Midwest Ag-Focus Climate Outlook

May 16, 2025

Main Points

- Dry and warm conditions persisted in the Dakotas and Minnesota this past week.
- Northern Minnesota is currently battling 3 wildfires, covering over 30,000 acres as of Friday AM.
- Optimal planting conditions this week allowed for continued planting progress across the western portion of the region.
- Precipitation forecasted for much of the region may relieve some dryness concerns.

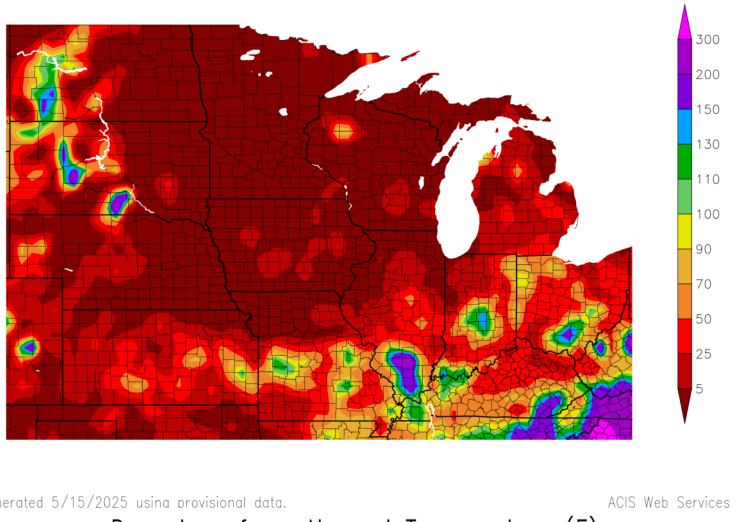
Current Conditions

The past week (May 8th-May 14th) has been dry across the Midwest, with minimal precipitation (0.1 inch, less than 5% of normal precipitation) received in much of the region. However, the western Dakotas received between 0.25 inch and 1 inch of much needed precipitation. The southeast portion of the region spanning from Indiana through eastern Kansas, Kentucky, and Ohio also received over 0.5 inch with pockets in southern Illinois receiving over 2.5 inches of precipitation.

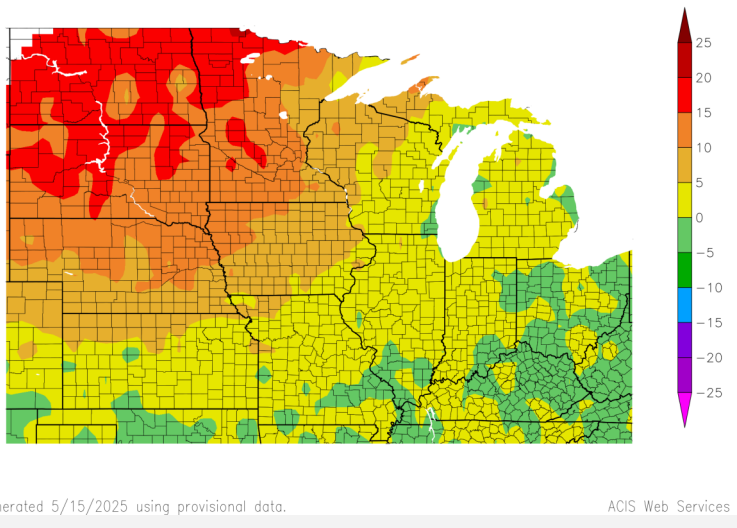
Temperatures ranged from the low 50°Fs in the northeastern portions to the low 70°Fs in the northwestern portion. The rest of the region extending from the northwest to the southeast remained in the 60°Fs. Going back to the northwest portion, the Dakotas and northern Minnesota were 15 -20°F warmer than normal with individual daily highs reaching the 90°Fs. A pocket in northern Minnesota recorded temperatures 20°F above normal. Portions of northern Nebraska, Iowa and Wisconsin were 10-15°F above normal, with other swaths ranging 5-10°F above normal. The rest of the region's temperatures were closer to average.

Growing Degree Days (GDD) ranged from 150 GDD around the Great Lakes to 500 GDD in the southern portions of the region, having accumulated since April 1st. Warm weather in the Dakotas and Minnesota has resulted in GDDs that are 120-140 GDD above normal GDD accumulation for this

Percent of Normal Precipitation (%)
5/8/2025 – 5/14/2025



Departure from Normal Temperature (F)
5/8/2025 – 5/14/2025



Images from High Plains Regional Climate Center (HPRCC), Online Data Services: ACIS Climate Maps. Generated: 05/15/2025.

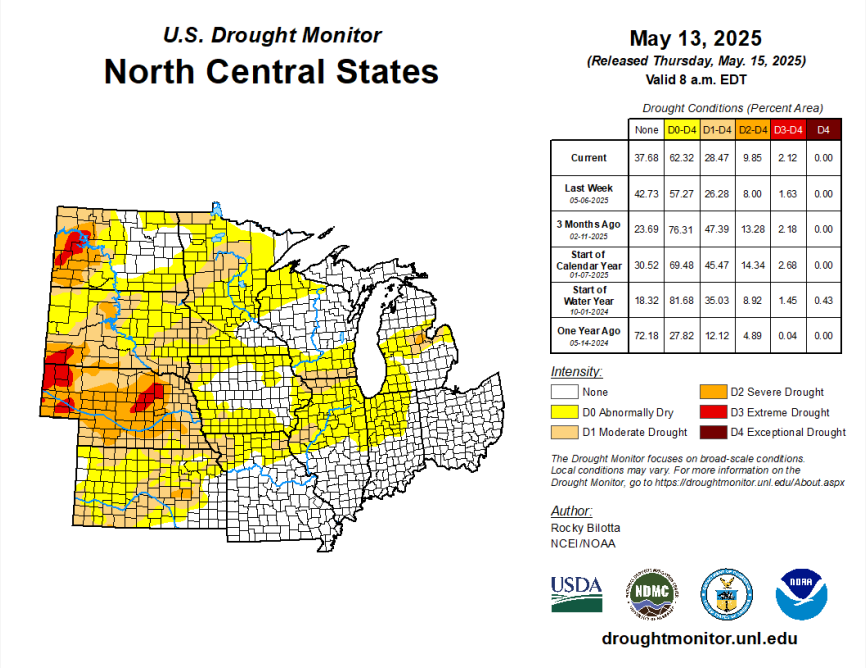
point in the year. Elsewhere in the Midwest is near to slightly ahead of average GDD accumulation. The Corn Growing Degree Day decision support tool provides a point location look at GDD accumulation from a desired start date to maturity.

Impacts

Drought

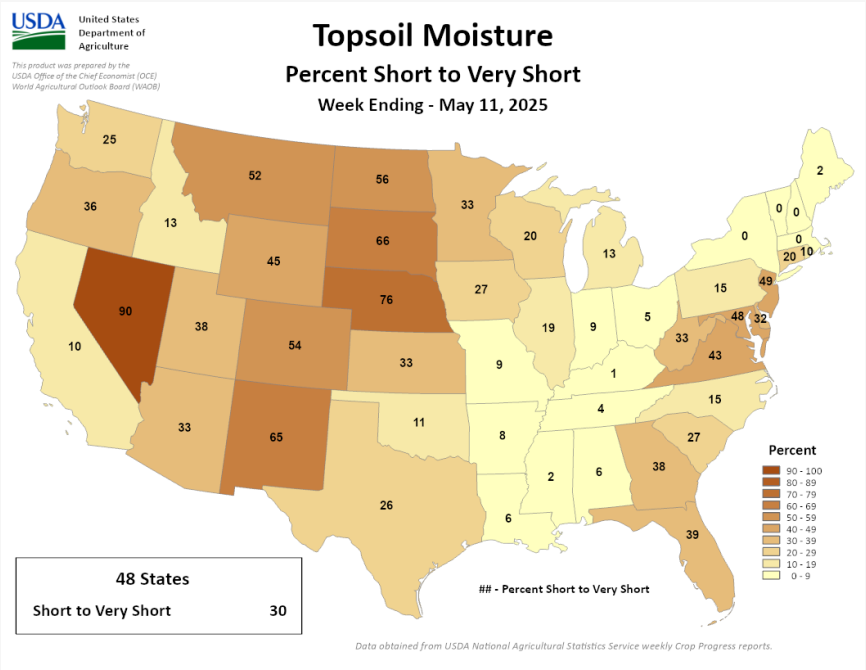
In comparison to last week, drought conditions have degraded by 1-class in pockets across the central portion of the region. This week, 38% of the region is classified as no intensity, 34% as abnormally dry (D0), 19% as moderate drought (D1), 8% as severe drought (D2), and 2% as extreme drought (D3), an increase in drought conditions from last week.

Over the past week, we've seen an increase in the percentage of topsoil moisture classified as short to very short across the region. As of the week ending May 11th, the Plains continue to feel the impact of lack of precipitation – with 56-76% of topsoil moisture in short to very short supply from North Dakota through Nebraska. On the other hand, 50% of topsoil moisture in Ohio is in surplus. That being said, topsoil moisture conditions are adequate across most of the Midwest – ranging from 54-77%.

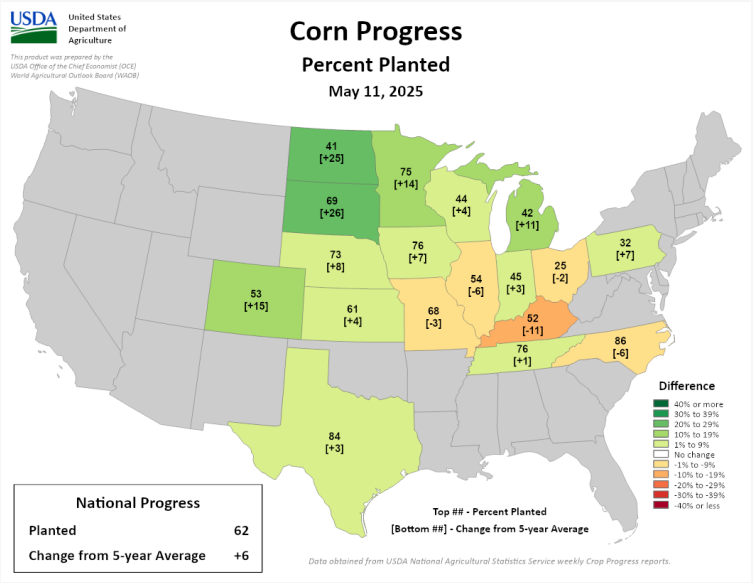


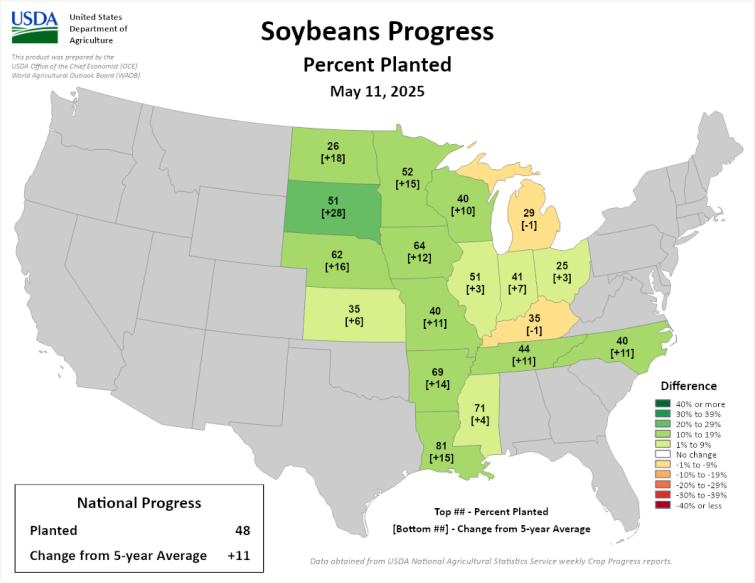
Soils, Crops and Livestock

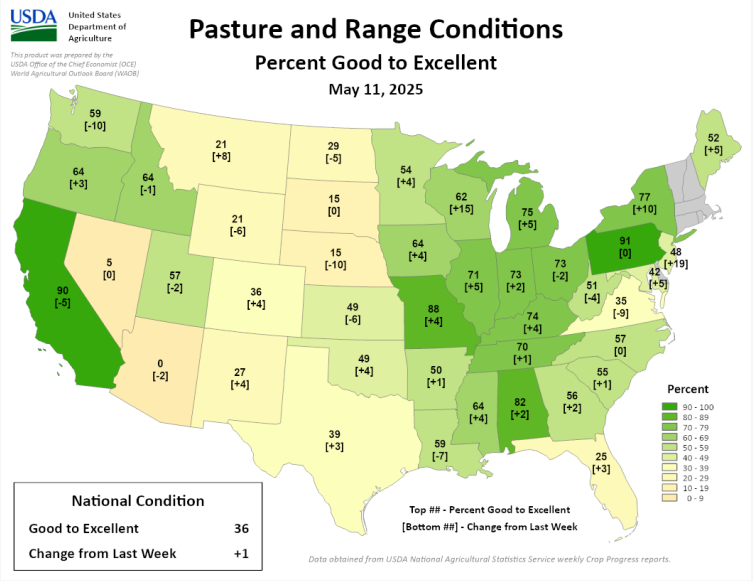
Planting progress has picked up, and those in the western portion of the region experienced an optimal planting window, with 6 days suitable for fieldwork over the last week. Given last week's favorable planting conditions, most states in the western portion of the region are reporting 60% or more of corn planted. Corn planting and emergence is slightly behind the 5-year average in Illinois, Missouri, Kentucky, and Ohio due to ongoing wet conditions. Soybean progress is slightly behind corn but still ahead of the 5-year average, with 25-64% planted across the region. Oats are almost completely planted in parts of the region; Iowa reports 97% of oats planted, followed by 94% in South Dakota, and 93% in Nebraska. Less than a third of winter wheat crop in South



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







Dakota and Nebraska are in good to excellent condition, due to ongoing dry conditions.

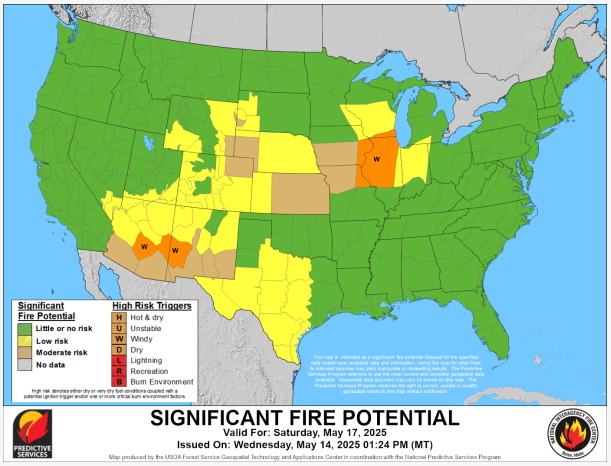
Pasture and rangeland conditions vary considerably across the region, highlighting the influence of spring rainfall haves and haves not. As the Plains continue to struggle with drought, pasture conditions are feeling the impact – with 52% of pasture and range classified as poor to very poor in Nebraska. In contrast, spring rainfall has left the majority (54-88%) of pasture and rangeland in good to excellent conditions for those in the central and eastern portion of the region.

Severe Weather

Unseasonably warm temperatures and a moist airmass paired with a cold front brought severe weather to parts of Minnesota and northern Great Lakes States on Thursday, including wind, hail, and tornadoes. Western and central Wisconsin were hit particularly hard, and severe damage has been reported. Earlier in the week, large hail and high winds were reported across portions of the Plains as strong thunderstorms moved through the region. The threat for severe weather is expected to continue in the coming days, with a severe thunderstorm outbreak expected in the Ohio and Mississippi Valleys tonight and a threat for severe storms in the Plains and Midwest later in the weekend into next week.

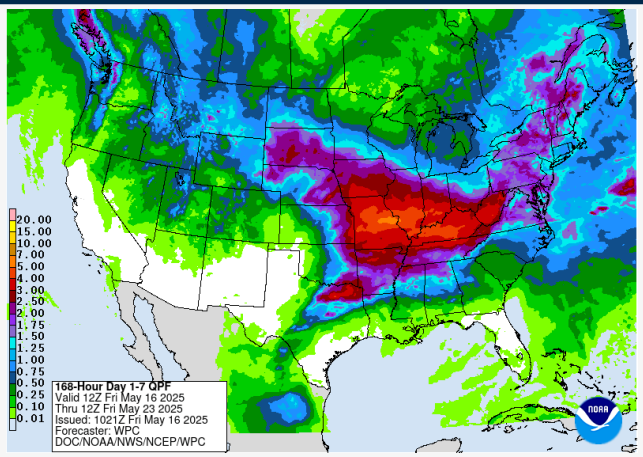
Fire

Northeastern Minnesota is currently battling three wildfires. According to the National Interagency Fire Center, as of Friday morning, the fires cover 32,000 acres and are 0% contained. Looking over the next few days, the lower Plains, portions of Minnesota, Iowa, Missouri and Illinois have a low to moderate risk for fire potential, while the rest of the region has little to no risk. Persistent windy conditions in the central portions of the region could serve as a trigger for out-of-control fires.



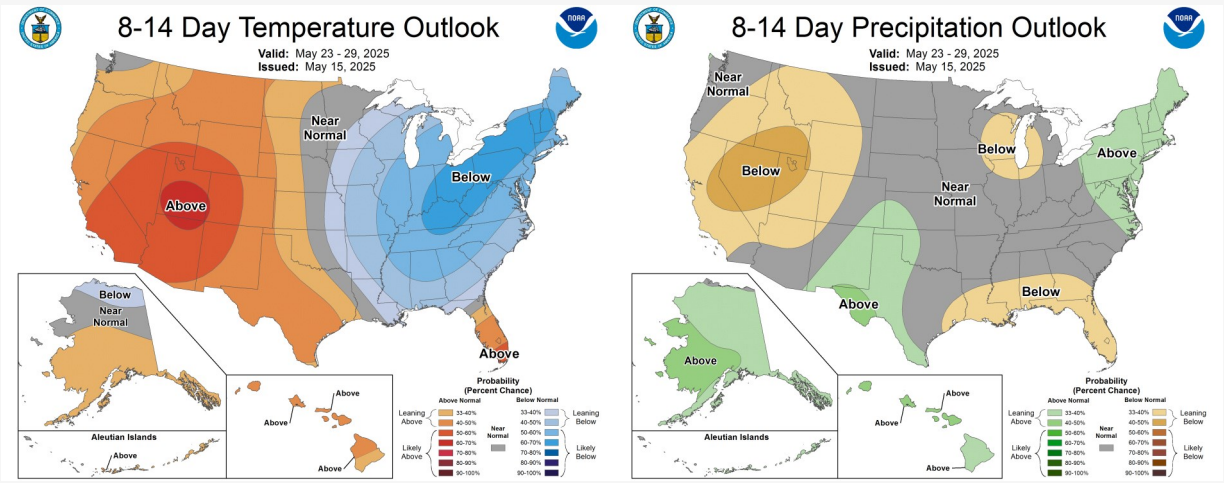
Maps generated by the United States Department of Agriculture and the National Interagency Fire Center.

Outlook



Lows in the 30s with some sub-freezing temperatures closer to the Canadian border are possible through May 19. The forecasted precipitation over the next seven days could have many of the areas struggling for moisture receiving over 1 inch. Much of the region, stretching from the northwest to the southeast, is forecasted to receive 3-4 inches of rainfall. States in the southeastern portion of the region could see up to 5-7 inches in some locations. These amounts are based on model consensus and will vary depending on storm tracks.

The 8-14 day temperature outlook from the Climate Prediction Center has the far western portions of our region leaning toward experiencing above average temperatures. A near normal expected temperature swath extends from Minnesota to central Kansas. Temperatures are leaning toward below average temperatures for Wisconsin, Iowa, Missouri. The eastern states of our region are likely to experience below average temperatures. Precipitation in the next 8-14 days is expected to be near normal for nearly everywhere, with a few exceptions. Specifically, southwestern Kansas is leaning toward above normal precipitation and the region surrounding Lake Michigan is leaning toward below 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)

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