Drought Information Statement for NE Minesota & NW Wisconsin Valid November 8, 2024 Issued By: NWS Duluth, MN Contact Information:

- Next Update: Friday, November 22, 2024
- Please see all currently available products at <u>https://drought.gov/drought-information-statements</u>.
- Please visit <u>https://www.weather.gov/DLH/DroughtInformationStatement</u> for previous statements.
- Please visit <u>https://www.drought.gov/drought-status-updates/</u> for regional drought status updates.
- Moderate to Severe Drought conditions have been largely unchanged in the past two weeks. A few rounds of light precipitation have not been enough to improve the drought much as soil moisture is still below normal.

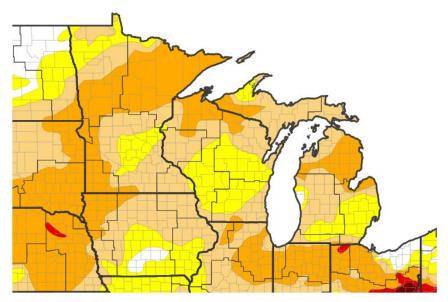


U.S. Drought Monitor

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

- Drought intensity and Extent
 - D2 (Severe Drought): Arrowhead, Twin Ports, South Shore, parts of inland northwest Wisconsin, and north-central Minnesota.
 - D1 (Moderate Drought): The remainder of inland northwest Wisconsin not in a Severe Drought, parts of east-central Minnesota, and far north-central Minnesota.
 - **D0: (Abnormally Dry)**: Near International Falls and in the St. Croix River Valley.

U.S. Drought Monitor



U.S. Drought Monitor

Abnormally Dry (D0)	Moderate Drought (D1)	Severe Drought (D2)	Extreme Drought (D3)	Exceptional Drought (D4)
Source(s): NDMC, NOAA, USDA; image courtesy of Drought.gov				Data Valid: 11/05/24

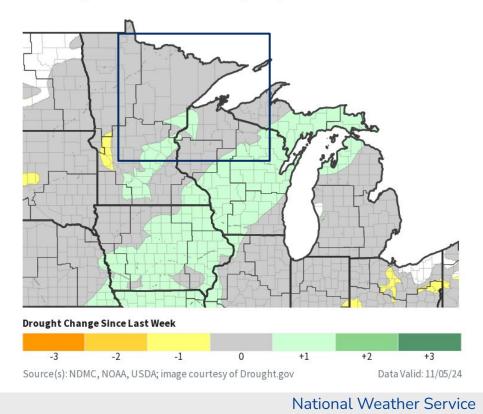


Recent Change in Drought Intensity

Link to the latest <u>4-week change map</u> for NE Minnesota and NW Wisconsin

- One Week Drought Monitor Class Change.
 - Drought Worsened: Not Applicable.
 - No Change: The remainder of the Northland that didn't see drought improve.
 - Drought Improved: Far southeast Aitkin and Carlton counties, western Douglas County, northern and far southern portions of Pine and Burnett counties, and western Washburn County.

U.S. Drought Monitor 1-Week Change Map



Duluth. MN

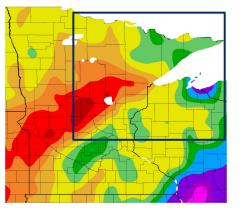


Precipitation

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

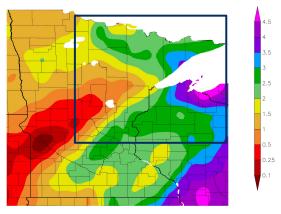
- Regional precipitation in the past month ranges from well-below to above normal depending on location.
 - Small parts of the Arrowhead and portions of the South Shore along and east of the eastern Bayfield County are above normal for rainfall.
 - Much of north-central Minnesota into the Twin Ports are below to well-below average for rainfall.
 - The remainder of the Northland is within plus-or-minus 0.5" of normal rainfall over the past month.

Departure from Normal Precipitation (in) 10/9/2024 - 11/7/2024



Generated 11/8/2024 at HPRCC using provisional data.

Precipitation (in) 10/9/2024 - 11/7/2024



NOAA Regional Climate Centers Generated 11/8/2024 at HPRCC using provisional data

-1.5

NOAA Regional Climate Center

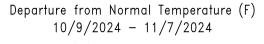


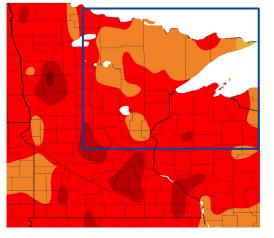
National Oceanic and Atmospheric Administration U.S. Department of Commerce

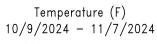
Temperature

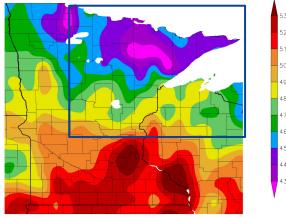
Temperatures that were observed in the Northland over the last month

 Temperatures have been an average of 4°F to 8°F above normal across the entire Northland over the past month.









rated 11/8/2024 at HPRCC using provisional data.



Generated 11/8/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Hydrologic Impacts

• Streamflows are running below to much below normal in northeast Minnesota and around normal in northwest Wisconsin. (USGS Streamflow).

Agricultural Impacts

• Below normal soil moisture

Fire Hazard Impacts

• Fire danger is Low for north-central into east-central Minnesota (<u>MN Fire Danger</u>). Fire danger is also Low for northwest Wisconsin (<u>WI Fire Danger</u>).

Other Impacts

- Increased irrigation of gardens and golf courses.
- Less water for wildlife.
- Change in wetlands, swamps, and creeks.

Mitigation Actions

• Burn Restrictions - Burning permits are required in <u>northeast Minnesota</u>.

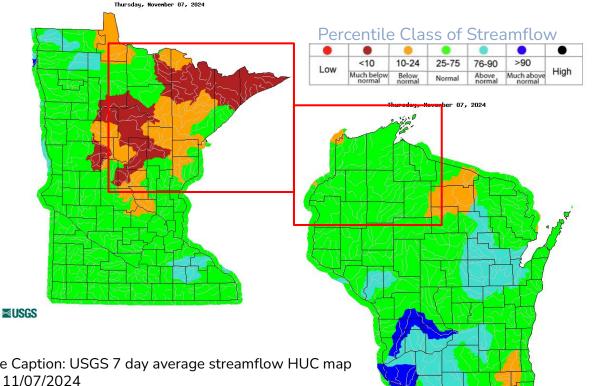


Hydrologic Conditions and Impacts

Northeast Minnesota -

Streams are running much below normal to below normal for most basins in north-central and northeast Minnesota.

Northwest Wisconsin -Streams are running around normal for northwest Wisconsin.



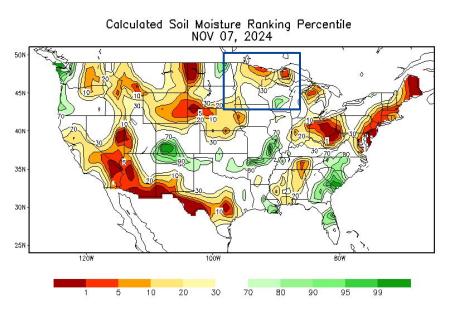
USGS

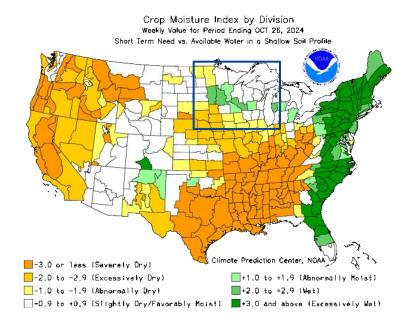
Image Caption: USGS 7 day average streamflow HUC map valid 11/07/2024





• Soil moisture is below normal in the Northland.



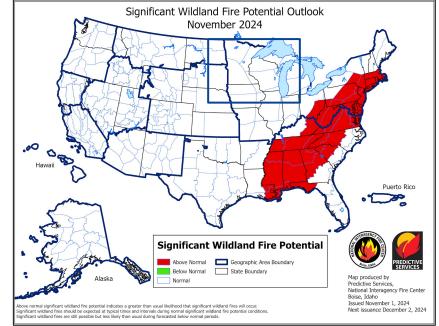






Link to Wildfire Potential Outlooks from the National Interagency Coordination Center.

Significant Wildland
 Fire Potential
 conditions are normal
 for November.



Latest MN burn ban and fire danger information available here.

Latest WI burn ban and fire danger information available here.

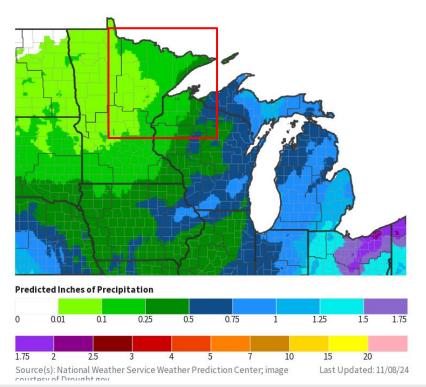


Seven Day Precipitation Forecast

Amount of liquid equivalent precipitation forecast over the next seven days

- Scattered rain will bring less than one-quarter of an inch of rain to the Northland Saturday afternoon, 11/9, through Sunday, 11/10.
- Another low pressure system is forecast to move through the Upper Great Lakes late Tuesday, 11/12, and depart early Thursday, 11/14.
 Precipitation will primarily be in the form of rain, though temperatures could get cold enough Wednesday evening and night for some light snow to mix in. Additional liquid precipitation amounts of 0.1 to 0.5 inches are forecast, highest in north-central Wisconsin.

7-Day Quantitative Precipitation Forecast for November 8, 2024–November 15, 2024



National Weather Service Duluth, MN

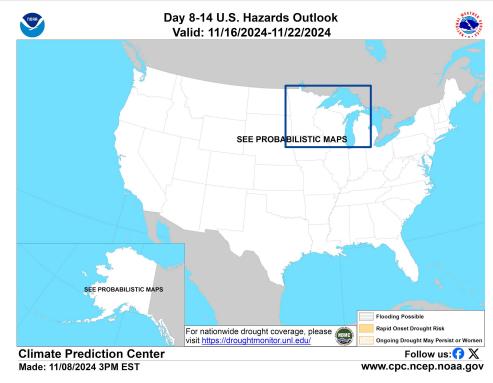


National Oceanic and Atmospheric Administration

Rapid Onset Drought Outlook

Links to the latest Climate Prediction Center 8 to 14 day <u>Temperature Outlook</u> and <u>Precipitation Outlook</u>.

• No rapid onset drought expected.

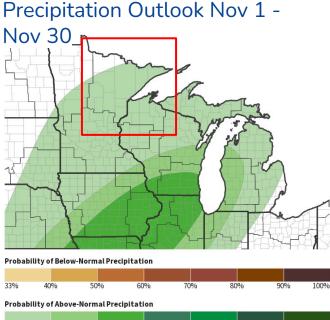


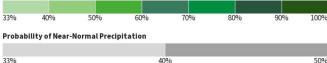
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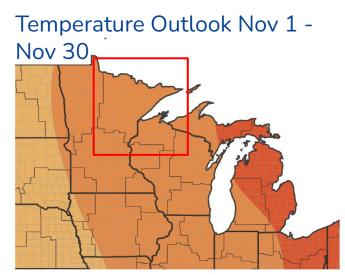
The latest monthly and seasonal outlooks can be found on the CPC homepage

- Longer-term forecasts show a slight lean (33-40%) of above normal precipitation for the remainder of November.
- Longer-term forecasts show a lean (40-50% chance) towards above normal temperatures for the remainder of November.





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



Probability of Below-Normal Temperatures



Probability of Above-Normal Temperatures



Probability of Near-Normal Temperatures

50%

Last Updated: 10/31/24

33%	40%	50%
Source(s): Climate Prediction Center: image courtesv of Drought.gov		Last Updated: 10/31/24

National Weather Service Duluth. MN



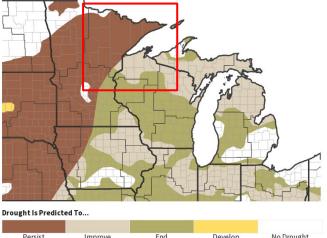
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Most of the Northland is currently experiencing drought, with the drought expected to persist through at least January in northeast Minnesota, but improve and/or end in northwest Wisconsin

Drought Outlook

Seasonal Outlook Late October 2024 - January 2025



Persist Improve End Develop No Drought
Source(s): Climate Prediction Center; image courtesy of Drought.gov Last Updated: 10/31/24

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



National Oceanic and Atmospheric Administration U.S. Department of Commerce