### Summary of Lower Platte & Elkhorn Rivers

### Ice Report 3/1/2014 through 3/7/2014:

#### Summary (3/7/2014)

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 25°F with wind speeds averaging 12 mph out of the NW earlier in the week and the south yesterday during the readings. (Ten week seasonal averages: Temps 21°F and winds 10mph.)

The <u>Platte and Elkhorn Rivers</u> were experiencing 50-80% ice coverage with most areas of the Platte showing the water channels enlarging, and continuing to expand as the warmer temperatures settle in this next week. Several areas along the Platte have ice built up on the sandbars in the middle of the River, with a 20-50% open channel flowing downstream in most places. The Elkhorn continues to be mostly ice covered and has some small channels noted when readings were taken this week. The Confluence shows a 50% open channel with frazil slush ice and sandbars visible.

NO Ice Jams on the Rivers at this time.

\*\*NOTE: NWS, David Pearson's updated spring flood outlook at the end of this report! \*\*

# **Platte River:**

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

#### Latitude: 41:21:14 Longitude: 96:30:9 (Thursday, March 6, 2014 @ 2:00PM CDT)

Temperature was 38°F. The average wind speed was 20 mph (S). It was estimated that it was less than 8 feet bank full at this location. The channel remains NA%. It was noted: "At Hwy 77 the channel varies in size, there's not a lot of open channel. Very much ice upstream of Hwy 77 and between the 77 bridge and the BN RR Bridge. Some of that ice is piled from previous breakup and the majority of the ice is in the center of the river on sandbars and shallow water. "

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

#### Latitude: 41:27:7 Longitude: 96:46:30 (Thursday, March 6, 2014 @ 03:15PM CDT)

Temperature was 40°F. The average wind speed was 20 mph (S). It was estimated that it was less than 8 feet bank full at this location. The channel remains NA%. It was noted: "At Hwy 79 there's very little open channel as it has re-froze. What open channel there is, are near the north and south banks and not as open as previously reported. A lot of ice up and down the river, some of it piled from a previous break up. There is still a lot of ice to melt and/or move."

#### PM4 - Douglas County, on the Platte Hwy 92

#### Latitude: 41:14:2 Longitude: 96:21:55 (Tuesday, March 4, 2014 @ 11:30PM CDT)

Temperature was 24°F. The average wind speed was 5 mph (SE). It was estimated that it was less than 3 feet bank full at this location. The channel remains NA%. It was noted: "Small Ice Jam remains across from Day use at Two Rivers Rec Area. Water is within its banks and down a few feet. River looks like it froze up some since last week with maybe 8 percent open water and mostly on the west side "

#### Latitude: 41:14:2 Longitude: 96:21:55 (Wednesday, March 5, 2014 @ 09:20AM CDT)

Temperature was 21°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 50%. It was noted: "West side is 50% open with frazil slush ice, ice on sandbars. East side is 20% open with a channel not open all the way."

# 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, March 5, 2014 @ 10:05AM CDT)

Temperature was 21°F. The average wind speed was 10 mph (NW). It was estimated that it was less than feet bank full at this location. The channel remains 20%. It was noted: "The river is about 20% open, there is a lot of ice on sandbars."

# **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, March 5, 2014 @ 08:50AM CDT)

Temperature was 21°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 50%. It was noted: "There is a good open channel with 50% frazil slush ice. You can see sandbars with ice sitting on them."

# **Elkhorn River:**

#### PM2 - Douglas County, on the Elkhorn Hwy 36

#### Latitude: 41:22:45 Longitude: 96:18:9 (Wednesday, March 5, 2014 @ 09:50AM CDT)

Temperature was 21°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: "River is still ice covered, there are areas where there is open water and small channels of water."

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

#### Latitude: 41:13:51 Longitude: 96:16:41 (Wednesday, March 5, 2014 @ 10:30AM CDT)

Temperature was 21°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: "River is still ice covered; there are areas where there are open channels of water."

#### PM6 - Douglas County, on the Elkhorn Hwy 64

#### Latitude: 41:17:30 Longitude: 96:17:0 (Wednesday, March 5, 2014 @ 09:35AM CDT)

Temperature was 21°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: "River is still ice covered, there are areas where there is open water or small channels of water."

# Papio-Missouri NRD

#### No ice thickness measurements taken this week due to the warming conditions.

# **David Pearson NWS**

Yesterday, March 6, 2014, the NWS issued an updated spring flood outlook. The overall flood threat remains low. Here are the highlights of what has changed in the last two weeks:

- The mountain snowpack in the Missouri River headwaters has increased. This has resulted in a water equivalent increase of about 10%. The water equivalent of the snowpack is currently about 135% of normal in the Missouri River headwaters and 125% of normal in the Platte River headwaters. We are only 80% through the normal snow accumulation time frame so these values will likely increase. Because of the increase in snowpack we've highlighted a higher potential for minor flooding along the Missouri River below the Platte River confluence.

- A significant amount of ice moved through the Platte River system the last week of February. Some ice jam flooding was noted around Schuyler and North Bend. Some ice remains in the river, thus the ice jam threat isn't over. We will likely see a second push of ice next week when we warm up into the 60s.
- **Frost depths remain deep**; our latest measurement here at our office in Valley is about two feet of frost. This presents a significant flooding threat if heavy rain were to fall on this frozen ground.

The full spring flood outlook is available here: <a href="http://goo.gl/sxe670">http://goo.gl/sxe670</a>

If you have any questions don't hesitate to ask.

Regards,

**David Pearson** 

National Weather Service Valley/Omaha

Senior Service Hydrologist

402-359-5166 x493

402-359-4381 (after hours)

402-359-5368 (fax)

www.weather.gov/omaha