

CLIMATE UPDATE

Temperatures continue above-average streak

Aside from a handful of locations across the state that were slightly below normal, Nebraska again experienced warmer-than-normal monthly average temperatures. The statewide average of 49.6°F ranked as 1.3°F above the 30-year average. April temperatures in Nebraska have, in fact, warmed since 1895 by about 1.0°F. The year-to-date (January to April) average temperature of 37.9°F for Nebraska is nearly 3 degrees above average and ranks as eighth warmest on record.

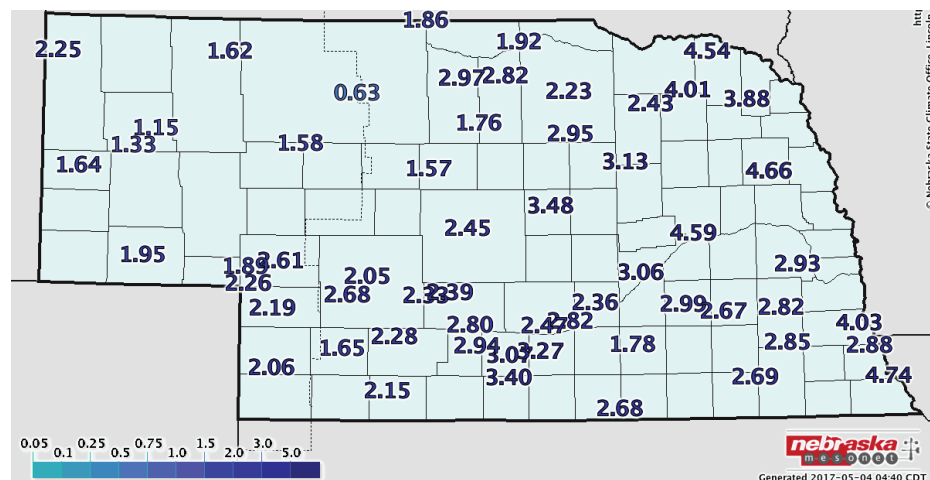
The most interesting precipitation story was the strong, late-season snow storm that moved across the Plains during the end of April and early May. The highest daily snowfall amounts were in the 10-inch range. The storm left a relatively narrow swath of snowcover through central Nebraska. The heaviest snow amounts and likely the most widespread agricultural impacts were in Kansas. It remains to be determined the damage to the winter wheat crop in Nebraska. For newly planted corn, there is potential for seedling diseases, chilling injury and freeze damage from the very cold air and soil temperatures. The lowest Mesonet air temperature reading was 20°F on April 27 at Sparks and the 4-inch bare soil temperature reached a low of 34°F at Ainsworth.

Precipitation

How much precipitation you received depended on where you were in Nebraska. Areas in the northern Panhandle, central, southcentral and southeast generally were wetter than normal. Pockets of lower-than-normal precipitation were in the northcentral, southwest, east central and northeast. Nebraska Mesonet precipitation totals for the month showed the highest amount at Indian Cave State Park at 4.74 inches. Six stations observed more than 4 inches for the month — all located in eastern Nebraska.

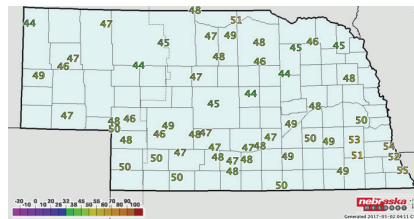
The statewide average precipitation

LIQUID PRECIPITATION TOTALS (IN) FOR APRIL 2017



NEBRASKA STATE CLIMATE OFFICE

WEEKLY AVERAGE 4-INCH BARE SOIL TEMPERATURE (F)



NEBRASKA STATE CLIMATE OFFICE

amount of 2.54 inches is close to the 30-year normal of 2.42 inches. Precipitation over time for the month of April has increased by about 1.2 inches since 1895. This is Nebraska, though, and variability from year to year is high. The year-to-date precipitation of 5.82 inches is nearly an inch more than normal.

Soil temperatures

Soil temperatures are an observation that is closely followed this time of year in the agricultural and horticultural

April extremes

Nebraska's statewide weather network operated by the University of Nebraska Lincoln, the Nebraska Mesonet, cataloged the following extremes this April:

- Highest air temperature:** 87°F on April 19 at Guide Rock 3E (Red Cloud area)
- Lowest air temperature:** 20°F on April 27 at Sparks 5NE
- Greatest 24-hour temperature change:** 39°F, 77°F on April 9 to 38° on April 10 at Memphis 5N (Mead area)
- Highest 4-inch bare soil temperature:** 79°F on April 18 at Central City 3W
- Lowest 4-inch bare soil temperature:** 34°F on April 27 at Ainsworth 2NE
- Highest 5-second wind gust:** 61 mph on April 27 at Ainsworth 2NE

**U.S. Drought Monitor
Nebraska**

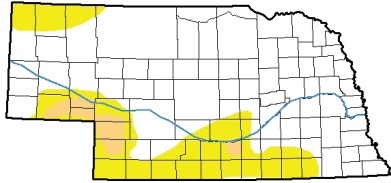
April 4, 2017
(Released Thursday, Apr. 6, 2017)
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	74.30	25.70	3.77	0.00	0.00	0.00
Last Week 03-29-2017	72.64	27.36	5.45	0.00	0.00	0.00
3 Months Ago 01-03-2017	48.25	51.75	13.43	0.16	0.00	0.00
Start of Calendar Year 01-01-2017	48.25	51.75	13.43	0.16	0.00	0.00
Start of Water Year 09-30-2016	77.28	22.71	1.59	0.16	0.00	0.00
One Year Ago 04-05-2016	76.40	23.60	0.00	0.00	0.00	0.00

Intensity:
 D0 Abnormally Dry D1 Moderate Drought
 D2 Severe Drought D3 Extreme Drought
 D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Anthony Artusa
NOAA/NWS/NCEP/CPC



DROUGHTMONITOR.UNL.EDU

**U.S. Drought Monitor
Nebraska**

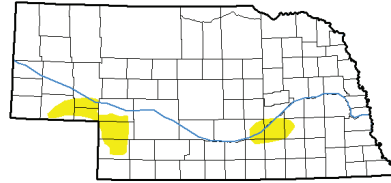
May 2, 2017
(Released Thursday, May. 4, 2017)
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	95.03	4.97	0.00	0.00	0.00	0.00
Last Week 04-25-2017	76.74	23.26	3.33	0.00	0.00	0.00
3 Months Ago 01-03-2017	55.30	44.70	9.48	0.00	0.00	0.00
Start of Calendar Year 01-01-2017	48.25	51.75	13.43	0.16	0.00	0.00
Start of Water Year 09-30-2016	77.28	22.71	1.59	0.16	0.00	0.00
One Year Ago 05-03-2016	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:
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Author:
Brian Fuchs
National Drought Mitigation Center



community. Nebraska Mesonet stations observe this at the 4-inch depth over bare ground at all our sites across Nebraska. For the week ending on May 1, temperatures averaged in the mid 40s to mid 50s. This represents a cool-down from earlier in April, which was driven by the low temperatures at the end of the month as well as the rain and snow.

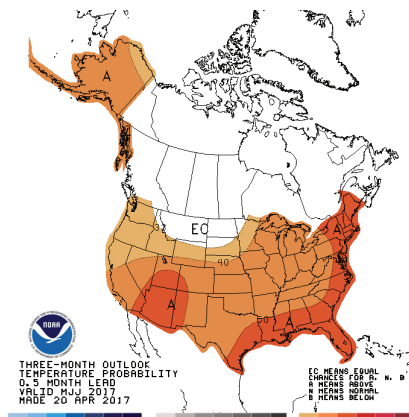
Drought

It is not surprising that drought conditions in Nebraska were eased as beneficial rains were received, particularly during the last week of April. Areas of concern in the state as far as dryness were in the southcentral and southwest as well as the northern Panhandle with 25 percent in D0-D1 at the start of the month. All of the D1 conditions have been erased, and 95 percent of Nebraska is in no abnormal dryness or drought. There are two pockets of longer-term abnormal dryness (D0) left in Nebraska at the start of May, the southcentral (Hall, Hamilton, and York counties) and southwest (Cheyenne to Chase counties). This is a significant improvement when compared to the start of the year when 51 percent of Nebraska was in D0-D2.

Snowpack

Mountain snowpack in the Platte basins that help to feed Nebraska rivers were

**90-DAY OUTLOOK
TEMPERATURE**

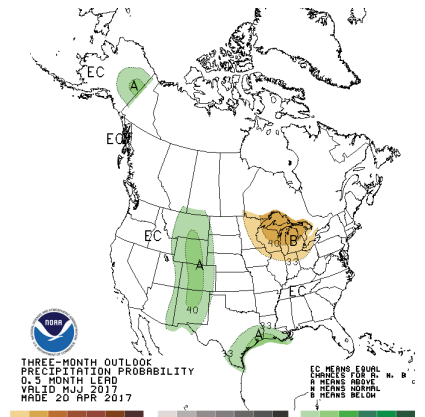


running near normal in both Wyoming and Colorado, on average. Once passing this time-frame, the peak mountain snow accumulation has generally passed as temperatures warm and significant melting begins. Streamflow conditions at the start of May around the state showed a gradient from below normal in the southwest, normal in Central Nebraska, and above to much-above normal in the east.

Outlook

The 30-day outlook from the Climate Prediction Center is showing odds that favor below-normal temperatures for extreme southeast Nebraska with equal chances of above, near, and below normal

PRECIPITATION



for the rest of the state. May precipitation conditions favor the below-normal category for the eastern third of Nebraska and the above-normal category for the extreme western panhandle, and much of the intermountain west. Going forward 90 days with the May to July seasonal outlook, temperatures again are indicative of continued warmth with the odds favoring above-normal conditions. This pattern is holding some consistency in the 90-day outlook discussed in the March summary. A tilt toward wetter-than-normal conditions is again in place for areas west of Nebraska and including the Panhandle. The remainder of Nebraska lies in equal chances of above, near, and below-normal categories.



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