

Summary of Lower Platte & Elkhorn Rivers

Initial Ice Report 12/20/2017 through 1/5/2018:

Ice Thickness Summary (1/4/2018)

Drilling was performed on Jan 4th by Bill Warren of Papio MO NRD near the Union Dike on the Platte River, on the Werner Property with an average thickness of 11 inches. The Measurement Memo is at the end of this summary report.

NO ICE JAMMING AT THIS TIME on the East end of the State.

Elkhorn

PM6 - Douglas County, on the Elkhorn Hwy 64

Latitude: 41:17:30 Longitude: 96:17:0 (Wednesday, December 27, 2017 @ 9:00AM CDT)

Temperature was -5°F. The average wind speed was 1 mph (NW). It was estimated that it was less than 10 feet bank full at this location. The channel remains NA%. It was noted: "

PM6 - Douglas County, on the Elkhorn Hwy 64

Latitude: 41:17:30 Longitude: 96:17:0 (Wednesday, January 3, 2018 @ 8:43AM CDT)

Temperature was 10°F. The average wind speed was 15 mph (NW). It was estimated that it was less than 10 feet bank full at this location. The channel remains NA%. It was noted: "

Elkhorn

PM2 - Douglas County, on the Elkhorn Hwy 36

Latitude: 41:22:45 Longitude: 96:18:9 (Wednesday, December 27, 2017 @ 9:10AM CDT)

Temperature was -4°F. The average wind speed was 1 mph (NW). It was estimated that it was less than 10 feet bank full at this location. The channel remains 70%. It was noted: "

PM2 - Douglas County, on the Elkhorn Hwy 36

Latitude: 41:22:45 Longitude: 96:18:9 (Wednesday, January 3, 2018 @ 9:00AM CDT)

Temperature was 10°F. The average wind speed was 15 mph (NW). It was estimated that it was less than 10 feet bank full at this location. The channel remains NA%. It was noted: "

Elkhorn

PM3 - Douglas/Saunders County, on the Elkhorn Hwy 92

Latitude: 41:13:51 Longitude: 96:16:41 (Wednesday, December 27, 2017 @ 9:50AM CDT)

Temperature was -1°F. The average wind speed was 2 mph (SE). It was estimated that it was less than 10 feet bank full at this location. The channel remains 30%. It was noted: "North and south of the bridge for about 300 feet is open then channel appears to be 100% ice cover."

PM3 - Douglas/Saunders County, on the Elkhorn Hwy 92

Latitude: 41:13:51 Longitude: 96:16:41 (Wednesday, January 3, 2018 @ 9:40AM CDT)

Temperature was 10°F. The average wind speed was 15 mph (NW). It was estimated that it was less than 10 feet bank full at this location. The channel remains NA%. It was noted: "

Platte

PM4 - Douglas County, on the Platte Hwy 92

Latitude: 41:14:2 Longitude: 96:21:55 (Wednesday, December 27, 2017 @ 8:30AM CDT)

Temperature was -6°F. The average wind speed was 1 mph (NW). It was estimated that it was less than 4 feet bank full at this location. The channel remains NA%. It was noted: " Both the east and west channels are 100%

ice covered.”

PM4 - Douglas County, on the Platte Hwy 92

Latitude: 41:14:2 Longitude: 96:21:55 (Wednesday, January 3, 2018 @ 8:30AM CDT)

Temperature was 10°F. The average wind speed was 15 mph (NW). It was estimated that it was less than 4 feet bank full at this location. The channel remains NA%. It was noted: " Both the east and west channels of the Platte at Hwy 92 are 100% ice covered.”

Platte

PM7 - Douglas County, on the Platte Union Dike, 1/4 mile west of Hwy 275 & 3.1 miles upstream of Hwy 64

Latitude: 41:21:40 Longitude: 96:25:0 (Wednesday, December 27, 2017 @ 9:30AM CDT)

Temperature was 0°F. The average wind speed was 2 mph (SE). It was estimated that it was less than 3 feet bank full at this location. The channel remains NA%. It was noted: "

PM7 - Douglas County, on the Platte Union Dike, 1/4 mile west of Hwy 275 & 3.1 miles upstream of Hwy 64

Latitude: 41:21:40 Longitude: 96:25:0 (Wednesday, January 3, 2018 @ 9:15AM CDT)

Temperature was 10°F. The average wind speed was 15 mph (NW). It was estimated that it was less than 3 feet bank full at this location. The channel remains NA%. It was noted: "

Platte

P9 - Sarpy County, on the Platte Hwy 6 & Platte River Bridge (Linoma)

Latitude: 41:3:42 Longitude: 96:19:31 (Thursday, December 28, 2017 @ 9:44AM CDT)

Temperature was 17°F. The average wind speed was 5 mph (SE). It was estimated that it was less than 4.3 feet bank full at this location. The channel remains 10%. It was noted: “The main channel flow route is similar to previous observations from 2016-2017 reports.”

P9 - Sarpy County, on the Platte Hwy 6 & Platte River Bridge (Linoma)

Latitude: 41:3:42 Longitude: 96:19:31 (Wednesday, January 3, 2018 @ 2:14PM CDT)

Temperature was 17°F. The average wind speed was 15 mph (NW). It was estimated that it was less than 2.7 feet bank full at this location. The channel remains 10%. It was noted: " Not much change from last week other than the ice thickness continues to develop with subzero temps in the area.”

Platte

P7 - Sarpy County, on the Platte Hwy 31 at 204 St.

Latitude: 41:1:27 Longitude: 96:15:29 (Thursday, December 28, 2017 @ 10:01AM CDT)

Temperature was 17°F. The average wind speed was 5 mph (S). It was estimated that it was less than 4.3 feet bank full at this location. The channel remains 5%. It was noted: “The main channel flow route is noticeably changed from last year.”

P7 - Sarpy County, on the Platte Hwy 31 at 204 St.

Latitude: 41:1:27 Longitude: 96:15:29 (Wednesday, January 3, 2018 @ 2:34PM CDT)

Temperature was 17°F. The average wind speed was 15 mph (NW). It was estimated that it was less than 2.7 feet bank full at this location. The channel remains 5%. It was noted: " Not much change from last week other than the ice thickness continues to develop with subzero temps in the area.”

Near Hwy 31- Schram State Park Dec 28 2017



Schram State Park on Jan 3 2018



Platte

P10 - Sarpy County, on the Platte Hwy 50 & Platte River Bridge

Latitude: 41:0:53 Longitude: 96:9:28 (Thursday, December 28, 2017 @ 10:21AM CDT)

Temperature was 17°F. The average wind speed was 7 mph (S). It was estimated that it was less than 5.61 feet bank full at this location. The channel remains 15%. It was noted: "The main channel flow route is noticeably changed from last year."

P10 - Sarpy County, on the Platte Hwy 50 & Platte River Bridge

Latitude: 41:0:53 Longitude: 96:9:28 (Wednesday, January 3, 2018 @ 2:45PM CDT)

Temperature was 17°F. The average wind speed was 15 mph (NW). It was estimated that it was less than 4.31 feet bank full at this location. The channel remains 15%. It was noted: " Not much change from last week other than the ice thickness continues to develop with subzero temps in the area."

Platte

LS1 - Saunders County, on the Platte Hwy 6 near Ashland

Latitude: 41:3:41 Longitude: 96:19:35 (Wednesday, January 3, 2018 @ 09:15AM CDT)

Temperature was 11°F. The average wind speed was 13 mph (N). It was estimated that it was less than 4 ft. feet bank full at this location. The channel remains 10%. It was noted: "Channel 10% open. No ice moving in open channel. "

Platte

LS2 - Cass County, on the Platte Hwy 50 at Louisville

Latitude: 41:0:47 Longitude: 96:9:27 (Wednesday, January 3, 2018 @ 10:00AM CDT)

Temperature was 12°F. The average wind speed was 13 mph (N). It was estimated that it was less than 5.5ft feet bank full at this location. The channel remains 25%. It was noted: "Stationary ice is snow covered. Frazil slush occupying 25% of the open channel. "

Platte/Elkhorn

E1 - Sarpy County, on the Platte/Elkhorn Confluence of Platte and Elkhorn Rivers

Latitude: 41:8:0 Longitude: 96:19:0 (Wednesday, December 27, 2017 @ 8:00AM CDT)

Temperature was -12°F. The average wind speed was 1 mph (NW). It was estimated that it was less than 12 feet bank full at this location. The channel remains NA%. It was noted: "Both Platte and Elkhorn at the confluence are 100% ice covered."

E1 - Sarpy County, on the Platte/Elkhorn Confluence of Platte and Elkhorn Rivers

Latitude: 41:8:0 Longitude: 96:19:0 (Wednesday, January 3, 2018 @ 8:00AM CDT)

Temperature was 10°F. The average wind speed was 15 mph (NW). It was estimated that it was less than 12 feet bank full at this location. The channel remains NA%. It was noted: " "

Memorandum

To: File 536, 528

From: Bill Warren, O&M Superintendent

Date: January 4, 2018

Re: Platte River Ice Thickness Measurement Along Union Dike

On January 4, 2018, the writer performed ice thickness measurements on the Platte River. The measurements were taken perpendicular to the river flow, near the Union Dike on the Werner Property, at approximately Station 155+00 (1.1 miles upstream of Highway 64; location is known as 10 jetty site).

A gas-powered auger was used to drill the holes. The location of the holes on the table below were measured (stepped off) from the east bank of the Platte River. The snow cover on the ice varied from 2" to 3" in depth.

Distance From East Bank (Feet)	Ice Thickness (Inches)	Depth From Top Of Ice To River Bed (Inches)
25	10.0	49.0
125	10.5	26.5
225	12.5	32.0
* 325	11.0	18.0

*The entire river has an ice cover, but only the 0 to 325 ft. width of ice from the east bank of the river was considered safe enough to conduct borings. The west bank is approximately 700 feet west of 325 ft. boring.

The average ice thickness is **11.0 inches**.

Cc: John Winkler, Marlin Petermann, Martin Cleveland, Amanda Grint, P-MRNRD
 Mary Baker, NEMA
 Katie Ringland, NDNR
 David Pearson, NWS
 Matt Krajewski, USACE

32417 MC r: File: 536, 528 - Platte River Ice Thickness

PLATTE RIVER: 1.1 Miles Upstream of Hwy. 64 (STA. 155+00, UNION DIKE)
(Werner Property)

