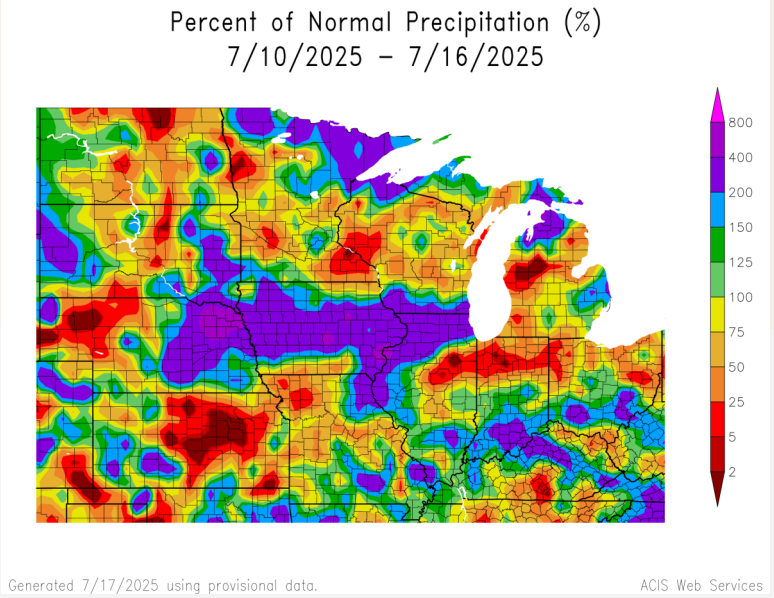
Midwest Ag-Focus Climate Outlook

July 17, 2025

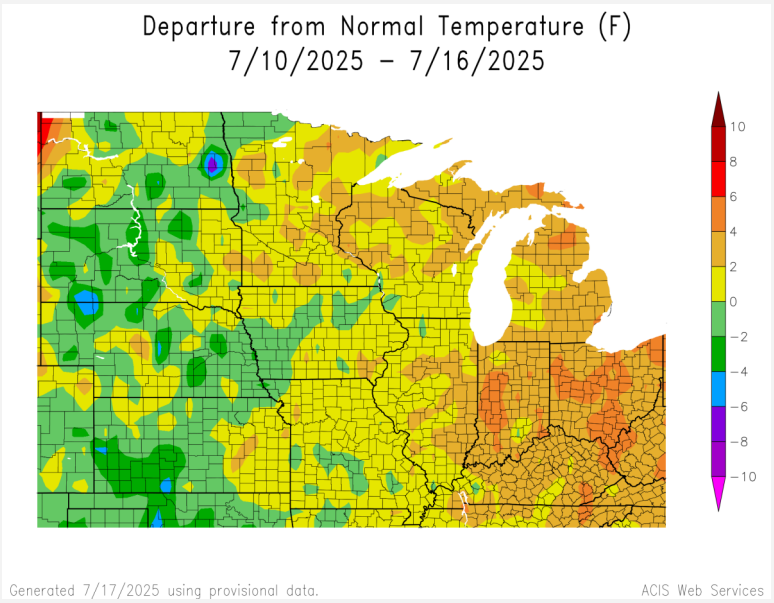
Main Points

- Warmer conditions across much of the central and eastern region, with variable (heavy in places) rainfall across the North Central region.
- Recent rainfall improved USDM conditions in Nebraska and northern Illinois.
- Crops remain in good to excellent condition across the region.
- Heat in the near term may lead to human/livestock stress and possible crop stress.



Current Conditions

Over the last seven days (7/10 – 7/16) parts of the region saw fairly active conditions leading to heavier rainfalls. A band from Nebraska to northern Illinois had several inches above average during this time. Other scattered areas were wetter. In contrast, isolated areas of eastern Kansas, southeast Minnesota and part of northern Illinois and Indiana were drier than average by a couple inches leading to percent of normal below 25% to zero precipitation. Overall, the Corn Belt was generally split on temperatures with most of the eastern half near to above average temperatures (+2-6 F was very common), while the Plains states into Iowa and Missouri were near to below average temperatures. Warmer than average temperatures are occurring close to the usually warmest time of the year.



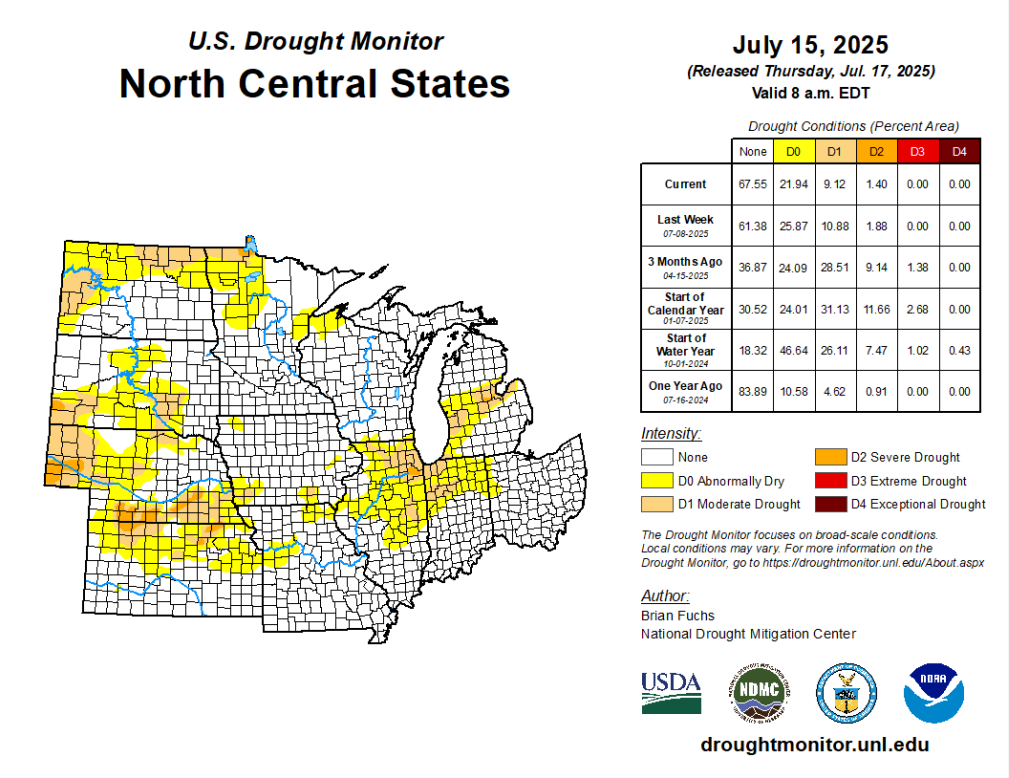
Images from High Plains Regional Climate Center (HPRCC), Online Data Services: ACIS Climate Maps. Generated: 07/17/2025.

Impacts

Drought

As of July 15th, 68% of the region is classified as no drought intensity, 22% as abnormally dry (D0), 9% as moderate

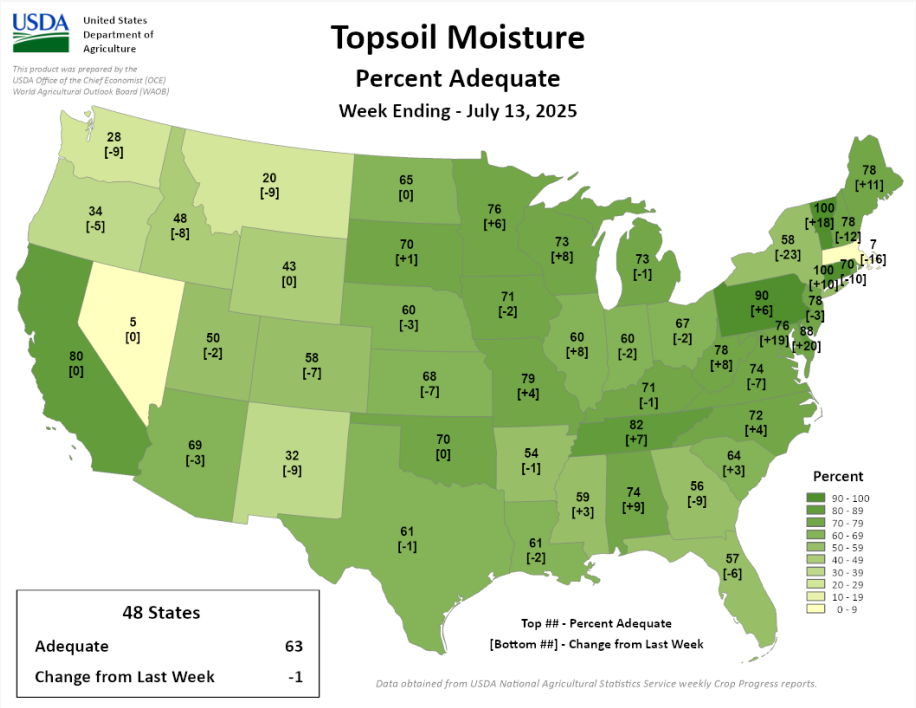
drought (D1), and 1% as severe drought (D2). With a band of heavy rainfall this week, U.S. drought monitor (USDM) conditions have generally improved across the region. Specifically, drought conditions improved by 1-class across Nebraska, eastern Iowa, northern Illinois, and northern Minnesota in comparison to last week. In contrast, drought conditions degraded by 1-class in small pockets of Indiana and Kansas over the course of the week.



As of the week ending July 13th, 60 to 79% of topsoil moisture is adequate across the region. Ohio has finally dried out, after earlier months of surplus soil moisture due to heavy spring rainfall. After recent rainfall, 23% of topsoil moisture in Iowa is in surplus, compared to 12% in Ohio. On the other hand, in North Dakota, Nebraska, Kansas, Illinois, and Indiana, 25% or more of topsoil moisture is short to very short. Currently, 53 to 79% of subsoil moisture is adequate across the region, with the Northern Plains, Illinois, and Indiana on the drier end of the range.

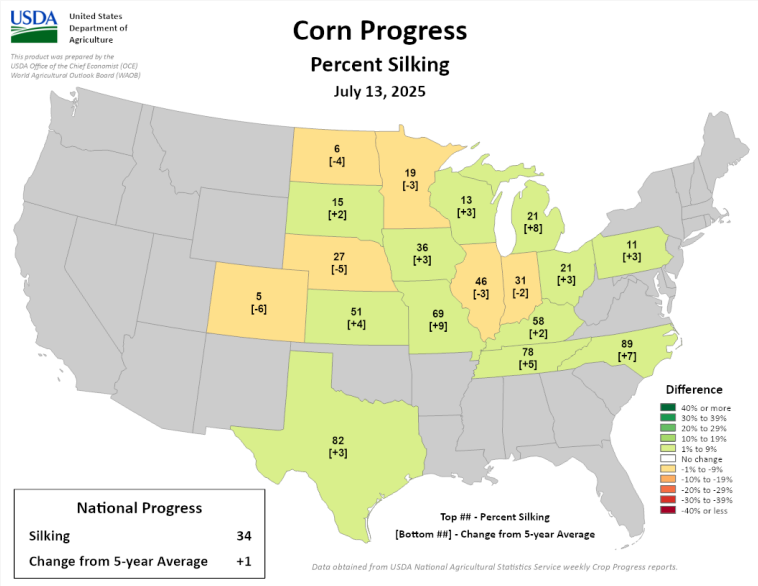
Soils, Crops and Livestock

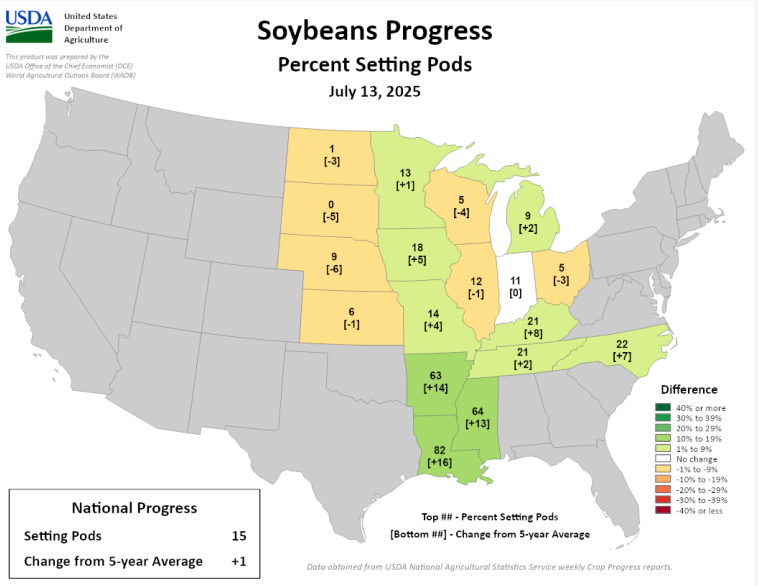
Warm temperatures and summer rainfall have promoted crop progress. Across the North Central region, 6 to 69% of corn is silking as of July 13th. Southern states in the region report that corn has reached the dough growth stage. In Missouri, 20% of corn is at the dough stage, 8% ahead of the 5-year average. Soybean blooming continues across the region, ranging from 38 to 54% blooming, with double digit increases for most states compared to last week. Additionally, zero to 18% of soybeans are setting pods across states in the region. Most of spring wheat has headed, ranging from 81 to 100%. While southern states in the region are in the final stages of winter wheat harvest, 10, 30, and 35% of winter wheat is harvested across South Dakota, Michigan, and Nebraska, respectively.

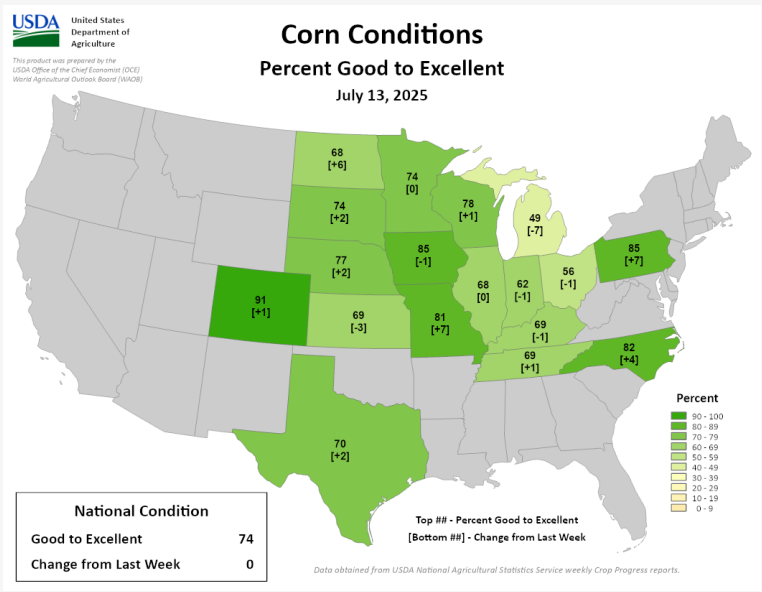


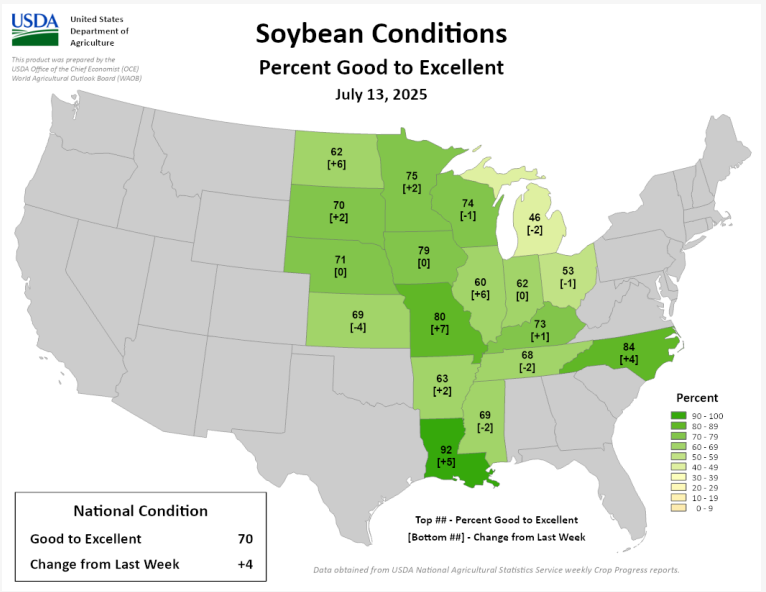
According to USDA-NASS, 49 to 85% of corn and 46 to 80% of soybeans are in good to excellent condition. Currently, Michigan sits at the low-end for crop quality, while Missouri and Iowa are on the upper end. Across the region, pasture and rangeland condi-

Maps generated by the National Drought Mitigation Center and the United States Department of Agriculture.









Maps generated by the United States Department of Agriculture.

tions range from 24 to 92% good to excellent. The poorest conditions remain across Nebraska, consistent with much of the earlier growing season.

Severe Weather

Active weather systems brought tornado, wind, and hail reports to the Midwest over the past week. Looking to the weekend, there is a slight to marginal risk for severe thunderstorms over portions of the region.

Fire

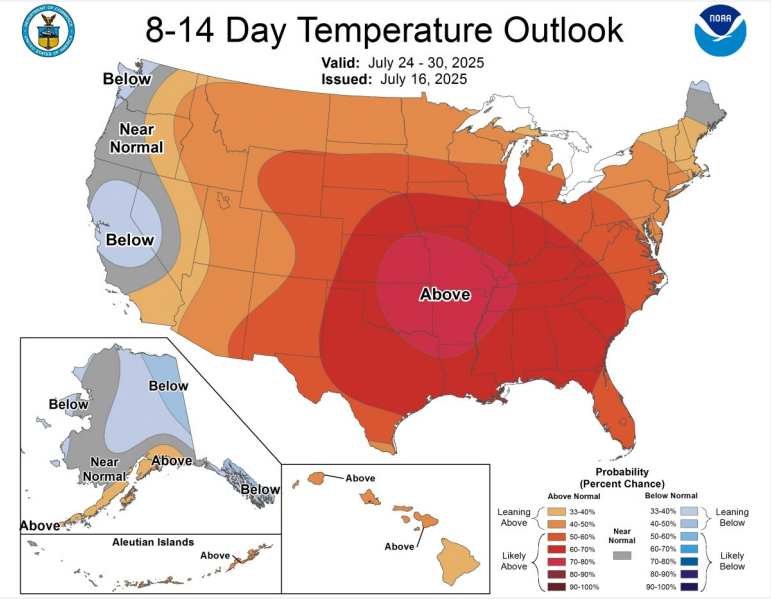
Over the most recent weekend (July 12-13th), wildfire smoke from Canada impacted air quality across the Upper Midwest. Over the weekend, air quality ranged from unhealthy to very unhealthy across portions of Wisconsin, Minnesota, Michigan, and North Dakota, forcing some to rethink their summertime outdoor activities. Looking forward, the North Central region is at little to low risk for fire potential over the next week.

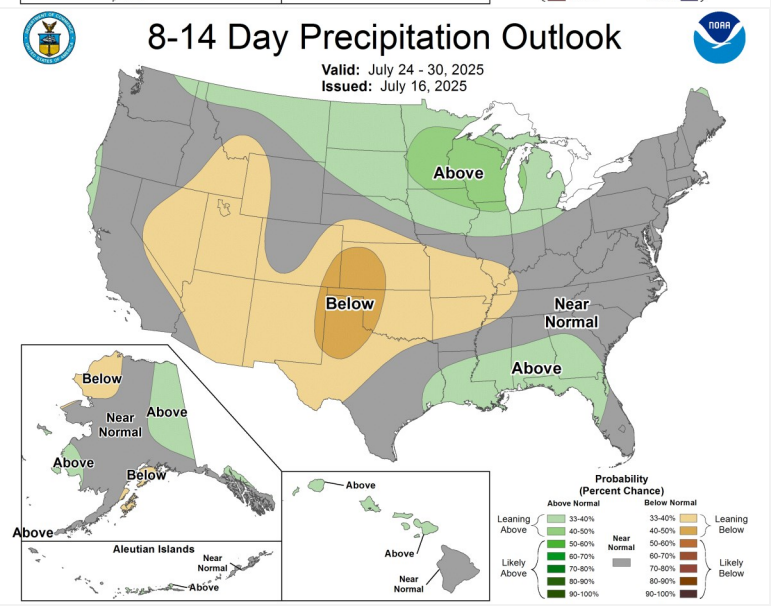
Outlook

In the week-2 outlook (last week of July) there is an increasing chance of very warm temperatures over most of the central US, potentially reaching dangerous levels for humans and livestock (when combined with likely high dew points). People should monitor this developing situation. In the last week of July northern areas see slightly better chances for precipitation, while farther south slightly below average chances exist.

The new seasonal outlooks from NOAA's Climate Prediction Center persist with slightly better chances for warmer conditions for August-October. As for precipitation, chances lean toward the dry side in the Plains, while the eastern Corn Belt has equal chances for below or above precipitation.

In the shorter term, the heat is the driving concern for mainly humans/livestock. Crops may start to experience some stress, though soil moisture conditions should mitigate some of the issues. If the heat persists and/or the region turns drier, crops could start to see some issues. Much of the corn crop will be past tasseling and into grain fill, mitigating some of the potential loss. How soybeans will be affected could vary. Drying may provide some benefit to soybeans in wetter areas. But if the heat persists for an extended period, there may be some potential smaller yield loss. In the longer term, the increased chances for dryness in the Plains could increase drought coverage already existing in the region.





Outlooks provided by the Weather Prediction Center and 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)

Midwest State Climatologists

High Plains Regional Climate Center (HPRCC)

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