Midwest Climate Hub
U.S. DEPARTMENT OF AGRICULTURE

# Midwest Ag-Focus Climate Outlook

May 22, 2025

## Main Points

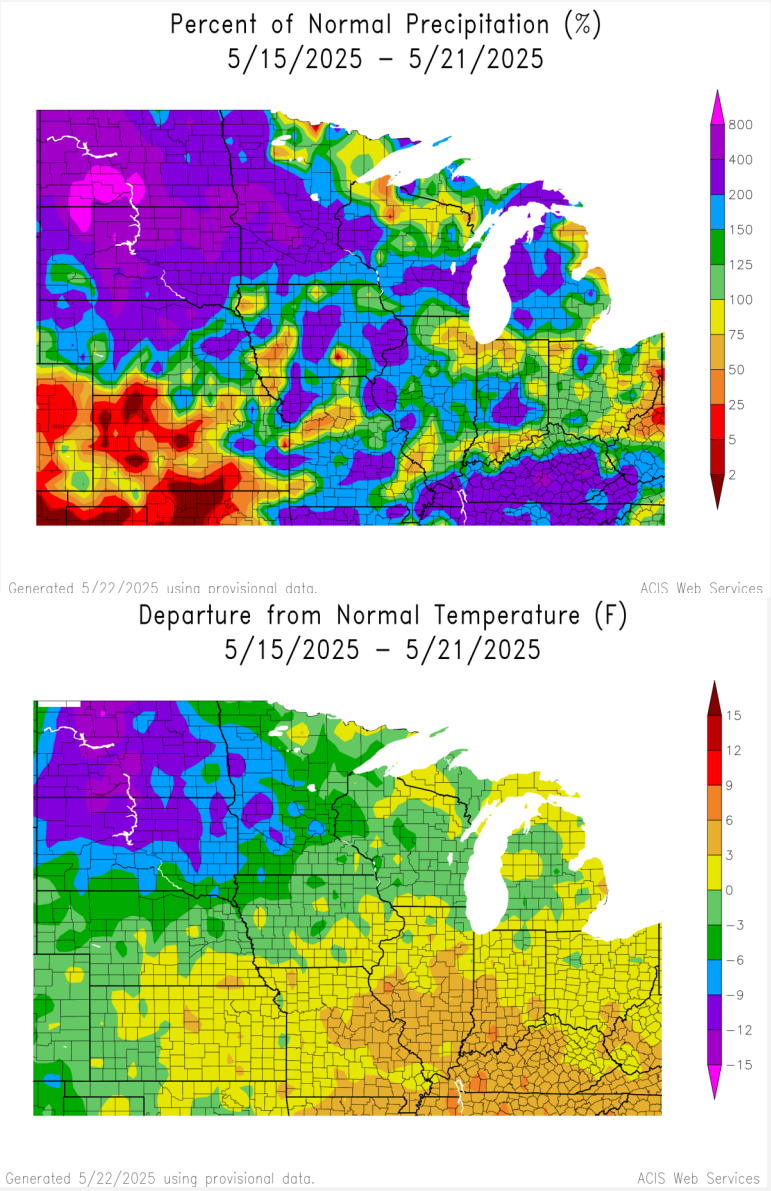
- Wetter across the region, especially in the northwest.
- A dust storm and deadly tornado outbreak impacted parts of the Midwest over the last week.
- Corn and soybean planting progress is ahead of the 5-year average, especially in the northwest corner of the region.

## Current Conditions

Much needed precipitation fell this past week (May 15th – May 21st) across the region with most locations receiving near normal precipitation of 1-3 inches. However, central to western Kansas missed out on precipitation, receiving less than 0.1 inches in most cases. Northeastern areas of the Corn Belt received less than 1 inch of precipitation in the past week. North and South Dakota on the other had received precipitation totals surpassing 6 inches, resulting in weekly precipitation that was 400% above normal through the Dakotas, Minnesota, and pockets of Nebraska. In the southeast portion of the region, Kentucky also received precipitation amounts exceeding 4 inches.

Temperatures in the Corn Belt ranged from the low 40°Fs in the northwest to the mid 70°Fs in the southeast. The northwest portion of the region experienced a 180-degree change from the previous week to this week. Temperatures were 6-9°F below average across the Dakotas and Minnesota, with large portions reaching 12°F below and a few pockets reaching 15°F below average temperatures for this time of the year. The southeastern portion of the Corn Belt experienced temperatures 3-6°F above normal, with pockets 6-9°F above normal. Some near-freezing conditions did occur across far northern areas.

Growing Degree Days (GDD) have continued to accumulate across the region, ranging from 200 GDD in the northeast to 750 GDD in the southern portions of the region. Western Minesota into the Dakotas, Iowa, Nebraska and



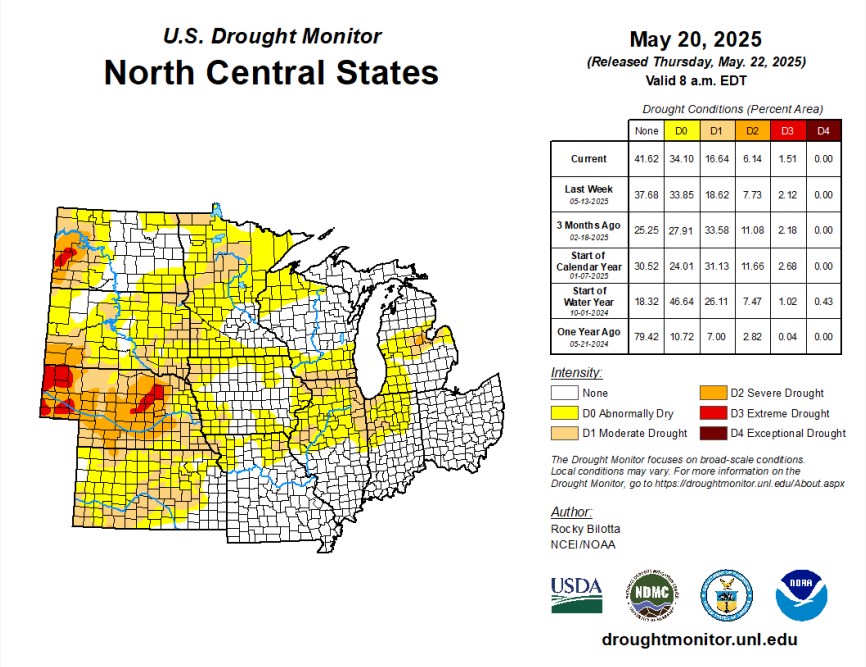

*Images from High Plains Regional Climate Center (HPRCC), Online Data Services: ACIS Climate Maps. Generated: 05/22/2025.*

Kentucky GDDs are greater than 60 GDD above normal for this time of the year. Elsewhere around the Midwest region, GDD are near to slightly above normal. Check out the Corn Growing Degree Day decision support tool to see an in-depth look at GDD for your corn crop's location.

# Impacts

## Drought

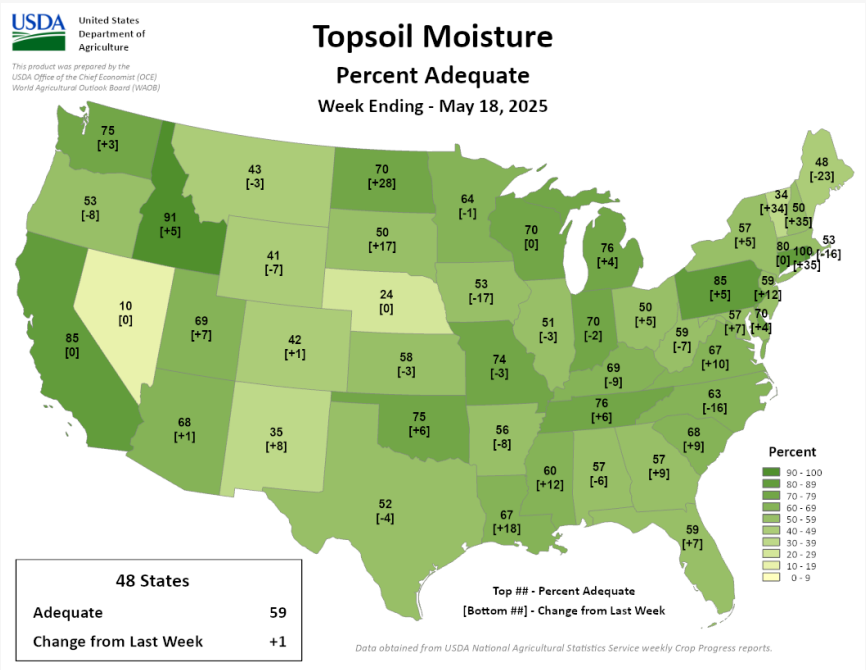
As of May 20th, 42% of the region is classified as no drought intensity, 34% as abnormally dry (D0), 17% as moderate drought (D1), 6% as severe drought (D2), and 2% as extreme drought (D3). In comparison to last week, drought conditions have improved by 1-class across a swath of the Dakotas, while pockets of northern Minnesota and eastern Illinois experienced a 1-class degradation.



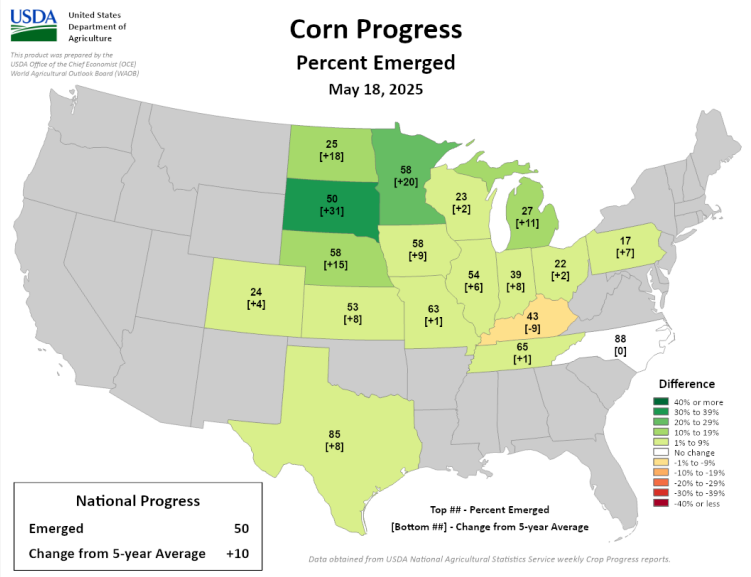

As of the week ending May 18th, recent rains have brought much needed moisture to the Dakotas, alleviating some soil moisture concerns. However, dry soil conditions persist across Nebraska, where 75% of topsoil and 81% of subsoil moisture is short to very short according to USDA-NASS. Across the rest of the region, the majority (50-76%) of topsoil moisture is adequate. Similar to last week, wet conditions remain across Ohio where 50% of topsoil moisture is considered surplus.

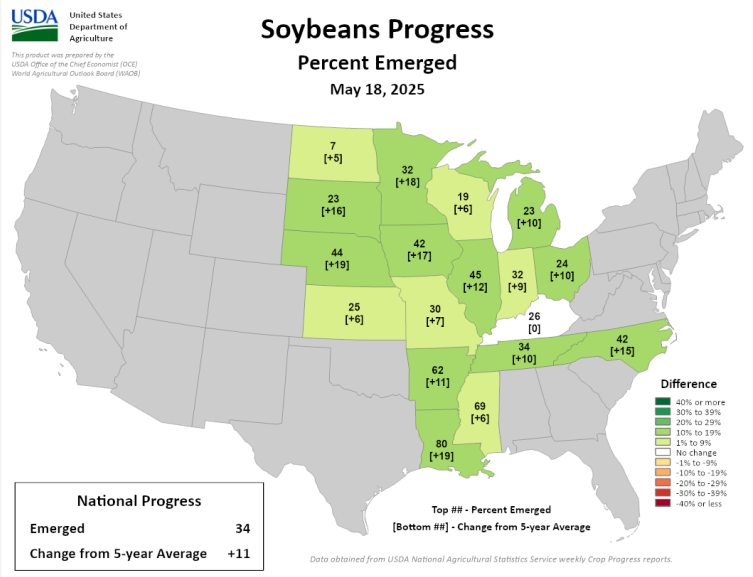
## Soils, Crops and Livestock

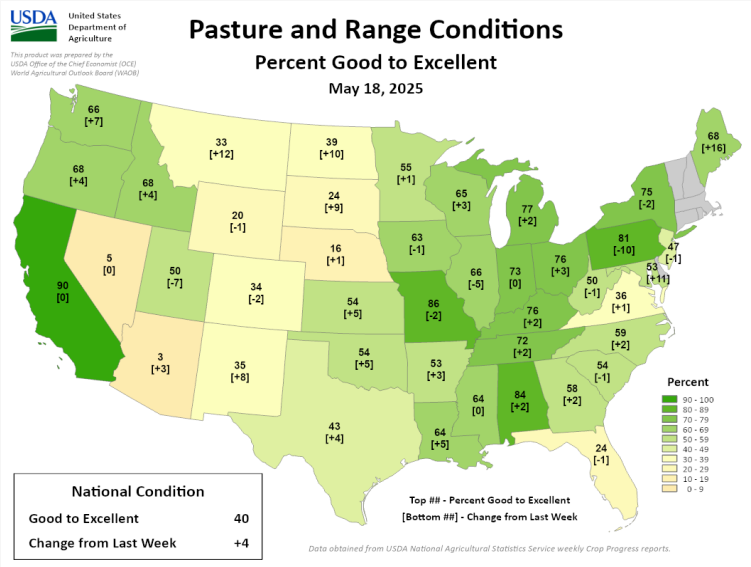
As of May 18th, the majority of corn is planted across the region (78% nationwide), tracking above the 5-year average for planting progress. In particular, the Dakotas are tracking well above the 5-year average, with corn planting progress 19-35% above normal. Notable exceptions include Ohio, where only 34% of corn has been planted due to wet field conditions. Roughly 22-63% of corn has emerged across the region by state, with Missouri leading the way. In terms of soybeans, 40-84% have been planted across the region. Soybean planting progress is 1-28% above the 5-year average, with the northwest portion of the region falling on the upper end of the range. At least 70% of spring wheat and oats have been planted across the region, and 83-86% of oats have emerged across Iowa, Nebraska, and South Dakota. Recent rainfall over the last week improved winter wheat conditions, decreasing the amount of winter wheat in poor to




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




very poor condition.

Despite improvements in soil moisture across portions of the Plains over the past week, pasture and rangeland conditions continue to struggle. The Dakotas report 23-26% of pasture and range in poor to very poor conditions, and in Nebraska, where rainfall is especially needed, 48% of pasture and range are in poor to very poor shape. Consistent with last week, the central and eastern portions of the region show 55-86% of pasture and range in good to excellent condition.

## Severe Weather

On May 16th a severe weather system resulted in a tornado outbreak across portions of Missouri, Illinois, and Kentucky, including an EF3 tornado that traveled through the Greater St. Louis area. The tornados left a path of destruction in their wake, and more than 27 fatalities have been reported across Kentucky and Missouri. In the days following, an additional tornado outbreak occurred across the Plains, causing extensive damage in portions of the region.

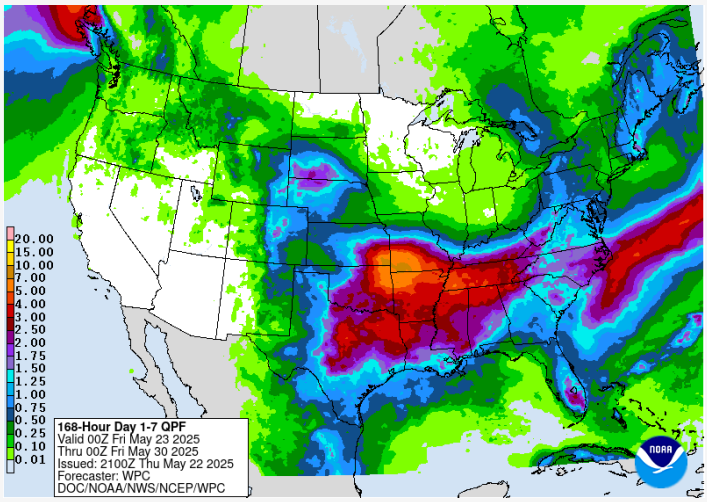
Also on May 16th, a dust storm impacted portions of central and east-central Illinois, including the Chicago area. The dust storm developed due to strong winds brought on by a severe thunderstorm system moving through the area, paired with bare, dry soil across farms in central Illinois. According to the National Weather Service (NWS), the last time a dust storm of this size and severity impacted Chicago was during the 1930s Dust Bowl.

## Fire

According to the National Interagency Fire Center, there is little or no risk for significant fire potential for most of the region over the next week. Currently, northern Minnesota is classified as low risk, and as the week progresses, Wisconsin, Iowa, and northern Missouri are also considered low risk for fire potential. In northeastern Minnesota, firefighters continue to battle multiple wildfires but have made progress on containment.

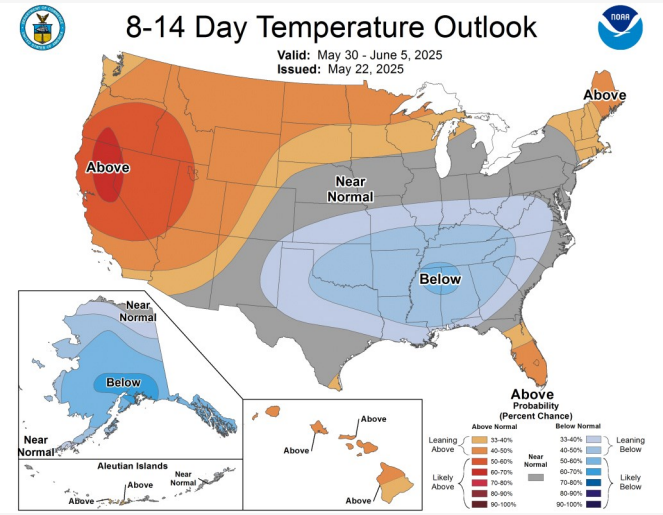
*Maps generated by the United States Department of Agriculture.*

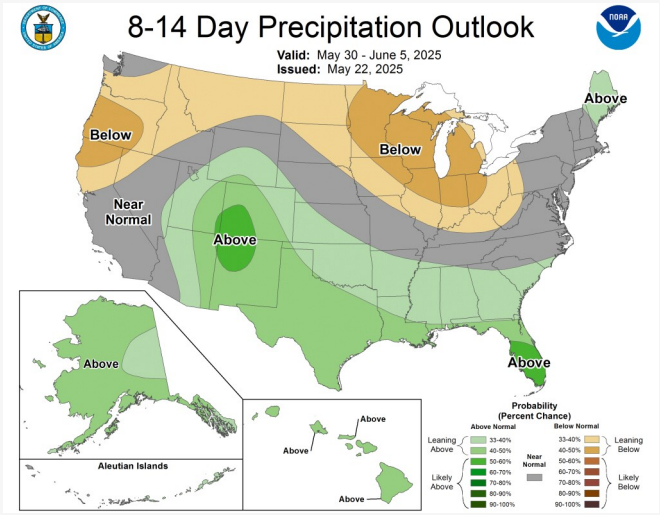
# Outlook




Over the next seven days the northern portion of the region is forecasted to receive minimal to no precipitation. However forecasted precipitation is greater than 1 inch from South Dakota through Kansas over Missouri into Kentucky. Southwestern Missouri has the highest forecasted total precipitation nearing 4-5 inches.

Looking a little further out to the 8-14 day temperature and precipitation outlooks from the Climate Prediction Center. The temperature outlook shows that the northern half of the Corn Belt region from Kansas to Wisconsin is leaning to experience above normal temperatures with Western Nebraska, the Dakotas, Minnesota, and northern Wisconsin likely to experience above normal temperatures. Southern Missouri into Kentucky lean toward below normal temperatures with the rest of the region likely to experience near normal temperatures. The precipitation outlook has the northern half of the region leaning toward below normal precipitation. Nebraska, Kansas and Missouri are likely to experience near normal precipitation.




*Outlooks provided by the Weather Prediction Center and 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)

Midwest State Climatologists

High Plains Regional Climate Center (HPRCC)

## For More Information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