

MIDWEST & MISSOURI RIVER BASIN

AUGUST 23, 2018



Extreme to Exceptional Drought Worsens in Missouri, Kansas, and Iowa Since Mid-July

- Drought conditions have increased in severity and coverage across the central United States since mid-July, particularly in MO, KS, IA, MI, MN, ND, and SD.
- Despite some recent rains, exceptional drought (D4) persists in KS and MO.
- Agriculture and water supply have been the most negatively affected by this summer's drought conditions. Some of the recent rainfall may help soybeans and pasture recovery, but it likely fell too late to help stressed corn. In addition, some water resources are so limited that consistent and multiple precipitation events are needed to see full recovery.

CURRENT CONDITIONS

- While some the drought-affected areas in KS and MO received near- to above-normal precipitation over the last 30 days, rainfall totals have not drastically improved the drought conditions and [soil moisture](#) continues to be much below normal in these areas. Areas with significantly below-normal precipitation (10-25% of normal) include portions of IA, IL, MI, MN, MT, ND, SD, WI, and WY (Figure 2).
- A majority of the region did get some relief from the summer's persistent above-normal temperatures; recent cooler temperatures have helped reduce stress on crops and livestock (Figure 3).
- In MI, above-normal temperatures and below-normal precipitation continued over the last 30 days, contributing to the introduction of severe drought (D2) and expansion of moderate drought (D1).

IMPACTS

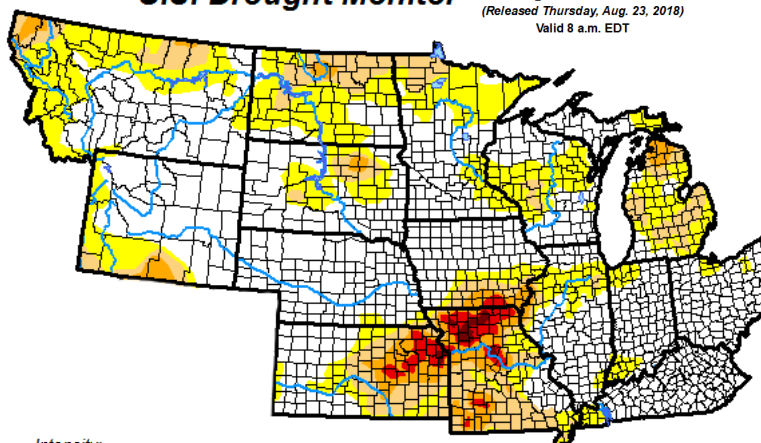
- Impacts to municipal and rural water supply continue to intensify. A handful of counties or cities in KS and MO and a regional water commission in MO are implementing water restrictions and conservation measures. Hamilton County (MO) is looking to connect to emergency water supplies.
- Notable agricultural impacts include continued crop and vegetation stress (Figure 4), very dry pastures ([USDA](#) reports 74% of pastures in MO are reporting poor to very poor conditions), hauling of water and early feeding of hay for livestock, and limited water in livestock ponds. Some farmers in IA, KS and MO have cut the corn for silage, and livestock producers are selling cattle from their herds to reduce feed usage.
- [USDA Drought Disaster Designations](#) have been declared for 95 counties in Kansas, 84 counties in Missouri, and 19 in Iowa.

U.S. Drought Monitor

August 21, 2018

(Released Thursday, Aug. 23, 2018)

Valid 8 a.m. EDT



Intensity:

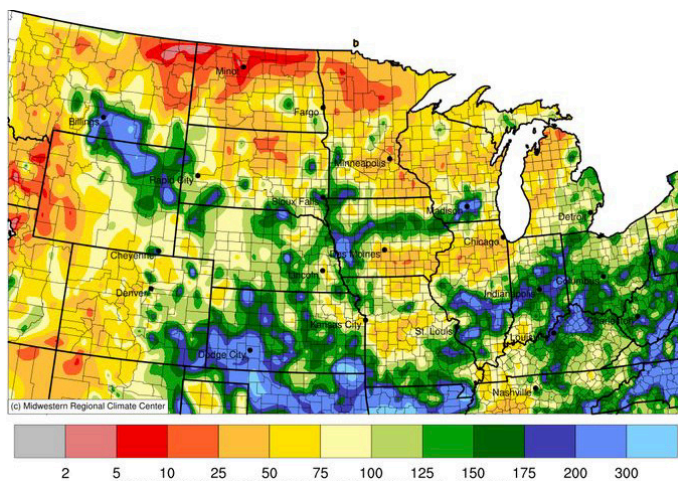
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought



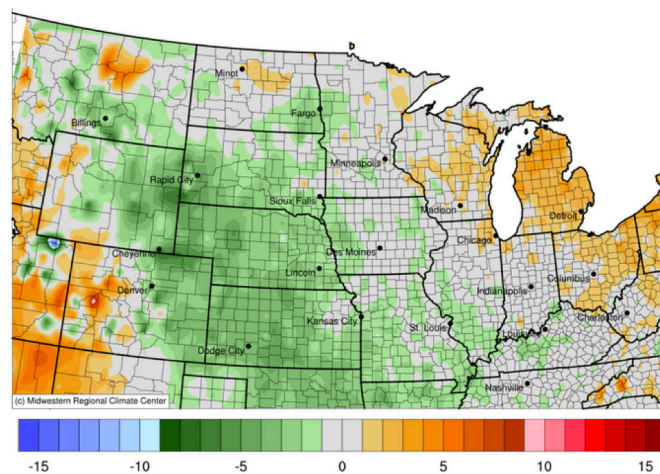
<http://droughtmonitor.unl.edu/>

Fig 1. All levels of drought (moderate to exceptional) exist in the Midwest and Missouri River Basin, with the worst category of exceptional drought (D4) in Missouri and Kansas, and extreme drought (D3) in those states and Iowa. Moderate to severe drought (D1-D2) is affecting every state on the map except for Indiana, Kentucky, and Ohio. Source: U.S. Drought Monitor

Do you have local drought impacts? Report them to the [Drought Impact Reporter](#).



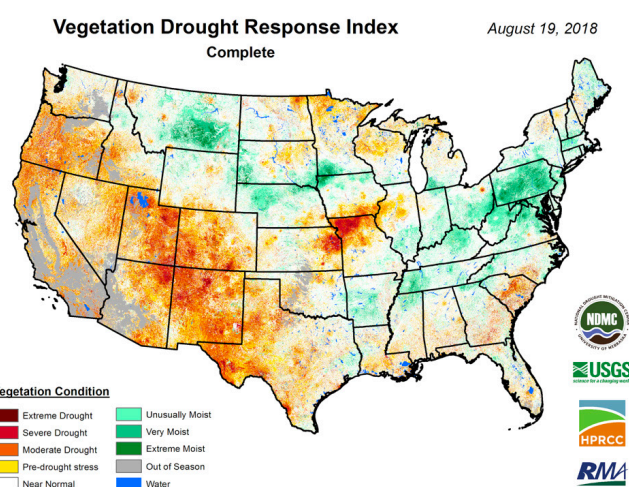
▲ **Fig 2.** The percent of normal precipitation over the last 30 days (July 24-August 21, 2018) across the north central U.S. Source: Midwest Regional Climate Center



▲ **Fig 3.** Average temperature differences over the last 30 days (July 24-August 21, 2018) across the north central U.S. Source: Midwest Regional Climate Center

OUTLOOK

- The 8-14 Day Precipitation Outlook shows a greater chance for below-normal precipitation in areas of IA, KS, and MO, which may allow for crops to dry down earlier this year (Figure 5).
- Above-normal temperatures are likely across the entire eastern U.S. in the 8-14 Day Temperature Outlook, which may help bring some crops like sorghum to maturity, while stressing others like soybeans.
- Since it is nearing the end of the growing season, any rainfall received will likely be too late to significantly help some row crop agriculture, but could benefit lawns, gardens, and specialty crop growers.
- Rainfall is extremely important now to recharge soil moisture, pastures, and water resources in the drought-stricken areas of the central U.S. ahead of the 2019 growing season.



▲ **Fig 4.** The weekly Vegetation Drought Response Index (VegDRI) map for August 19, 2018, which depicts drought's effects on vegetation. Source: NDMC/University of Nebraska

▼ **Fig 5.** Precipitation probabilities for August 30-Sept 5, 2018. Source: Climate Prediction Center.

Drought Resources:

[NDMC interactive map showing drought impacts](#)

[Find your state climatologist](#)

[Kansas State University Extension](#)

[Missouri DNR Drought News, Conditions, and Resources](#)

[Iowa State University Extension](#)

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/>

