

Summary of Lower Platte & Elkhorn Rivers

Initial Ice Report 1/25/2014 through 1/31/2014:

Summary (1/31/2014)

The observations from the Platte River, the confluence of the Platte and Elkhorn Rivers and the Elkhorn River are summarized as having an average temperature of 22 °F with wind speeds averaging 15 mph out of the South early in the week and the North by NW during the later readings this past week.

The Platte and Elkhorn rivers were experiencing 75-100% ice coverage with some areas of that Platte showing some ice chunks. The thawing and refreezing is causing more open pockets of water but no flowing ice at this time. The Elkhorn continues to be 100% covered and the Confluence is showing about 10% open from the Elkhorn and 20% from the Platte River. *Ice thickness report is attached at the end of this summary. Thank you Papio MO NRD.*

NO ICE JAMMING HAS BEEN REPORTED AT THIS TIME

Platte River:

LN1 - Saunders/Dodge County, on the Platte Hwy 77 at Fremont

Latitude: 41:21:14 Longitude: 96:30:9 (Thursday, January 30, 2014 @ 8:15AM CDT)

Temperature was 41°F. The average wind speed was 15 mph (SW). It was estimated that it was less than 4.5' feet bank full at this location. The channel remains NA%. It was noted: "This Platte River observation was taken approx. 1/2 - 3/4 miles upstream of the Platte River Bridge near Big Island. The river is 90% frozen over with water pooled on top of the ice. Old cracks can be seen on the north shore where this observation was taken. The cracks are both vertical and perpendicular to the shoreline, but appear to have refrozen. There is no displacement in these crack locations at this time. "

Latitude: 41:21:14 Longitude: 96:30:9 (Thursday, January 30, 2014 @ 3:10PM CDT)

Temperature was 28°F. The average wind speed was 20 mph (N). It was estimated that it was less than 8 feet bank full at this location. The channel remains NA%. It was noted: "Very small open water channel on south bank under the Hwy 77 Bridge. Overall the ice is smooth and estimated at 98% covered. Small open channel on north bank west of bridge is basically unchanged. "

LN2 –Saunders/Dodge Co on Platte Hwy 79 at North Bend

Latitude: 41:27:7 Longitude: 96:46:30 (Thursday, January 30, 2014 @ 3:40PM CDT)

Temperature was 26°F. The average wind speed was 20 mph (N). It was estimated that it was less than 8 feet bank full at this location. The channel remains NA%. It was noted: "In the area of Hwy 79 at North Bend it seems this area is opening in areas more and more. South channel up and down stream of the bridge has opened more. The channel between the south bank and the island has increase in size over the week. Overall, the ice in the area is smooth. The open channel on the north just west of the bridge has also increased in size. "

LS1 –Saunders Co on Platte Hwy near Ashland

Latitude: 41:3:41 Longitude: 96:19:35 (Wednesday, January 29, 2014 @ 12:30PM CDT)

Temperature was 34°F. The average wind speed was 15 mph (SW). It was estimated that it was less than 5 feet bank full at this location. The channel remains NA%. It was noted: " Lots of cracks both vert. and horizontal that have frozen back together. "

PM4 - Douglas County, on the Platte Hwy 92

Latitude: 41:14:2 Longitude: 96:21:55 (Wednesday, January 29, 2014 @ 09:25AM CDT)

Temperature was 5°F. The average wind speed was 10 mph (NW). It was estimated that it was less than 9 feet bank full at this location. The channel remains 20%. It was noted: "West side 10% open, no flowing ice, some pockets of open water. East side 20% open, no flowing ice with some pockets of open water. "

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 29, 2014 @ 10:10AM CDT)**

Temperature was 5°F. The average wind speed was 10 mph (NW). It was estimated that it was less than 4 feet bank full at this location. The channel remains 10%. It was noted: "100% open water, some small open pockets of water. Open channel 20' wide about 1/4 mile long. "

P7 - Sarpy County, on the Platte Hwy 31 at 204 St.**Latitude: 41:1:27 Longitude: 96:15:29 (Wednesday, January 29, 2014 @ 2:35PM CDT)**

Temperature was 42°F. The average wind speed was 25 mph (S). It was estimated that it was less than feet bank full at this location. The channel remains 85%. It was noted: "few flowing ice chunks"

P9 - Sarpy County, on the Platte Hwy 6 & Platte River Bridge (Linoma)**Latitude: 41:3:42 Longitude: 96:19:31 (Wednesday, January 29, 2014 @ 1:50PM CDT)**

Temperature was 38°F. The average wind speed was 15 mph (S). It was estimated that it was less than feet bank full at this location. The channel remains 10%. It was noted: "uplifted ice blocks downstream from bridge"

P10 - Sarpy County, on the Platte Hwy 50 & Platte River Bridge**Latitude: 41:0:53 Longitude: 96:9:28 (Wednesday, January 29, 2014 @ 2:20PM CDT)**

Temperature was 42°F. The average wind speed was 25 mph (S). It was estimated that it was less than feet bank full at this location. The channel remains 75%. It was noted."

Confluence of the Platte and Elkhorn Rivers:**E1 - Sarpy County, on the Platte/Elkhorn Confluence of Platte and Elkhorn Rivers****Latitude: 41:8:0 Longitude: 96:19:0 (Wednesday, January 29, 2014 @ 09:00AM CDT)**

Temperature was 5°F. The average wind speed was 10 mph (NW). It was estimated that it was less than 12 feet bank full at this location. The channel remains 20%. It was noted: "Platte River is about 20% open, the channel is about 1/4 mile long. River has dropped 1'. Elkhorn is about 10% open. "

Elkhorn River:**PM2 - Douglas County, on the Elkhorn Hwy 36****Latitude: 41:22:45 Longitude: 96:18:9 (Wednesday, January 29, 2014 @ 09:55AM CDT)**

Temperature was 5°F. The average wind speed was 10 mph (NW). It was estimated that it was less than 13 feet bank full at this location. The channel remains NA%. It was noted: "100% ice covered"

PM3 - Douglas/Saunders County, on the Elkhorn Hwy 92**Latitude: 41:13:51 Longitude: 96:16:41 (Wednesday, January 29, 2014 @ 10:40AM CDT)**

Temperature was 5°F. The average wind speed was 10 mph (NW). It was estimated that it was less than 13 feet bank full at this location. The channel remains NA%. It was noted: "100% ice covered"

PM6 - Douglas County, on the Elkhorn Hwy 64**Latitude: 41:17:30 Longitude: 96:17:0 (Wednesday, January 29, 2014 @ 09:40AM CDT)**

Temperature was 5°F. The average wind speed was 10 mph (NW). It was estimated that it was less than 13 feet bank full at this location. The channel remains NA%. It was noted: "100% ice covered"

Papio-Missouri NRD

Platte River Ice Thickness measurements

TO: File 536

FROM: Bill Warren, O&M Superintendent

SUBJECT: Platte River Ice Thickness Measurement Along Union Dike

DATE: January 28, 2014

On January 28, 2014, Pat McEvoy performed ice thickness measurements on the Platte River. The measurements were taken perpendicular to the river flow, near the dike's 10 jetty project location, near Werner Property south line, at approximately Station 155+00 (1.1 miles upstream of Highway 64).

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. There was an open water area about 50 ft. wide approximately 75 ft. west of the 140 ft. hole, so it was not possible to drill additional holes.

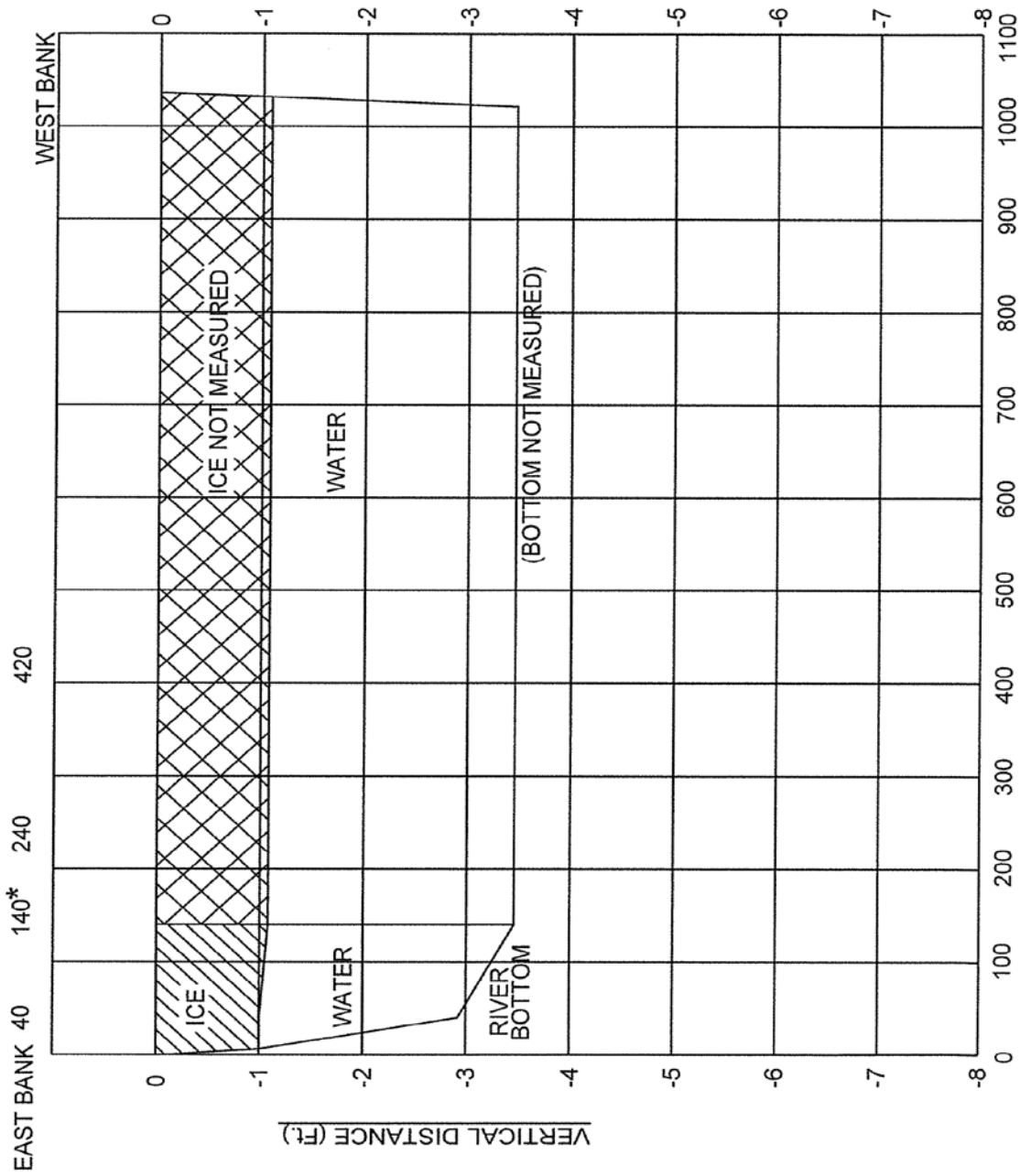
| Distance From East Bank (Feet) | Ice Thickness (Inches) | Depth From Top of Ice to River Bed (Inches) |
|--------------------------------|------------------------|---|
| 40 | 12.0 | 35.0 |
| 140* | 13.0 | 41.5 |

*This hole is located about 860 feet from the west bank of the river. The average ice thickness is **12.5 inches**.

Enclosure

CC: John Winkler, Marlin J. Petermann, Martin Cleveland, Amanda Grint,
Emmett Egr, and Directors, P-MRNRD
Mary Baker, NEMA
Bill Jones, NDNR
David Pearson, NWS
Kim Thomas, USACE

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



*Hole location is approx. 860' from the west bank.
 January 28th, 2014

HORIZONTAL DISTANCE (Ft.)

WEST
 Looking Downstream

