

# North Central and Central Montana Storm of April 27-30 2009 Summary

The information listed is as of noon MDT April 30.

The storm that brought record amounts of snow to central and north central Montana this week is now winding down. The heavy snowfall caused roads and airports to close, produced power outages and forced the closure of many area schools.

The storm began with snow falling in a strong upslope flow pattern along the Rocky Mountain Front on Monday morning (Apr 27) and continued with periods of heavy snow on the 28<sup>th</sup> and 29<sup>th</sup>, before decreasing to light snow on Thursday morning (Apr 30). Strong winds pushed the snow into drifts as high as 10 to 12 feet over portions of the northern Rocky Mountain Front.

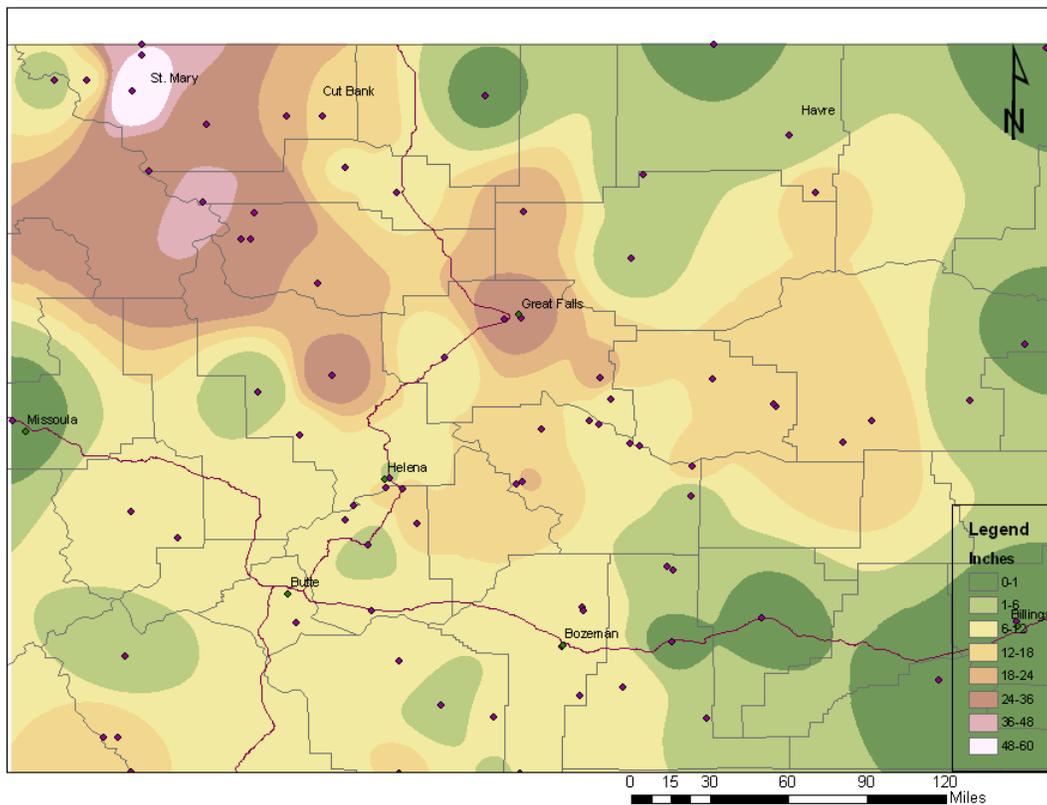
The heaviest snow fell over northern portions of the Rocky Mountain Front on the Blackfeet Indian Reservation. Over two feet of snow fell as far east as the Great Falls area, with much lighter amounts in the Havre and Lewistown areas. Most of Blaine county and eastern portions of Fergus county primarily measured rainfall. Even the rainfall was heavy with Grass Range reporting over 2.3 inches of precipitation with only 3 inches of snow. Chinook reported just under one inch of rain (0.90).

Following is a table with some of the snowfall amounts reported from Monday through Thursday morning... A contoured map of snow reports follows the table.

|                 | SNOW... | WATER EQUIV | ( BOTH VALUES IN INCHES ) |
|-----------------|---------|-------------|---------------------------|
| ST MARY.....    | 60      |             |                           |
| BABB VICINITY.. | 48      |             |                           |
| BADGER PASS.... | 43      | 4.00        |                           |
| DUPUYER CREEK.. | 34      | 2.20        |                           |
| MT LOCKHART.... | 34      | 2.70        |                           |
| WALDRON.....    | 34      | 1.90        |                           |
| ROGERS PASS.... | 26.7    | 1.30        |                           |
| PIKE CREEK..... | 26      | 2.70        |                           |
| GREAT FALLS.... | 25.6    | 1.66        |                           |
| BROWNING.....   | 24      |             |                           |
| CUT BANK 10W... | 24      |             |                           |
| PENDROY.....    | 20      |             |                           |
| PICKFOOT CREEK. | 20      |             |                           |
| CHOTEAU.....    | 18.7    |             |                           |
| BENCHLAND.....  | 18      |             |                           |
| CARTER 25N..... | 18      |             |                           |
| CHOTEAU 8NE.... | 16      |             |                           |
| HOBSON.....     | 16      |             |                           |
| CRYSTAL LAKE... | 16      | 1.60        |                           |
| HELENA 3S.....  | 14      |             |                           |
| DAISY PEAK..... | 14      | 1.50        |                           |

|                 |      |      |
|-----------------|------|------|
| GOLD BUTTE..... | 13   | 0.58 |
| MONTANA CITY... | 13   |      |
| MILLEGAN.....   | 13   | 0.56 |
| ROCKY BOY.....  | 13   | 1.50 |
| CHOTEAU.....    | 12.5 |      |
| MONARCH.....    | 12   |      |
| CASCADE 5SSE... | 12   |      |
| STANFORD.....   | 12   | 1.13 |
| VALIER.....     | 11.7 | 1.89 |
| CONRAD.....     | 11   |      |
| MANY GLACIER... | 11   | 0.50 |
| NEIHART.....    | 10.1 | 0.47 |
| CASCADE 20SSE.. | 8    |      |
| BOZEMAN MSU.... | 6    |      |
| WHITE SULPHUR.. | 6    | 0.53 |
| FORT BENTON.... | 4.5  | 1.75 |
| RUDYARD 19S.... | 4    | 0.75 |
| GRASS RANGE.... | 3    | 2.32 |
| BOULDER.....    | 2    |      |
| FT ASSINNIBOINE | 1.3  | 1.05 |
| VALENTINE.....  | 0.2  | 1.70 |
| CHINOOK.....    | 0    | 0.90 |

Snowfall Totals April 27-30 2009



The recent snows have added to the large amounts of snow recorded over the past winter across much of the area. Some locations have recorded their snowiest season of record, with the snow season not yet finished. Following is a table with snowfall totals for the season and other record information...

| <b>Location</b> | <b>2008-09 Snowfall</b> | <b>Record</b>  |
|-----------------|-------------------------|--|
| Chinook         | 103.1 inches            | Snowiest of record. The old record was 63 inches in 1995-96.   |
| Choteau         | 65.6                    | 3 <sup>rd</sup> snowiest of record. The record is 90 inches.   |
| Ft Assinniboine | 78.2                    | Snowiest of record and the snowiest since 1989-90 when 50.1 inches were recorded.  |
| Gold Butte      | 88.6                    | 4 <sup>th</sup> snowiest of record. The record is 118 inches in 1966-67.   |
| Great Falls     | 108.8                   | 2 <sup>nd</sup> snowiest of record. The record is 120.2 inches in 1988-90. This is only the 4 <sup>th</sup> season in which the seasonal snowfall has exceeded 100 inches. The average is 62 inches. April's total snowfall of 35.4 inches now ties April 1967 for the snowiest April of record. |
| Millegan        | 187.3                   | Snowiest of record. The old record was 186 inches in 2003-04.  |
| Stanford        | 77.5                    |  |

For the month of April, some snow records have also fallen. At Bozeman MSU 49.4 inches of snow have fallen. This exceeds the record of 37 inches in April 1955. This is also the most measured in any month at Bozeman MSU. The old record was 44.3 inches in November 1941. This is also the wettest April of record. 4.40 inches of precipitation has fallen. The old record was 3.59 inches in 1912 and 2003.

At Cut Bank - the 11 inches of snow on the ground on April 30 is the greatest recorded on any day in April. The old record was 10 inches on April 30 1967.

Daily snowfall records set...

| <b>Date</b> | <b>Location</b>  | <b>Amount</b> |
|-------------|------------------|---------------|
| Apr 27      | Fort Benton      | 1.6           |
|             | Valier           | 8.0           |
| April 28    | Great Falls      | 8.1           |
|             | Choteau          | 12.5          |
|             | Ft. Assinniboine | 1.1           |
|             | Rogers Pass      | 21.6          |
|             | Shelby           | 3.0           |
|             | Valier           | 3.0           |
| April 29    | Great Falls      | 16.1          |
|             | Choteau          | 6.3           |
|             | Gold Butte       | 3.0           |
|             | Millegan         | 8.0           |
|             | Stanford         | 4.0           |

Extreme two and three day storm total snowfall records were also set at Great Falls.

Storm total snowfall at Great Falls for the three day period of April 27-29 measured 25.4 inches. This is an all time three day snowfall record which surpasses the previous record of 18.1 inches set November 26-28, 2005.

Snowfall for the two day period of April 28-29 measured 24.2 inches. This is also an all time snowfall record which surpasses the previous record of 17.3 inches set April 19-20, 1973.

The all time one day snowfall record at Great Falls is 16.5 inches set on April 20, 1973. The 16.1 inches recorded April 29<sup>th</sup> is the second highest one day snowfall total recorded since climatic records began at Great Falls in 1892.