

Drought Information Statement for Central, Southern Minnesota and Western Wisconsin

Valid October 12, 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 west of the Twin Cities this week; no change elsewhere.
- Longer term, the drought has gotten worse in western Minnesota.
- Widespread accumulating rainfall expected over the next few days.
- Dry conditions return next week.

IMPORTANT UPDATES

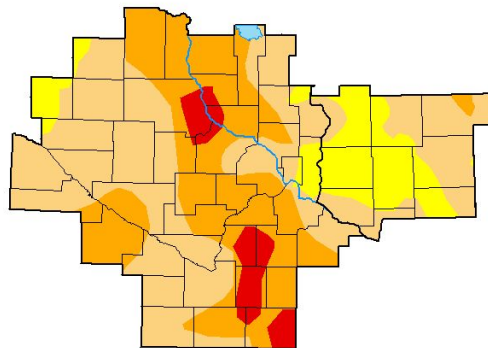
- Very little change in the drought this week.

Next Scheduled Update

- Thursday, October 19th, 2023

U.S. Drought Monitor

**Twin Cities/
Chanhassen, MN WFO**



October 10, 2023

(Released Thursday, Oct. 12, 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	36.77	5.40	0.00
Last Week 10-03-2023	0.00	100.00	86.62	37.21	8.48	0.00
3 Months Ago 07-11-2023	0.00	100.00	72.45	23.48	0.00	0.00
Start of Calendar Year 01-01-2023	15.54	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 10-11-2022	11.84	88.16	55.37	25.75	8.12	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 10th, 2023



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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 southwest, and improved in the metro and east.

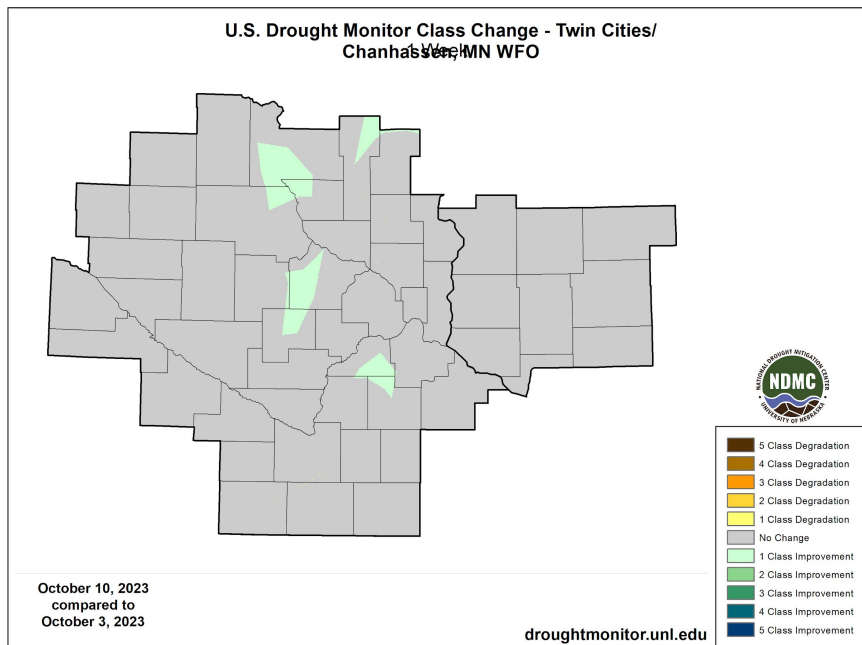


Image Caption: U.S. Drought Monitor 1-week change map valid 7am CDT October 10, 2023.

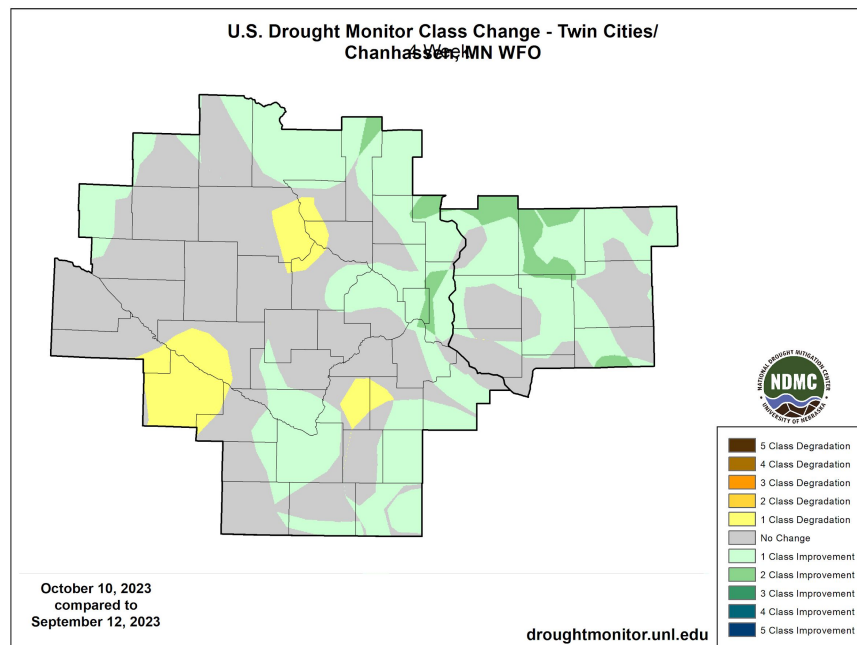


Image Caption: U.S. Drought Monitor 4-week change map valid 7am CDT October 10, 2023.



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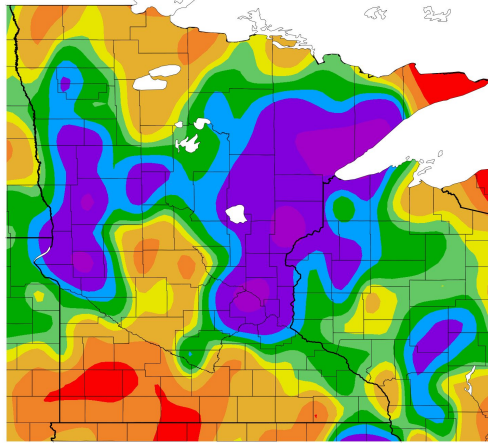


Precipitation Departures

1-month and 3-month percent of normal precipitation

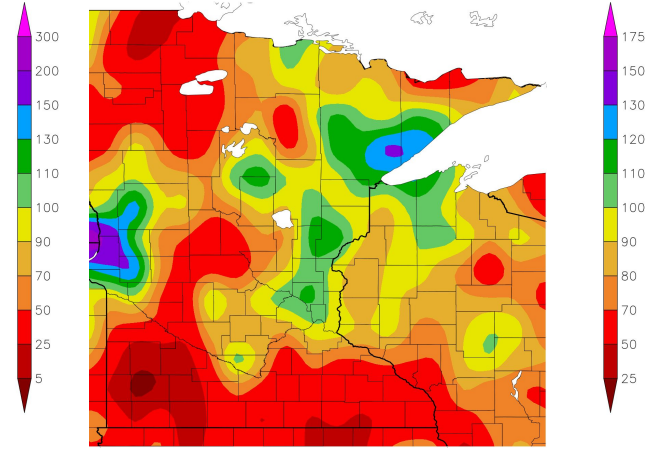
- Areas to the north and far west have been above normal in the last month, but overall we remain below normal.
- These dry conditions extend back through the summer and into mid-May.
- For example, much of the D3 drought area has a precipitation deficit of 8 to 12 inches since April.

Percent of Normal Precipitation (%)
9/11/2023 – 10/10/2023



Generated 10/11/2023 at HPRCC using provisional data.

Percent of Normal Precipitation (%)
7/13/2023 – 10/10/2023



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 10, 2023



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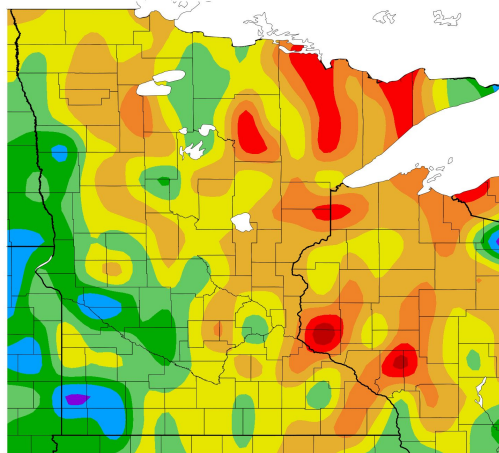


Temperature Departure

1-week and 1-month temperature departure

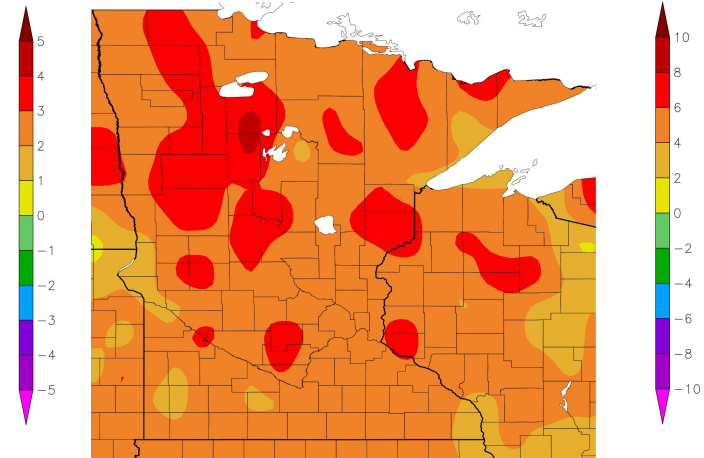
- The last week was near normal for temperatures, 1 to 3 degrees above east and 1 to 3 degrees below west.
- Multiple heat waves have kept temperatures above normal overall for the past month as well, though recent cooler temperatures has helped.

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



Generated 10/11/2023 at HPRCC using provisional data.

Departure from Normal Temperature (F)
9/11/2023 – 10/10/2023



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 10, 2023

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Summary of Impacts

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

Hydrologic Impacts

- The Mississippi River flow has continued to improve over the past two weeks, but is still considered to be near “low flow” across much of the entire Upper Mississippi region from Grand Rapids through the Brooklyn Park gage.
 - Conditions have improved enough to stop low flow forecasts.

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.

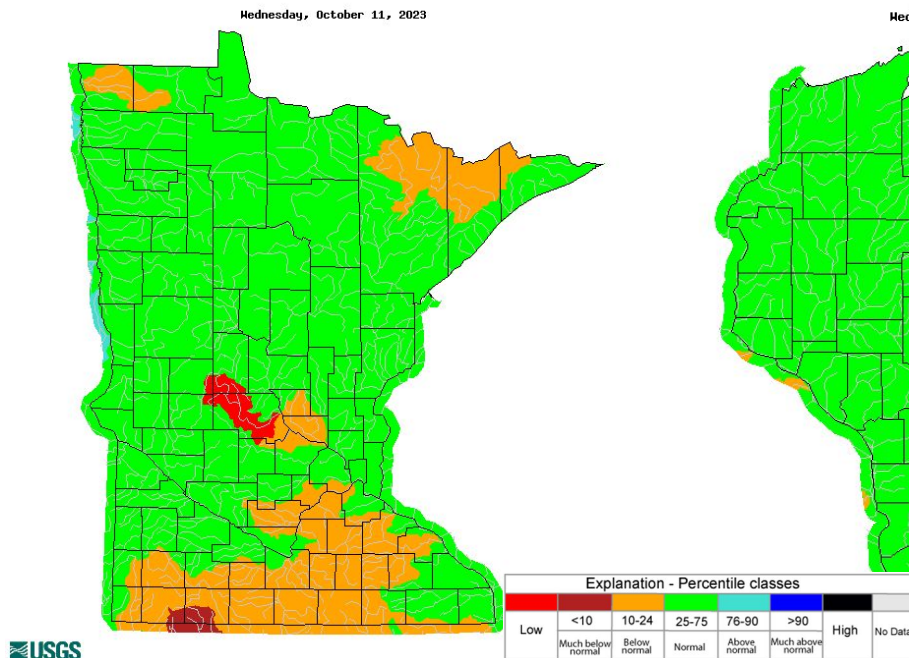


Image Caption: [USGS 7-day Streamflow departure from normal for MN](#). Valid October 11, 2023

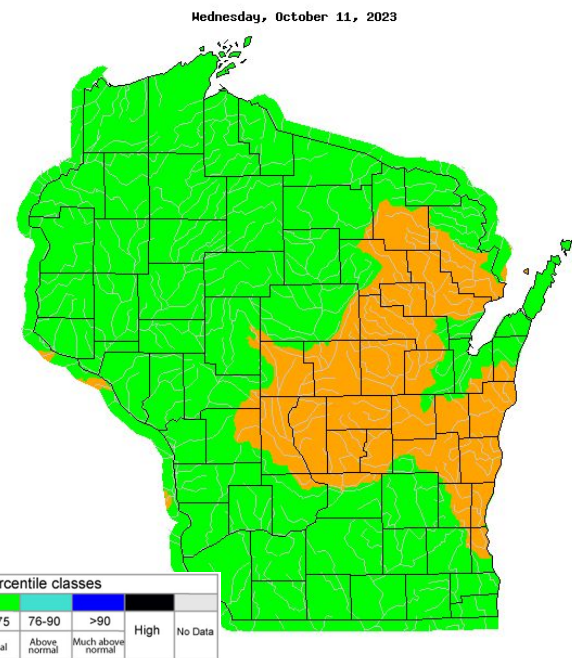


Image Caption: [USGS 7-day Streamflow departure from normal for WI](#). Valid October 11, 2023



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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	18%	42%	38%	2%
Subsoil	20%	54%	26%	0%

Wisconsin (Entire State)

As of Oct 1	Very Short Moisture	Short Moisture	Adequate Moisture	Moisture Surplus
Topsoil	11%	31%	57%	1%
Subsoil	18%	39%	43%	0%

Crop Condition as of October 8, 2023 MN

Item	Very Poor	Poor	Fair	Good	Excellent
	(percent)	(percent)	(percent)	(percent)	(percent)
Corn	7	17	35	32	9
Pasture and range ...	26	37	29	8	0
Soybeans	4	12	40	37	7
Sugarbeets	0	2	6	25	67
Sunflowers	0	4	44	51	1

Crop Condition as of October 8, 2023 WI

Item	Very Poor	Poor	Fair	Good	Excellent
	(percent)	(percent)	(percent)	(percent)	(percent)
Corn	2	14	33	38	13
Pasture and range .	10	21	37	29	3
Soybeans	3	12	36	38	11

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.

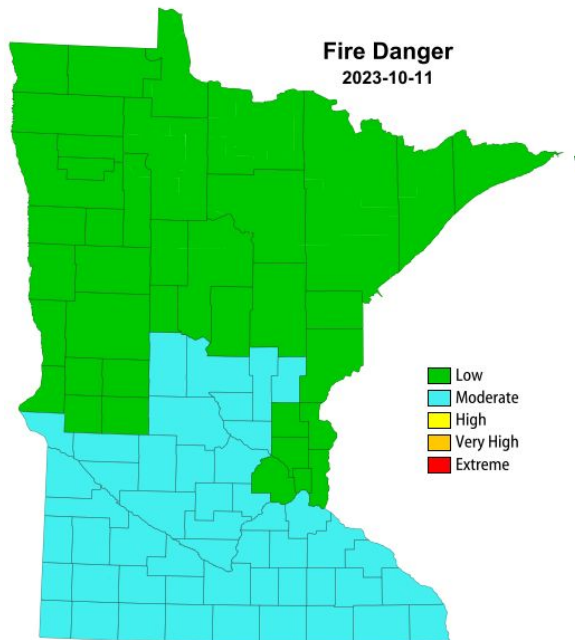




Fire Hazard Impacts

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.



© MNDNR

Image Caption: [Wildfire Danger for MN](#). Valid October 11, 2023

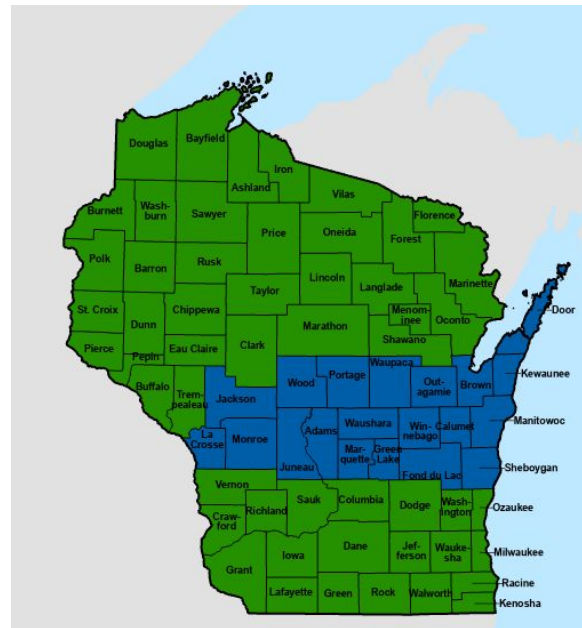


Image Caption: [Wildfire Danger for WI](#). Valid October 11, 2023



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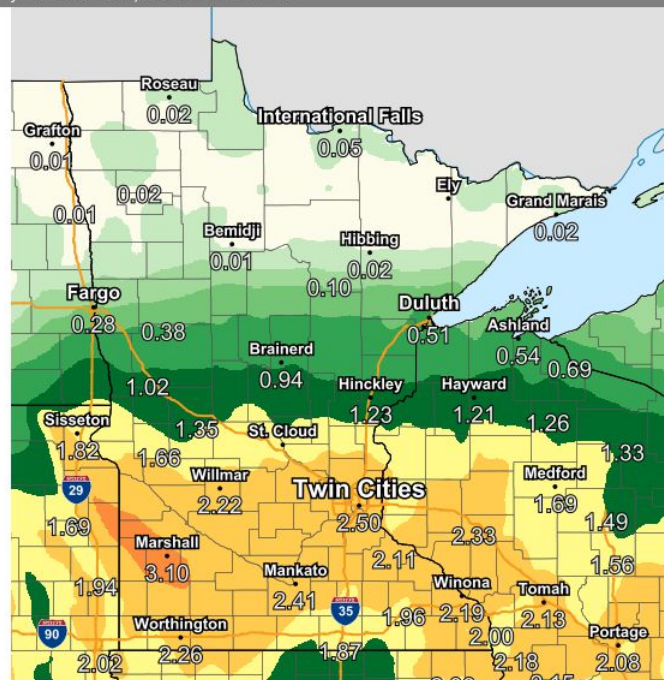
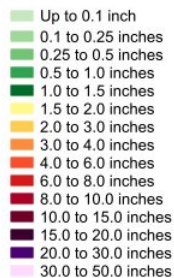
Seven Day Precipitation Forecast

- Widespread accumulating precipitation is expected over the entire area in the next week.
- Temperatures remain near or a little below normal for the next week, rather than the extremely warm weather we saw at the end of September and first few days of October.



Forecast Precipitation

Valid Ending Thursday October 19th, 2023 at 7 PM CDT



Graphic Created
October 12th, 2023
12:52 PM CDT

Image Caption: Weather Prediction Center [7-day precipitation forecast](#) valid Thursday October 5 to Thursday October 12, 2023.





Rapid Onset Drought Outlook

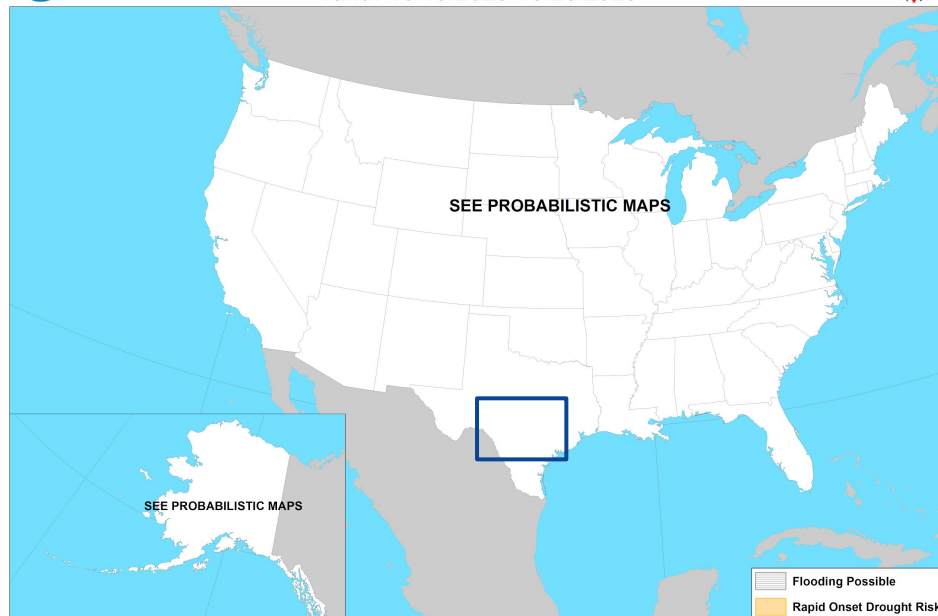
Links to the latest Climate Prediction Center 8 to 14 day [Temperature Outlook](#) and [Precipitation Outlook](#).

- Summarize conditions and impacts here





Day 8-14 U.S. Hazards Outlook

Valid: 10/19/2023-10/25/2023



Climate Prediction Center

Made: 10/11/2023 3PM EDT

Follow us:  

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Image Caption:

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



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8-14 Day Outlooks

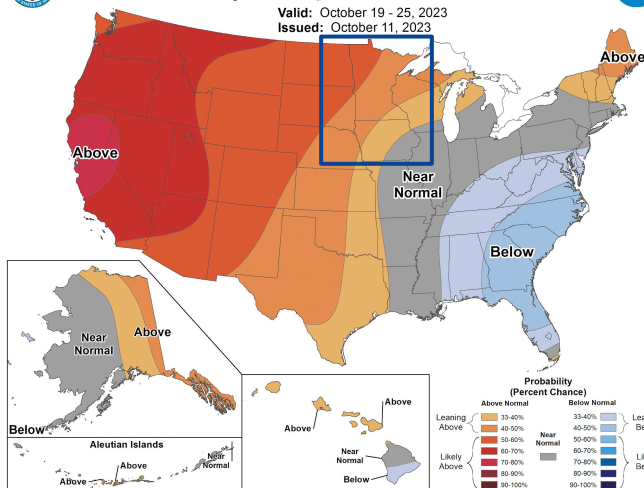
The latest weekly to seasonal outlooks can be found on the [CPC homepage](#)

- Above normal temperatures continue to be favored through the end of October.
- There is a chance of below normal precipitation during week 2.



8-14 Day Temperature Outlook

Valid: October 19 - 25, 2023
Issued: October 11, 2023



8-14 Day Precipitation Outlook

Valid: October 19 - 25, 2023
Issued: October 11, 2023

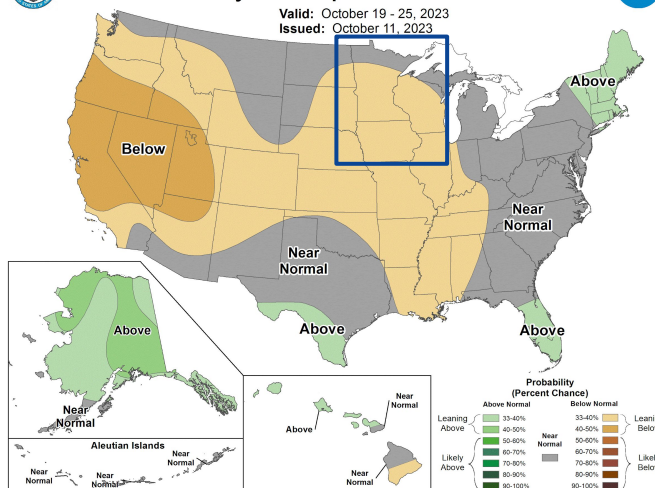


Image Captions:

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

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

Issued October 11, 2023



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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

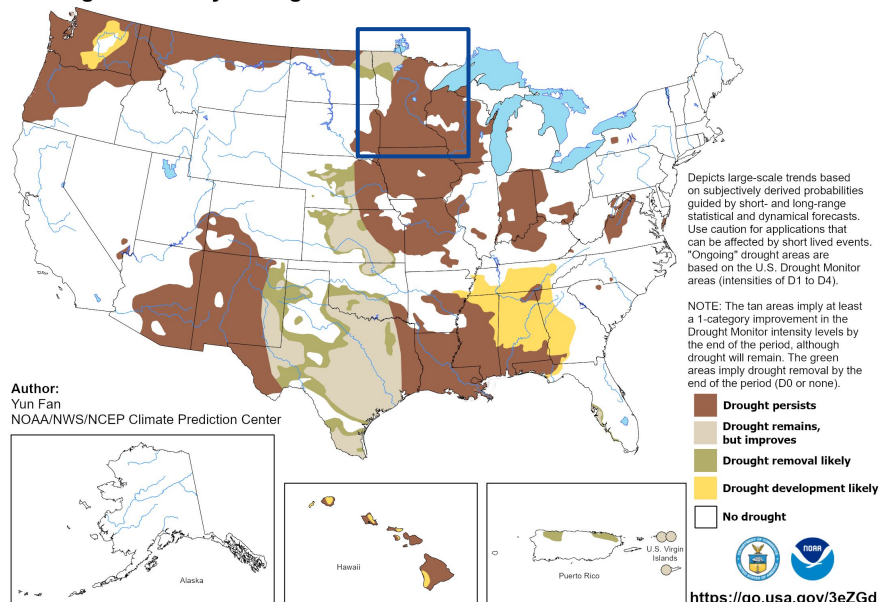


Image Caption: Climate Prediction Center Seasonal Drought Outlook Released September 30, 2023 valid for Oct 2023

Links to the latest:

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



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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.

