

## MIDWEST & NORTHERN PLAINS

JUNE 21, 2018



Corn leaves rolling in Missouri in response to heat and lack of rain. Photo: Pat Guinan

## Drought Concerns Linger With Above-Normal Temperatures

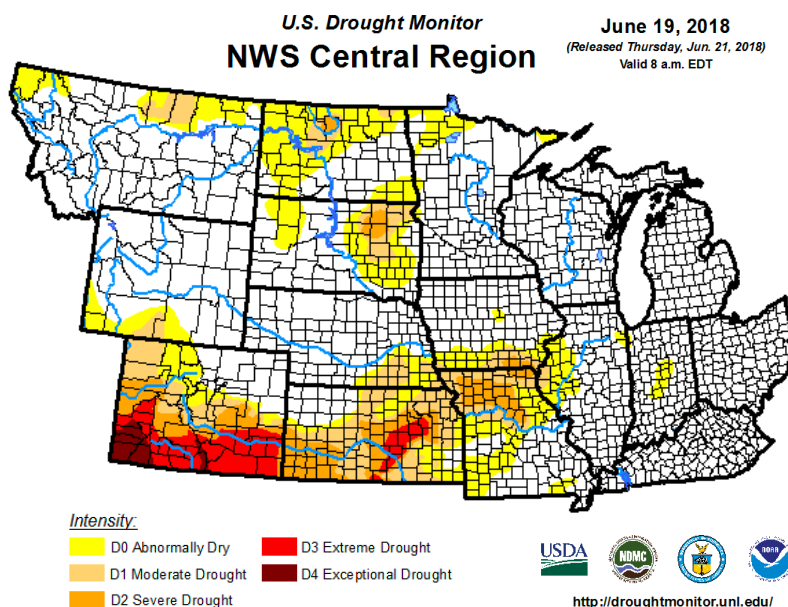
- Recent rainfalls have eased some immediate drought concerns. However, warmth and existing drought conditions will continue to pose potential problems for the region.
- Above-normal temperatures are likely to return in mid-summer, causing potential stress on crops during critical crop growth stages.

### CURRENT CONDITIONS

- Soaring extreme and consistently warm temperatures since early May over much of the central U.S. have exacerbated drought, and increased concern for drought worsening across the area.
- The persistent above-normal temperatures have increased [evapotranspiration](#) for a broad area of the central U.S., resulting in reduced [soil moisture](#) and crop stress.
- The warm temperatures have been coupled with very dry conditions throughout much of the region. Over the last 30 days, rainfall has only been 10-75% of normal in several areas across the North Central U.S. (Figure 3).
- Recent widespread rains have eased some near-term drought issues, however some areas in drought did not receive significant rainfall.

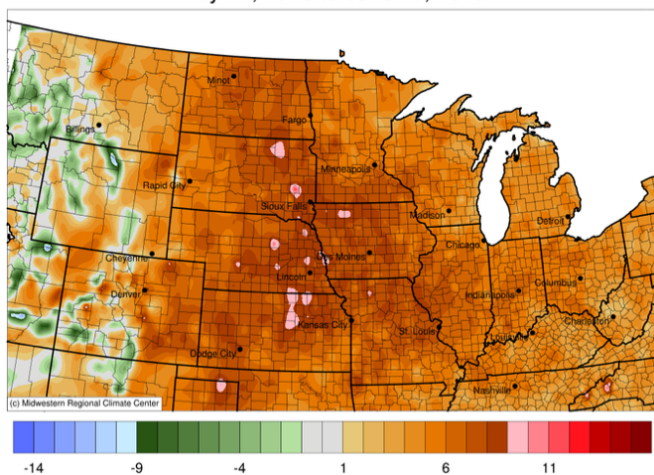
### IMPACTS

- Significant drought impacts that have been reported include major wildfires (CO), crop stress (KS, MO, SD, ND, IA) and some water supply issues (MO). Corn leaves have been rolling in many states, which is a sign of water deficiency.
- Crop phenology in all of these states is entering a time where crop water use will increase quickly, which increases the potential for more crop issues.
- In addition, [streamflows](#) have fallen below average in some areas from Colorado to western Illinois.



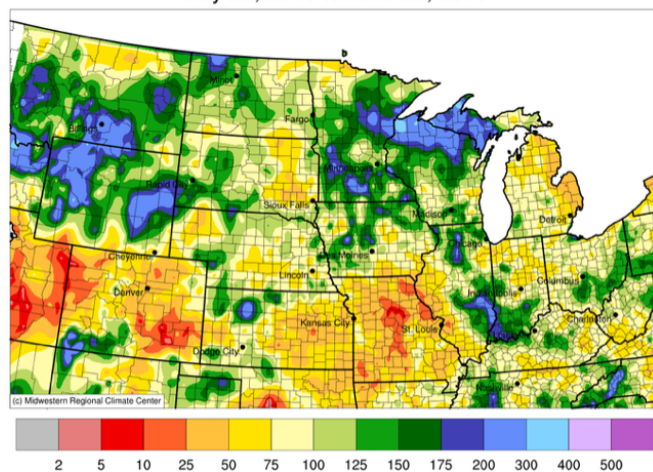
▲ **Fig 1.** All levels of drought from moderate (D1) to exceptional (D4) exist in the North Central U.S., with severe drought (D2) or worse in Colorado, Kansas, Missouri, Iowa, and the Dakotas. Source: U.S. Drought Monitor

## Average Temperature (°F): Departure from 1981-2010 Normals May 22, 2018 to June 20, 2018



**Fig 2.** Average temperature differences over the last 30 days (May 22-June 20, 2018). Source: Midwestern Regional Climate Center

## Accumulated Precipitation (in): Percent of 1981-2010 Normals May 22, 2018 to June 20, 2018



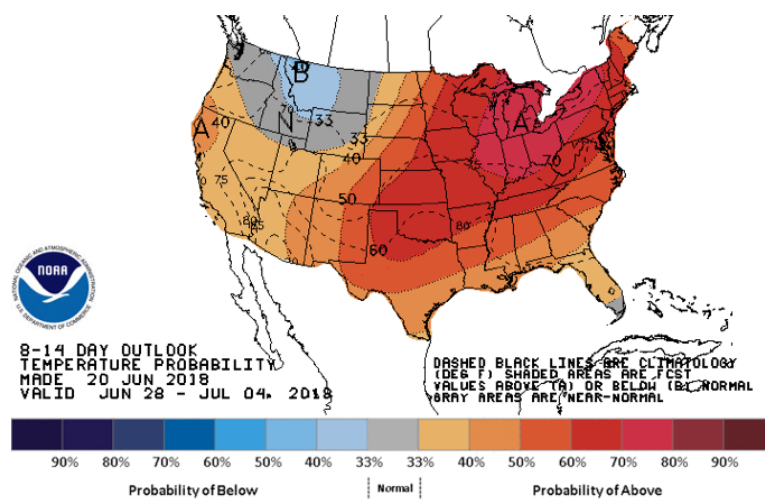
**Fig 3.** The percent of normal precipitation over the last 30 days (May 22-June 20, 2018) across the North Central U.S. Source: Midwestern Regional Climate Center

## OUTLOOK

- Over the next week, significant rainfall is forecasted across the central U.S., potentially bringing some relief and possible excess moisture to certain areas.
- Through early July, there is an increased chance for above-normal temperatures and above-normal precipitation across most of the Midwest and Plains (Figure 4 and 5).
- Despite chances for rainfall, the current dryness issues, expected heat, and water demand during the critical growing stage, may still cause drought persistence or development.

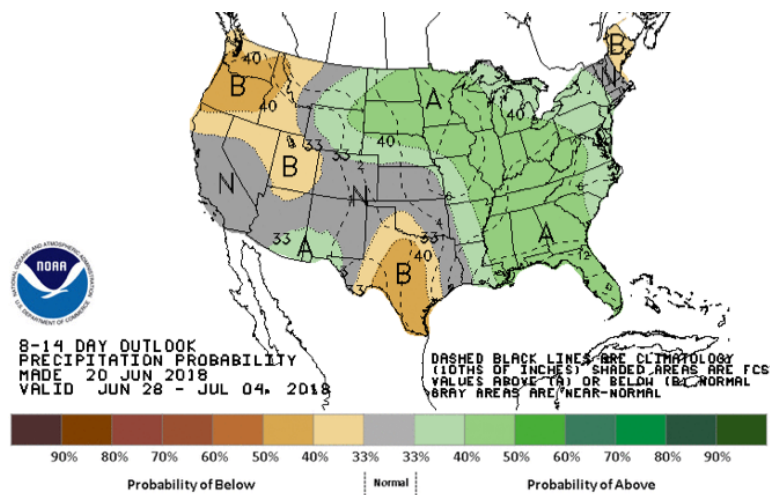
**Fig 4.** Temperature probabilities for June 28-July 4, 2018. Source: Climate Prediction Center

**Fig 5.** Precipitation probabilities for June 28-July 4, 2018. Source: Climate Prediction Center.



8-14 DAY OUTLOOK  
TEMPERATURE PROBABILITY  
MADE 20 JUN 2018  
VALID JUN 28 - JUL 04, 2018

DASHED BLACK LINES ARE CLIMATOLOGY  
(10THS OF INCHES) SHADED AREAS ARE FCS  
VALUES ABOVE (A) OR BELOW (B) NORMAL  
GRAY AREAS ARE NEAR-NORMAL



8-14 DAY OUTLOOK  
PRECIPITATION PROBABILITY  
MADE 20 JUN 2018  
VALID JUN 28 - JUL 04, 2018

DASHED BLACK LINES ARE CLIMATOLOGY  
(10THS OF INCHES) SHADED AREAS ARE FCS  
VALUES ABOVE (A) OR BELOW (B) NORMAL  
GRAY AREAS ARE NEAR-NORMAL

## Next Update

Drought Status Updates will be issued in the future as conditions evolve. Drought and Climate Outlook Webinars are offered for regional Drought Early Warning Systems, more information can be found at: <https://www.drought.gov/drought/calendar/webinars>

