



Drought Information Statement for NE Minnesota & NW Wisconsin

Valid March 30, 2024

Issued By: NWS Duluth

Contact Information:

- This product will be updated April 15, 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/DLH/DroughtInformationStatement> for previous statements.

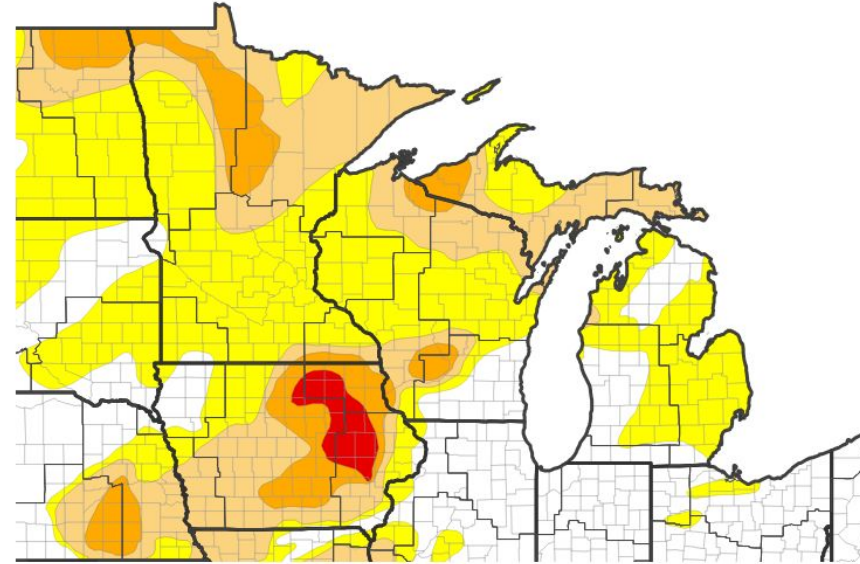




U.S. Drought Monitor

Link to the [latest U.S. Drought Monitor](#) for NE Minnesota and NW Wisconsin

- Drought conditions persist across Northland.
- Drought intensity and extent
 - D2 (Severe Drought): North-central Minnesota around the Brainerd Lakes and Walker, and far eastern Ashland County and much of Iron County in northwest Wisconsin.
 - D1 (Moderate Drought): The Arrowhead, Iron Range and Aitkin County in northeast Minnesota and Bayfield to Sawyer Counties eastward into north-central Wisconsin.
 - D0: (Abnormally Dry): Small area along the International Border in eastern Koochiching and northwestern St. Louis Counties and counties along the WI/MN stateline, including Washburn County.



U.S. Drought Monitor



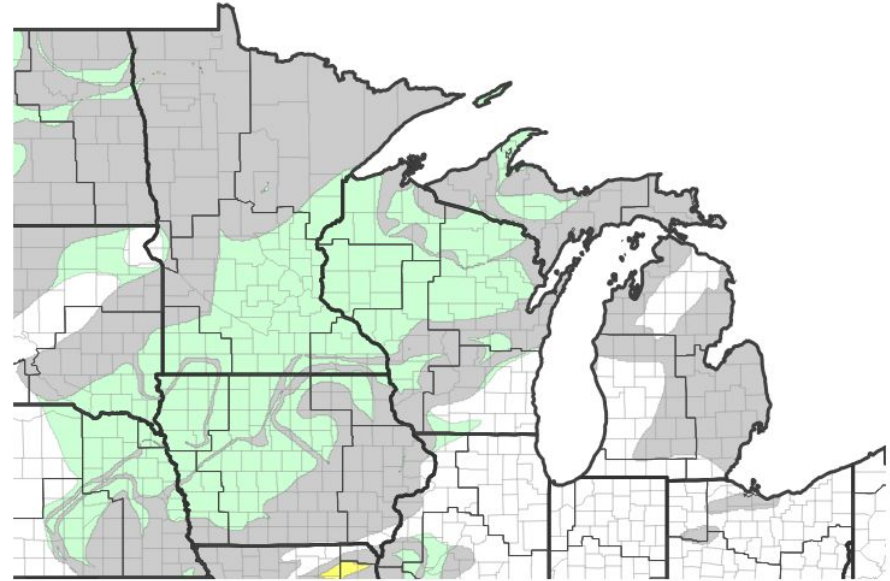


Recent Change in Drought Intensity

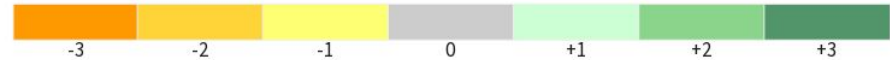
Link to the latest [4-week change map](#) for NE Minnesota and NW Wisconsin

- One Week Drought Monitor Class Change.
 - Drought Worsened: Not Applicable
 - No Change: north-central and most of northeast Minnesota
 - Drought Improved: I-35 corridor of Minnesota and most of northwest Wisconsin

One Week Change in the Drought Intensity As of Thursday, March 28, 2024



Drought Change Since Last Week



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



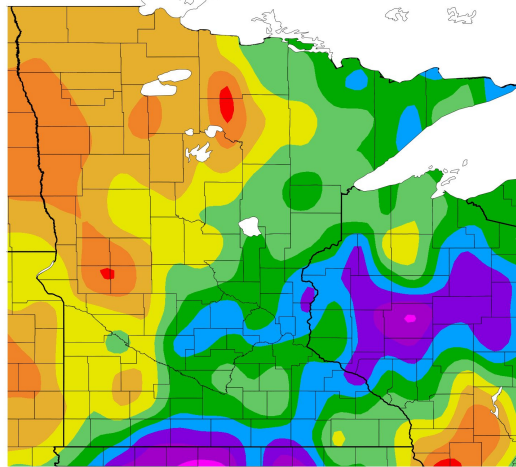


Precipitation

Precipitation (sum of liquid and melted frozen) that was observed in the Northland over the last month

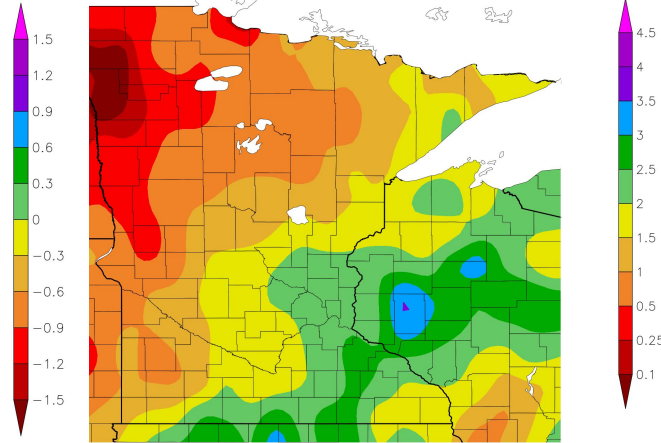
- Regional precipitation in the past month has been near to above normal.
- The exception is slightly below normal precipitation from Cass to Koochiching Counties.
- Recent heavy snowfall has created a frozen snowpack that will slowly melt, but near-record low levels of snow over the entire winter persist.

Departure from Normal Precipitation (in)
2/29/2024 – 3/29/2024



Generated 3/30/2024 at HPRCC using provisional data.

Precipitation (in)
2/29/2024 – 3/29/2024



NOAA Regional Climate Centers



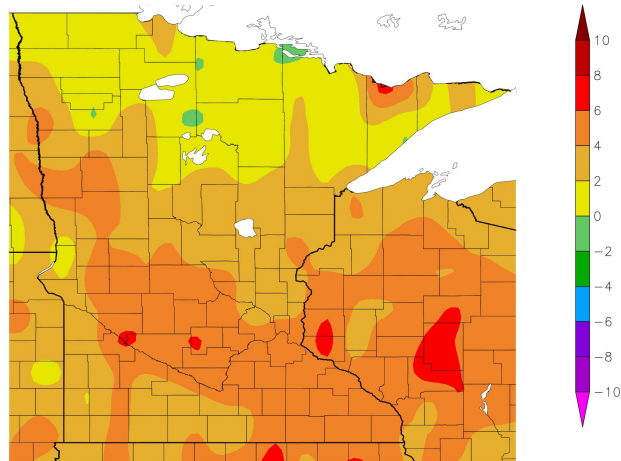


Temperature

Temperatures that were observed in the Northland over the last month

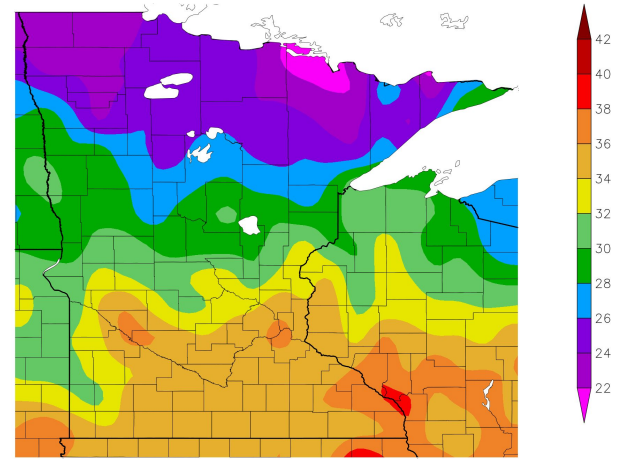
- Temperatures have been around 0 to 2 degrees above normal in far northern Minnesota and 2 to 6 degrees above normal in the Brainerd Lakes, near the I-35 corridor and eastward into northwest Wisconsin.

Departure from Normal Temperature (F)
2/29/2024 – 3/29/2024



Generated 3/30/2024 at HPRCC using provisional data.

Temperature (F)
2/29/2024 – 3/29/2024



NOAA Regional Climate Centers



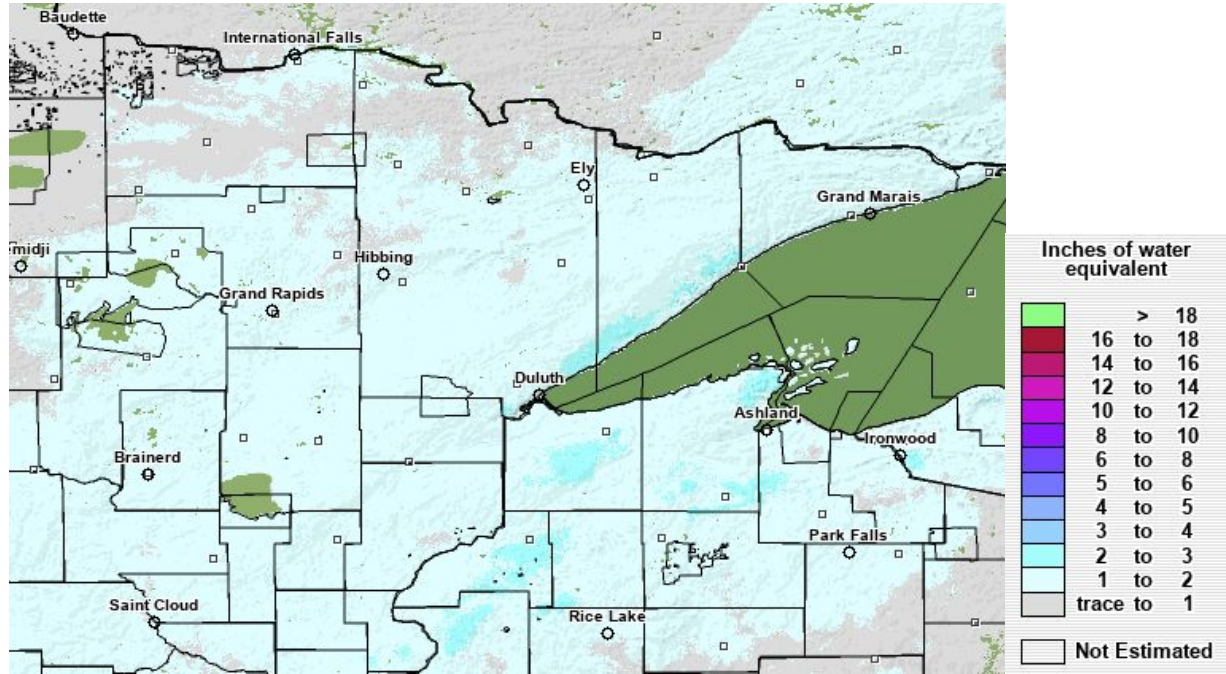


Snow Water Equivalent - As of Saturday, March 30

Amount of liquid equivalent precipitation currently frozen in the snowpack

- The snow water equivalent from recent heavy snowfall ranges from 0.5 to 2 inches, locally up to 2.5 inches in northwest WI and along the North Shore of MN as of Saturday, March 30.
- There is a better chance of this melting snowpack percolating into the ground in the southern part of the Northland where less frost depth is being observed, but runoff into area streams is also likely across the entire region.

Modeled Snow Water Equivalent for the Northland
As of Saturday, March 30 2024





Summary of Impacts

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

Hydrologic Impacts

- Streamflows are generally running normal to well below normal around the region. Late season heavy snow has created a snowpack with about 0.5 to 2 inches of liquid equivalent, but the normal snowpack for this year remains well-below normal. Ice out on inland lakes and rivers is occurring about 4-5 weeks ahead of the median ice out date per the [Minnesota Department of Natural Resources](#).

Agricultural Impacts

- No recent reports.

Fire Hazard Impacts

- The Significant Wildland Fire Potential remains above normal for April, while improving to normal for May. Burning restrictions are in effect in some parts of Minnesota and Wisconsin.

Other Impacts

- A record-low snow winter led to large economic losses for areas that rely on winter tourism to sustain them through their slow seasons. Many winter events, such as ski and sled dog races, and snowmobile events, were canceled.

Mitigation Actions



Hydrologic Conditions and Impacts

- **Northeast Minnesota** - Streams are running much below normal along and south of the Iron Range, with the worse conditions in the Brainerd Lakes region, while running near normal north of the Iron Range.
- **Northwest Wisconsin** - The South Shore and St. Croix Valley region are running below normal, while inland north-central Wisconsin is running near-normal.

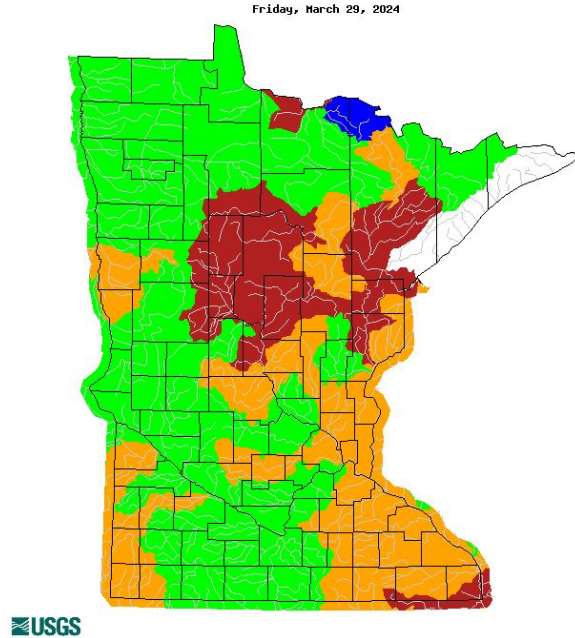
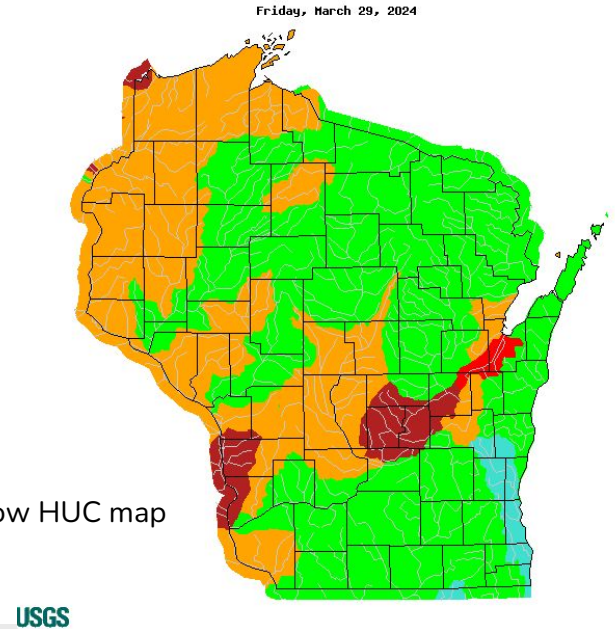


Image Caption: USGS 7 day average streamflow HUC map valid 3/29/2024

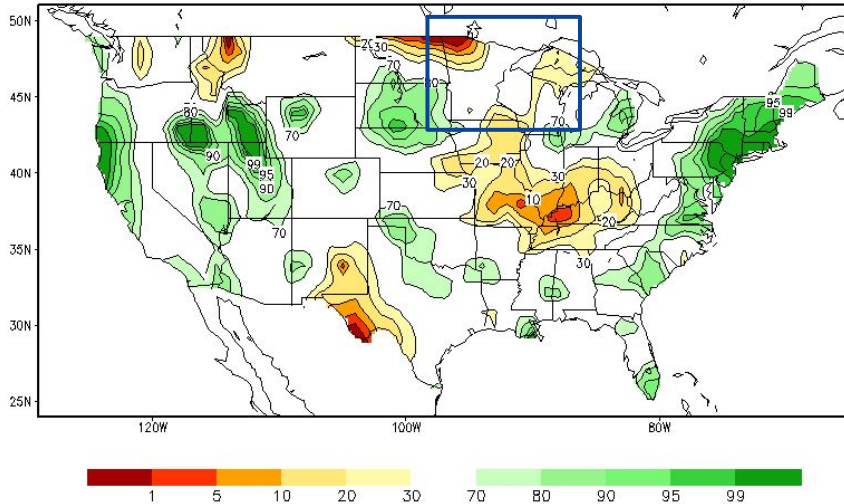




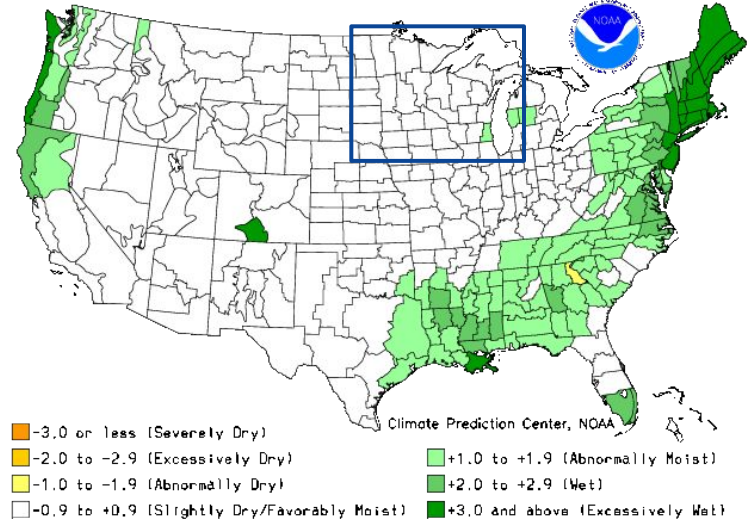
Agricultural Impacts

- Soil moisture is generally around average in the Northland, but areas immediately outside of the region are slightly below normal.

Calculated Soil Moisture Ranking Percentile
MAR 28, 2024



Crop Moisture Index by Division
Weekly Value for Period Ending MAR 23, 2024
Short Term Need vs. Available Water in a Shallow Soil Profile

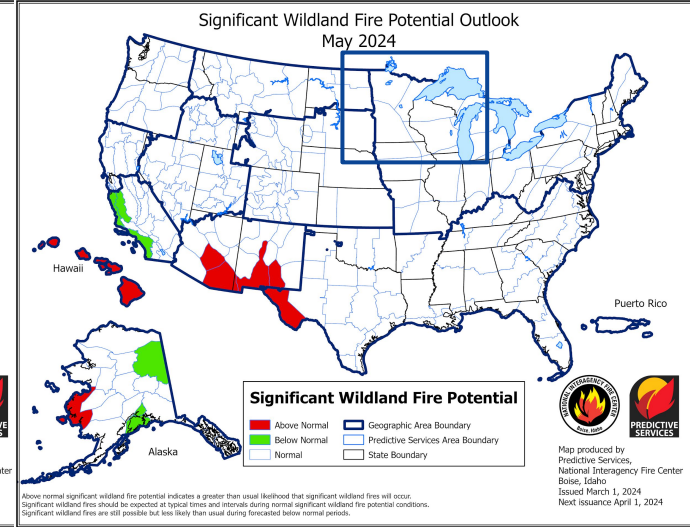
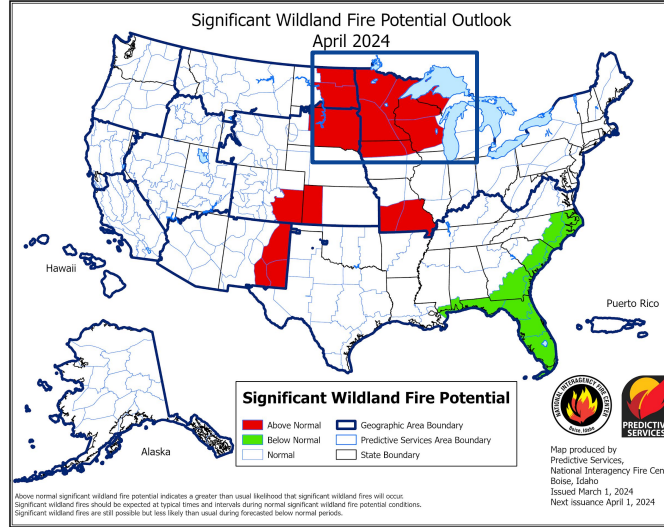




Fire Hazard Impacts

Link to [Wildfire Potential Outlooks from the National Interagency Coordination Center](#).

- Below average precipitation and warm temperatures in March are creating persistent elevated fire hazards as shown by the **Significant Wildland Fire Potential** continuing to be **above normal** for April, but **improving to normal** for May.



Latest MN burn ban and fire danger information available [here](#).

Latest WI burn ban and fire danger information available [here](#).

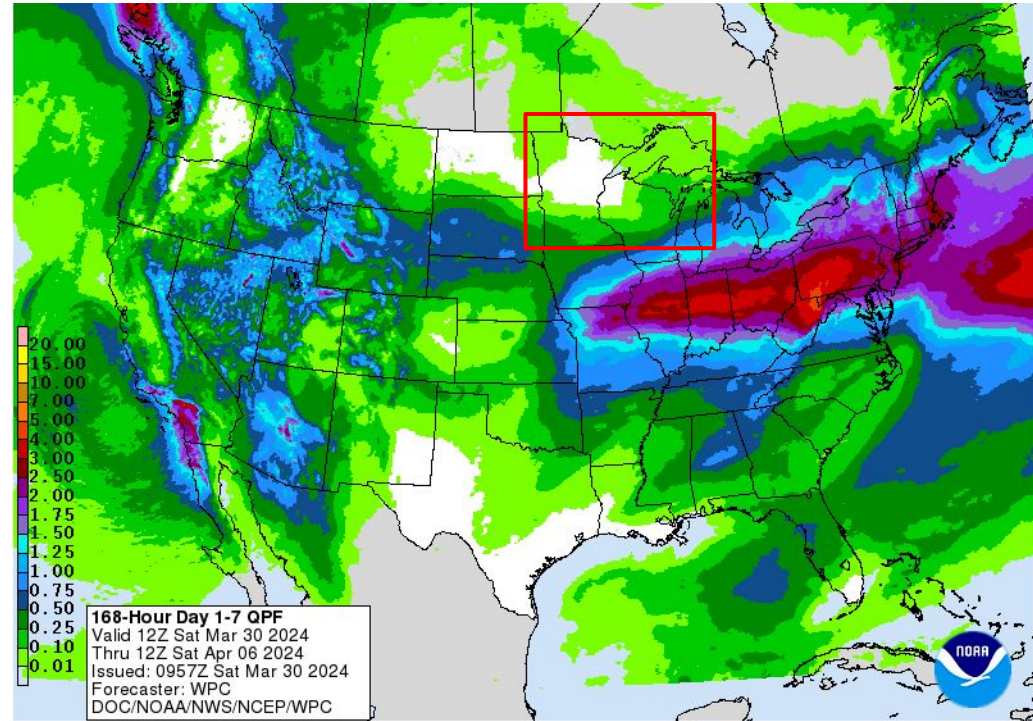




Seven Day Precipitation Forecast

Amount of liquid equivalent precipitation forecast over the next seven days

- Very little precipitation is likely over the next week across much of Northern Minnesota and Northern Wisconsin.
- Nearly all precipitation from an early-week system Sunday, March 31 into Monday, April 1 remains south of the Northland.
- A clipper passing through Ontario Tuesday, April 2 into Wednesday, April 3 may (30% chance) create very light precipitation for far northern Minnesota.

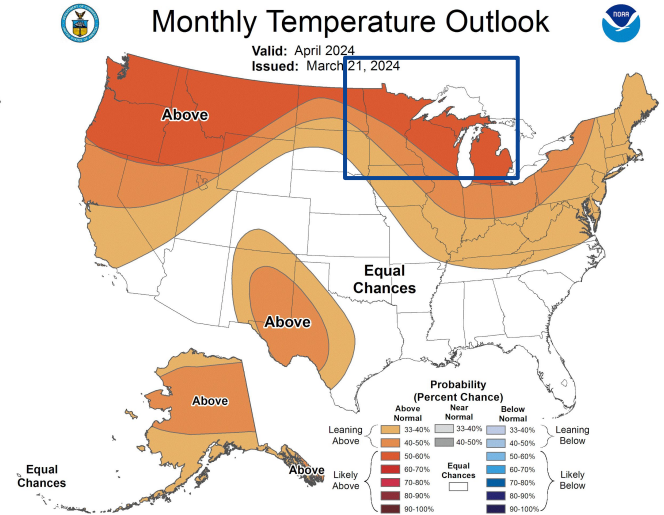
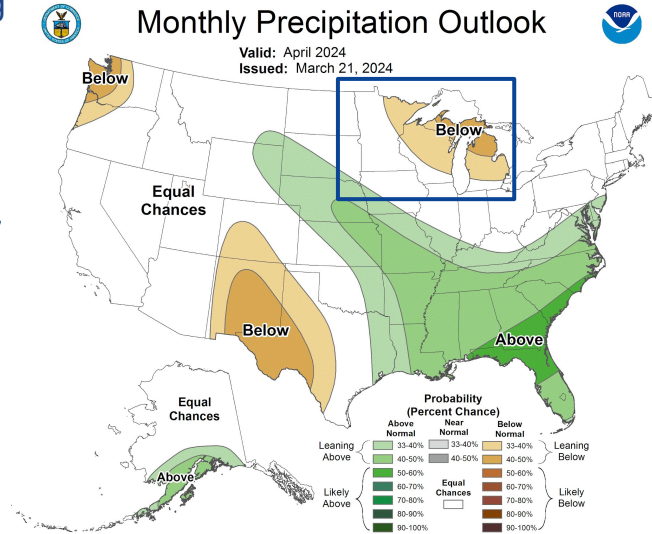




Long-Range Outlooks

The latest monthly and seasonal outlooks can be found on the [CPC homepage](#)

- Longer-term forecasts lean towards below normal precipitation being favored (30-40% chance) in the month of April.
- Above normal temperatures are strongly favored (50-60% chance) for the month of April.



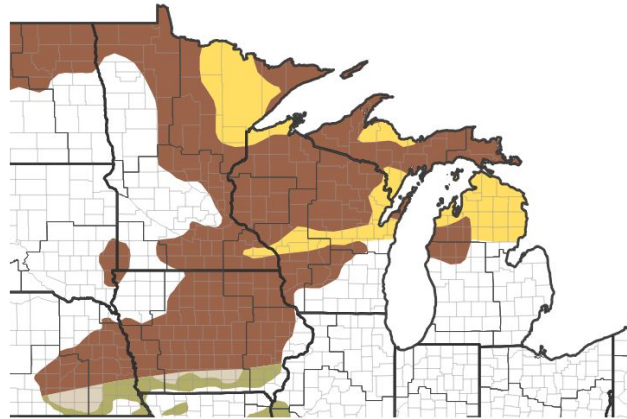


Drought Outlook

The latest monthly and seasonal outlooks can be found on the [CPC homepage](#)

- Areas that are currently experiencing drought are expected to see drought persist or worsen over the next one to three months.

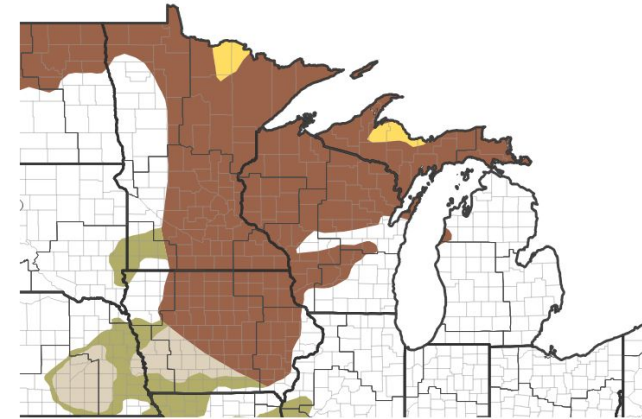
1-Month Drought Outlook



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

Data Valid: 03/29/24

Seasonal (3-Month) Drought Outlook



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

Data Valid: 03/29/24

Links to the latest:

[Climate Prediction Center Monthly Drought Outlook](#)

[Climate Prediction Center Seasonal Drought Outlook](#)

