

# **Drought Information Statement for Central and** Southern Minnesota and Western Wisconsin

Valid November 7, 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 <a href="https://drought.gov/drought-information-statements">https://drought.gov/drought-information-statements</a>.
- 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 over western Minnesota
- Drought begins to ease from New Ulm through the Twin Cities



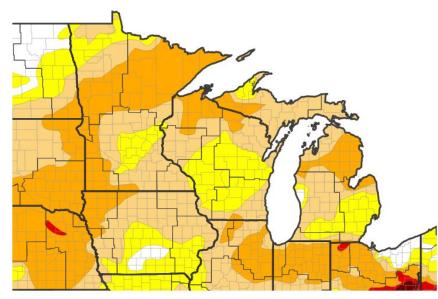




Link to the <u>latest U.S. Drought Monitor</u>

- Drought intensity and Extent
  - D2 (Severe Drought): parts of central, western and southwest Minnesota along with northwest Wisconsin
  - D1 (Moderate Drought): Much of central and southern Minnesota and western Wisconsin
  - D0: (Abnormally Dry): the center of southern Minnesota

#### U.S. Drought Monitor







Source(s): NDMC, NOAA, USDA; image courtesy of Drought.gov

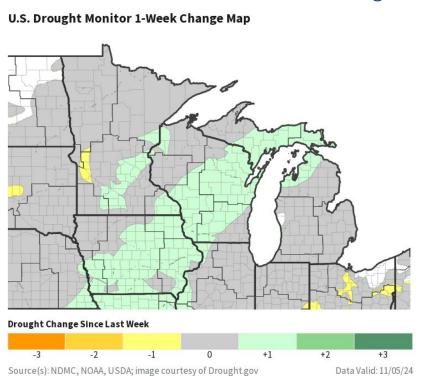
Exceptional Drought (D4) Data Valid: 11/05/24

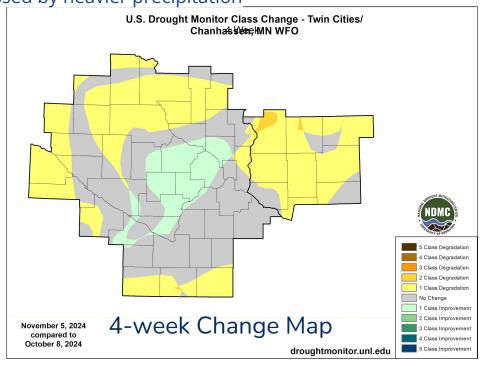


# Recent Change in Drought Intensity

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

 It was a mix of improvements where heavy rain and snow fell on Halloween and degradation in western Minnesota, which continues to get missed by heavier precipitation



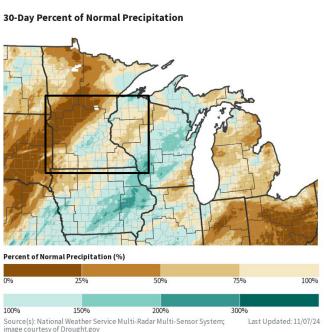




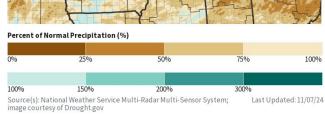
## **Precipitation Departures**

#### 1-month and 3-month percent of normal precipitation

- Very dry conditions continue to persist from eastern South Dakota into central Minnesota
- Despite some improvements to deficits in the last 30 days from southern into eastern Minnesota. large precipitation deficits remain over the last 90 days







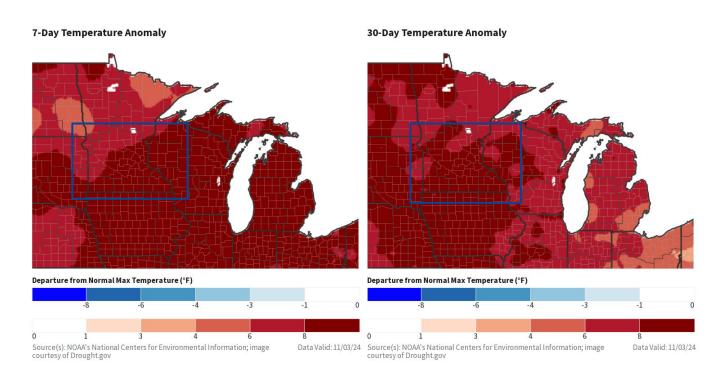
#### 90-Day Percent of Normal Precipitation



## Temperature Departures

1-week and 1-month temperature departure

 Though we may have started to see rain again, one thing that has not changed is our continued trend this fall of seeing well above normal temperatures





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

#### **Hydrologic Impacts**

 Recent rains have helped to stabilize and improve streamflows across the area, though the upper Mississippi continues to struggle with low flows (<u>USGS Streamflow</u>).

#### **Agricultural Impacts**

This drought has actually be beneficial for non-grazing agricultural activities, as this has been ideal
weather for harvesting field crops (<u>State USDA Crop Reports</u>).

#### **Fire Hazard Impacts**

 Multiple precipitation events since the last week of October has greatly reduced the fire danger across 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 continues to have significantly reduced flows
- Recent rains have allowed all other basins to have they streamflows stabilize

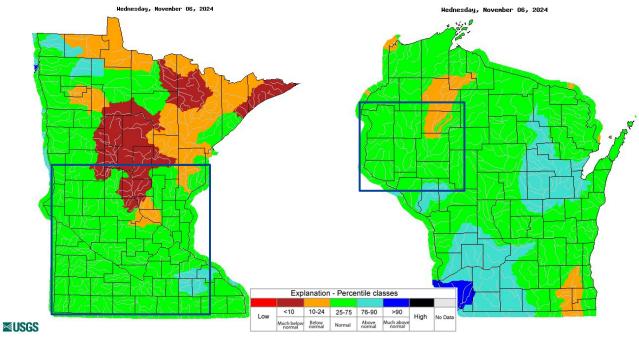


Image Caption: USGS 7-day Streamflow departure from normal for MN. Valid April 10, 2024

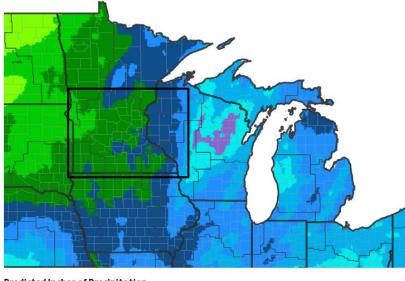
Image Caption: USGS 7-day Streamflow departure from normal for WI. Valid April 10, 2024

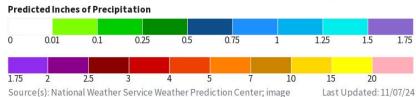




# Seven Day Precipitation Forecast

 Our wet and active pattern is expected to continue for the next week, though the we'll continue to see a pattern where rainfall is lower in western Minnesota and higher in western Wisconsin 7-Day Quantitative Precipitation Forecast for November 7, 2024-November 14, 2024





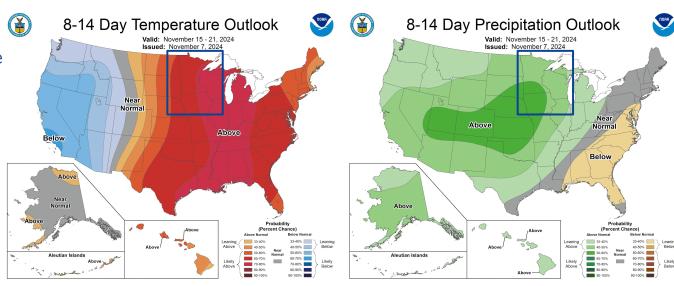
courtney of Drought gov





The latest weekly to seasonal outlooks can be found on the <a href="CPC homepage">CPC homepage</a>

- Temperatures are expected to remain above normal
  - Though remember normal highs will be falling through the 40s!
- An active pattern is expected to continue into mid-November

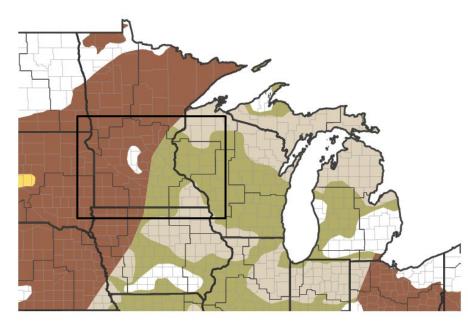


# **Drought Outlook**

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

- A primary storm track from Texas into the Great Lakes is expected to continue to chip away at the drought across eastern Minnesota and Wisconsin during the rest of November
- Drought conditions are expected to persist through November in western Minnesota

1-Month Drought Outlook for November 1, 2024-November 30, 2024



#### Links to the latest:

Climate Prediction Center Monthly Drought Outlook Climate Prediction Center Seasonal Drought Outlook





Source(s): Climate Prediction Center: image courtesy of Drought gov

National Weather Service

Twin Cities / Chanhassen



### Drought Definitions and State Resources

What do those categories mean?

#### **Drought Category Definitions:**

DO	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	<ul> <li>Some damage to crops, pastures</li> <li>Streams, reservoirs, or wells low, some water shortages developing or imminent</li> <li>Voluntary water-use restrictions requested</li> </ul>
D2	Severe Drought	Crop or pasture losses likely     Water shortages common     Water restrictions imposed
D3	Extreme Drought	<ul> <li>Major crop/pasture losses</li> <li>Widespread water shortages or restrictions</li> </ul>
D4	Exceptional Drought	<ul> <li>Exceptional and widespread crop/pasture losses</li> <li>Shortages of water in reservoirs, streams, and wells creating water emergencies</li> </ul>

Comprehensive Drought Information for Minnesota: <a href="http://www.drought.gov/state/minnesota">http://www.drought.gov/state/minnesota</a>
Comprehensive Drought Information for Wisconsin: <a href="http://www.drought.gov/state/wisconsin">http://www.drought.gov/state/wisconsin</a>

These sites contain links to resources from each state, to help you dive into drought information in more detail.

