



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

Valid October 26, 2023

Issued By: NWS Twin Cities / Chanhassen MN

Contact Information: [nws.twincities@noaa.gov](mailto:nws.twincities@noaa.gov)

- This product will be updated next Thursday, 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

- Very little change in drought conditions as of Tue 10/24 – **this map was created BEFORE this week’s rainfall occurred.**
- While conditions have been generally improving, long term drought remains
- Upper portions of the soil are becoming saturated, but groundwater conditions are still very low.
- Dry and cold weather expected for the next week.

## IMPORTANT UPDATES

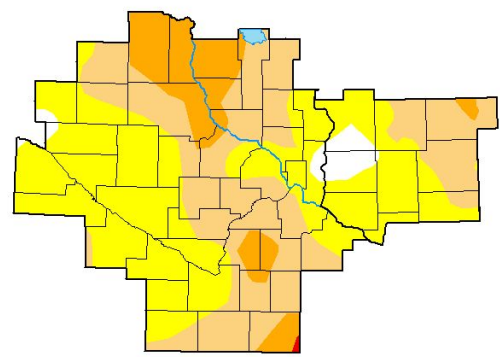
- Drought conditions improving, but a long way from over.

## Next Scheduled Update

- Thursday, November 2nd, 2023



### U.S. Drought Monitor Twin Cities/ Chanhassen, MN WFO



**October 24, 2023**  
(Released Thursday, Oct. 26, 2023)  
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	3.06	96.94	48.92	12.25	0.11	0.00
Last Week 10-17-2023	3.00	97.00	55.49	13.35	0.11	0.00
3 Months Ago 07-25-2023	0.00	100.00	73.86	38.10	1.74	0.00
Start of Calendar Year 01-01-2023	16.54	83.46	67.01	32.37	0.00	0.00
Start of Water Year 09-26-2022	0.00	100.00	90.60	40.96	8.44	0.00
One Year Ago 10-25-2022	11.28	88.72	68.17	32.16	8.12	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:  
Rocky Billotta  
NCEI/NOAA



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

Image Caption: U.S. Drought Monitor - NWS Twin Cities Region valid at 7am CDT October 24th, 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

- The wetter than normal September and October have improved drought conditions over the entire area.

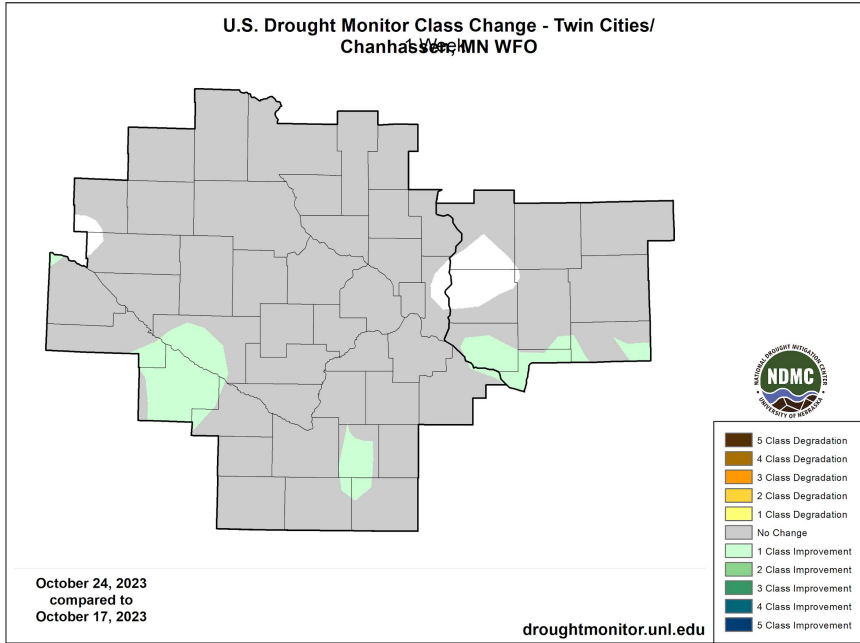


Image Caption: U.S. Drought Monitor 1-week change map valid 7am CDT October 24, 2023.

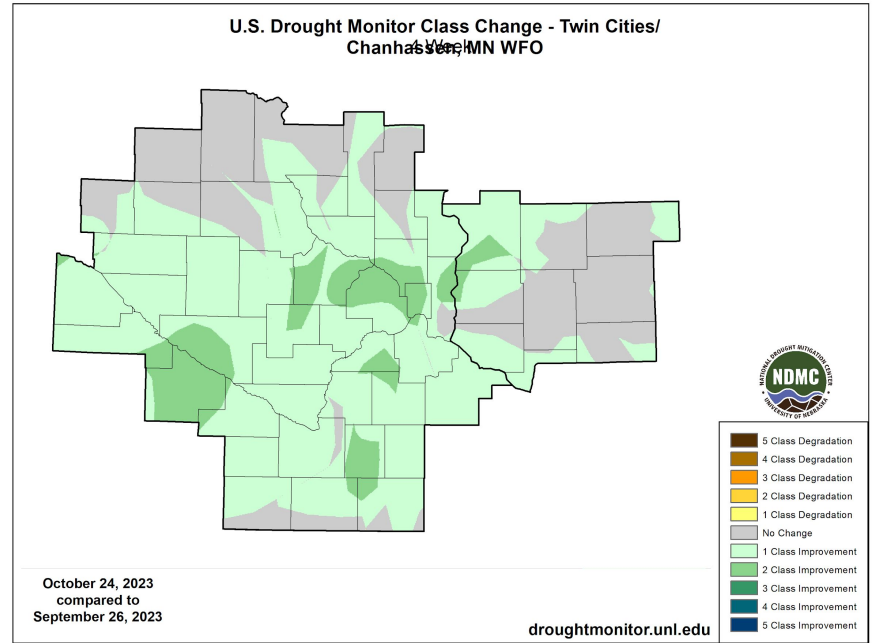


Image Caption: U.S. Drought Monitor 4-week change map valid 7am CDT October 24, 2023.



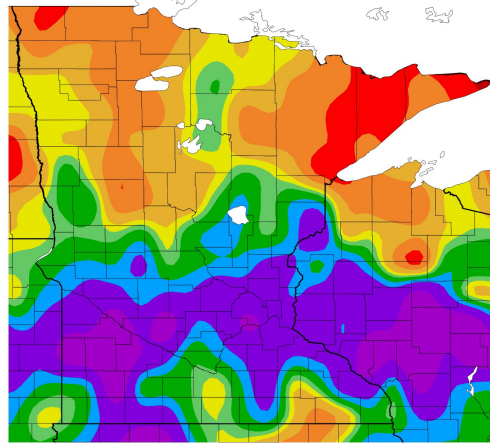


# Precipitation Departures

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

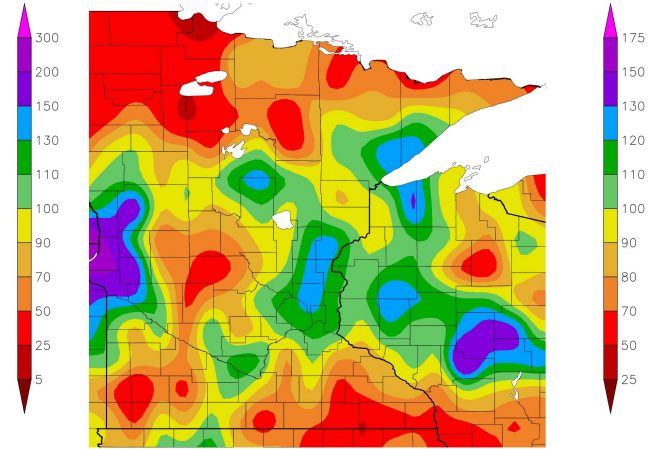
- Much of the region has now seen above normal rainfall over the past month.
- This rain has helped, but a long term deficit remains, going back to last spring.
  - For example, in the metro area, a deficit of around 5-6 inches since May remains (it had been over 10 inches going into September).

Percent of Normal Precipitation (%)  
9/26/2023 – 10/25/2023



Generated 10/26/2023 at HPRCC using provisional data.

Percent of Normal Precipitation (%)  
7/28/2023 – 10/25/2023



NOAA Regional Climate Centers at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions:  
 Left - [30-Day Percent of Normal Precipitation for MN and western WI](#)  
 Right - [90-day Percent of Normal Precipitation for MN and western WI](#)

Data Courtesy High Plains Regional Climate Center.  
 Data over the past 30 & 90 days ending on October 24, 2023



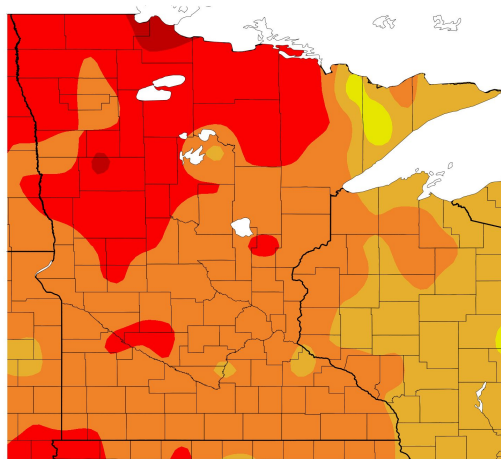


# Temperature Departure

## 1-week and 1-month temperature departure

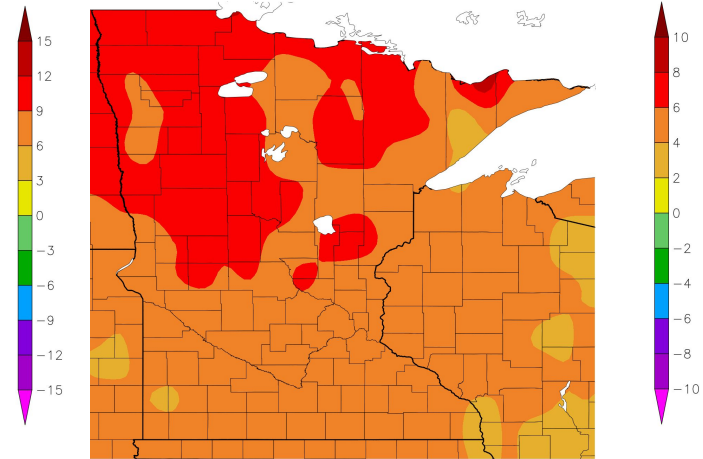
- The last week was above normal for temperatures, around 4 degrees above normal for most of the area.
- Multiple bouts of warm weather have kept temperatures above normal overall for the past month, around 4 to 6 degrees above normal.

Departure from Normal Temperature (F)  
10/19/2023 – 10/25/2023



Generated 10/26/2023 at HPRCC using provisional data.

Departure from Normal Temperature (F)  
9/26/2023 – 10/25/2023



NOAA Regional Climate Centers 2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions:

- Left - [1 week average temperature departure for MN and western WI](#)
- Right - [1 month average temperature departure for MN and western WI](#)

Data Courtesy High Plains Regional Climate Center.  
Data over the past 7 & 30 days ending October 24, 2023





# Summary of Impacts

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

## Hydrologic Impacts

- The Mississippi River low flow plan has been discontinued, as river levels are no longer threatening low water thresholds.

## Agricultural Impacts

- The increasing rain was mostly too late to help crop yields, but is good for the longer term health of the soil.

## Fire Hazard Impacts

- Wildfire activity has remained low the last few weeks.

## Other Impacts

- Groundwater, and thus the baseflow for rivers and major source of water for lakes and wetlands, remains very low despite the recent rain.





# Hydrologic Conditions and Impacts

Average streamflow for the past 7 days

- Streamflows are actually quite normal now over the area, with some basins in Wisconsin now above normal for October.
- This is due to a combination of a few bouts of rainfall, combined with climatologically low normal streamflows this time of year.

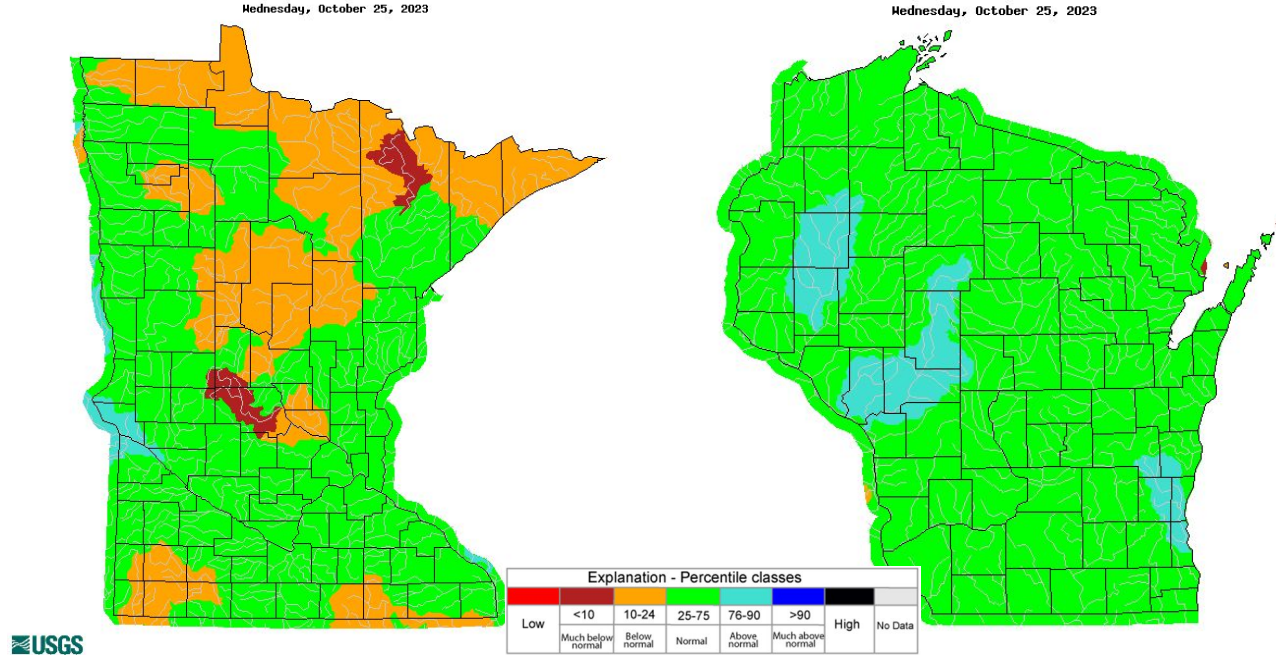


Image Caption: [USGS 7-day Streamflow departure from normal for MN](#). Valid October 25, 2023

Image Caption: [USGS 7-day Streamflow departure from normal for WI](#). Valid October 25, 2023





# Agricultural Impacts

Soil moisture and crop conditions for [MN](#) and [WI](#)

<b>Minnesota (Entire State)</b>	As of Oct 22	Very Short Moisture	Short Moisture	Adequate Moisture	Moisture Surplus
<b>Topsoil</b>		<b>11%</b>	<b>24%</b>	<b>62%</b>	<b>3%</b>
<b>Subsoil</b>		<b>14%</b>	<b>43%</b>	<b>41%</b>	<b>2%</b>

<b>Wisconsin (Entire State)</b>	As of Oct 22	Very Short Moisture	Short Moisture	Adequate Moisture	Moisture Surplus
<b>Topsoil</b>		<b>6%</b>	<b>20%</b>	<b>69%</b>	<b>5%</b>
<b>Subsoil</b>		<b>11%</b>	<b>31%</b>	<b>57%</b>	<b>1%</b>

## Crop Condition as of October 22, 2023

Item	Very Poor	Poor	Fair	Good	Excellent
	(percent)	(percent)	(percent)	(percent)	(percent)
Pasture and range ...	20	34	33	12	1

## Crop Progress as of October 22, 2023

Item	This week	Last week	Last year	5-year avg
	(percent)	(percent)	(percent)	(percent)
Corn harvested for grain .....	62	45	57	49
Potatoes harvested .....	93	92	100	96
Soybeans harvested .....	88	76	93	80
Sugarbeets harvested .....	92	61	94	76
Sunflowers harvested .....	63	36	34	45

## Crop Condition as of October 22, 2023

Item	Very Poor	Poor	Fair	Good	Excellent
	(percent)	(percent)	(percent)	(percent)	(percent)
Corn .....	4	12	34	38	12
Pasture and range ..	9	21	40	28	2
Wheat, winter .....	1	4	30	50	15

Item	This week	Last week	Last year	5-year avg
	(percent)	(percent)	(percent)	(percent)
Corn dented .....	92	86	95	91
Corn mature .....	24	14	21	28
Corn harvested for grain .....	96	93	93	92
Corn harvested for silage .....	30	21	42	32
Fall tillage .....	98	95	100	97
Soybeans dropping leaves .....	69	54	73	60
Soybeans harvested .....	86	74	90	82
Wheat, winter, planted .....	61	49	65	60
Wheat, winter, emerged .....				

**MN**

**WI**

## Highlights

Soil moisture has improved in the topsoil and root zone; groundwater (not shown) is still well below normal for October. Agriculturally, pasture and range has had the worst response to drought this season, and overall harvesting is progressing as well as can be expected.



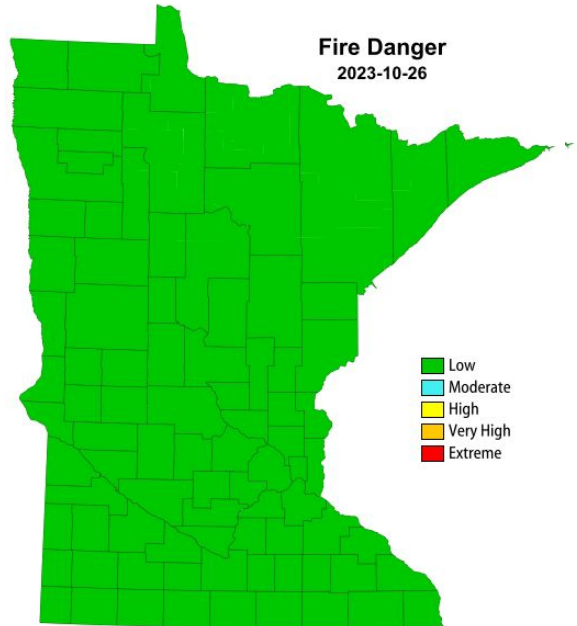




# Fire Hazard Impacts

Fire Danger ratings valid for the date listed ONLY

- Wildfire activity has remained low due to the recent rainfall.



© MNDNR

Image Caption: [Wildfire Danger for MN](#). Valid October 25, 2023

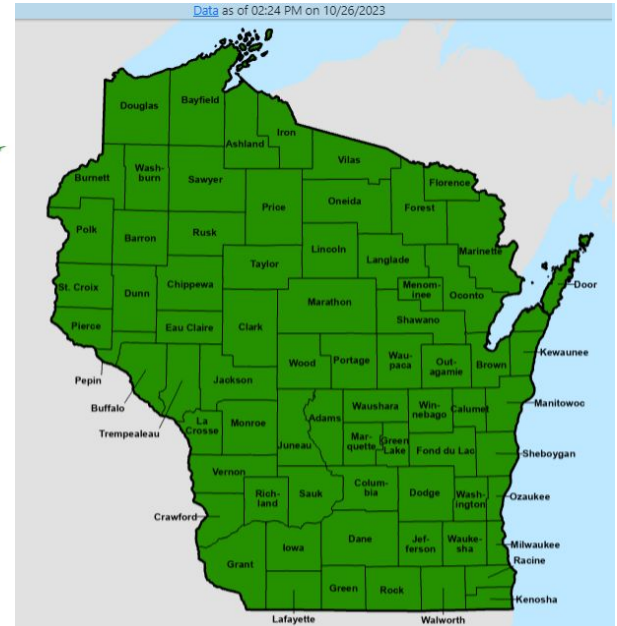


Image Caption: [Wildfire Danger for WI](#). Valid October 25, 2023





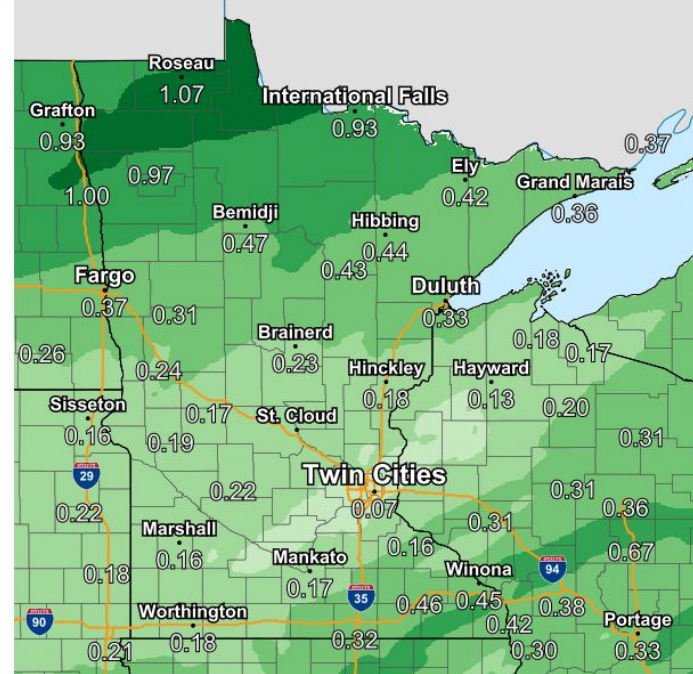
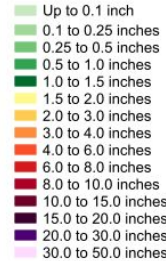
# Seven Day Precipitation Forecast

- After this week's rain, weather conditions turn sharply colder and fairly dry for the next week.



## Forecast Precipitation

Valid Ending Thursday November 2nd, 2023 at 1 PM CDT



Graphic Created  
October 26th, 2023  
2:25 PM CDT

Image Caption: Weather Prediction Center [7-day precipitation forecast](#) valid Thursday October 26 to Thursday November 2, 2023.





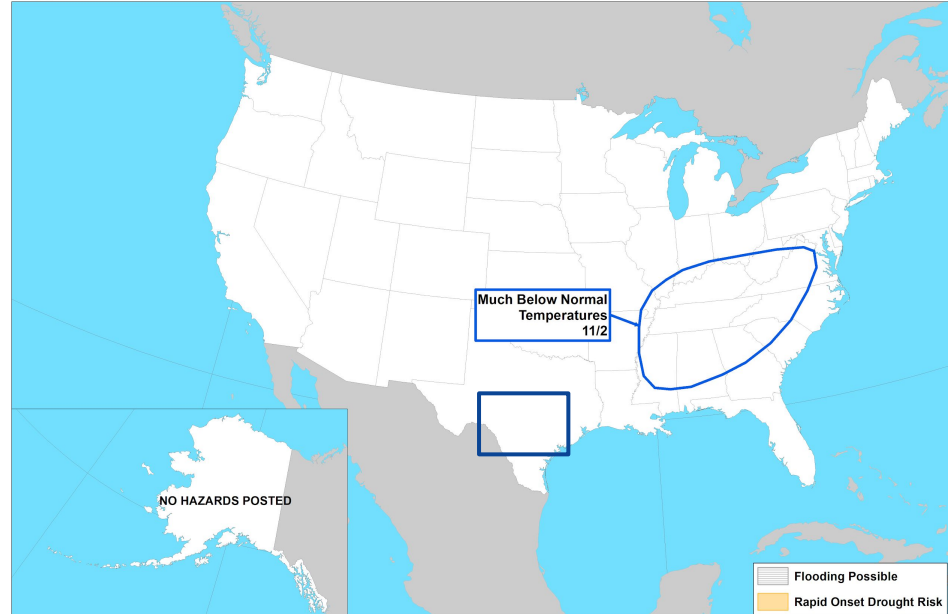
# Rapid Onset Drought Outlook

Links to the latest Climate Prediction Center 8 to 14 day [Temperature Outlook](#) and [Precipitation Outlook](#).

- Summarize conditions and impacts here



Day 8-14 U.S. Hazards Outlook  
Valid: 11/02/2023-11/08/2023



Climate Prediction Center  
Made: 10/25/2023 3PM EDT

Follow us:   
[www.cpc.ncep.noaa.gov](http://www.cpc.ncep.noaa.gov)

Image Caption:  
[Days 8 to 14 U.S. Hazards Outlook](#) Valid Month DD to DD.





# 8-14 Day Outlooks

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

- Temperatures look to be near to below normal for week 2.
- The precipitation pattern has no clear trend above or below normal.

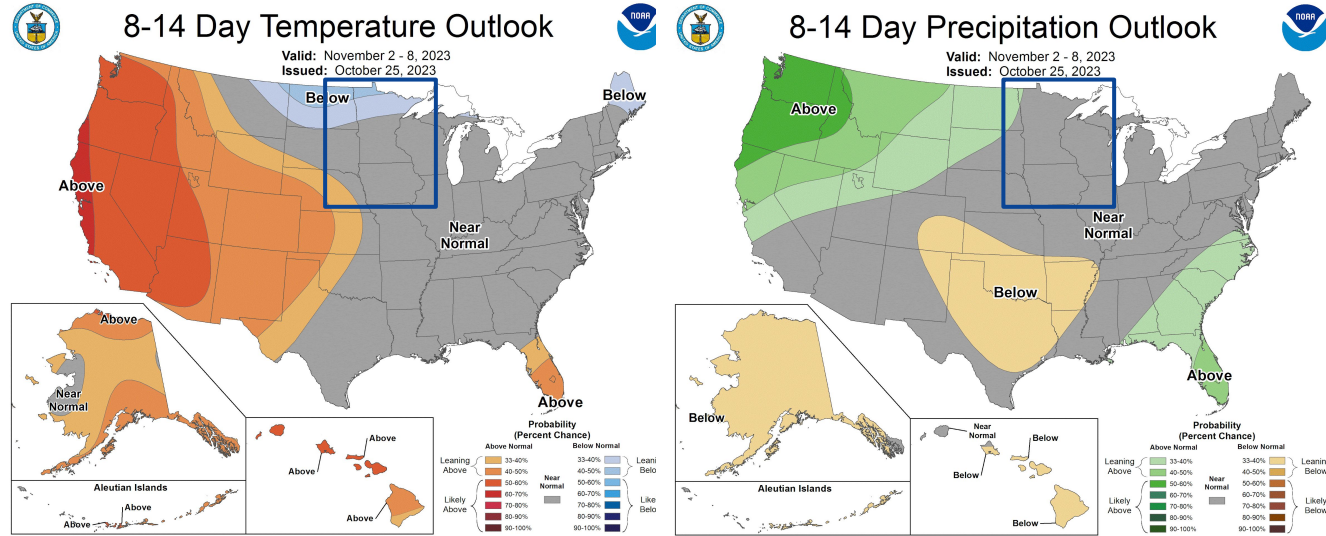


Image Captions:

Left - [Climate Prediction Center 8-14 Day Temperature Outlook](#),

Right - [Climate Prediction Center 8-14 Day Precipitation Outlook](#),

Issued October 25, 2023





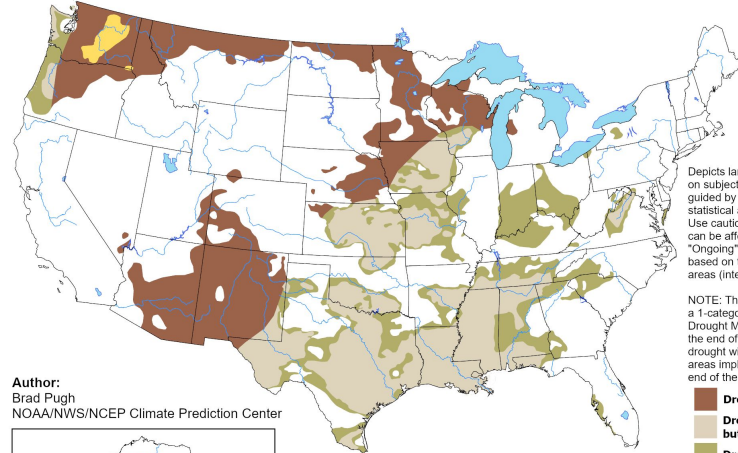
# Drought Outlook

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

- The Climate Prediction Center expects drought to persist over our area through the early winter.
- Recent rainfall has improved drought conditions in October, however long term drought persists.

## U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

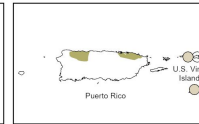
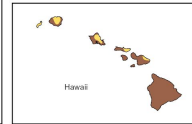
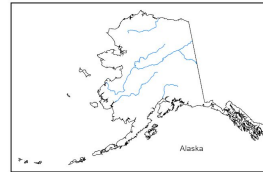
Valid for October 19, 2023 - January 31, 2024  
Released October 19, 2023



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. \*Ongoing\* drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:  
Brad Pugh  
NOAA/NWS/NCEP Climate Prediction Center



- Drought persists
- Drought remains, but improves
- Drought removal likely
- Drought development likely
- No drought



<https://go.usa.gov/3eZ73>

Links to the latest:

[Climate Prediction Center Monthly Drought Outlook](#)

[Climate Prediction Center Seasonal Drought Outlook](#)

Image Caption: Climate Prediction Center Seasonal Drought Outlook Released October 19, 2023 valid for Oct-Nov-Dec 2023.



National Oceanic and Atmospheric Administration

U.S. Department of Commerce

National Weather Service  
Twin Cities/Chanhasen MN



# Drought Definitions and State Resources

What do those categories mean?

## Drought Category Definitions:

<b>D0</b>	<b>Abnormally Dry</b>	<b>Going into drought:</b> <ul style="list-style-type: none"> <li>Short-term dryness slowing planting, growth of crops or pastures</li> </ul>	<b>Coming out of drought:</b> <ul style="list-style-type: none"> <li>Some lingering water deficits</li> <li>Pastures or crops not fully recovered</li> </ul>
<b>D1</b>	<b>Moderate Drought</b>	<ul style="list-style-type: none"> <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>	
<b>D2</b>	<b>Severe Drought</b>	<ul style="list-style-type: none"> <li>Crop or pasture losses likely</li> <li>Water shortages common</li> <li>Water restrictions imposed</li> </ul>	
<b>D3</b>	<b>Extreme Drought</b>	<ul style="list-style-type: none"> <li>Major crop/pasture losses</li> <li>Widespread water shortages or restrictions</li> </ul>	
<b>D4</b>	<b>Exceptional Drought</b>	<ul style="list-style-type: none"> <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: <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.

