

April brings swing of weather extremes

After a wild ride in March, April brought some interesting extremes to Nebraska this year, which is not uncommon for spring weather conditions. Some areas received a foot of snow – in one day – near mid-month. Record high daily temperatures occurred during the third week. This was followed by temperatures plunging at month’s end with more snow for portions of the state. Clean-up, recovery and damage assessments continue across portions of Nebraska affected by the flood. Massive amounts of sand deposited on crop fields remains a significant issue in some low-lying areas. Portions of Interstate 29 along Nebraska’s eastern border remained closed through April.

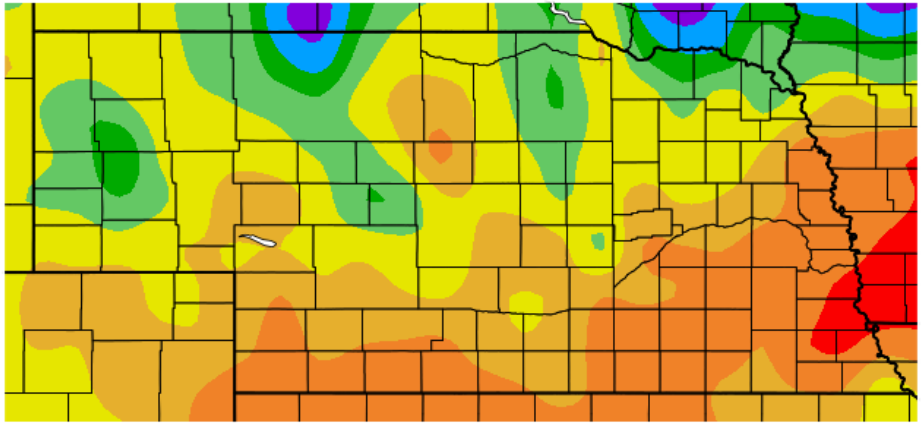
Precipitation

There were a couple of main precipitation events during April – near mid-month and at the end of April. The precipitation occurred as storm systems moved through and temperatures fell below normal. The event around April 10 to 11 resulted in a foot of snow for portions of the northern Panhandle. Chadron and Harrison both reported 12 inches on April 11. Later in the month, another system brought several inches of snow to northern areas of the state. As a result, April snow totals were plentiful with anywhere from 8 to 18 inches for the north and west.

In terms of liquid water equivalent for snow and rainfall, there was a gradient of increasing precipitation from south to north. The southern half of the state reported a quarter of an inch to 1 inch of precipitation, about 50% of the average amount. Two to 4 inches were reported for portions of northcentral and northeast Nebraska, which is about an inch above average and 150% of normal.

The highest daily precipitation totals

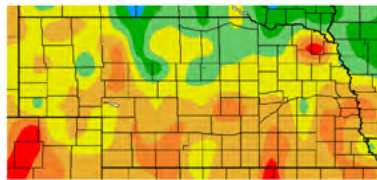
DEPARTURE FROM NORMAL PRECIPITATION (IN)



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All maps generated using April provisional data.

DEPARTURE FROM NORMAL TEMPERATURE (F)

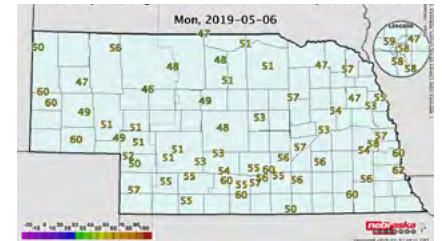


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were more than 1.5 inches, observed at a handful of locations scattered around eastern Nebraska. Days with measurable precipitation were reported on anywhere from 10 to 15 days during the month.

The statewide average precipitation was 1.72 inches, which is 0.7 below normal. If we look over the long term for April in Nebraska, conditions have trended toward wetter. This holds true for both the long-term period

WEEKLY AVERAGE 4-INCH BARE SOIL TEMPERATURE (F)



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of record (since 1895) and over the past three decades.

Temperatures

As is typical with spring, temperatures varied quite a bit during April. Conditions were relatively warm during the first week. Cold and snowy weather moved in during the middle of the month. This was followed

by a nice warm-up with temperatures in the 90s for a large swath of the state. Valentine AP (93°F on April 20), Scottsbluff AP (82°F on April 21), McCook AP (91°F on April 20), Hastings AP (86°F on April 20) and Lincoln AP (87°F on April 20) all report record highs for their respective dates. Temperatures plummeted again with below-average conditions to close out April. The lowest observed temperatures were a few single-digit temperatures reported in the Panhandle.

For the April average, we were a bit warmer than normal for much of the state. Portions of northern Nebraska averaged below normal. Zooming out further, Nebraska was on the southern edge of a cool pocket across the northern tier of the U.S. The statewide average temperature was 49.2°F, which is 0.9°F above normal.

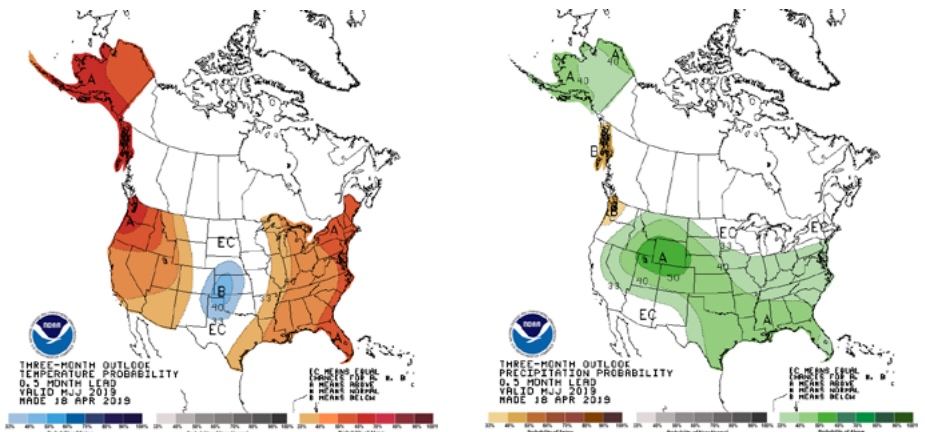
Bare soil temperatures from the Nebraska Mesonet showed quite a range of observations. The minimum of 31°F was observed at the Ord station on the first of April. By the third week, temperatures were up to 80°F on the afternoon of April 24 at the Central City station. At the start of May, the weekly average bare soil temperature was up to 60°F for southern locations but still in the upper 40s for portions of central and northern Nebraska. Soil moisture levels have shown little change in the profile over the past month with continued wetness and a bit drier conditions in portions of the west.

According to the National Agricultural Statistics Service, 71% of winter wheat in Nebraska was rated in the “good to excellent” category, as of May 5. This is up 10% from the same time last year. Soybean planting progress for the state was essentially on track at 14% thus far. However, corn is down 12% compared to the past five years at 35% planted. Cattle have shown signs of the cold, wet winter and periodic blizzards with health impacts and losses.

Drought

For the U.S. on the whole, drought conditions remain at historically low levels with only 2.64% of the country in drought,

90-DAY OUTLOOK TEMPERATURE (LEFT) & PRECIPITATION



April extremes

Nebraska’s statewide weather network operated by the Nebraska Mesonet at the University of Nebraska-Lincoln cataloged the following extremes this April:

- Highest air temperature:** 92°F on April 20 at Naper 12SW
- Lowest air temperature:** 11°F on April 12 at Sidney 2NW
- Highest 4-inch bare soil temperature:** 80°F on April 24 at Central City 3W
- Lowest 4-inch bare soil temperature:** 31°F on April 1 at Ord 2N
- Highest 5-second wind gust:** 56 mph on April 18 at Gothenburg 2NW
- Largest 24-hour precipitation event:** 1.2 inches on April 22 at Holdrege 5N

Source: [The Nebraska Mesonet](#) at Nebraska State Climate Office, University of Nebraska-Lincoln

according to the U.S. Drought Monitor. Nebraska remains drought-free. Portions of the Panhandle and southwest are running a 1.5- to 3-inch precipitation deficit (70% of normal) for the cumulative total going back to October.

Outlook

The increased chance for an overall warmer-than-normal April came to fruition. Looking ahead to May monthly temperatures, the outlook suggests a trend toward cooler-than-normal conditions for the month. Along with this is unfortunately an increased chance for a wetter-than-normal May. These trends cover a large portion of the central U.S. Delays in field preparation and planting look to continue to be problematic throughout the region. Timing and intensity of the rain events along with the occurrence of intermittent warm days will determine just how impactful the outlooks may be.

For the May through July period, the Climate Prediction Center is placing much of the U.S. in enhanced probability of wetter-than-normal conditions, which includes all of Nebraska. The central U.S. lies in a zone of equal chances of below-, near- and above-normal temperatures. However, the southern half of Nebraska is in a bubble of an increased chance for below-normal temperatures. Predictions for the eastern and western U.S. favors the above-normal temperature category.

— NSCO



NEBRASKA STATE CLIMATE OFFICE
 153 Hardin Hall | 3310 Holdrege St. | Lincoln, NE 68503-0931
 School of Natural Resources at University of Nebraska - Lincoln

CONTACT US
 e) nsco@unl.edu | p) 402.472.5206

ON THE WEB
 nsco.unl.edu

FOLLOW US
 @mshulski3