Drought Information Statement for Central and Southern Minnesota and Western Wisconsin

Valid October, 31, 2024

Issued By: NWS Twin Cities / Chanhassen, MN

Contact Information:

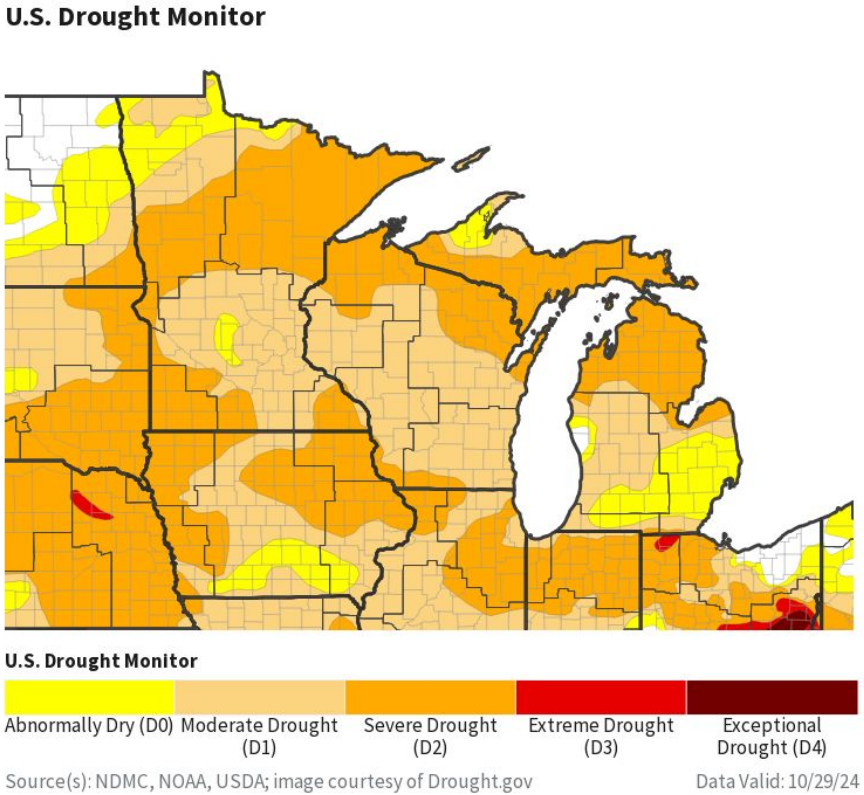
- This product will be updated November 14, 2024 or sooner if drought conditions change significantly.
- Please see all currently available products at https://drought.gov/drought-information-statements.
- Please visit https://www.weather.gov/MPX/DroughtInformationStatement for previous statements.
- Please visit https://www.drought.gov/drought-status-updates/ for regional drought status updates.

- Drought continues to deepen
- Halloween rain and snow will be accounted for in the drought monitor issued on November 7th, they were not a part of this drought monitor update

U.S. Drought Monitor

Link to the latest U.S. Drought Monitor

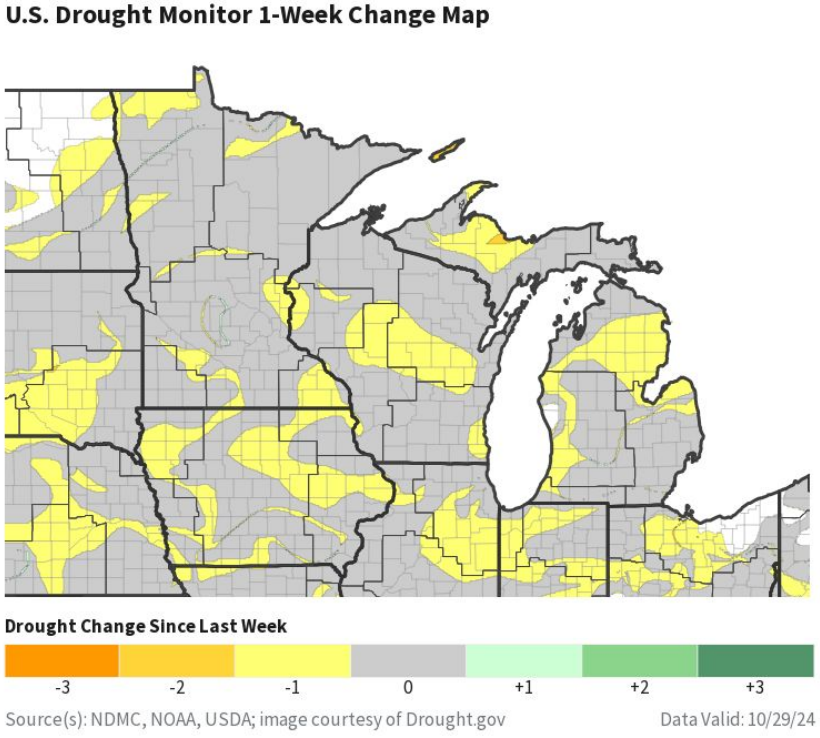
- Drought intensity and Extent
  - **D2 (Severe Drought)**: parts of central and southwest Minnesota and northwest Wisconsin
  - **D1 (Moderate Drought)**: Most of central and southern Minnesota and western Wisconsin not in D2 conditions
  - **D0: (Abnormally Dry)**: A small islands in central Minnesota

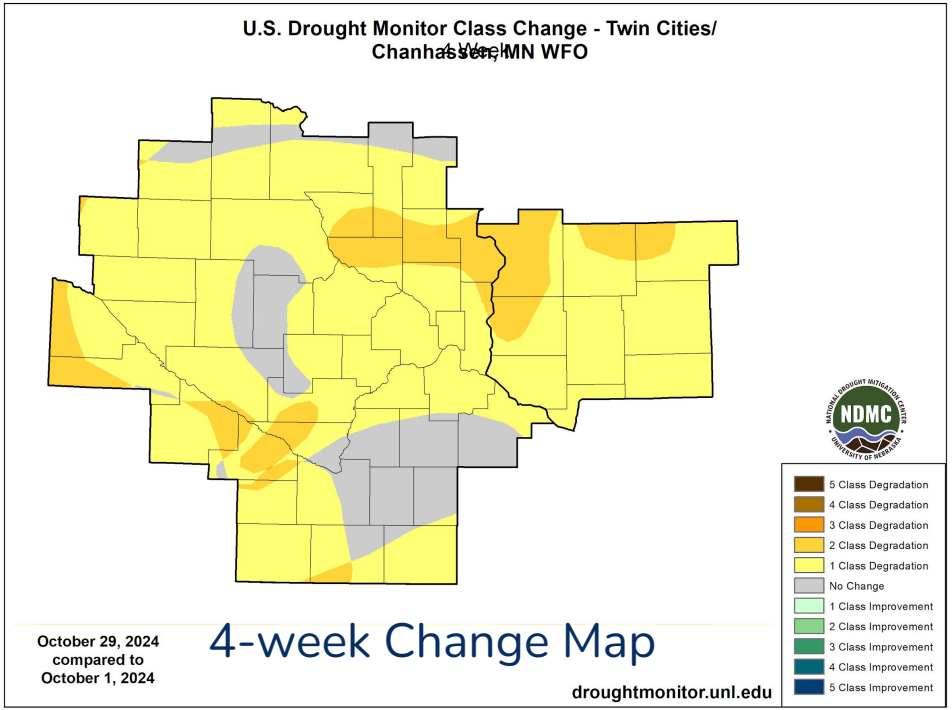


Recent Change in Drought Intensity

Link to the latest 1-week change map and 4-week change map for the NWS Twin Cities Region

- Little rain since the end of August has allowed for the rapid expansion of drought conditions over the last month

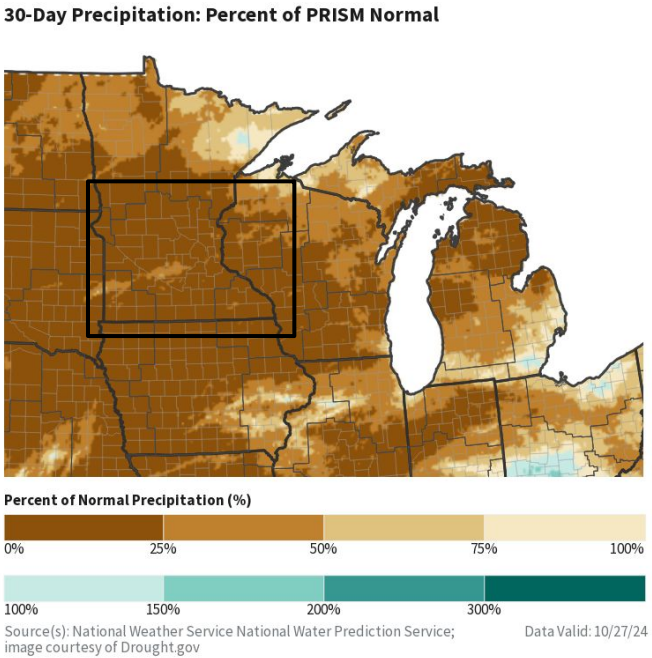


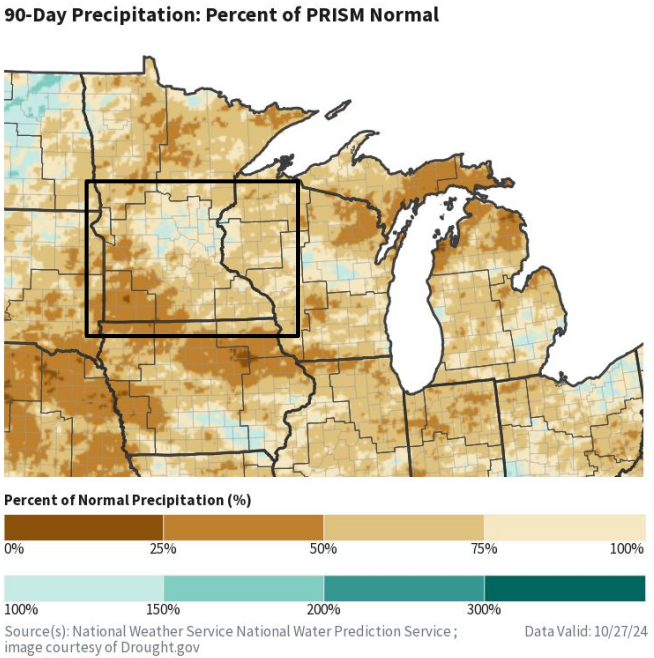


Precipitation Departures

1-month and 3-month percent of normal precipitation

- Significant rainfall deficits remain for the previous 30 days, NOT including October 31st.
- This current dry streak goes back about 6 weeks (early September), with most of the dry signal in the last 90 days coming in second half of the period

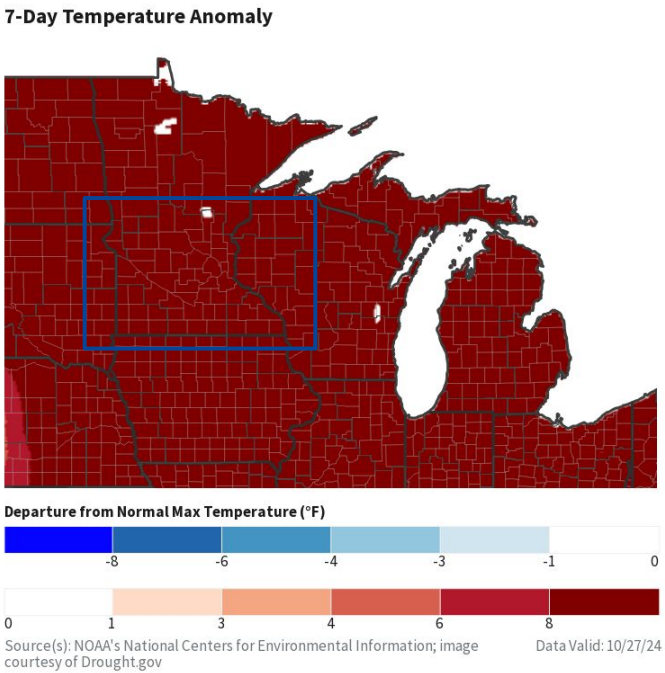


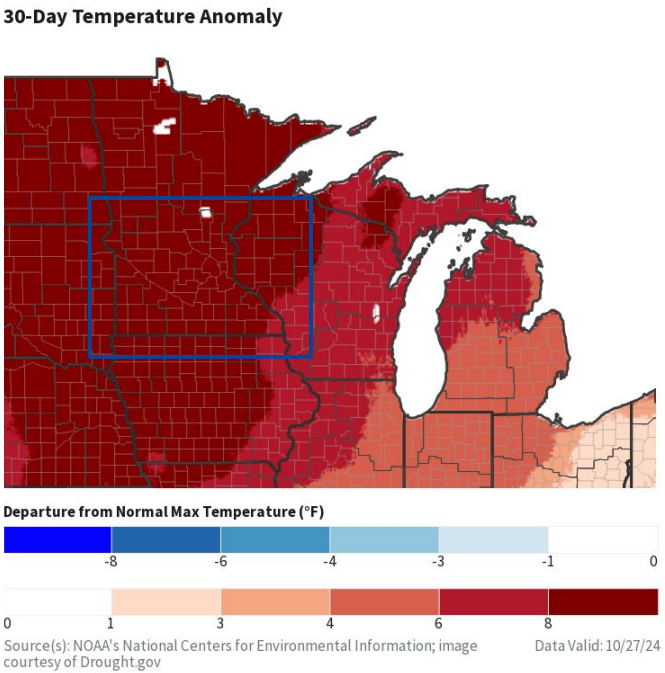


Temperature Departures

1-week and 1-month temperature departure

- Record high temperatures were set across much of the region on the 28th and 29th of October.
- Trough October 30th, this has been the warmest fall on record.
- These warm temperatures with the dry conditions has facilitated the expansion of the drought this fall





Summary of Impacts

Links: See/submit Condition Monitoring Observer Reports (CMOR) and view the Drought Impacts Reporter

Hydrologic Impacts

- The lack of rain has led to falling river levels, with the Mississippi River in particular seeing the lowest flows with respect to normal (USGS Streamflow).

Agricultural Impacts

- This drought has actually be beneficial for non-grazing agricultural activities, as this has been ideal weather for harvesting field crops (State USDA Crop Reports).
- However, soils are becoming dry and some moisture is needed to begin apply fall fertilizers. (Current soil moisture observations).

Fire Hazard Impacts

- Rainfall on the 24th of October finally started to bring fire dangers down in both Minnesota and Wisconsin (MN Fire Danger, WI Fire Danger).

Other Impacts

- No known additional impacts.

Mitigation Actions

- None Currently in place.

Hydrologic Conditions and Impacts

Average streamflow for the past 7 days

- The headwaters of the Mississippi basin in particular have significantly reduced flows

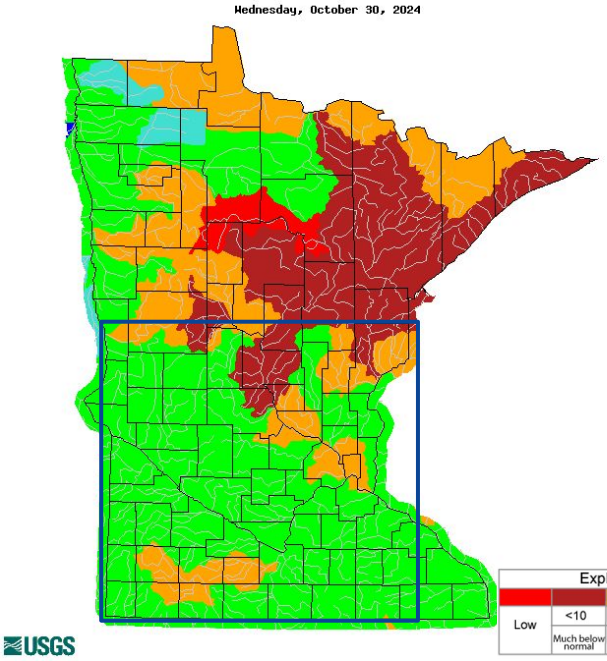


Image Caption: USGS 7-day Streamflow departure from normal for MN. Valid April 10, 2024

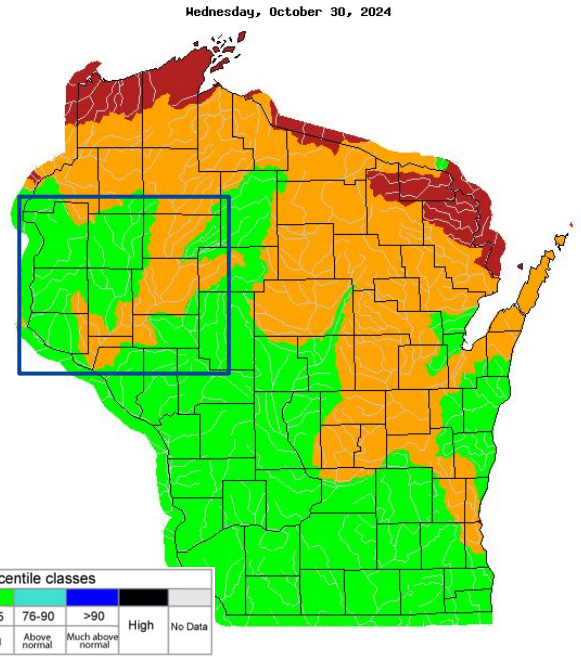


Image Caption: USGS 7-day Streamflow departure from normal for WI. Valid April 10, 2024

Fire Hazard Impacts

Fire Danger ratings valid for the date listed ONLY. Wildfire Danger for MN Wildfire Danger for WI

- Rain that occurred back on October 24th, along with cooler temperatures and more precipitation at the end of the month have really improved the fire danger across both Minnesota and Wisconsin

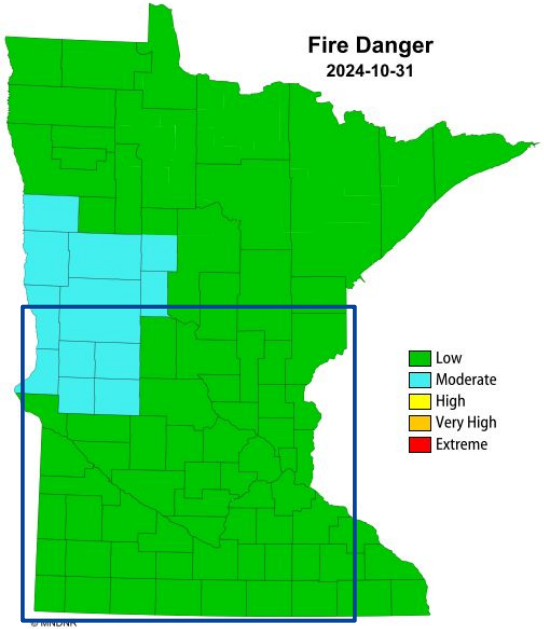


Image Caption: Wildfire Danger for MN. Valid October 31, 2024

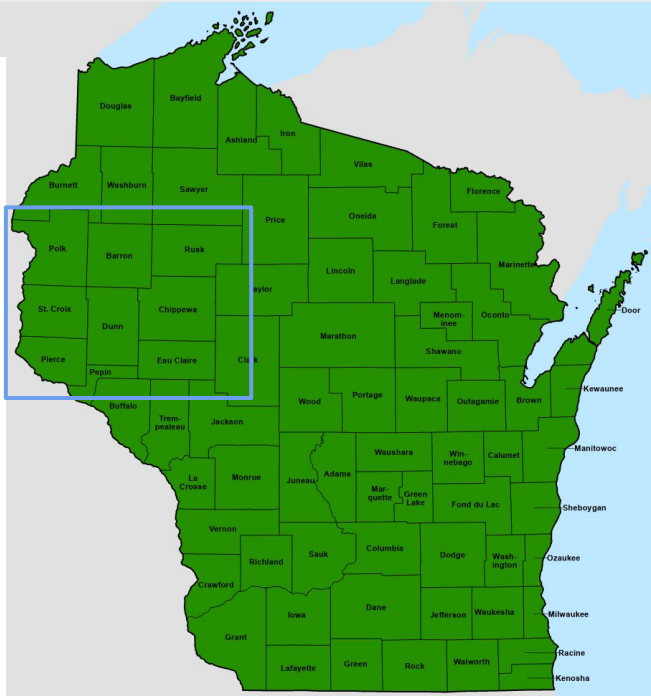
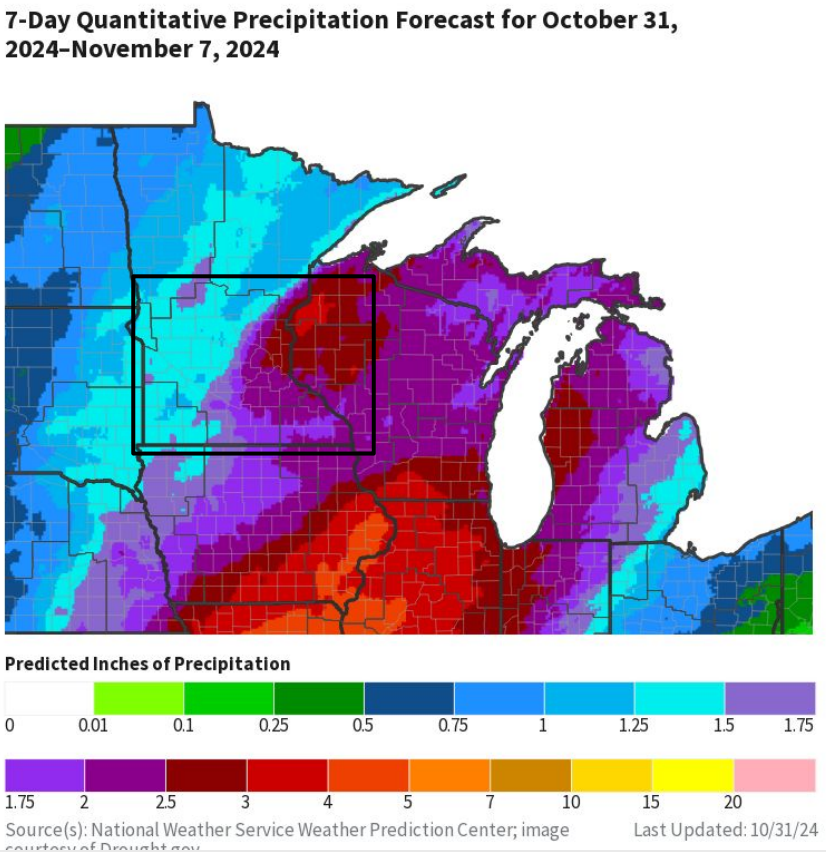


Image Caption: Wildfire Danger for WI. Valid October 31, 2024

Seven Day Precipitation Forecast

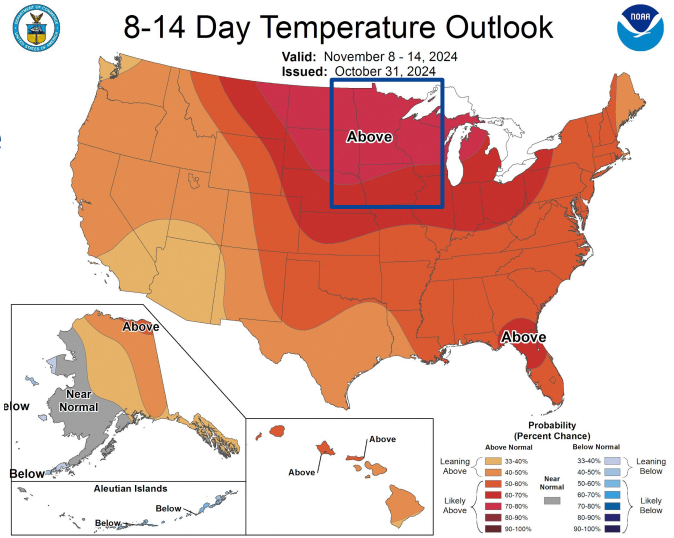
- After a wet Halloween, more rain is expected Friday across central and northern Minnesota, with multiple chances for rain across the entire area from Saturday night through Tuesday of next week
- Given the precipitation on the 31st and continued chances for rain in the coming days, the drought has likely reached its zenith this fall with this update.

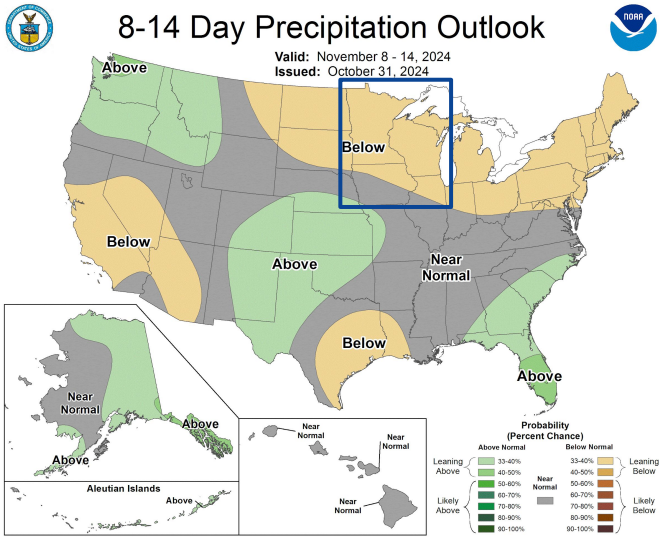


8-14 Day Outlooks

The latest weekly to seasonal outlooks can be found on the CPC homepage

- Through mid-November, temperatures are expected to remain above normal
  - Though remember normal highs will be falling through the 40s!
- A drier weather pattern is expected to return during the second half of next week.

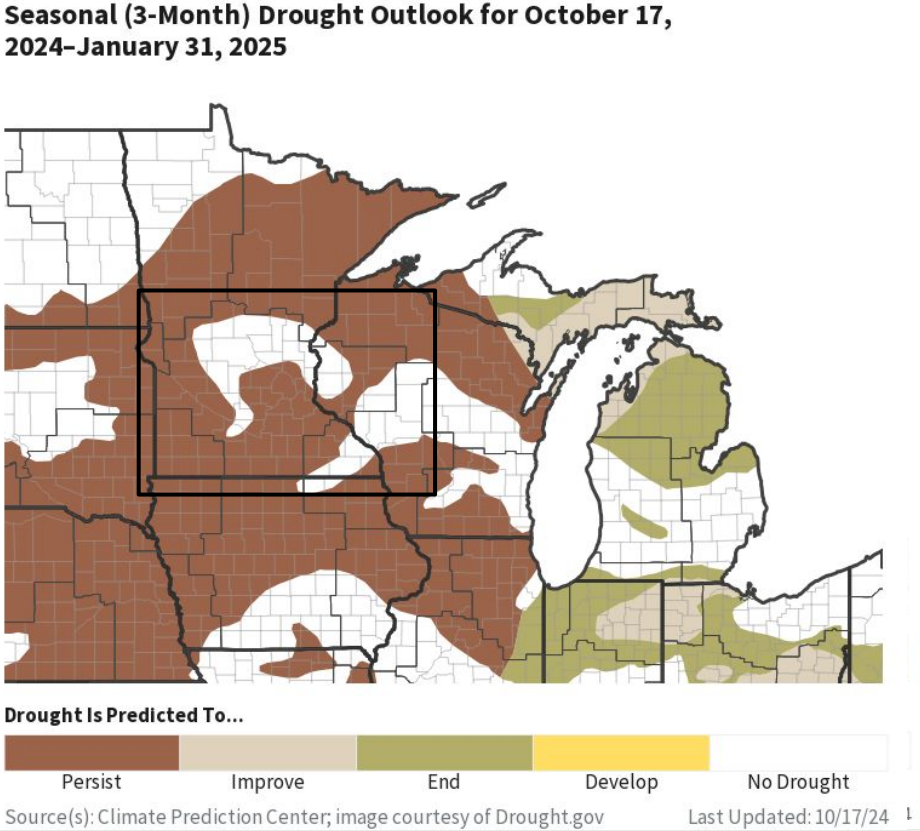




Drought Outlook

The latest monthly and seasonal outlooks can be found on the CPC homepage

- As we approach the cool season, it becomes more difficult to move the drought needle as our normal precipitation values continue to decrease, with drought conditions expected to persist into the winter



Links to the latest:
Climate Prediction Center Monthly Drought Outlook
Climate Prediction Center Seasonal Drought Outlook

Drought Definitions and State Resources

What do those categories mean?

Drought Category Definitions:

D0	**Abnormally Dry**	**Going into drought:** • Short-term dryness slowing planting, growth of crops or pastures	**Coming out of drought:** • Some lingering water deficits • Pastures or crops not fully recovered
D1	**Moderate Drought**	• Some damage to crops, pastures • Streams, reservoirs, or wells low, some water shortages developing or imminent • Voluntary water-use restrictions requested	
D2	**Severe Drought**	• Crop or pasture losses likely • Water shortages common • Water restrictions imposed	
D3	**Extreme Drought**	• Major crop/pasture losses • Widespread water shortages or restrictions	
D4	**Exceptional Drought**	• Exceptional and widespread crop/pasture losses • Shortages of water in reservoirs, streams, and wells creating water emergencies	

Comprehensive Drought Information for Minnesota: http://www.drought.gov/state/minnesota
Comprehensive Drought Information for Wisconsin: http://www.drought.gov/state/wisconsin
These sites contain links to resources from each state, to help you dive into drought information in more detail.