



North Dakota Monthly Climate Summary

April 2014

Precipitation:

April 2014 finished wet in many parts of North Dakota. Most of the month was quite dry, but a widespread rain system dropped significant rain across much of the state during the last week of the month. That one event pushed rainfall totals during April to near or over 200% of normal precipitation (see Figure 1) for much of the eastern one-half of North Dakota. That end of month rain event caused flooding, especially in the Red River Valley (see page 2).

Preliminary data suggests a state wide average of 1.89 inches of precipitation in comparison to the average of 1.37 inches. That would rank April 2014 as the 28th wettest April on record. The U.S. Drought Monitor did not include any part of North Dakota in drought conditions.

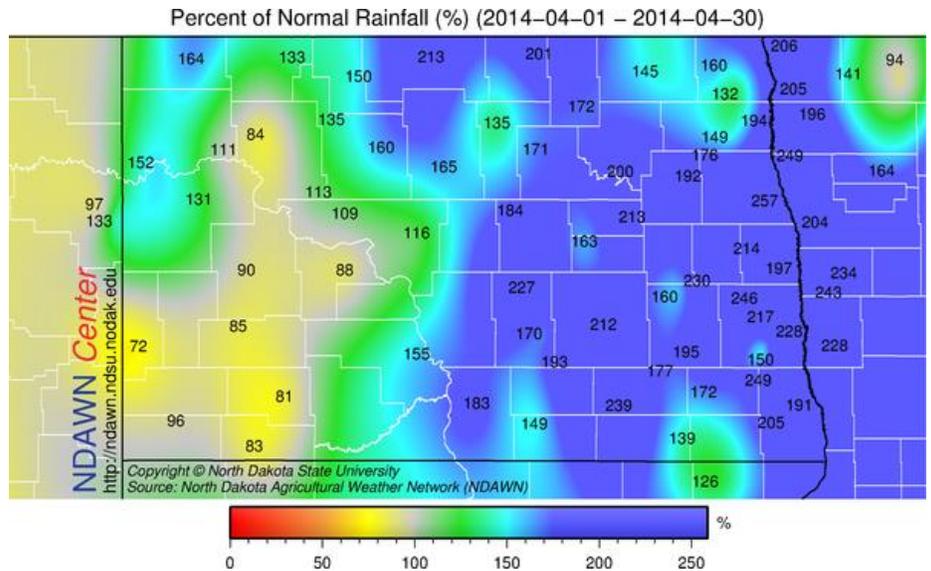


Figure 1. Precipitation Percent of Normal in April 2014 for North Dakota (North Dakota Agricultural Weather Network, NDAWN)

Temperature:

April was a noticeably cold month in North Dakota. The NDAWN average temperature anomalies ranged from 2 to 8 degrees below normal for the month. The coldest readings were in the northeastern portion of North Dakota where a late March snow storm dropped a significant snow cover that negatively impacted the temperatures for the first week of April. The preliminary statewide average temperature was 38.1 degrees which is 3.1 degrees below normal and would rank April 2014 as the 25th coldest on record.

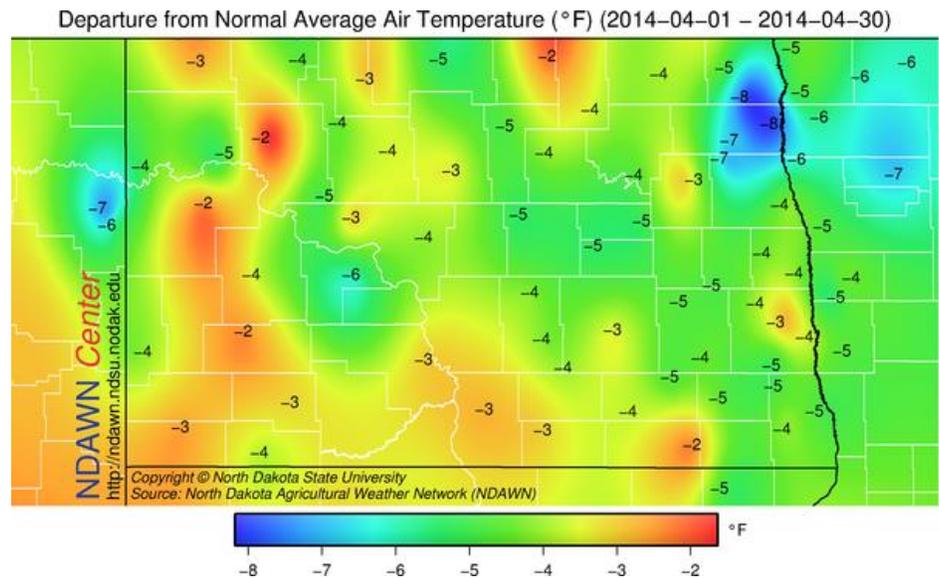


Figure 2. Temperature Departure from Normal in April 2014 for North Dakota (North Dakota Agricultural Weather Network, NDAWN)

Notable Weather:

The most notable weather event during the month was a large slow moving storm that impacted much of the central part of the United States in late April. In North Dakota, although some snowfall was recorded in the western part of the state, that storm system was principally a rain maker. The storm came with many waves of rainfall and by the time that area of low pressure moved out of the area all of the NDAWN stations recorded over one inch of rain. The highest totals were in southeastern North Dakota where some locations recorded over three inches of rain. (see Figure 3).

The excessive rain recorded in southeastern North Dakota attributed to quick rises for streams and rivers, especially in the southern Red River Valley. The Wild Rice at Abercrombie, North Dakota rose to 17.14 feet, just shy of the 18 foot major flood stage for that location. The Red River gauge at Wahpeton, North Dakota rose to 12.5 feet, not too far from the 13 foot moderate stage. In Fargo, (see Figure 4) the Red River rose into the moderate flood stage with a crest near 26.7 feet on May 2.

Although the heaviest rain was near the headwaters of the Red River, even locations far removed from the heaviest rain recorded notable river rises. As an example, the Red River at East Grand Forks rose into the minor flood stage and Pembina, North Dakota, along the Canadian border, the Red River gauge crested near flood stage.

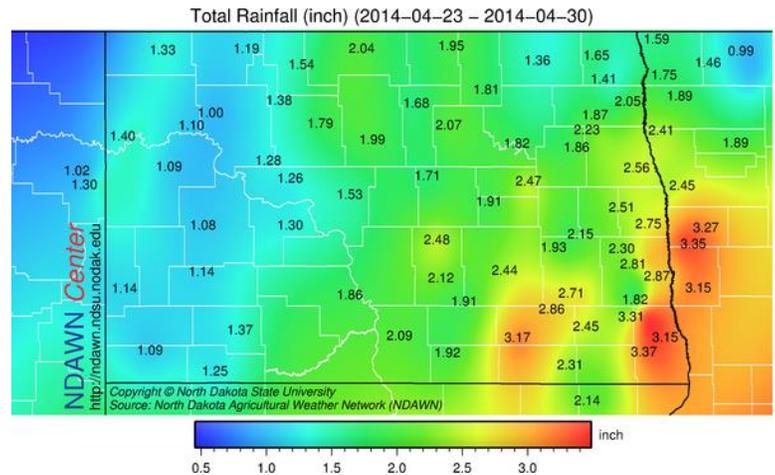


Figure 3. Recorded rainfall for at the NDAWN sites from April 23 through April 30, 2014 (North Dakota Agricultural Weather Network)

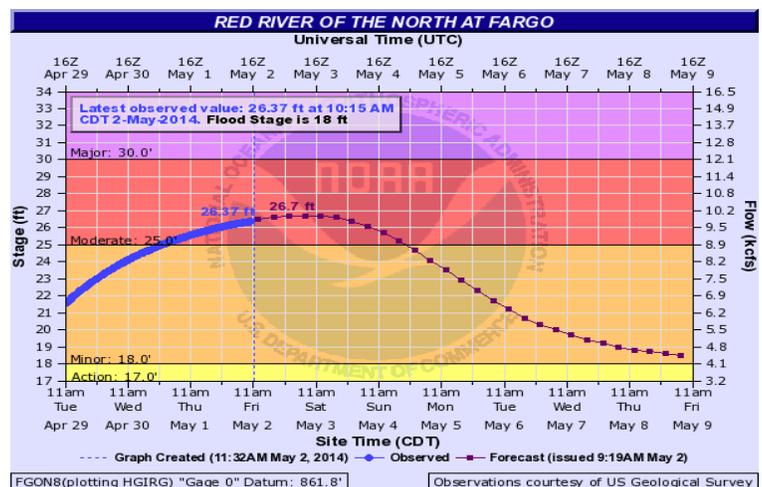


Figure 4. Red River at Fargo approaching crest on May 2, 2014 from heavy rain event in late April, 2014 (Advanced Hydrologic Prediction Service, NOAA)