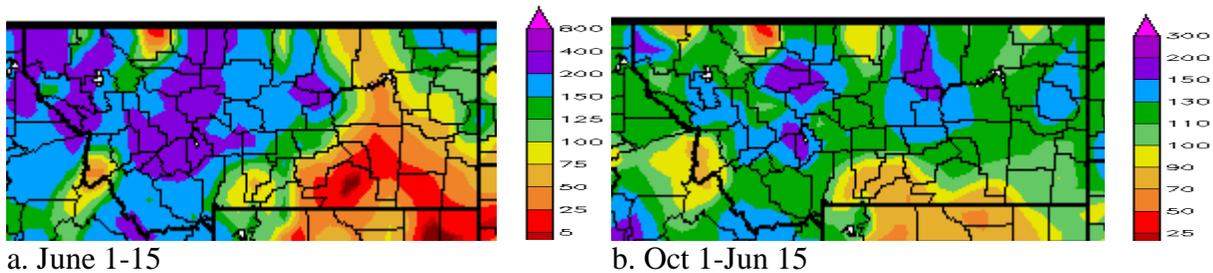


Figure 2. Precipitation anomaly (% of normal) for (a) June 1-15 and (b) October 1 – June 15 (courtesy High Plains Climate Center).

For a state map of % of normal water year precipitation (updated around the 7th of each month), go to:
http://www.wrh.noaa.gov/tfx/image.php?wfo=tx&type=data&loc=hydro&fx=watyr_pctnorm.png

For the latest information on mountain snow pack from the NRCS, go to:
<http://www.mt.nrcs.usda.gov/snow/index.html>

For the latest U.S. Drought Monitor, issued weekly by the Climate Prediction Center (CPC), go to:
<http://www.drought.unl.edu/dm/monitor.html>

All reported data is preliminary. Further inquiries about the moisture conditions can be directed to Dave Bernhardt or Gina Loss at (406) 453-2081. Many more links can be found on the Drought Information Page of the NWS Great Falls web site at
<http://www.wrh.noaa.gov/tfx/main/drought.php?wfo=tx>