

Storm Data and Unusual Weather Phenomena - April 2013

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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NORTH DAKOTA, Central and West

MCHENRY COUNTY --- 4.4 WSW VELVA [48.05, -101.02], 2.3 SE VELVA [48.05, -100.89], 2.1 NNE VELVA [48.10, -100.92], 5.4 NW VELVA [48.12, -101.02]

04/01/13 00:00 CST	20K	Flood (due to Heavy Rain / Snow Melt)
04/30/13 23:59 CST	0	Source: Emergency Manager

A late season rapid snow melt caused flooding along the Souris (Mouse) River through southwest McHenry County. Additionally, there were necessary releases from upstream dams in North Dakota and Saskatchewan, Canada, due to rapid snow melt there. Some roads near the river were damaged.

WARD COUNTY --- 2.0 ENE FOXHOLM [48.38, -101.53], 4.4 WSW MINOT [48.21, -101.37], 2.5 SE SAWYER [48.05, -101.02], 3.1 NNE SAWYER [48.12, -101.02], 2.4 WNW SURREY [48.24, -101.18], 4.6 E FOXHOLM [48.38, -101.47]

04/01/13 00:00 CST	0.35M	Flood (due to Heavy Rain / Snow Melt)
04/30/13 23:59 CST	0	Source: Emergency Manager

A late season rapid snow melt caused flooding along the Souris (Mouse) River and Des Lacs River through Ward County. Additionally, there were necessary releases from upstream dams in North Dakota and Saskatchewan, Canada, due to rapid snow melt there. Homes in the Project Road area near Burlington took on water. Many county and township roads near the river were damaged.

A late season rapid snow melt caused flooding along the Souris (Mouse) River and Des Lacs River through north central North Dakota. Additionally, there were necessary releases from upstream dams in North Dakota and Saskatchewan, Canada, due to rapid snow melt there. Homes in the Project Road area near Burlington took on water. Many county and township roads near the river were damaged. This flood continued through May and into June.

(ND-Z017) MCKENZIE, (ND-Z018) DUNN, (ND-Z031) GOLDEN VALLEY, (ND-Z032) BILLINGS, (ND-Z033) STARK, (ND-Z040) SLOPE, (ND-Z041) HETTINGER

04/08/13 07:00 CST	0	Heavy Snow
04/08/13 14:00 CST	0	

An area of strong frontogenesis developed along a southward advancing cold front and extended from southern Montana into western North Dakota. Areas west and south of the Missouri River received the most snow, ranging from three inches just west of the river, to a foot of snow at Beach on the Montana border.

(ND-Z051) DICKEY

04/11/13 04:00 CST	0	Heavy Snow
04/11/13 14:00 CST	0	

A spring storm brought heavy wet snow to parts of Dickey County in southeastern North Dakota on April 11th. A storm total of eight inches was reported in Ellendale, the county seat.

(ND-Z009) WILLIAMS, (ND-Z010) MOUNTRAIL, (ND-Z011) WARD, (ND-Z012) MCHENRY, (ND-Z013) PIERCE, (ND-Z017) MCKENZIE, (ND-Z018) DUNN, (ND-Z019) MERCER, (ND-Z020) OLIVER, (ND-Z021) MCLEAN, (ND-Z022) SHERIDAN, (ND-Z023) WELLS, (ND-Z025) FOSTER, (ND-Z031) GOLDEN VALLEY, (ND-Z032) BILLINGS, (ND-Z033) STARK, (ND-Z034) MORTON, (ND-Z035) BURLEIGH, (ND-Z036) KIDDER, (ND-Z037) STUTSMAN, (ND-Z040) SLOPE, (ND-Z041) HETTINGER, (ND-Z042) GRANT, (ND-Z043) BOWMAN, (ND-Z044) ADAMS, (ND-Z045) SIOUX, (ND-Z046) EMMONS, (ND-Z047) LOGAN, (ND-Z048) LA MOURE, (ND-Z050) MCINTOSH, (ND-Z051) DICKEY

04/14/13 03:00 CST	0	Winter Storm
04/15/13 09:00 CST	0	

(ND-Z022) SHERIDAN, (ND-Z023) WELLS, (ND-Z025) FOSTER, (ND-Z035) BURLEIGH, (ND-Z036) KIDDER, (ND-Z037) STUTSMAN, (ND-Z046) EMMONS, (ND-Z047) LOGAN, (ND-Z048) LA MOURE, (ND-Z050) MCINTOSH, (ND-Z051) DICKEY

04/14/13 09:00 CST	0	Blizzard
04/14/13 20:00 CST	0	

Strong low pressure pushed across the Rockies April 13th, slowed down over the Dakotas April 14th, then moved east on April 15th. The peak of the storm occurred on Sunday when much of west and central North Dakota received heavy amounts of snow, with portions of the south central and southeast having a blizzard.

A combination of favorable moisture feed and strong surface and mid level dynamics brought historic snowfall to parts of west and central North Dakota. A moist conveyor belt extended from the eastern portions of Iowa and Illinois back northwest into North Dakota, situated along and north of an inverted surface trough stretched from southeast to northwest across South Dakota. Combined with strong diffluent flow aloft associated with the upper level low, snowfall rates approached two inches per hour across south central North Dakota on Sunday.

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In addition to the heavy snow, strong surface winds developed across south central North Dakota west of the Missouri River and into the James River Valley. Wind gusts to 40 miles per hour combined with the heavy snow resulting in a blizzard.

Storm total snowfall amounts ranged from 15 to 22 inches from the James River Valley into the Missouri River Valley. Lesser amounts were reported across the far west and north, with up to eight inches at Watford City, and around an inch near the Canadian border. The highest snowfall amounts were reported at Center and Flasher with 22 inches. A record snowfall for any calendar day of the year was set at Bismarck, with 15.5 inches falling on April 14th. The storm total in Bismarck was 17.7 inches. This also resulted in setting a new record April snowfall of 21.5 inches.

Impacts from this storm were numerous. All roads across the southwest, south central, and southeast were under no travel advisories due to the heavy snow. Interstate 94 was closed from the Montana border to Jamestown, and Highway 83 was closed from Bismarck to Underwood. In addition, multiple school closings occurred on the 15th due to the heavy snow.