



Drought Information Statement for Central, Southern Minnesota and Western Wisconsin

Valid October 5, 2023

Issued By: NWS Twin Cities / Chanhassen MN

Contact Information: 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

- Slight improvement near and north of the Twin Cities this week; no change elsewhere.
- Longer term, the drought has gotten worse in western Minnesota.
- Little rainfall expected in the next 7-10 days.

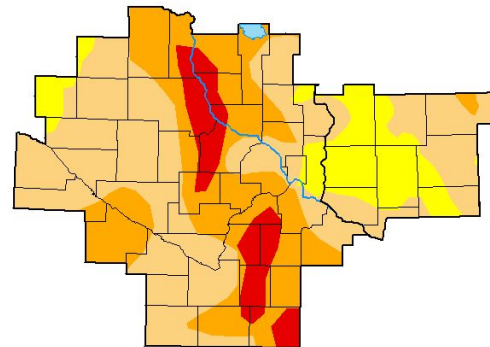
IMPORTANT UPDATES

- Very little change in the drought this week.

Next Scheduled Update

- Thursday, October 12th, 2023

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



October 3, 2023
(Released Thursday, Oct. 5, 2023)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	86.62	37.21	8.48	0.00
Last Week 08-26-2023	0.00	100.00	90.60	40.96	8.44	0.00
3 Months Ago 07-04-2023	1.74	98.26	71.70	14.37	0.00	0.00
Start of Calendar Year 01-03-2023	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 10-04-2022	11.92	88.08	54.84	25.30	7.33	0.00

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate 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:
Brad Pugh
CPC/NOAA



droughtmonitor.unl.edu

Image Caption: U.S. Drought Monitor - NWS Twin Cities Region valid at 7am CDT October 3rd, 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

- Little change recently; overall, drought conditions have worsened over the last month in the west, and improved in the metro and east.

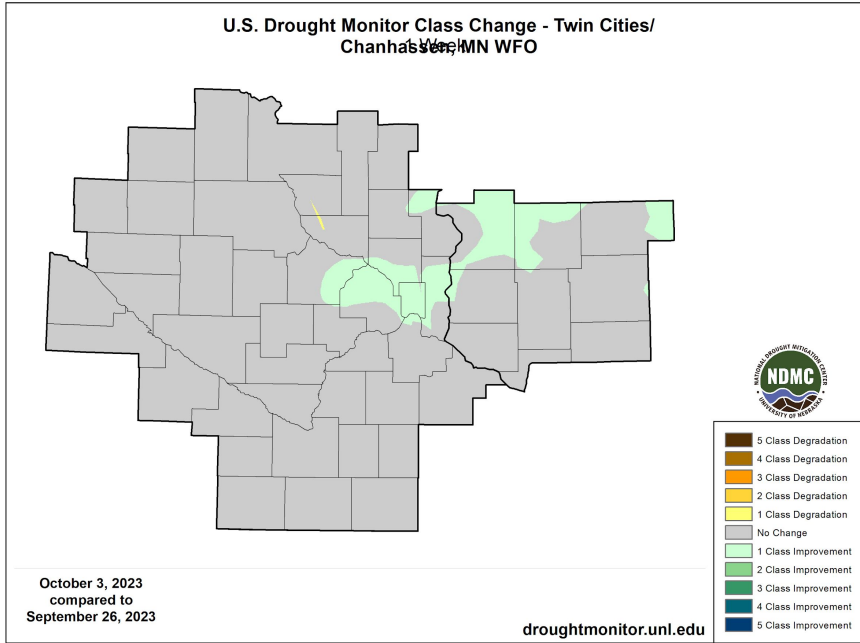


Image Caption: U.S. Drought Monitor 1-week change map valid 7am CDT October 3, 2023.

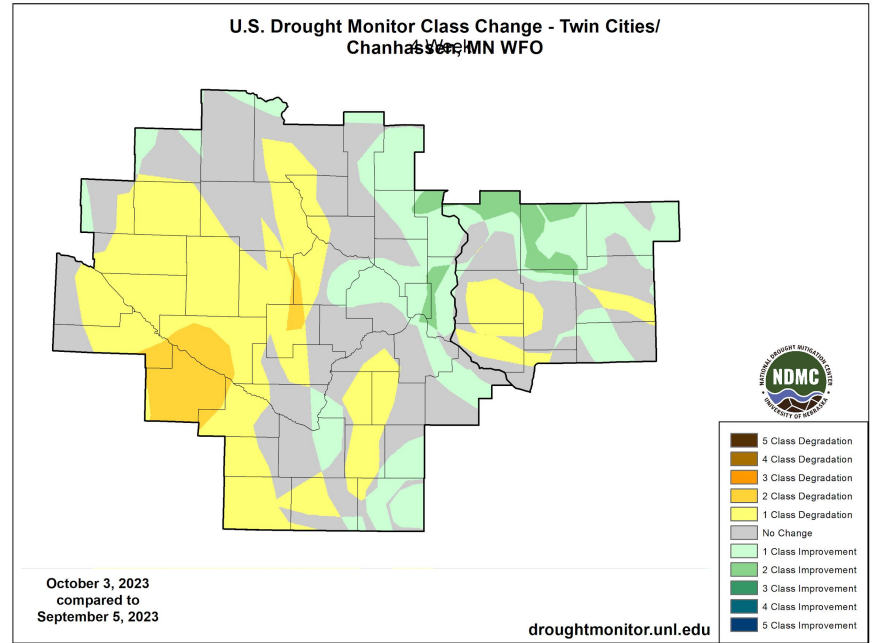


Image Caption: U.S. Drought Monitor 4-week change map valid 7am CDT October 3, 2023.



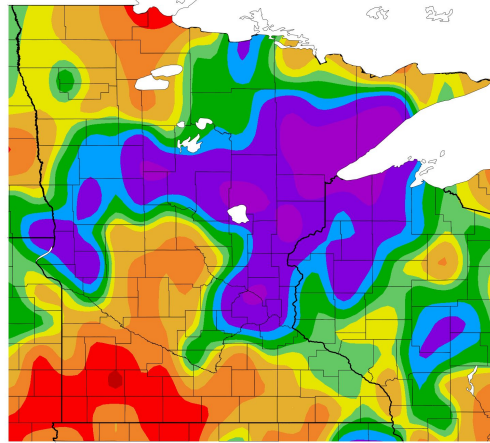


Precipitation Departures

1-month and 3-month percent of normal precipitation

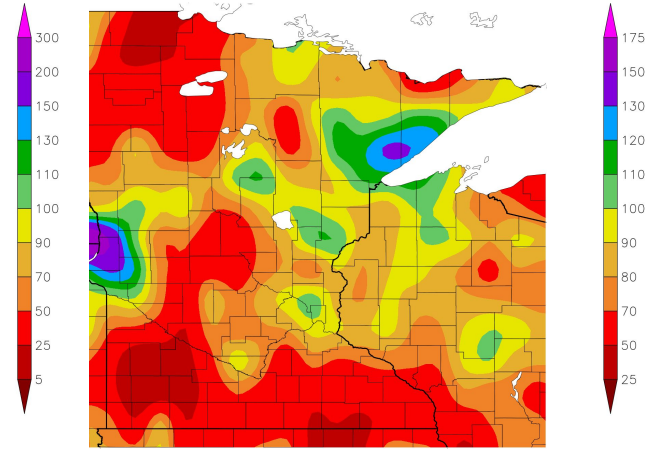
- Areas to the north and far west have been above normal in the last month, but overall we remain below normal.
- These dry conditions extend back through the summer and into mid-May.
- For example, much of the D3 drought area has a precipitation deficit of 8 to 12 inches since April.

Percent of Normal Precipitation (%)
9/5/2023 – 10/4/2023



Generated 10/5/2023 at HPRCC using provisional data.

Percent of Normal Precipitation (%)
7/7/2023 – 10/4/2023



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 3, 2023



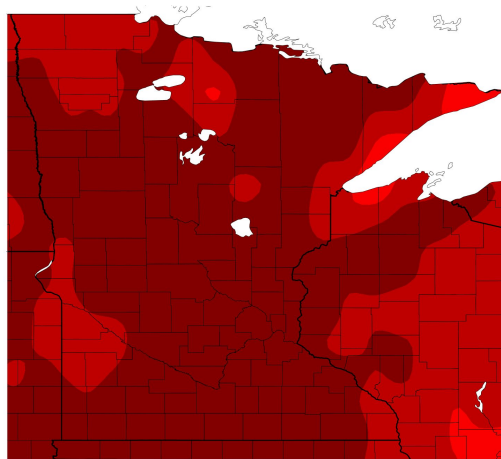


Temperature Departure

1-week and 1-month temperature departure

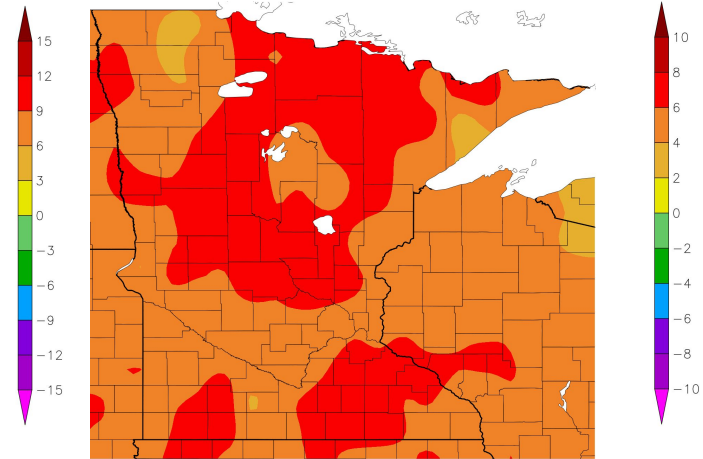
- The last week was well above normal for temperatures, mostly 12 to 16 degrees above.
- Multiple heat waves have kept temperatures above normal overall for the past month as well, though short periods of cooler weather have helped.

Departure from Normal Temperature (F)
9/28/2023 – 10/4/2023



Generated 10/5/2023 at HPRCC using provisional data.

Departure from Normal Temperature (F)
9/5/2023 – 10/4/2023



NOAA Regional Climate Centers 023 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 3, 2023





Summary of Impacts

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

Hydrologic Impacts

- The Mississippi River flow has improved somewhat over the past two weeks, but is still considered to be at or near “low flow” for the entire Upper Mississippi region from Grand Rapids through the Brooklyn Park gage.

Agricultural Impacts

- Sector seeing the biggest impact from the dry conditions have been hay fields, which have seen fewer cuts than usual this growing season in many areas.

Fire Hazard Impacts

- Wildfire activity has remained low the last few weeks.
- However, fuels continue to dry out and all we are is a day with favorable weather conditions away from seeing significant wildland activity in grassy fuels

Other Impacts

- State drought task forces remain active in both MN and WI.





Hydrologic Conditions and Impacts

Average streamflow for the past 7 days

- Streamflows are closer to normal this week than over the past few months.
- This is due to a combination of a few bouts of rainfall, combined with climatologically low normal streamflows this time of year.

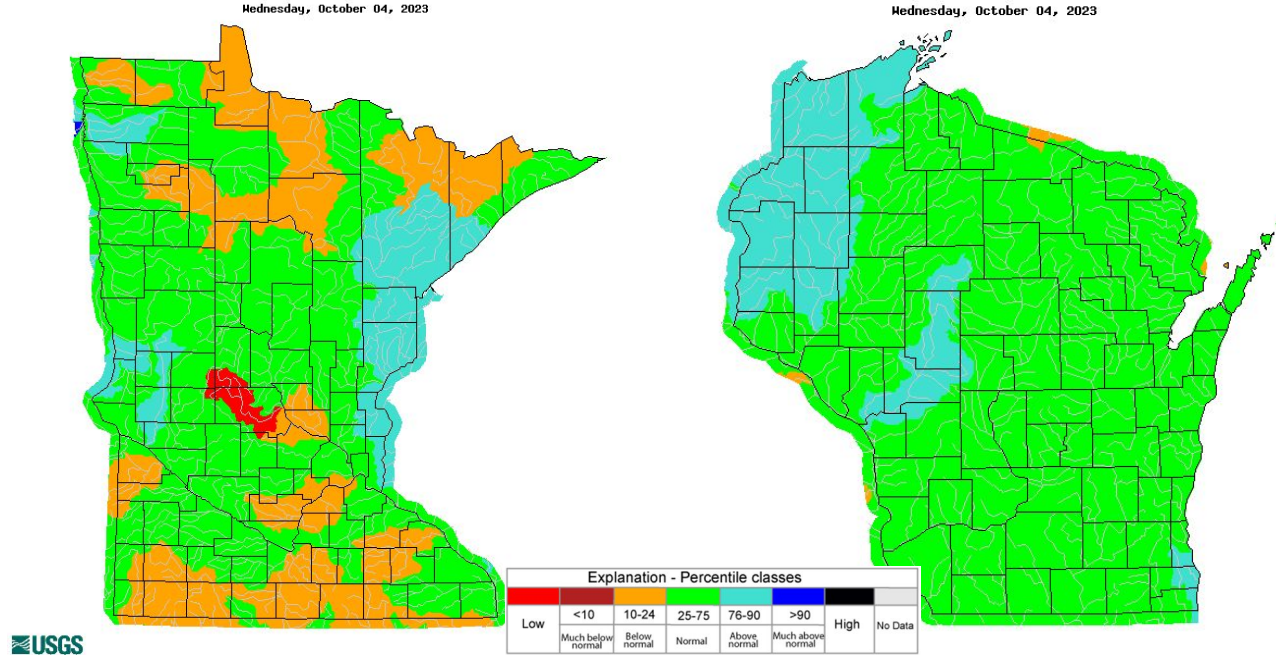


Image Caption: [USGS 7-day Streamflow departure from normal for MN](#). Valid October 4, 2023

Image Caption: [USGS 7-day Streamflow departure from normal for WI](#). Valid October 4, 2023





Agricultural Impacts

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

Minnesota (Entire State)	As of Oct 1	Very Short Moisture	Short Moisture	Adequate Moisture	Moisture Surplus
	Topsoil	20%	44%	30%	1%
	Subsoil	22%	54%	24%	0%

Wisconsin (Entire State)	As of Oct 1	Very Short Moisture	Short Moisture	Adequate Moisture	Moisture Surplus
	Topsoil	11%	31%	57%	1%
	Subsoil	18%	37%	45%	0%

Item	Very Poor	Poor	Fair	Good	Excellent
	(percent)	(percent)	(percent)	(percent)	(percent)
Corn	7	17	37	32	7
Pasture and range ...	27	38	28	7	0
Soybeans	4	13	40	36	7
Sugarbeets	0	2	5	20	73
Sunflowers	0	3	44	52	1

Item	Very Poor	Poor	Fair	Good	Excellent
	(percent)	(percent)	(percent)	(percent)	(percent)
Corn	4	16	30	38	12
Pasture and range .	13	26	36	23	2
Soybeans	4	14	33	39	10

Highlights

Drought has not affected row crops as badly as pasture and range; corn and beans are actually ahead of last year's harvest pace. Soil moisture has improved in Wisconsin over the past two weeks.



Fire Hazard Impacts

Fire Danger ratings valid for the date listed ONLY

- Wildfire activity has remained low due to a lack of favorable fire weather conditions (hot, dry, and windy).
- Recent rainfall has helped fine fuels recover somewhat, but we're still just a hot, dry, windy spell from seeing dangerous fire conditions anytime in the next month.

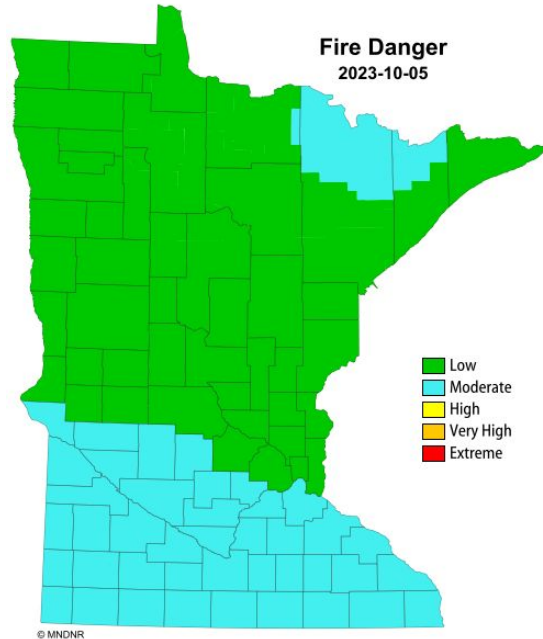


Image Caption: [Wildfire Danger for MN](#). Valid October 5, 2023

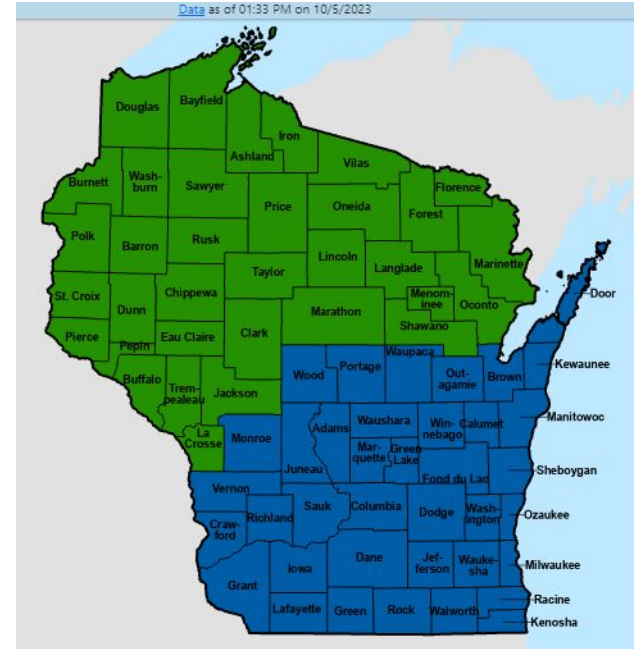


Image Caption: [Wildfire Danger for WI](#). Valid October 5, 2023





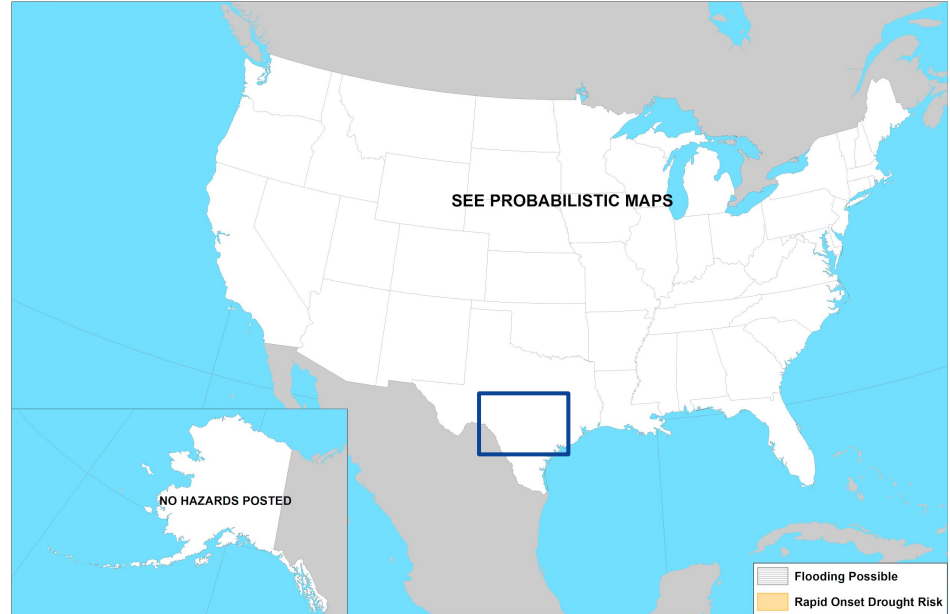
Rapid Onset Drought Outlook

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: 10/13/2023-10/19/2023



Climate Prediction Center
Made: 10/05/2023 3PM EDT

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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](#)

- Above normal temperatures continue to be favored going in mid October.
- There is a nearly equal chance of above, near, and below normal precipitation during week 2.

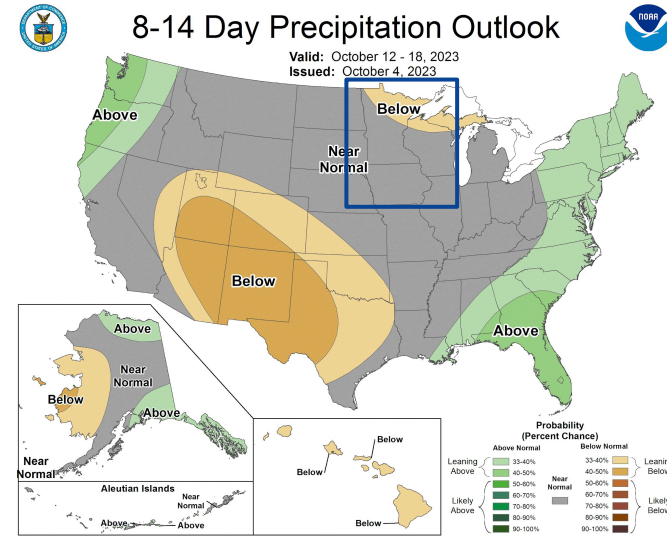
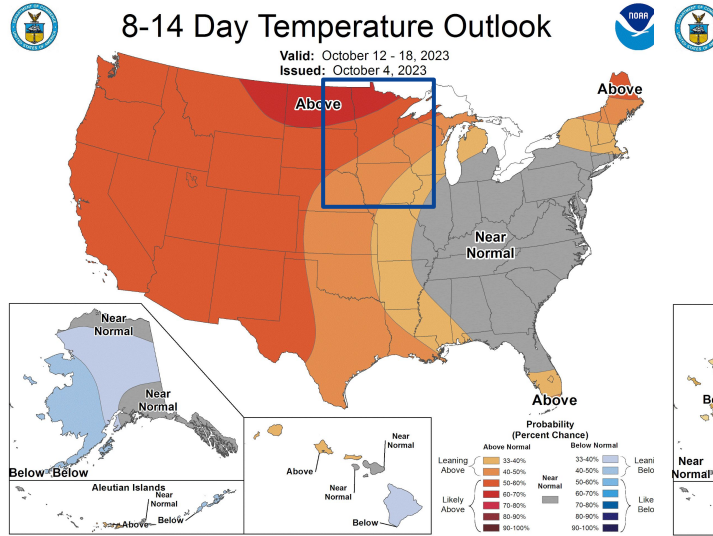


Image Captions:

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

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

Issued October 4, 2023





Drought Outlook

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

- The Climate Prediction Center expects little change in drought conditions for our area during the next month.
- Recent rainfall has at least slowed the progression and intensity of drought conditions expected through October.

U.S. Monthly Drought Outlook Drought Tendency During the Valid Period

Valid for October 2023
Released September 30, 2023

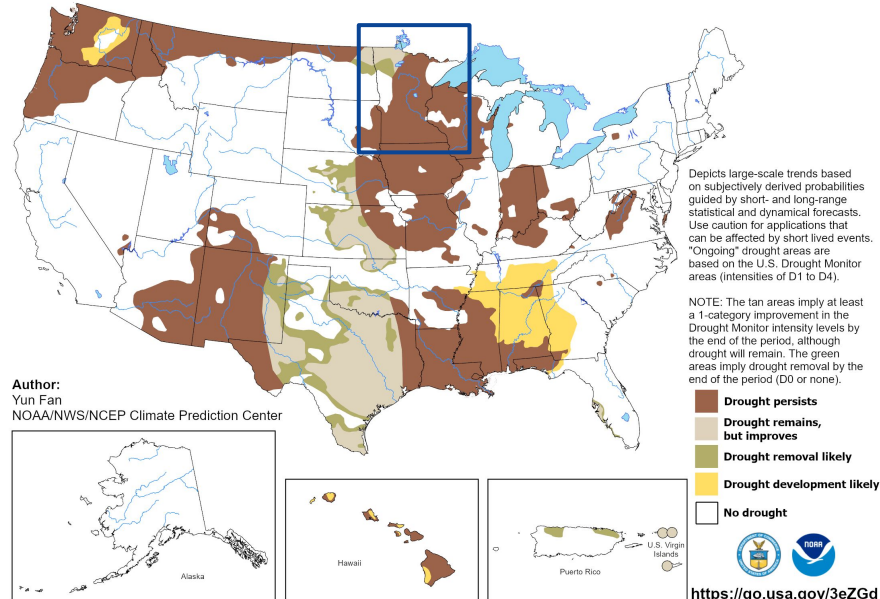


Image Caption: Climate Prediction Center Seasonal Drought Outlook Released September 30, 2023 valid for Oct 2023

Links to the latest:

- [Climate Prediction Center Monthly Drought Outlook](#)
- [Climate Prediction Center Seasonal Drought Outlook](#)





Drought Definitions and State Resources

What do those categories mean?

Drought Category Definitions:

D0	Abnormally Dry	Going into drought: <ul style="list-style-type: none"> Short-term dryness slowing planting, growth of crops or pastures 	Coming out of drought: <ul style="list-style-type: none"> Some lingering water deficits Pastures or crops not fully recovered
D1	Moderate Drought	<ul style="list-style-type: none"> Some damage to crops, pastures Streams, reservoirs, or wells low, some water shortages developing or imminent Voluntary water-use restrictions requested 	
D2	Severe Drought	<ul style="list-style-type: none"> Crop or pasture losses likely Water shortages common Water restrictions imposed 	
D3	Extreme Drought	<ul style="list-style-type: none"> Major crop/pasture losses Widespread water shortages or restrictions 	
D4	Exceptional Drought	<ul style="list-style-type: none"> Exceptional and widespread crop/pasture losses Shortages of water in reservoirs, streams, and wells creating water emergencies 	

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.

