Summary of Lower Platte & Elkhorn Rivers

Initial Ice Report 1/27/2018 through 2/2/2018:

Ice Thickness Summary (2/1/2018)

Papio-Missouri NRD performed ice measurements on February 1st, their memo is attached to the end of this summary report. Borings were done perpendicular to the river flow near the Union Dike on the Werner Property, apprx Station 155+00, known as 10 Jetty site. Average ice thickness was 13.6" down from 15.1" last week. With seasonal temperatures in the forecast not much change to be expected this next week.

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, January 31, 2018 @ 9:00AM CDT)

Temperature was 36°F. The average wind speed was 5 mph (NW). It was estimated that it was less than 10 feet bank full at this location. The channel remains 10%. It was noted: "Open channel 40 foot wide upstream and downstream of the bridge. Length of open channel about 400-500 ft. long.

Elkhorn

PM2 - Douglas County, on the Elkhorn Hwy 36

Latitude: 41:22:45 Longitude: 96:18:9 (Wednesday, January 31, 2018 @ 9:15AM CDT)

Temperature was 35°F. The average wind speed was 5 mph (NW). It was estimated that it was less than 10 feet bank full at this location. The channel remains 10%. It was noted: "

Elkhorn

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

Latitude: 41:13:51 Longitude: 96:16:41 (Wednesday, January 31, 2018 @ 9:55AM CDT)

Temperature was 37°F. The average wind speed was 5 mph (NW). It was estimated that it was less than 10 feet bank full at this location. The channel remains 10%. It was noted: "Open channel about 20 ft. wide and 200 ft. long both upstream and downstream of bridge. Ice looks grey and is deteriorating."

Platte

PM4 - Douglas County, on the Platte Hwy 92

Latitude: 41:14:2 Longitude: 96:21:55 (Wednesday, January 31, 2018 @ 8:40AM CDT)

Temperature was 37°F. The average wind speed was 5 mph (NW). It was estimated that it was less than 4 feet bank full at this location. The channel remains 10%. It was noted: "East channel of the Platte is 100% ice covered. West side has open channel about 50 foot wide and 100 foot long. Along the west bank the ice is deteriorating."

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, January 31, 2018 @ 9:30AM CDT)

Temperature was 35°F. The average wind speed was 5 mph (NW). It was estimated that it was less than 3 feet bank full at this location. The channel remains 20%. It was noted: "Platte is about 20% open with different channels. Ice is deteriorating.

Platte

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

Latitude: 41:3:42 Longitude: 96:19:31 (Wednesday, January 31, 2018 @ 01:38PM CDT)

Temperature was 39.5°F. The average wind speed was 3 mph (NW). It was estimated that it was less than 3 feet bank full at this location. The channel remains 30%. It was noted: " (Following Picture by Jesse Eret, Sarpy Co EMA)



Platte

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

Latitude: 41:1:27 Longitude: 96:15:29 (Wednesday, January 31, 2018 @ 01:58PM CDT)

Temperature was 40°F. The average wind speed was 4 mph (SW). It was estimated that it was less than 3 feet bank full at this location. The channel remains 10%. It was noted: " (Following Picture by Jesse Eret, Sarpy Co EMA)



Platte

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

Latitude: 41:0:53 Longitude: 96:9:28 (Wednesday, January 31, 2018 @ 02:13PM CDT)

Temperature was 40.5°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 80%. It was noted" (Following Picture by Jesse Eret, Sarpy Co EMA)



Platte/Elkhorn

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

<u>Latitude: 41:8:0 Longitude: 96:19:0 (Wednesday, January 31, 2018 @ 8:15AM CDT)</u>

Temperature was 30°F. The average wind speed was 5 mph (NW). It was estimated that it was less than 12 feet bank full at this location. The channel remains 5%. It was noted: "Open channel from confluence 40 to 100 foot wide about 1000 foot long."

Memorandum

To:

File 536, 528

From:

Bill Warren, O&M Superintendent

Date:

February 1, 2018

Re:

Platte River Ice Thickness Measurement Along Union Dike

On February 1, 2018, District staff performed ice thickness measurements on the Platte River. The measurements were taken perpendicular to the river flow, near the 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.

Distance From		Depth From Top
East Bank	Ice Thickness	Of Ice To River Bed
(Feet)	(Inches)	(Inches)
25	12	73
125	16	21
225	15	24
325	15	62
425	13	48
525	13	24
625	11	56

^{*}The entire river has an ice cover, but only the 0 to 625 ft. width of ice from the east bank of the river is considered safe enough to conduct borings. The west bank is approximately 400 feet west of 625 ft. boring.

The average ice thickness is **13.6 inches**.

(Previous 2018 average ice thickness: Jan. 4 – 11.0"; Jan. 18 – 16.0"; Jan. 25 – 15.1")

Cc:

John Winkler, Marlin Petermann, Martin Cleveland, Amanda Grint, P-MRNRD

Mary Baker, NEMA

Katie Ringland, NDNR

Daniel Pearson, NWS

Matt Krajewski and Roger Kay, USACE

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

