

Midwest Ag-Focus Climate Outlook

Main Points

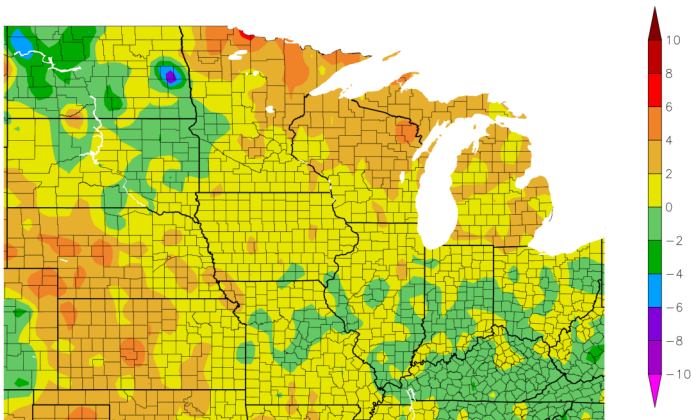


- ◆ Warmer- and wetter-than-normal conditions persisted across much of the region.
- ◆ Dry soils persist in some areas.
- ◆ Much of the region has equal chances of above- or below-normal conditions for temperature and precipitation in the next few months.
- ◆ La Niña development is still pending and influences the longer-range outlooks.



Current Conditions

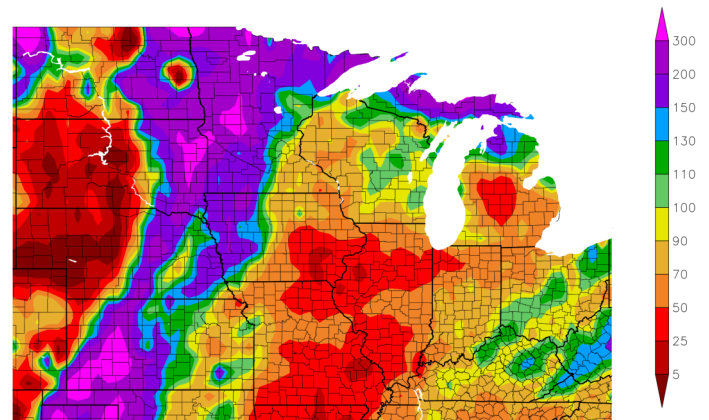
Departure from Normal Temperature (F)
11/12/2024 – 12/11/2024



Generated 12/12/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
11/12/2024 – 12/11/2024



Generated 12/12/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Over the past 30 days, much of the region has seen large contrasts in precipitation with a few areas receiving above average precipitation, while outside these areas dryness has been worsening. A band from Kansas to Minnesota has 2 to 3 times its average precipitation (actual amounts of 2 to 3 inches). Parts of the eastern Corn Belt were slightly above average. Lake effect snow areas were starting to kick in (as was expected with warmer-than-average lake temperatures). Outside these areas, precipitation amounts were much lower—less than 1 inch. This led to several areas receiving 50% or less of their average precipitation.

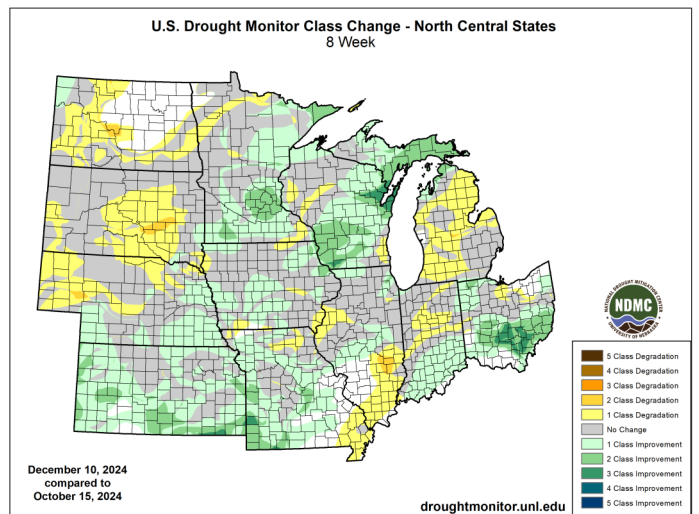
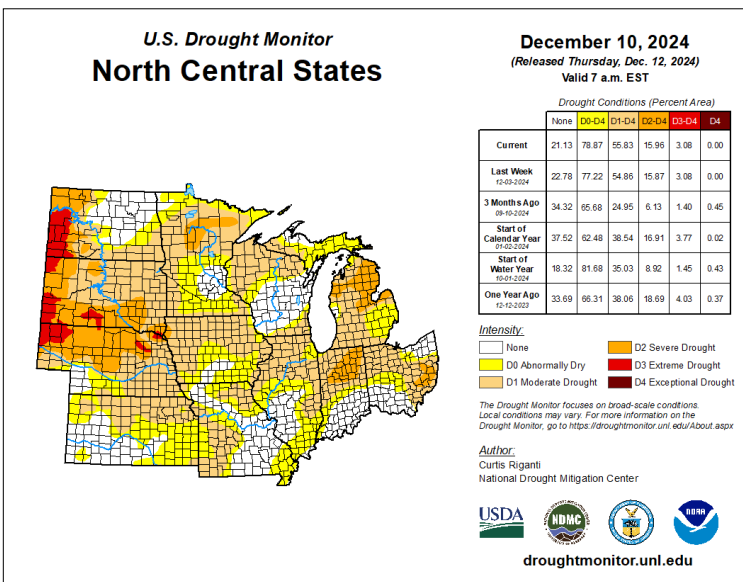
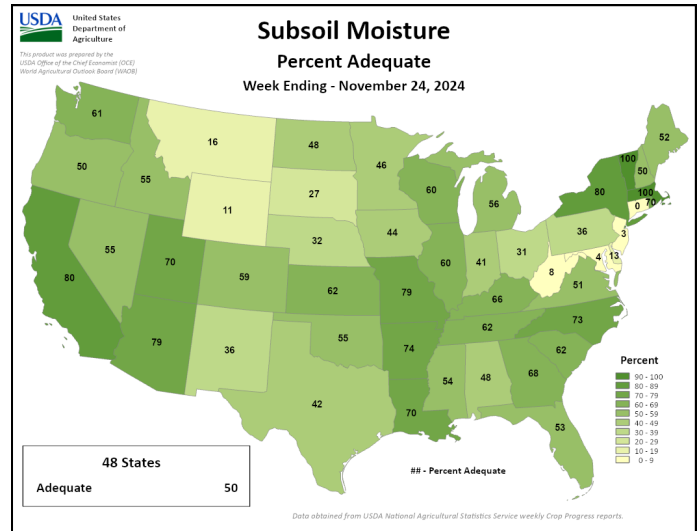
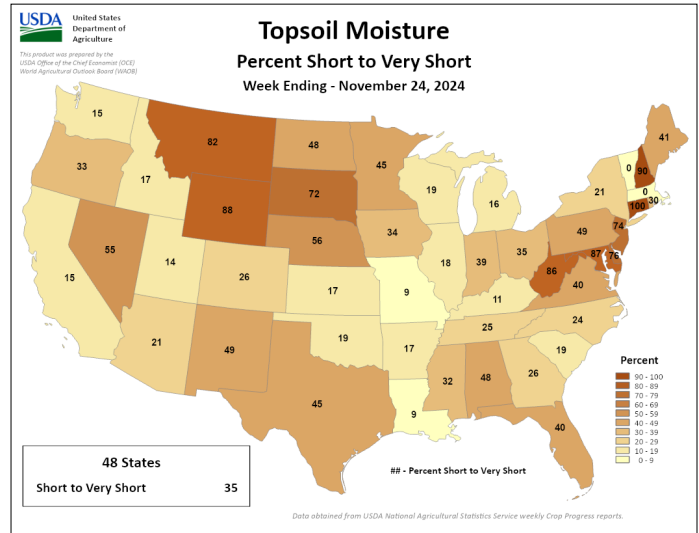
The past 30 days have been a mixed bag in terms of temperature. Much of the Plains and Great Lakes areas have been warmer than average by as much as 4°F. A swath from the Dakotas to the Ohio Valley has been closer to average and slightly below average temperatures.

Images from High Plains Regional Climate Center (HPRCC), Online Data Services: [ACIS Climate Maps](https://www.climatehubs.usda.gov/hubs/midwest). Generated: 12/12/2024.



Impacts

Precipitation over the past month has improved dry soil moisture conditions to some extent across the region. The U.S. Drought Monitor shows 1 to 2 drought class improvements in Minnesota through Kansas over the last four weeks. However, soil moisture levels in the Plains, Michigan, and eastern Ohio remain low and have resulted in pockets of drought degradation. Over 67% of the subsoil moisture levels in South Dakota, Nebraska, and Ohio are short to very short. In most North Central states, the percentage of topsoil moisture levels that are short to very short are generally lower than the percentage of subsurface soil moisture levels. The most recent precipitation has not had a chance to replenish soil moisture levels fully in the soil column and drought remains through much of the area. During November, corn and soybean harvest was completed across the region. Cooler soil temperatures have encouraged fall nitrogen application. Dry conditions prevented the planting and later emergence of plated winter wheat and cover crops in some of the drier areas of the region. The onset of cold pushed soil temperatures below freezing with frost depths going over 8" very quickly in some of the dry soil areas of the northern Plains.

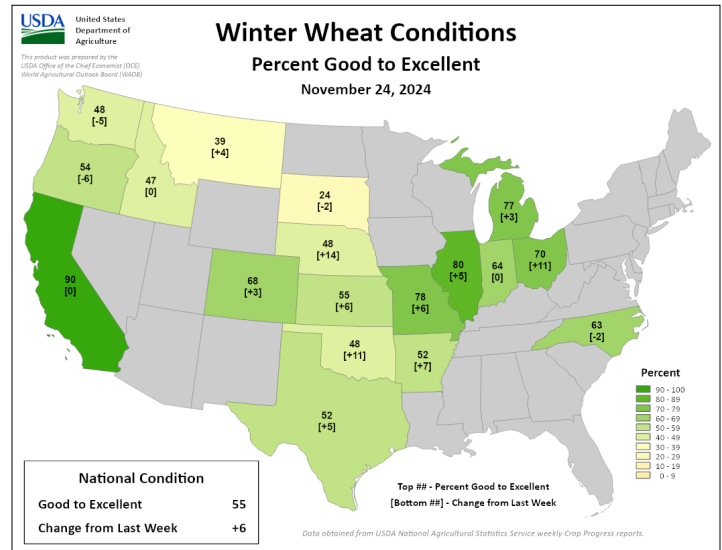


Maps Generated by the United States Department of Agriculture and the National Drought Mitigation Center.

Outlook

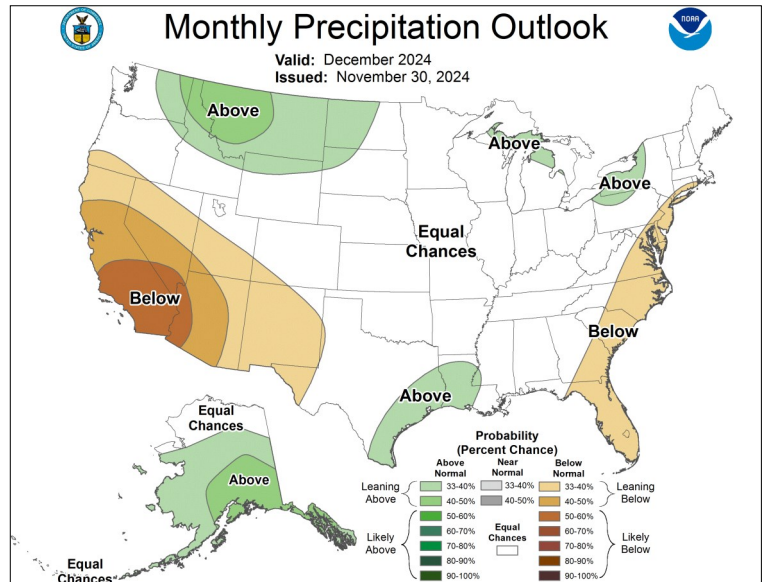
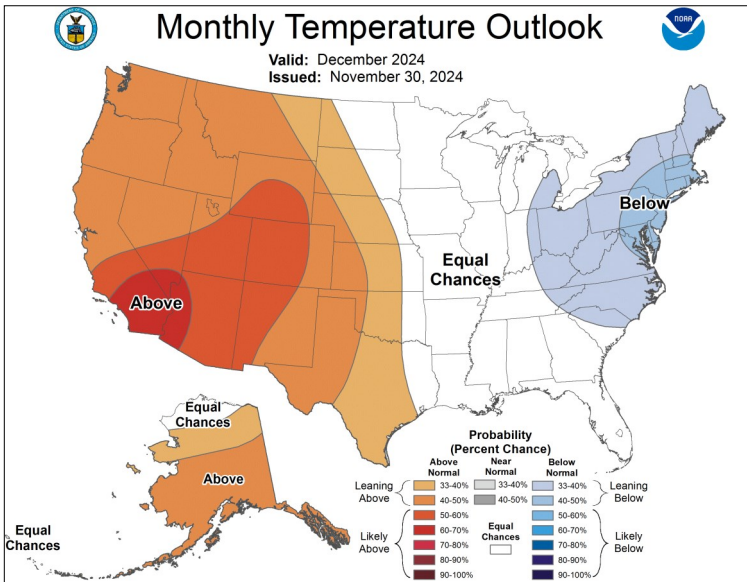


Precipitation for December has equal chances of being above or below normal for much of the region, with the exception of northern Michigan and the western Dakotas, which are leaning towards above-normal precipitation. Similarly, the central portion of the region has equal chances of temperatures trending above or below normal. The western portions of the region are leaning towards above-normal temperatures, while the eastern portions of Michigan, Indiana, and Kentucky are leaning towards below-normal temperatures.

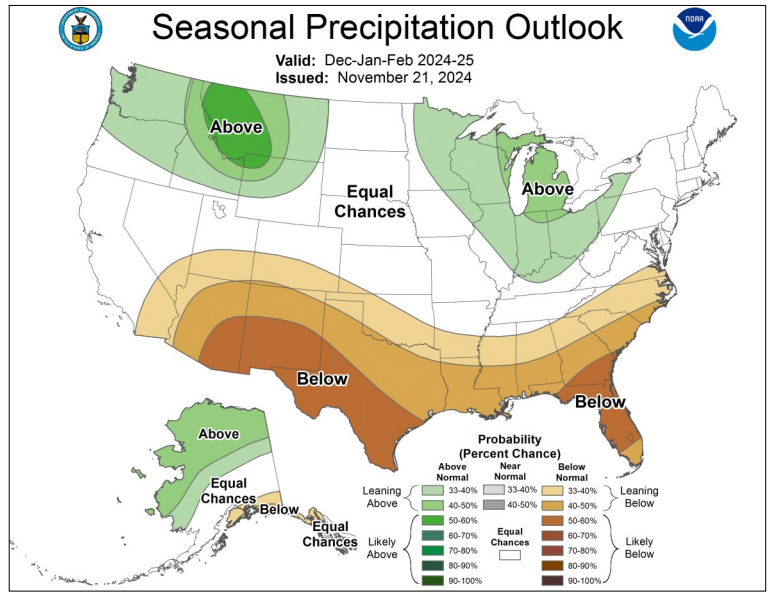
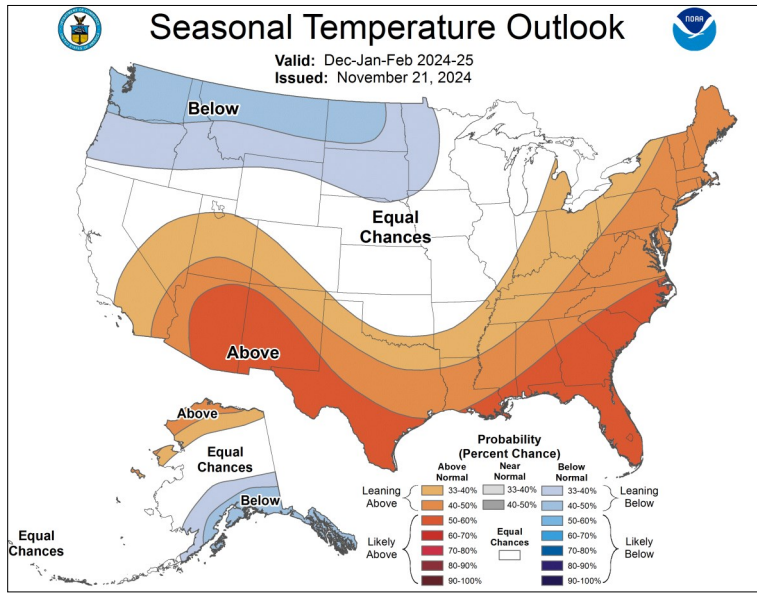


The seasonal outlooks show similar trends (see next page), with much of the region experiencing equal chances of above- and below-normal temperatures; however, Minnesota and the Dakotas are leaning towards below-normal temperatures. Michigan through Indiana and the eastern parts of the Midwest are leaning towards above-normal temperatures. The seasonal precipitation outlook also shows equal chances of above- or below-normal precipitation, except for Minnesota through Indiana, which are leaning towards above-normal precipitation through February.

The seasonal outlooks are connected to possible La Niña conditions. The most recent NOAA Climate Prediction Center outlooks still lean towards La Niña development into the winter, though these outlooks have again weakened the chances and possible strength.



Outlooks provided by the [Climate Prediction Center](https://www.cpc.ncep.noaa.gov/).



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Partners and Contributors



- [United States Department of Agriculture \(USDA\)](https://www.usda.gov/)
- [National Oceanic and Atmospheric Administration \(NOAA\)](https://www.noaa.gov/)
- [Climate Prediction Center \(CPC\)](https://www.cpc.ncep.noaa.gov/)
- [National Weather Service \(NWS\)](https://www.weather.gov/)
- [National Center for Environmental Information \(NCEI\)](https://www.ncei.noaa.gov/)

- [National Drought Mitigation Center \(NDMC\)](https://www.ndmc.gov/)
- [National Integrated Drought Information System \(NIDIS\)](https://www.nidis.gov/)
- [Midwestern Regional Climate Center \(MRCC\)](https://www.mrcc.org/)
- [Midwest State Climatologists](#)
- [High Plains Regional Climate Center \(HPRCC\)](https://www.hprcc.org/)



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For more information, please visit:
<https://www.climatehubs.usda.gov/hubs/midwest>