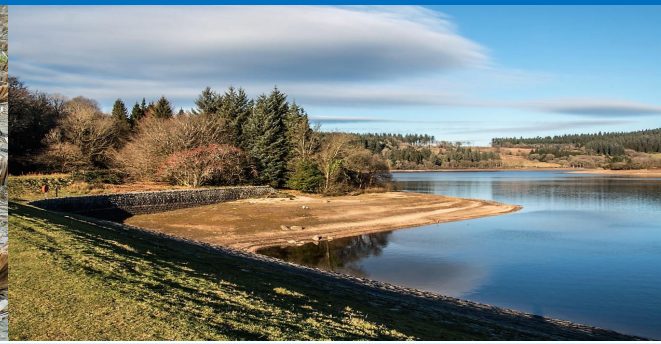
Drought Information Statement for Central, Southern Minnesota and Western Wisconsin

Valid November 17, 2023

Issued By: NWS Twin Cities / Chanhassen MN
Contact Information: nws.twincities@noaa.gov

- This product will be updated on the third Thursday of the month, 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.



U.S. Drought Monitor - NWS Twin Cities Region

Link to the latest U.S. Drought Monitor

Key Messages

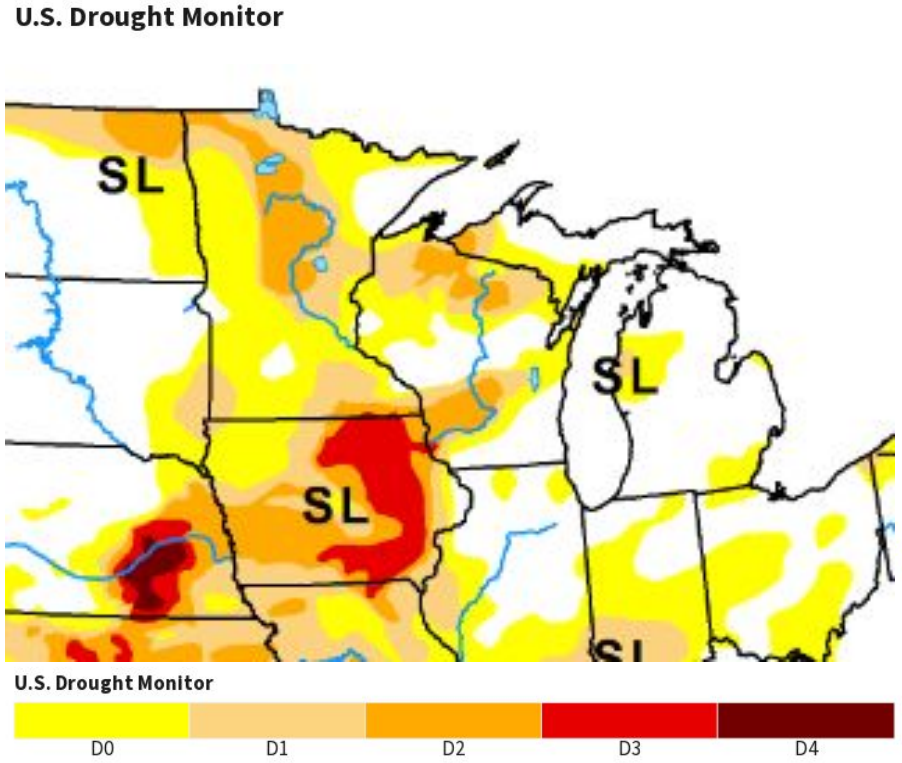
- No changes this week after improving through much of October.

Drought intensity and extent

- D2 (Severe drought): Small areas remain in central Minnesota and the southeast half of Freeborn county.
- D1 (Moderate drought): Remains in the much of central Minnesota from St. Cloud to the northern Twin Cities metro, across southeast Minnesota to the east and south of Mankato, and a small portion of north-central Rusk county in Wisconsin
- D0 (Abnormally dry): Covers most of central and southern Minnesota and western Wisconsin not in D1 or D2 drought

Next Scheduled Update

- Thursday, December 21st, 2023



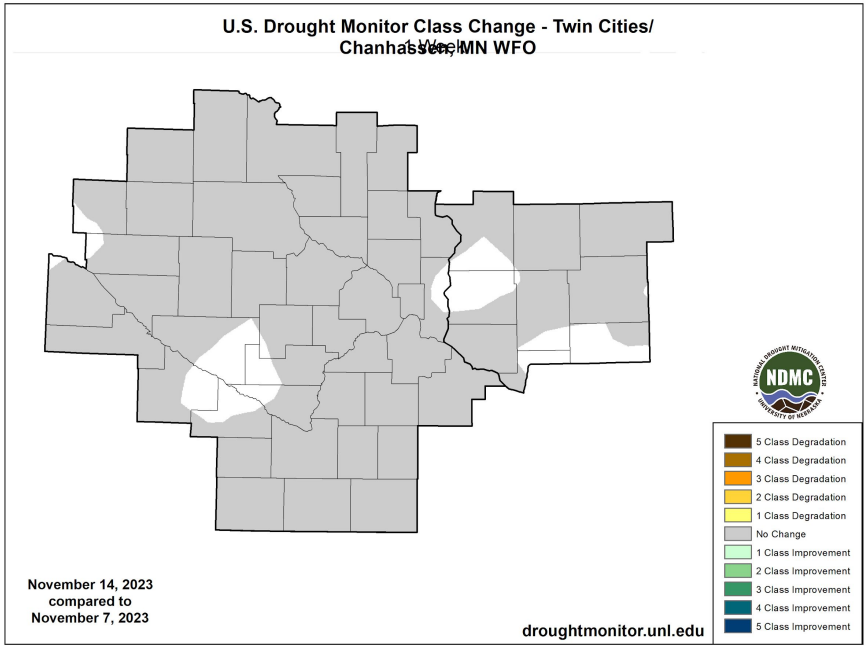
Source: Drought.gov

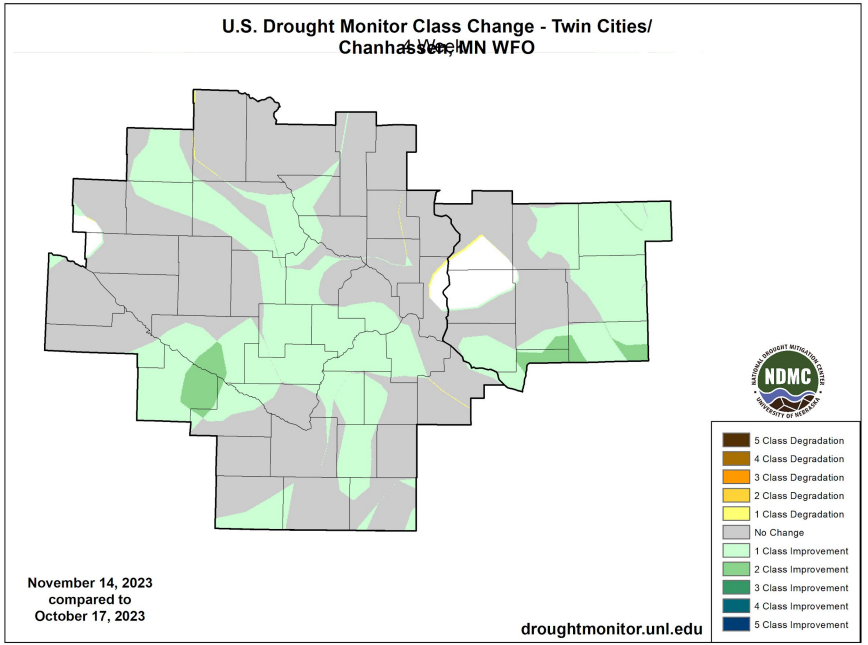
Valid 11/14/2023

Recent Change in Drought Intensity

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

- As we enter our climatologically lower precipitation amounts season, improvements in the drought from the fall have begun to slow down.



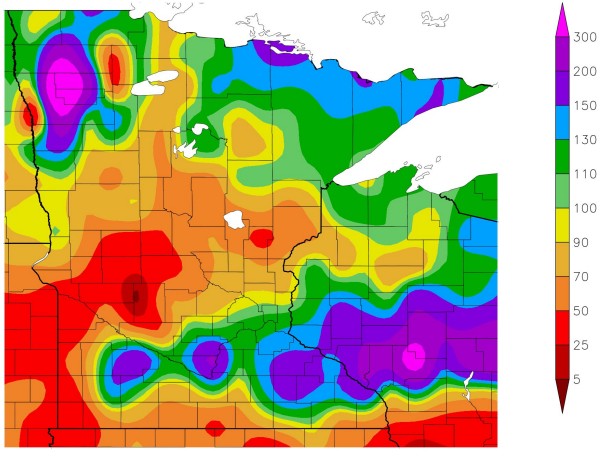


Precipitation Departures

1-month and 6-month percent of normal precipitation

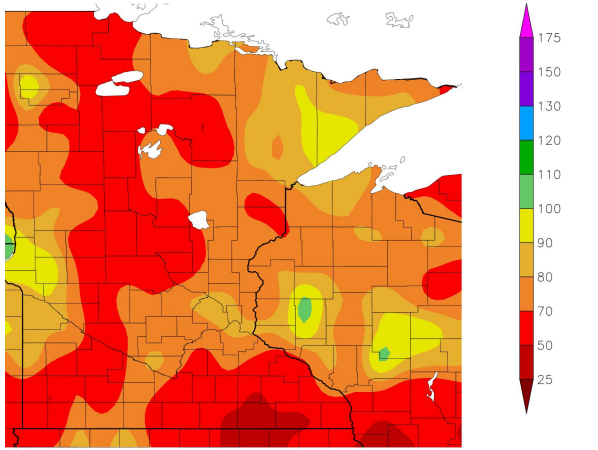
- After a wet October, we have seen a return to drier conditions for the first half of November.
- Long term deficits going back to last spring remain.
  - For example, in the metro area, a deficit of around 5 inches since May remains (it had been over 10 inches for May through August).

Percent of Normal Precipitation (%)
10/17/2023 – 11/15/2023



Generated 11/16/2023 at HPRCC using provisional data.

Percent of Normal Precipitation (%)
5/16/2023 – 11/15/2023



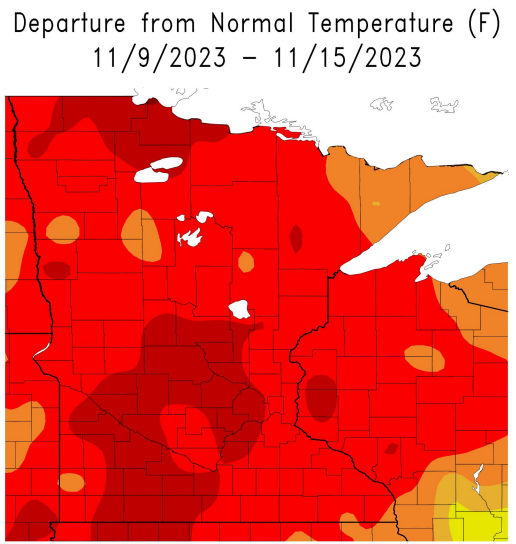
NOAA Regional Climate Centers at HPRCC using provisional data.

NOAA Regional Climate Centers

Temperature Departure

1-week and 1-month temperature departure

- The last week as seen temperatures more typical of mid-late October
- Despite a few days at the end of October that were well below normal, temperatures over the last 30 days have generally run above normal



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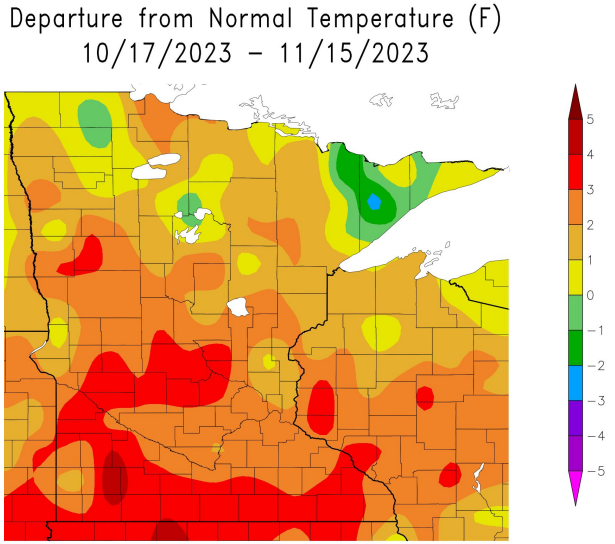


NOAA Regional Climate Centers 2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

Summary of Impacts

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

Hydrologic Impacts

- The only lingering hydrologic impacts reside with many lakes, ponds and wetlands that continue to have below normal levels, and ground water levels which have yet to recover from the dry summer

Agricultural Impacts

- Outside of the growing season. Warm, dry, and breezy conditions over the past week have resulted in slight increase in the coverage of soil moisture that is short to very short in Minnesota

Fire Hazard Impacts

- Wildfire activity has remained low the last few weeks.

Other Impacts

- No other remaining significant impacts

Mitigation activities

- None currently in place

Hydrologic Conditions and Impacts

Average streamflow for the past 7 days

- Streamflows are near normal for much of the Minnesota and Wisconsin.
- Some lower flow linger in the upper Mississippi River valley.

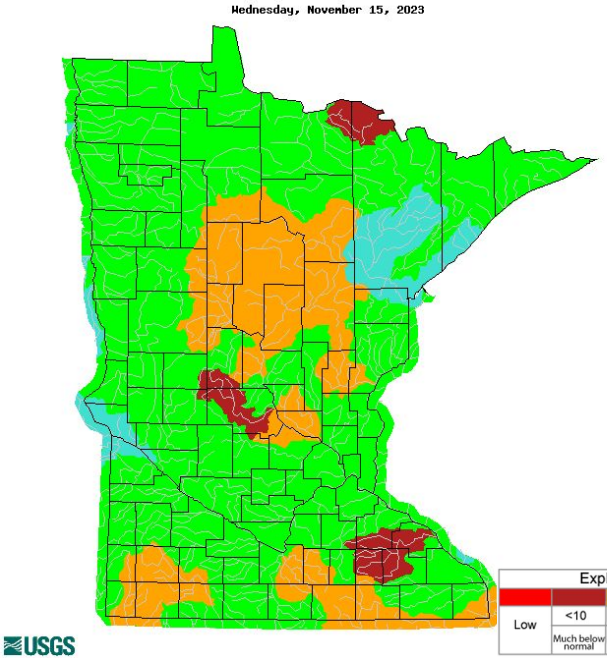


Image Caption: USGS 7-day Streamflow departure from normal for MN. Valid November 2, 2023

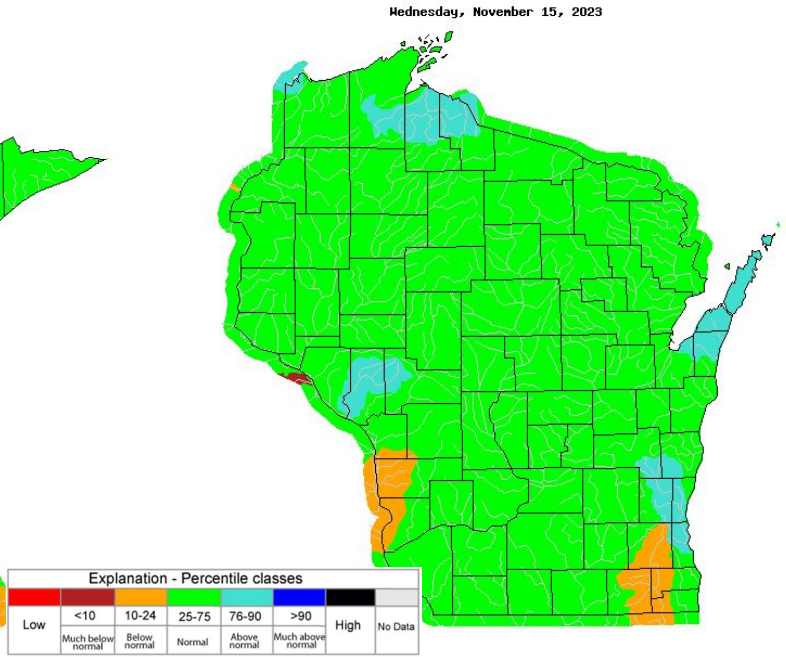


Image Caption: USGS 7-day Streamflow departure from normal for WI. Valid November 2, 2023

Fire Hazard Impacts

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

- Wildfire activity has remained low due to the recent rainfall.
- Very windy conditions across Wisonsin and the southern half of Minnesota have increased fire danger today.

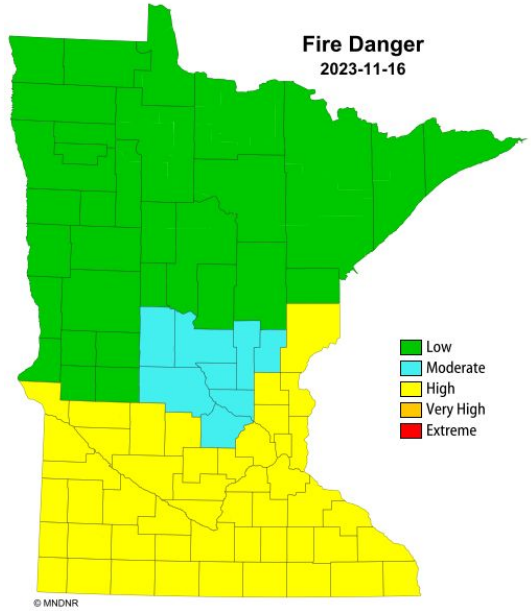


Image Caption: Wildfire Danger for MN. Valid November 16, 2023

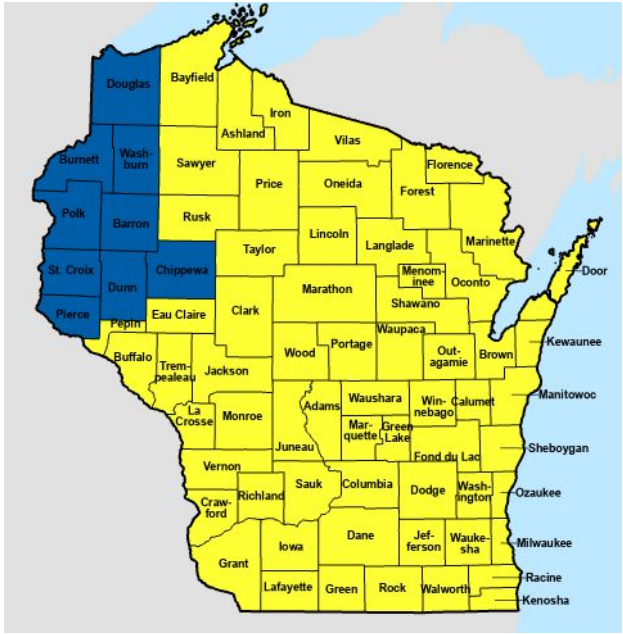


Image Caption: Wildfire Danger for WI. Valid November 16, 2023

Seven Day Precipitation Forecast

WPC 7-day precipitation forecast

- Very dry conditions expected to continue for the next week.

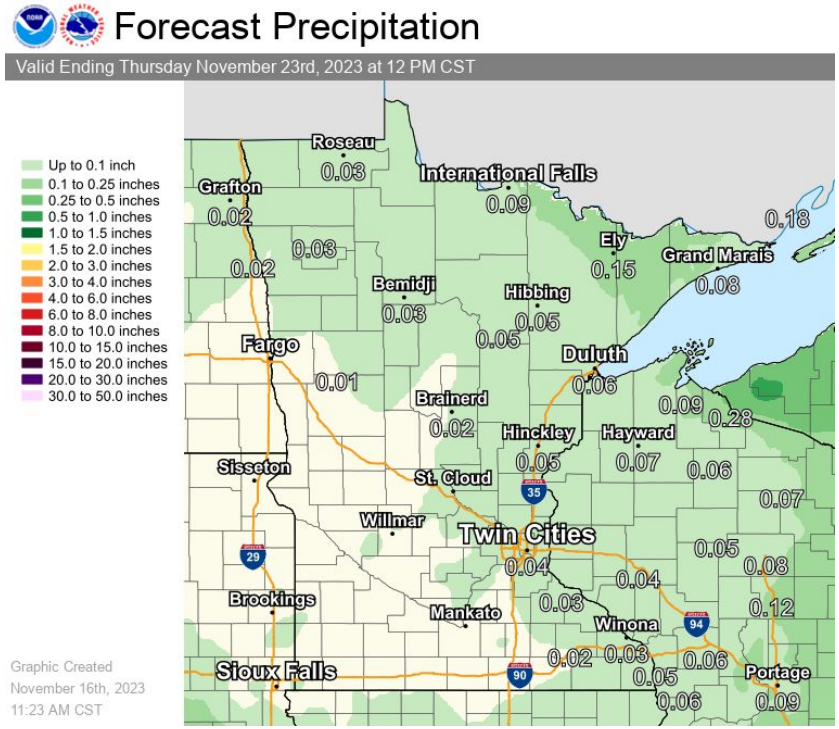
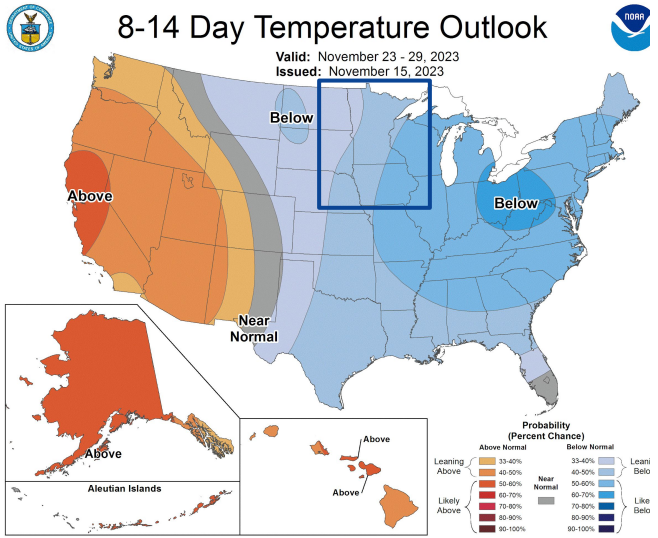


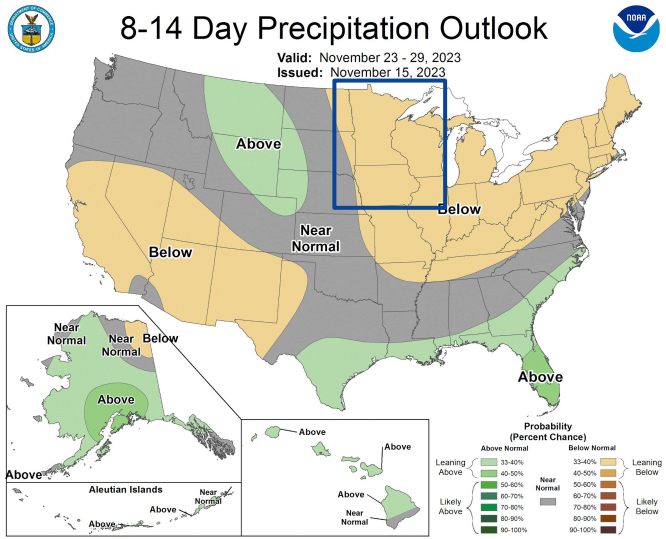
Image Caption: Weather Prediction Center 7-day precipitation forecast valid Thursday November 16 to Thursday November 23, 2023.

8-14 Day Outlooks

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

- A pattern shift during the week of Thanksgiving looks to bring in much cooler temperatures to the east of the Rocky Mountains
- Though temperatures look to change to below normal, precipitation looks to continue favor drier conditions

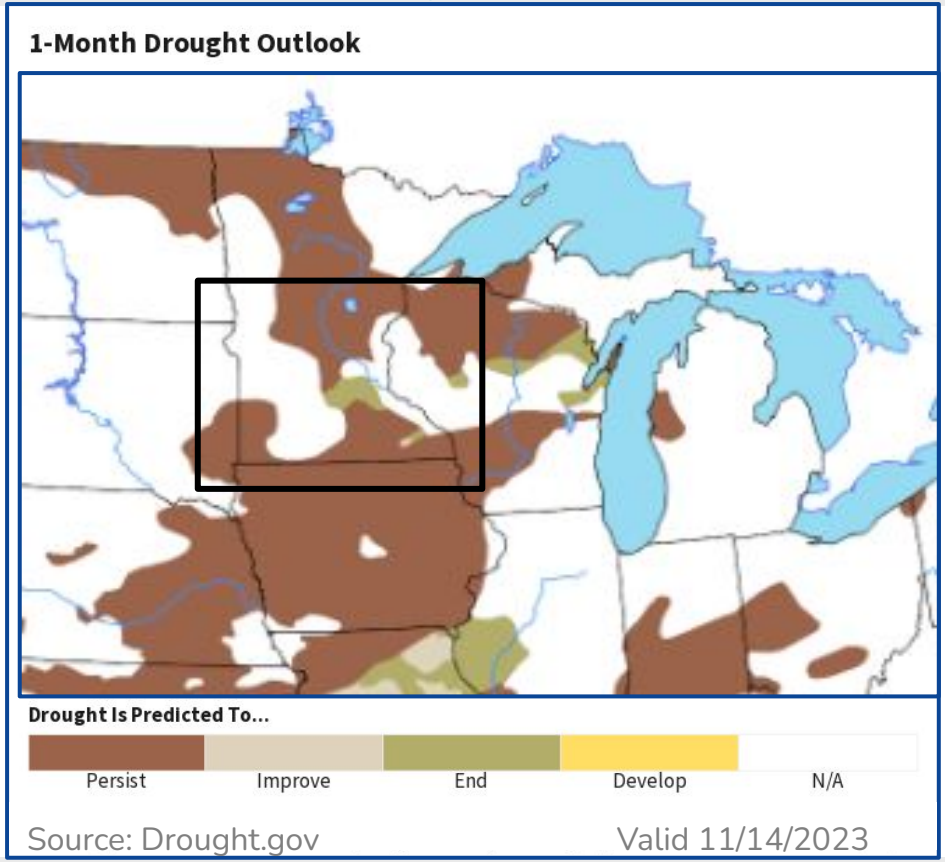




Drought Outlook

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

- What is left of the drought is expected to either persist or slightly improve through the winter
- It is normal for little change in drought conditions to occur in the winter months across the upper Mississippi River Valley due to the lack of precipitation we receive when compared to the warm season.
    - For example, we average about 3 inches of liquid equivalent precipitation for December through February combined, for June through August, this same number is about 13 inches.



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.