

Storm Data and Unusual Weather Phenomena - March 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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IOWA, Southwest

FREMONT COUNTY --- 1.8 NW BARTLETT [40.90, -95.81], 4.5 W HAMBURG [40.61, -95.73], 4.5 SW PAYNE [40.62, -95.80], 6.1 W PERCIVAL [40.74, -95.92], 5.2 WNW BARTLETT [40.92, -95.87]

	03/16/10 12:00 CST	5K	Flood (due to Heavy Rain / Snow Melt)
	03/28/10 04:00 CST	0	Source: Official NWS Observations

Melting snow and several periods of rain brought a prolonged period of flooding along the Missouri River. The river stage near Nebraska City (on the Nebraska side) crested around 21.5 feet late on March 22nd (flood stage is 18 feet). The high water flooded some county roads near the river and also approached Highway 2 east of Nebraska City. A few recreational areas were also flooded.

Melting snow combined with several periods of rain and brought a prolonged period of flooding along the Missouri River in mid to late March. The flooding was mainly minor with agricultural lowlands and a few county roads near the river affected.

POTTAWATTAMIE COUNTY --- 4.6 WNW GRABLE [41.49, -96.00], 5.7 WNW GRABLE [41.49, -96.03], 4.6 W GRABLE [41.47, -96.01], 1.4 S GRABLE [41.45, -95.92], 0.3 WSW GRABLE [41.47, -95.93]

	03/16/10 16:00 CST	10K	Flood (due to Heavy Rain / Snow Melt)
	03/21/10 10:00 CST	0	Source: Newspaper

The combination of melting snow and several rain episodes caused the Missouri River to flood southwest of Missouri Valley. The river flooded a few roads near the river and also the Wilson Island SRA where most of the 135-140 campsites were flooded. Damage likely occurred to the SRA's septic system and expenses were incurred after the event to pump the water out of low areas.

Melting snow combined with several periods of rain and caused flooding along the Missouri River north of Omaha.

NEBRASKA, East

OTOE COUNTY --- OTOE [40.72, -96.12]

	03/06/10 16:53 CST	0	Hail (0.75 in)
	03/06/10 16:53 CST	0	Source: Trained Spotter

A narrow line of thunderstorms developed along a cold front near the Missouri River in extreme eastern Nebraska on March 6th. The storms development were also aided by an upper level low pressure system that moved across the area and allowed for a narrow wedge of warmer air to spread into the region ahead of the cold front. Instability was marginal and thus the storms produced only isolated hail reports, one of which was around 3/4 of an inch.

DODGE COUNTY --- 2.4 WSW FREMONT ARPT [41.44, -96.57], 2.4 ESE NORTH BEND [41.46, -96.74], 1.4 SW NORTH BEND [41.45, -96.80], 3.7 WSW AMES [41.43, -96.69]

	03/08/10 14:00 CST	25K	Flood (due to Ice Jam)
	03/11/10 04:00 CST	0	Source: Newspaper

An ice jam around the North Bend area caused flooding of agricultural lowlands from around North Bend downstream to around Fremont. In addition, several homes were threatened by the flood waters, and a few county roads were flooded. Some water damage was likely noted due to rising ground water or backing up of sewers. This ice jam finally broke loose on March 10th which caused additional jamming and flooding around the Big Island area near Fremont on the 10th. The river at North Bend reached an ice impacted reading of nearly 11 feet during the morning of March 10th, flood stage is 8 feet.

PLATTE COUNTY --- 2.2 W SHELDONVILLE [41.45, -97.46], 1.8 SE OCONEE [41.46, -97.47], 1.8 E MONROE [41.48, -97.59], 2.3 SW MONROE [41.46, -97.65], 2.2 NNW DUNCAN [41.43, -97.51]

	03/09/10 04:00 CST	10K	Flood (due to Ice Jam)
	03/12/10 03:00 CST	0	Source: Emergency Manager

Snow melt and rain caused the Loup River to rise which then caused several ice jams from around Genoa downstream to the Lake Oconee area southwest of Columbus. This caused lowland flooding in Platte county from near Monroe to a little southeast of Lake Oconee. Several county roads in the region were flooded as were agricultural lowlands. Any damage was mainly confined to washing gravel off of the roads.

CUMING COUNTY --- 2.8 WNW WISNER [41.99, -96.98], 5.3 SE MONTEREY [41.75, -96.74], 5.2 S WEST PT [41.76, -96.71], 1.3 NNE WEST PT [41.85, -96.71], 3.1 ESE BEEMER [41.91, -96.77], 2.1 NW WISNER [42.00, -96.96]

	03/09/10 16:00 CST	0.10M	Flood (due to Ice Jam)
	03/13/10 09:00 CST	0	Source: Official NWS Observations

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Melting snow caused the Elkhorn River to rise which caused ice to break up and form several jams from near Wisner downstream through West Point . The ice jams caused flooding which was aggravated by a period or two of rain that occurred during the event. Besides flooding agricultural lowlands, several county roads in the region were flooded as was Highway 275 near Wisner and West Point and Highway 32 near West Point.

PIERCE COUNTY --- 0.6 SW OSMOND [42.36, -97.59], 0.4 S OSMOND [42.36, -97.58], 0.2 E OSMOND [42.37, -97.58], 0.5 WSW OSMOND [42.37, -97.59]

	03/10/10 00:00 CST		5K	Flood (due to Heavy Rain / Snow Melt)
	03/10/10 15:00 CST		0	Source: COOP Observer

Melting snow, possibly aggravated by ice jamming, caused minor flooding across a few county roads northeast of Osmond. The flooding mainly just washed away some gravel and flooded agricultural lowlands.

SALINE COUNTY --- 3.3 NW CRETE [40.67, -96.99], 2.8 NNW CRETE [40.67, -96.96], 2.4 SW CRETE ARPT [40.59, -96.95], 2.6 SSW CRETE [40.59, -96.97]

	03/10/10 01:30 CST		60K	Flood (due to Heavy Rain / Snow Melt)
	03/15/10 02:30 CST		0	Source: Official NWS Observations

Melting snow combined with several periods of rain caused minor lowland flooding along the Big Blue River near Crete. The river at Crete remained above its 18 foot flood stage for about 5 days reaching a crest near 20.5 feet during the morning of March 12th. The flooding mainly affected agricultural lowlands but did encroach a few county roads. Over \$60,000 worth of gravel was washed from county roads.

DODGE COUNTY --- 3.9 ESE FREMONT [41.43, -96.43], 6.5 E FREMONT [41.44, -96.38], 5.9 E FREMONT [41.44, -96.39], 3.7 ESE FREMONT [41.44, -96.43]

	03/10/10 03:00 CST		10K	Flood (due to Heavy Rain / Snow Melt)
	03/10/10 23:00 CST		0	Source: Newspaper

Snow melt and some light rain caused Rawhide Creek to flood low areas along it. A few driveways and county roads also experienced some flooding when water backed into ditches in the area. The high water caused some sewers to back up in some homes in the area.

DODGE COUNTY --- 2.6 S FREMONT ARPT [41.41, -96.53], 2.4 WSW FREMONT ARPT [41.44, -96.57], 1.3 WSW FREMONT ARPT [41.44, -96.55], 2.2 SSE FREMONT ARPT [41.42, -96.52]

	03/10/10 11:00 CST		50K	Flood (due to Ice Jam)
	03/11/10 10:00 CST		0	Source: Newspaper

An ice jam that apparently broke free around the North Bend area moved downstream and temporarily caused flooding in the Big Island area a little southwest of Fremont. Large chunks of ice and flood waters caused damage to several homes along the river in the Big Island area and a frontage road that ran through the Fremont Lakes areas was flooded. Six to 10 people had to be evacuated by boat from the rising waters.

DOUGLAS COUNTY --- 6.4 S WATERLOO [41.19, -96.31], 6.5 SSW WATERLOO [41.19, -96.33], 5.8 SSW WATERLOO [41.20, -96.34], 5.8 S WATERLOO [41.20, -96.31]

	03/10/10 15:45 CST		0	Flood (due to Ice Jam)
	03/11/10 03:00 CST		0	Source: Trained Spotter

A local ice jam caused minor flooding which crossed a county road near Harrison and 252nd Streets. This ice jam caused a little more flooding in Saunders county and also flooded lowlands in Sarpy county as well. Little damage was noted in Douglas county from this flooding.

SARPY COUNTY --- 4.2 NW GRETNA [41.19, -96.31], 3.2 W GRETNA [41.15, -96.31], 3.6 W GRETNA [41.15, -96.32], 4.2 WNW GRETNA [41.18, -96.32], 5.5 NW GRETNA [41.20, -96.33]

	03/10/10 15:45 CST		0	Flood (due to Ice Jam)
	03/11/10 03:00 CST		0	Source: Trained Spotter

A local ice jam caused minor flooding which crossed a county road near Harrison and 252nd Streets. This ice jam caused a little more flooding in Saunders county. Little damage was noted in Sarpy county from this flooding.

SAUNDERS COUNTY --- 3.0 SE YUTAN [41.22, -96.36], 3.3 NE WANN [41.18, -96.32], 2.7 E WANN [41.15, -96.32], 1.0 S VENICE [41.22, -96.37]

	03/10/10 15:45 CST		0	Flood (due to Ice Jam)
	03/11/10 03:00 CST		0	Source: Trained Spotter

An ice jam caused lowland flooding of roads near a housing development on the Saunders county side of the Platte River. This particular ice jam broke fairly quickly, however flood waters that had spilled out of the banks of the Platte took several hours to work their way back into the river. Besides affecting a few roads, the flood waters mainly flooded agricultural lowlands in the vicinity. Little or no monetary damage was noted according to emergency management.

Warming temperatures during the first two weeks of March prompted both snow melt and ice break up across many rivers and streams in eastern Nebraska. Further aggravated by several periods of rain, the resultant high water and ice jams caused mostly minor

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flooding episodes across the region. The areas affected by ice jams included sections of the Loup River southwest of Columbus, the Platte River near Fremont and also west of Omaha, and along the Elkhorn River near and a little downstream of West Point. River flooding due to snow melt occurred along sections of the Big Blue River near Crete and along a few creeks in northeast Nebraska.				
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NEMAHA COUNTY --- BROWNVILLE [40.40, -95.65], 3.0 N BROWNVILLE [40.44, -95.65], 2.0 E PERU [40.48, -95.69], 1.4 ENE PERU [40.48, -95.70], 1.7 S BROWNVILLE [40.38, -95.65], 0.5 SSW NEMAHA [40.32, -95.67], 6.3 SE NEMAHA [40.27, -95.58], 6.5 ESE NEMAHA [40.30, -95.55]				
	03/11/10 17:00 CST		10K	Flood (due to Heavy Rain / Snow Melt)
	03/31/10 23:59 CST		0	Source: Official NWS Observations

Melting snow, along with several rain events, brought a prolonged period of lowland flooding along the Missouri River, especially downstream of its confluence with the Platte River near Plattsmouth. The river at Brownville first crossed flood stage, 32 feet, during the afternoon on 3/ 11 and remained above flood stage into early April. The river at Brownville crested at around 38 feet during the evening of the 23rd. Agricultural lowlands and a few county roads near the river flooded in Nemaha county.

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RICHARDSON COUNTY --- 2.0 NNE BARADA [40.25, -95.57], 6.8 SE BARADA [40.16, -95.47], 0.7 NNW RULO [40.06, -95.43], 2.4 SE RULO [40.02, -95.40], 5.9 SE RULO [40.00, -95.34], 5.7 ESE RULO [40.02, -95.33], 6.8 N RULO [40.15, -95.41], 6.2 ENE BARADA [40.26, -95.48]				
	03/11/10 19:00 CST		0.25M	Flood (due to Heavy Rain / Snow Melt)
	03/31/10 08:00 CST		0	Source: Official NWS Observations

Melting snow, along with several rain events, brought a prolonged period of lowland flooding along the Missouri River, especially downstream of its confluence with the Platte River near Plattsmouth. The river at Rulo first crossed flood stage, 17 feet, during the evening of 3/ 11 and remained above flood stage until the morning of the 31st. The river at Rulo crested around 22 feet during the morning of the 25th. Agricultural lowlands and a few county roads near the river flooded in Richardson county and some cabins and recreational areas near Rulo also experienced flood waters.

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OTOE COUNTY --- 7.1 N NEBRASKA CITY ARPT [40.77, -95.87], 4.1 NNW NEBRASKA CITY ARPT [40.72, -95.90], 1.5 NNE NEBRASKA CITY [40.67, -95.84], 6.8 ESE PAUL [40.52, -95.77], 5.7 ESE NEBRASKA CITY [40.62, -95.75]				
	03/16/10 12:00 CST		25K	Flood (due to Heavy Rain / Snow Melt)
	03/28/10 04:00 CST		0	Source: Official NWS Observations

Melting snow, along with several rain events, brought a prolonged period of lowland flooding along the Missouri River, especially downstream of its confluence with the Platte River near Plattsmouth. The river at Nebraska City first crossed flood stage, 18 feet, early in the afternoon on 3/16 and remained above flood stage until the morning of the 28th. The river at Nebraska City crested at around 21.5 feet during the evening of the 22nd. Agricultural lowlands and a few county roads near the river flooded in Otoe county as did some recreational areas near Nebraska City.

A prolonged period flooding occurred along the Missouri River due to snow melt which was aggravated by several periods of rain. Although the flooding only lasted for a few days near and north of Omaha, it persisted for over a week downstream of the Missouri's confluence with the Platte River near Plattsmouth. The flooding affected mainly agricultural lowlands, but county roads near the river were also flooded. Several seasonal houses in the area were threatened and at least one reported some water damage due to flood waters.

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CASS COUNTY --- 2.2 NNE PLATTSMOUTH [41.05, -95.88], 3.7 ESE MURRAY [40.91, -95.85], 6.0 E MURRAY [40.90, -95.81], 3.6 NE PLATTSMOUTH [41.06, -95.86]				
	03/17/10 21:00 CST		0.63M	Flood (due to Heavy Rain / Snow Melt)
	03/26/10 16:00 CST		0	Source: Mesonet

Melting snow and periods of rain brought a prolonged period of flooding along the Missouri River. The river stage at Plattsmouth remained about its 26 foot flood stage for around 9 days in mid to late March, cresting at a little over 29 feet around midnight on the 22nd. The flooding mainly affected agricultural lowlands, but several roads near the river flooded, including the road that led to Plattsmouth's public boat dock and water treatment plant. Plant workers had to use a small boat to reach the plant. Damage included silt/debris clean-up and gravel washed off of county roads, which was estimated to be between \$250,000 and \$1 million according to emergency management.

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WASHINGTON COUNTY --- 3.6 ENE NASHVILLE [41.44, -95.93], 4.5 E FT CALHOUN BIL LO AR [41.46, -95.93], 1.9 E FT CALHOUN BIL LO AR [41.47, -95.98], 0.6 NNE FT CALHOUN BIL LO AR [41.48, -96.01], 0.4 E FT CALHOUN BIL LO AR [41.47, -96.01]				
	03/19/10 10:00 CST		50K	Flood (due to Heavy Rain / Snow Melt)
	03/21/10 20:00 CST		0	Source: Emergency Manager

Lowland flooding along the Missouri River closed several county roads and flooded at least one seasonal home east and southeast of Ft. Calhoun. In addition, the flooding entered the Boyer Chute Wildlife Area prompting its closure. The flood waters prompted several home owners to vacate their homes one night, and at least one home sustained flood damage. In addition, several county roads in the area flooded including county roads 32 and 47.

Snow melt combined with several periods of rain brought high water and flooding to the Missouri River from north of Omaha downstream past its confluence with the Platte River south of Omaha. The flooding north of Omaha mainly affected agricultural lowlands near the river, but county roads and some recreation areas were also flooded. The Missouri River near the confluence with the Platte River was above flood stage for a prolonged period, but mainly just a few county roads and parks near the area were flooded. Much of Douglas and Sarpy counties experienced little flooding along the Missouri due to levees in place.

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