

Drought Information Statement for Central, Southern Minnesota and Western Wisconsin Valid March 28, 2024

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 <u>https://drought.gov/drought-information-statements</u>.
- Please visit <u>https://www.weather.gov/MPX/DroughtInformationStatement</u> for previous statements.





U.S. Drought Monitor - NWS Twin Cities Region

Link to the latest U.S. Drought Monitor

Key Messages

 Recent heavy rains and snows resulted in large improvements to the drought situation over the last week

Drought intensity and extent

- D2 (Severe drought): The southeast corner of Freeborn county remain in a D2 Drought.
- D1 (Moderate drought): Now only covers the rest of Freeborn county along with northern Mille Lacs county through Morrison and Todd counties in central MN.
- D0 (Abnormally dry): Covers the rest of central and southern MN and west central WI

Next Scheduled Update

• Thursday, April 18th, 2024

U.S. Drought Monitor





Recent Change in Drought Intensity

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

• Significant amounts of precipitation between March 21s and March 26th has resulted in widespread improvements to drought conditions







Precipitation Departures

1-month and 9-month percent of normal precipitation

- The period of March 21-26 brought us our most significant precipitation amounts since the end of December
- Long term deficits going back to the spring and summer of 2023 remain.





Generated 3/28/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers at HPRCC using provisional data.

NOAA Regional Climate Centers



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1-week and 1-month temperature departure

- The second half of March has brought us something rare this cool season, below normal temperatures.
- Despite the cooler weather the past week, the long-term warmth continues to outweigh any short term cold we have seen.

Departure from Normal Temperature (F) 3/21/2024 - 3/27/2024





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NOAA Regional Climate Centers 324 at HPRCC using provisional data.

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

Hydrologic Impacts

• The lack of snow cover this winter is helping lead to a low risk of flooding this spring at this time.

Agricultural Impacts

• Outside of the growing season. Soils were starting to dry out before we hit the recent rains and snows, though the true impact of this precipitation on soil moisture conditions will not be known until next week when this snow has completely melted.

Fire Hazard Impacts

• Recent rains and snows have significantly reduced the wildfire risk in the short term. However, once the snow melts, we will continue to have an above normal wildfire risk through the rest of the spring fire season.

Other Impacts

• No other remaining significant impacts

Mitigation activities

• None currently in place



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Hydrologic Conditions and Impacts

Average streamflow for the past 7 days

 Stream flows across MN and WI are starting to quickly drop off with respect to normal due to the lack of snowmelt runoff that should be surging into area streams and lakes at this time.



Image Caption: USGS 7-day Streamflow departure from normal for MN. Valid March 14, 2024

Image Caption: USGS 7-day Streamflow departure from normal for WI. Valid March 14, 2024



Seven Day Precipitation Forecast

WPC 7-day precipitation forecast

- There will be a couple of chances for light precipitation over the next 7 days. First will be at the end of this week, with another at the beginning of next week (April 1st).
- The primary storm strack over the next 7 days is expected to remain to our south.

7-Day Quantitative Precipitation Forecast



Predicted Inches of Precipitation



Source(s): National Weather Service Weather Prediction Center; image courtesy of Drought.gov

Data Valid: 03/28/24



8-14 Day Outlooks

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

- As we head deeper into April, a warmer weather pattern is expected to return, though it looks to be active as well, with continued chances for precipitation (mostly rain) expected.
- Given the expected conditions over the next 2 weeks, the drought is expected to either remain steady or slightly improve.





Drought Outlook

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

- Minimal changes in the current drought conditions are currently expected for the rest of this Spring.
- We will continue to yo-yo in and out of drought until we see a growing season (April through September) with near to above normal temperatures.
 - Large growing season rainfall deficits in 2021, 2022, and 2023 continue to be a drag on completely ridding drought from the region.

Seasonal (3-Month) Drought Outlook



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

Data Valid: 03/28/24

National Weather Service Twin Cities/Chanhassen MN

Links to the latest: <u>Climate Prediction Center Monthly Drought Outlook</u> <u>Climate Prediction Center Seasonal Drought Outlook</u>



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What do those categories mean?

Drought Category Definitions:

| DO | Abnormally Dry | <u>Going into drought:</u> Short-term dryness slowing planting, growth of crops or pastures | <u>Coming out of drought:</u> 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: <u>http://www.drought.gov/state/minnesota</u> Comprehensive Drought Information for Wisconsin: <u>http://www.drought.gov/state/wisconsin</u> These sites contain links to resources from each state, to help you dive into drought information in more detail.



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