

Midwest Ag-Focus Climate Outlook

Main Points

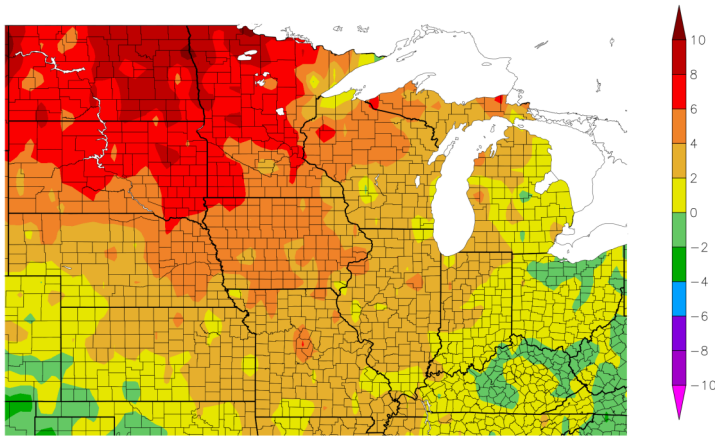


- ◆ Drought has started to resurge in areas that had seen recovery this spring, with a lack of precipitation and higher evapotranspiration across much of the Corn Belt.
- ◆ Precipitation has been very limited over the last 30-60 days.
- ◆ Stress on grasses and small grains has been the primary crop impact; corn conditions are starting to show more stress.
- ◆ Crop planting and progress has been aided by dry conditions overall.
- ◆ Fires have emerged in some unusual areas (Michigan and Canada) causing local issues, including wider spread smoke and air quality issues.



Current Conditions

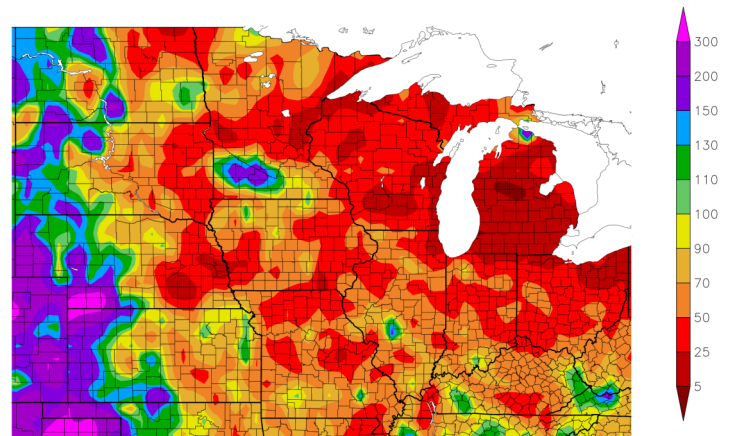
Departure from Normal Temperature (F)
5/7/2023 – 6/5/2023



Generated 6/6/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
5/7/2023 – 6/5/2023



Generated 6/6/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

In comparison to spring and early summer, large-scale conditions have shifted in much of the Corn Belt to mostly warmer and drier than average in the last 30 days. The main divergence from this pattern are the wetter conditions in the Plains. After a cool spring in the northern Plains, temperatures have become much warmer than average there (+6-10°F in much of the Dakotas and northern Minnesota). Warmer-than-average conditions, to a less extreme extent, have covered much of the rest of the Corn Belt. The warmth has been aided by dry surface conditions and persistent high pressure in the region. Mostly drier-than-average conditions covered nearly the whole Corn Belt with widespread areas at less than 50% of average precipitation. Several local areas, including broad swaths of Michigan, at less than 25% of average precipitation.

Meteorologically, the Midwest has experienced some unusual conditions recently, with most thunderstorms moving toward the west. An area of high pressure and upper air ridge has parked over southern Canada, leading to this easterly flow (winds from the east) in upper levels in the atmosphere, which steers storm direction.

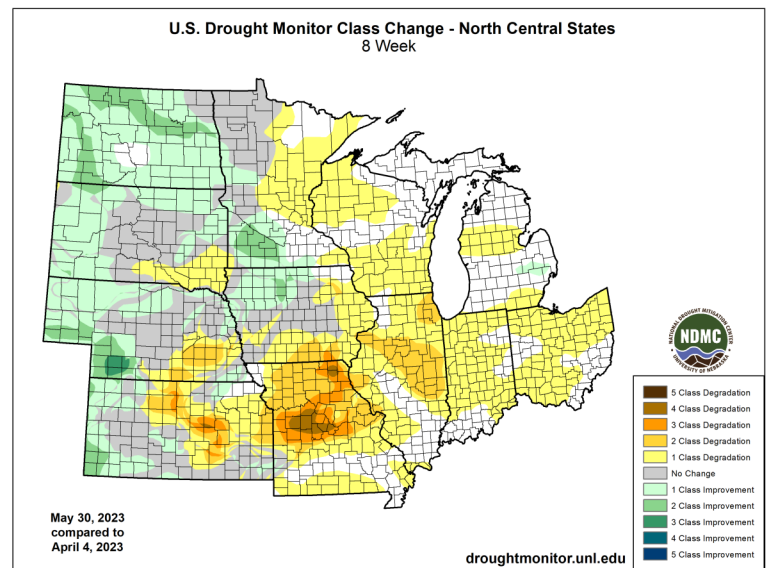
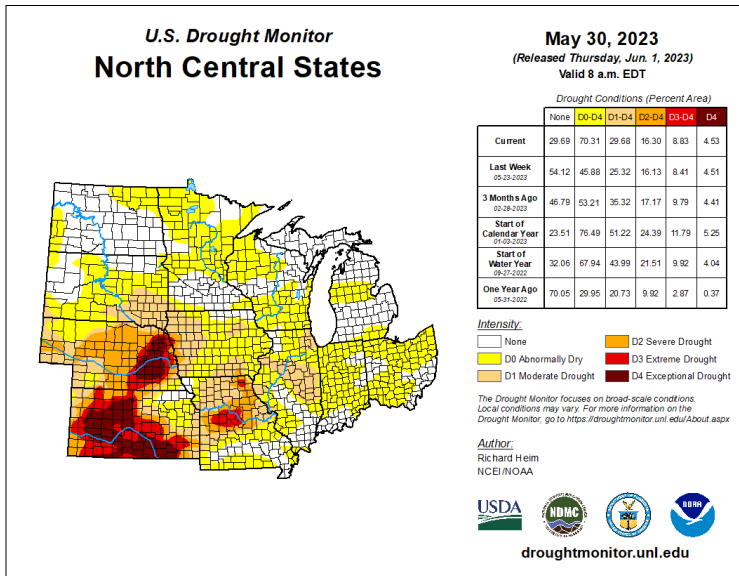
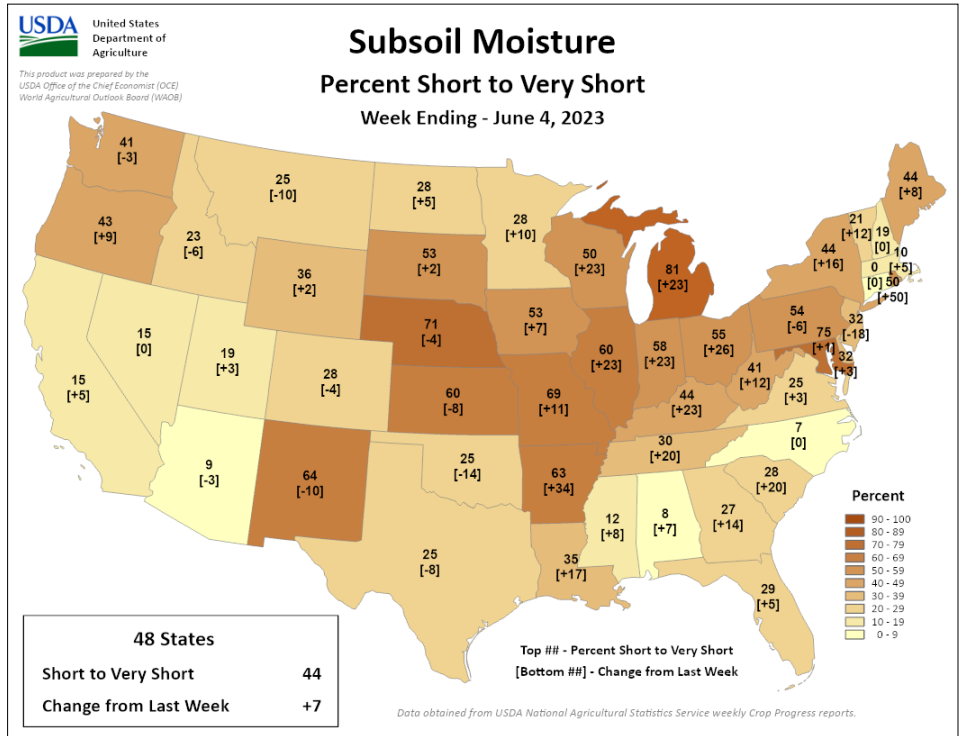
Images from High Plains Regional Climate Center (HPRCC), Online Data Services: [ACIS Climate Maps](https://www.climatehubs.usda.gov/hubs/midwest). Generated: 6/6/2023.



Impacts

The very dry conditions have caused some early summer drought concerns, while wetness in the Plains has helped ease some drought issues. Soil moisture is drying rapidly across the central and eastern Corn Belt because of severe precipitation deficits and very dry air that has been pervasive in late spring. Some early season crop impacts have been noted, as well as stress on pastures and grasses, but most of these crop issues are not severe. Major yield losses tend to be impacted by July-August crop stress. By contrast, hay cutting has proceeded with good drying conditions.

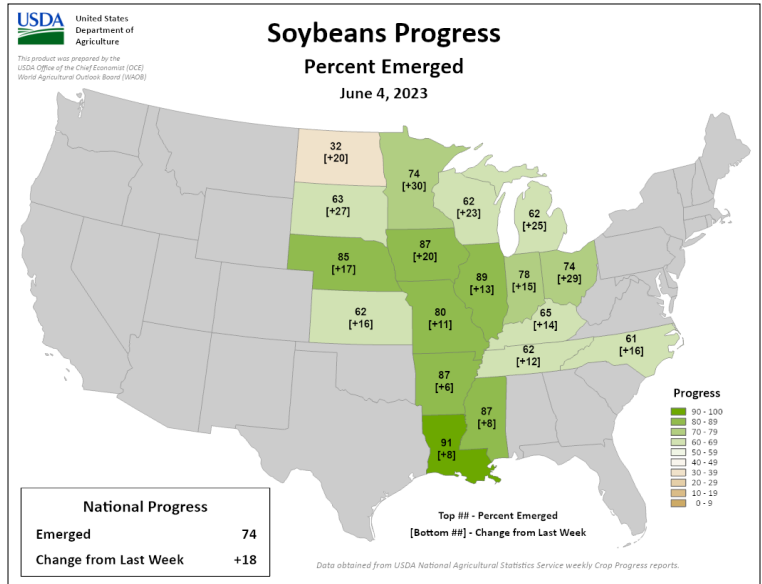
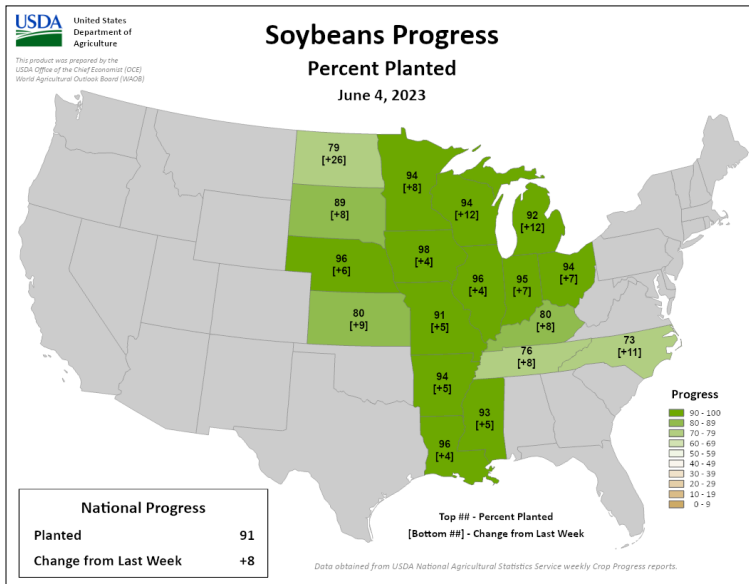
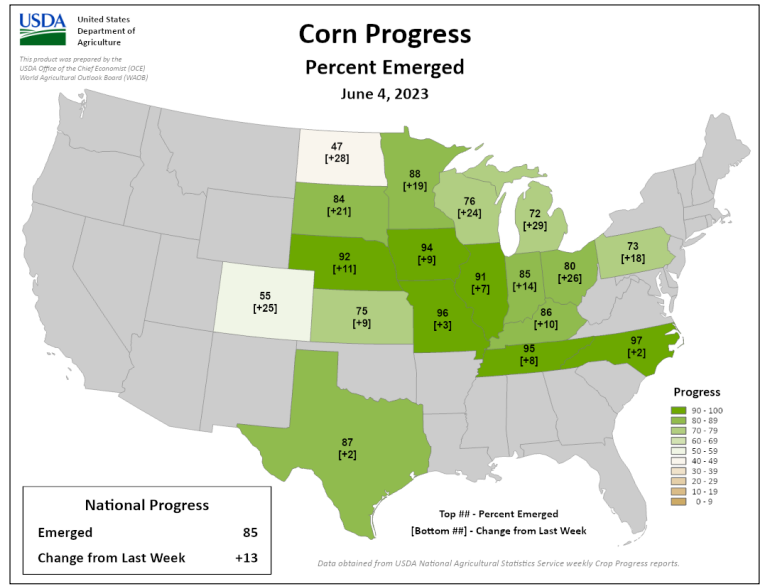
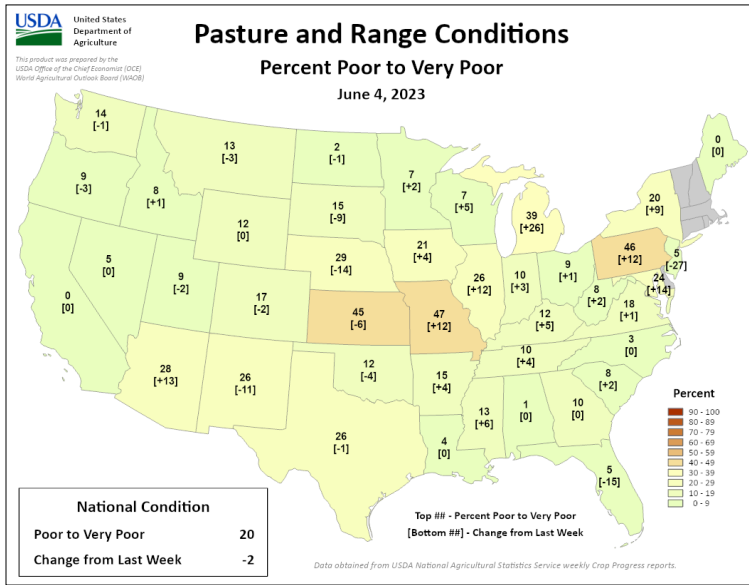
Streamflow and ground water issues are also emerging because this dryness is occurring on top of several years of dryness in some areas of the region.



Maps Generated by the [United States Department of Agriculture](https://www.usda.gov), [National Drought Mitigation Center](https://www.ndmc.gov) and the [Short-term Prediction Research and Transition Center](https://www.sprc.org).

For more information, please visit:

<https://www.climatehubs.usda.gov/hubs/midwest>



Maps generated by the United States Department of Agriculture and are now available on a National Drought Mitigation Center [webpage](#).

Outlook

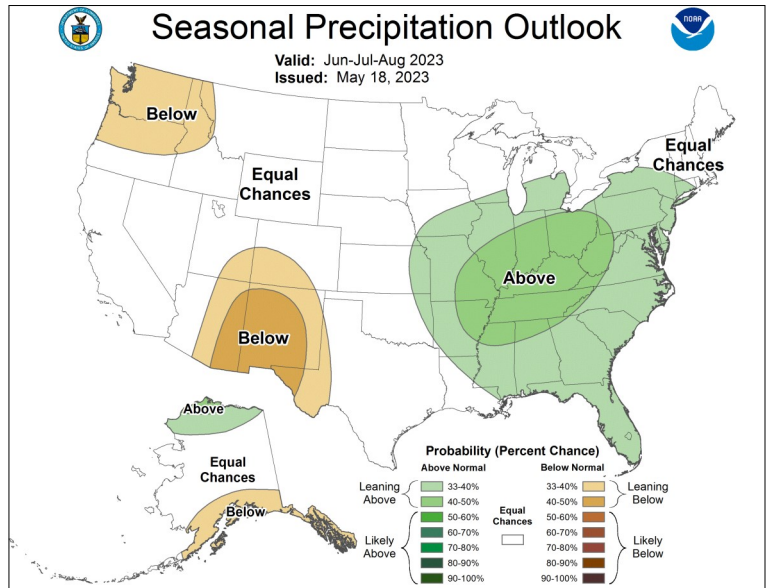
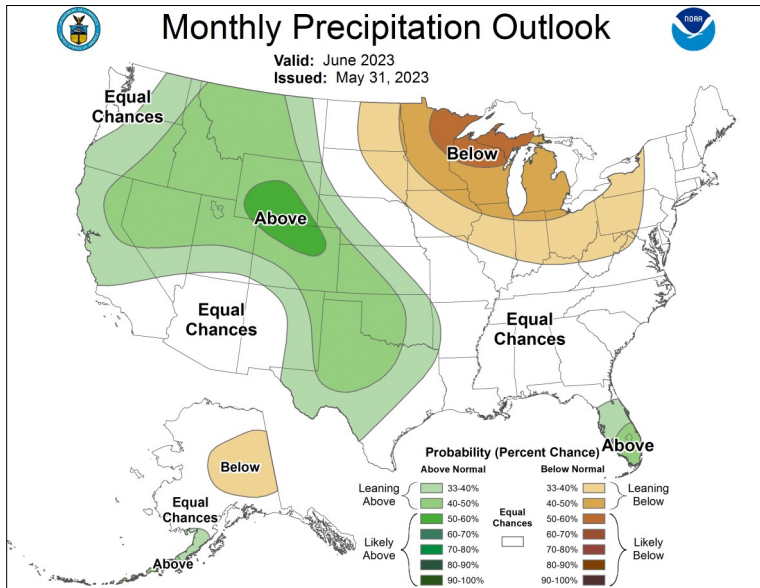
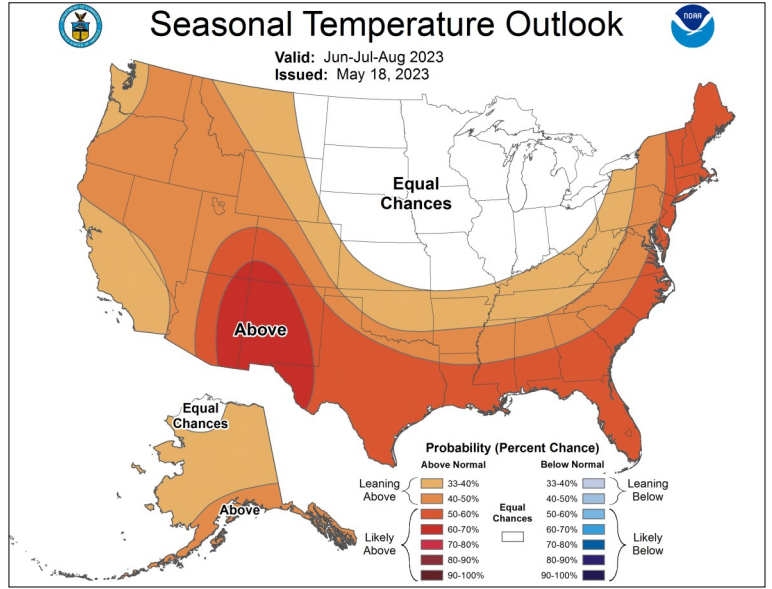
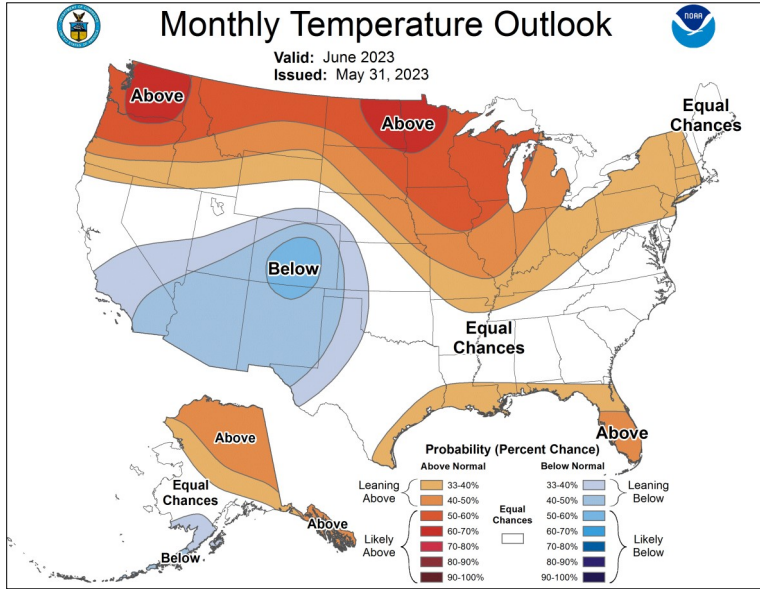


Conditions have transitioned fully to summer, including spotty thunderstorms—not widespread rainfalls—and warmer temperatures. During recent rains, spotty patterns have provided decently heavy rainfalls in some areas with no precipitation in nearby areas. This pattern will likely continue in the near term. The 7-day forecast is hinting at some active conditions over much of the region.

The 30-day outlook released on May 31 (representing June) reflects this “spotty precipitation” pattern and leans dry around the Great Lakes; it also suggests that warmer than average conditions are likely for the month. These conditions, on top of existing dryness, will likely increase drought coverage again and lead to some agricultural impacts among grasses and, potentially, specialty crops. Corn and soybeans may show stress, but June conditions don’t often predict yield pressures.



The 90-day outlook demonstrates a longer-term pattern with equal chances for temperatures (i.e. may be above or below normal) over the Corn Belt and with slightly elevated precipitation probability in the east. Not reflected in these outlooks are El Niño composites that lean towards lower chances for warm and dry conditions in the mid- to late-summer. Some drought conditions will likely persist across the region, but the extent and severity are uncertainties.



Outlooks provided by the [Climate Prediction Center](#).

Partners and Contributors



- [United States Department of Agriculture \(USDA\)](#)
- [National Oceanic and Atmospheric Administration \(NOAA\)](#)
- [Climate Prediction Center \(CPC\)](#)
- [National Weather Service \(NWS\)](#)
- [National Center for Environmental Information \(NCEI\)](#)

- [National Drought Mitigation Center \(NDMC\)](#)
- [National Integrated Drought Information System \(NIDIS\)](#)
- [Midwestern Regional Climate Center \(MRCC\)](#)
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- [High Plains Regional Climate Center \(HPRCC\)](#)



For More Information

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<https://www.climatehubs.usda.gov/hubs/midwest>