

Wisconsin Ag Climate Outlook

Week of August 19, 2024

Natasha Paris

Crops Educator – Adams, Green Lake,
Marquette, Waushara Cos.

natasha.paris@wisc.edu

Kristin Foehringer

NRCS State Working Lands Climate
Smart Specialist

kristin.foehringer@usda.gov

Dennis Todey

Director, Midwest Climate Hub

dennis.todey@usda.gov

Josh Bendorf

Ag Climatologist, Midwest Climate Hub

joshua.bendorf@usda.gov

Steve Vavrus

State Climatologist of Wisconsin

svavrus@wisc.edu

Bridgette Mason

Assistant State Climatologist of
Wisconsin

bmmason2@wisc.edu

Key Points

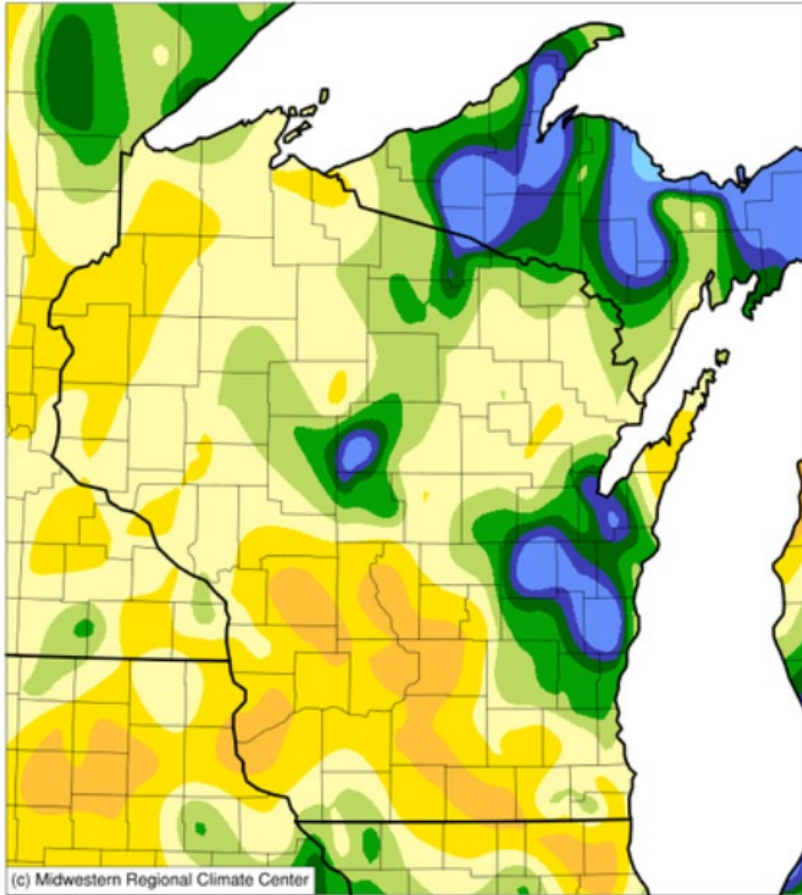
Navigate to select slides by clicking on the [links](#) below.

- 1) August has been near [normal](#) for most of WI.
- 2) Soil moisture levels remain at [good to adequate](#) levels for most, even after a [wet week](#) for some. Corn and soybeans in [good to excellent condition](#) are similar compared to last week.
- 3) This next week looks to be a [bit drier](#) for precip, but still lean towards below average precip for [8-14 days out](#).

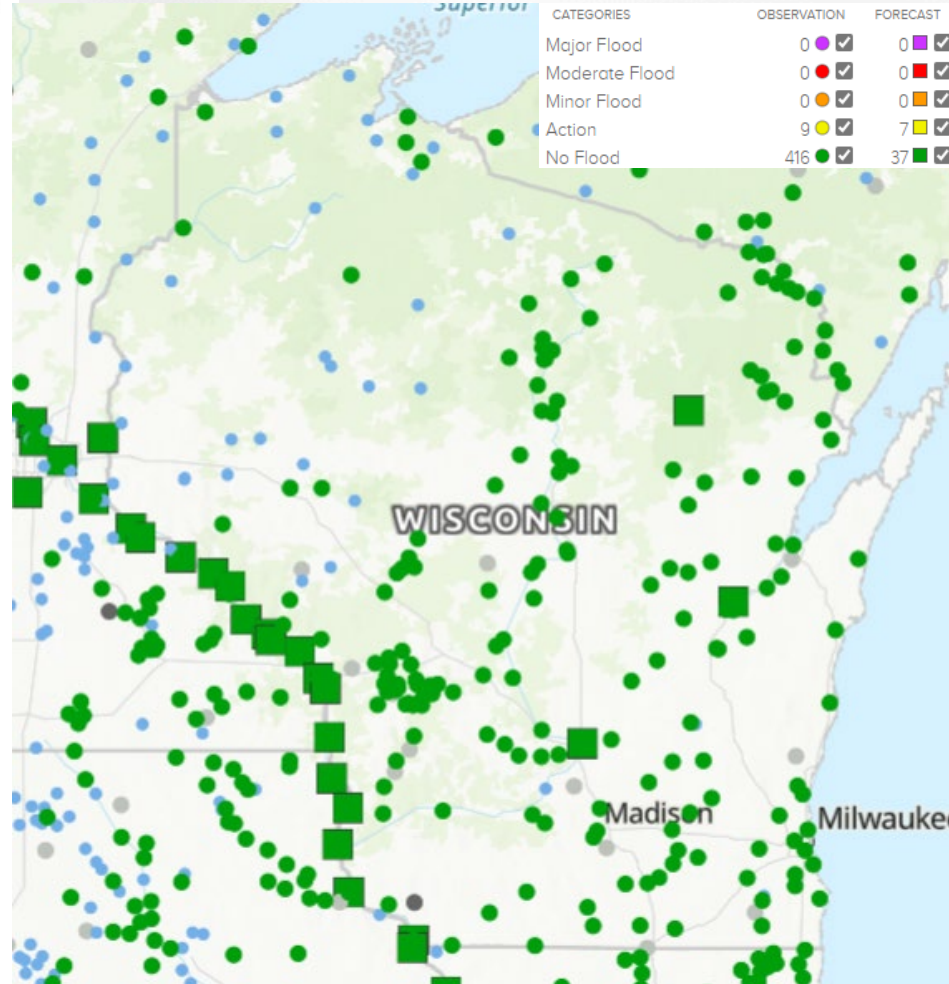
- *For this week's agronomic recommendations from UW Extension, click [here](#).*
- *For the latest GDD accumulation maps, click [here](#).*
- *For NASS crop progress & condition maps, click [here](#).*

Varied Precipitation Week

Accumulated Precipitation (in): Percent of 1991-2020 Normals
August 11, 2024 to August 19, 2024



(c) Midwestern Regional Climate Center

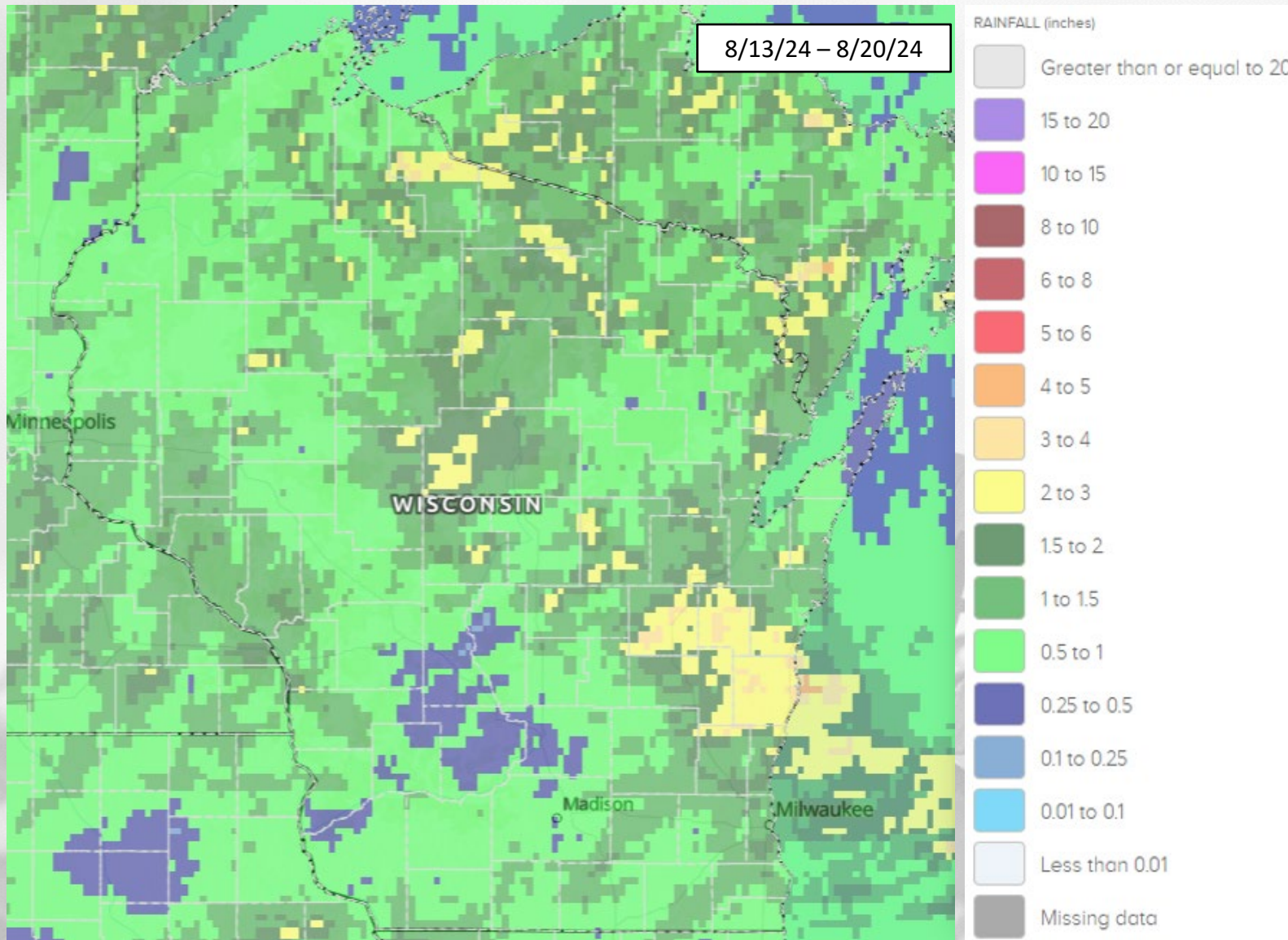


- Wet week for the north central and eastern portion of the state with some stations reporting **>200%** of the normal weekly total.
- A dry week for the western and southern portions of the state with many stations reporting **<75%** of the normal weekly total.
- River levels **remain below flood stage.**

<https://water.noaa.gov/>

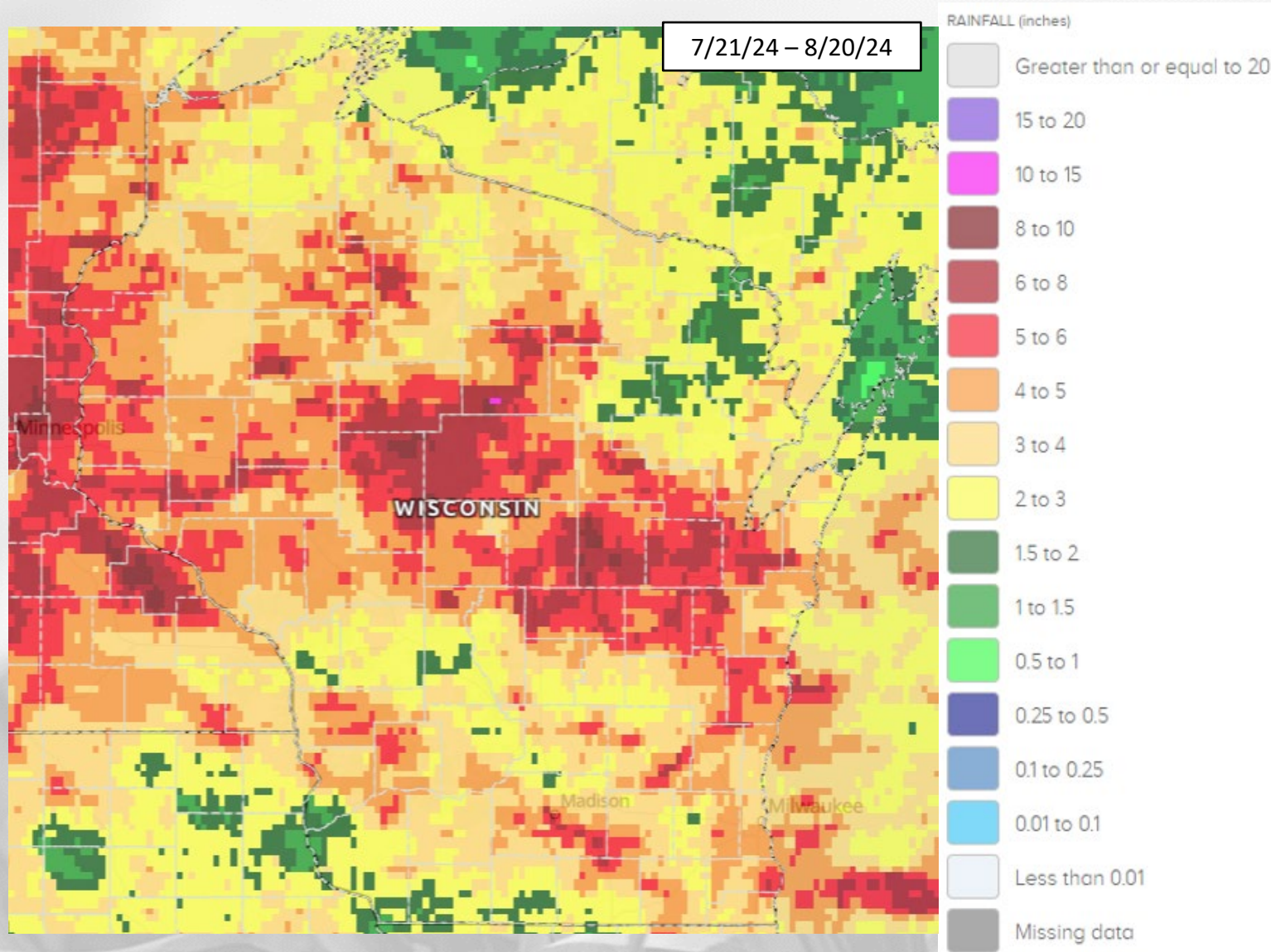
<https://mrcc.purdue.edu/CLIMATE>

7 Day Precip



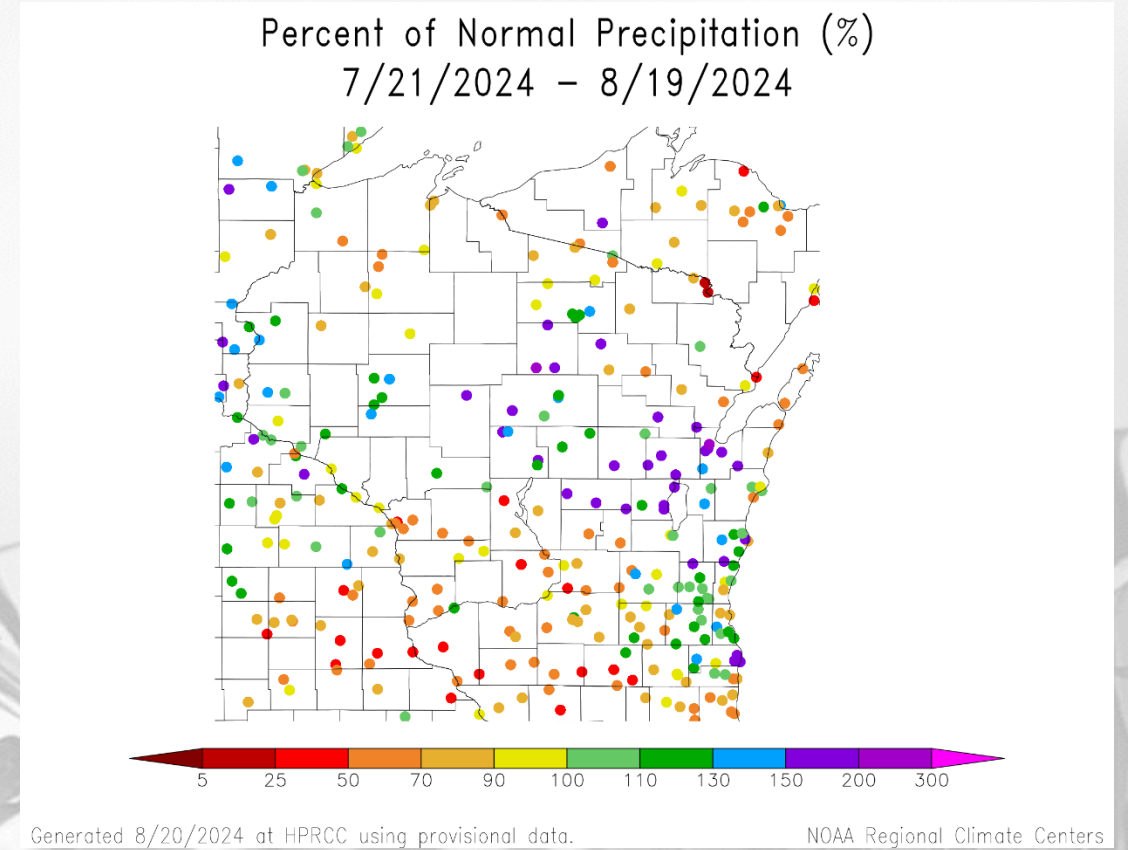
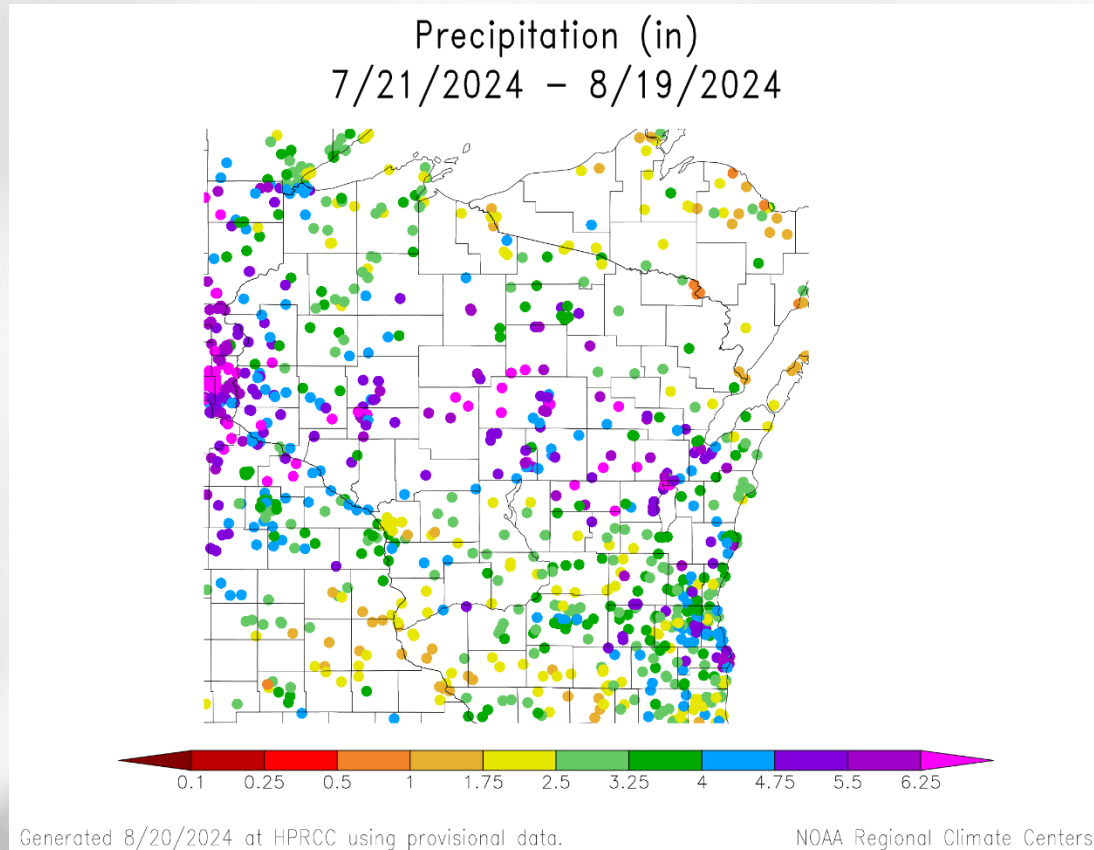
- Most of the state received at least **0.5"** of precip last week.
- Pockets of **2-3"** are scattered across the state.

30 Day Precip



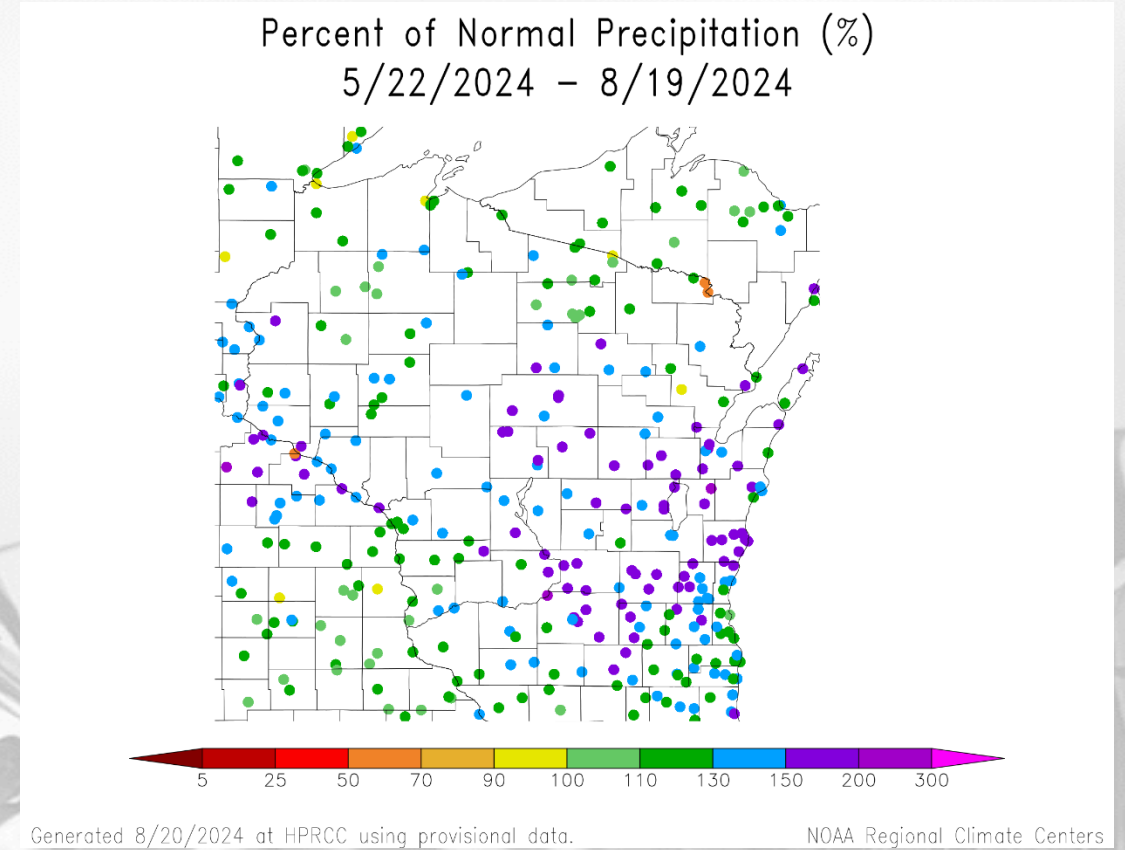
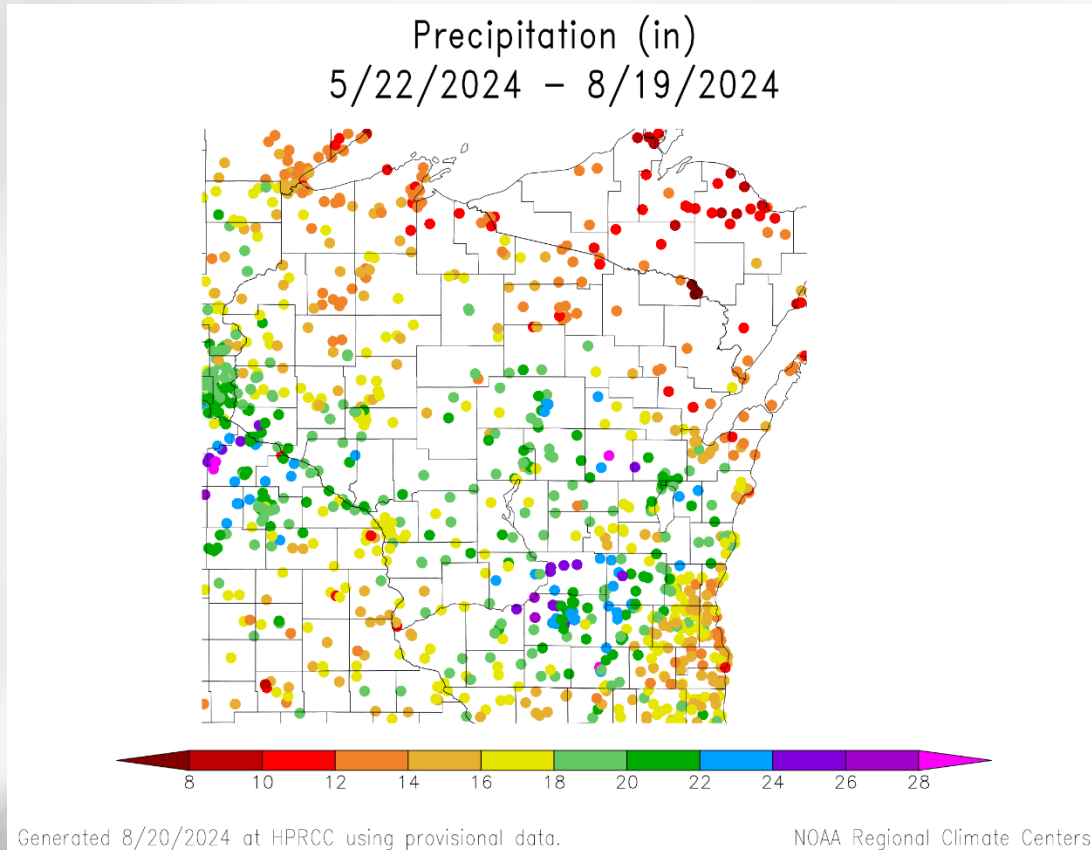
- **5" or more** was common across the middle of the state.
- **3" or less** in portions of the SW, N, and NE counties. Some areas in the NE had **<2"**.
- Everywhere is estimated to have received at least **1"**.

30 Day Precip Total/% Avg.



- Highest monthly totals in a triangle from Twin Cities to Green Bay to Milwaukee → **5" or more common.**
- Lower totals in the S, SW, and North → **3" or less (<100% of avg.)**
- Parts of SW and NE have seen **<50% of average** in the last month.

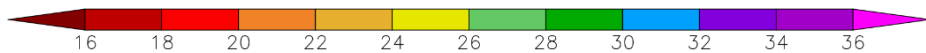
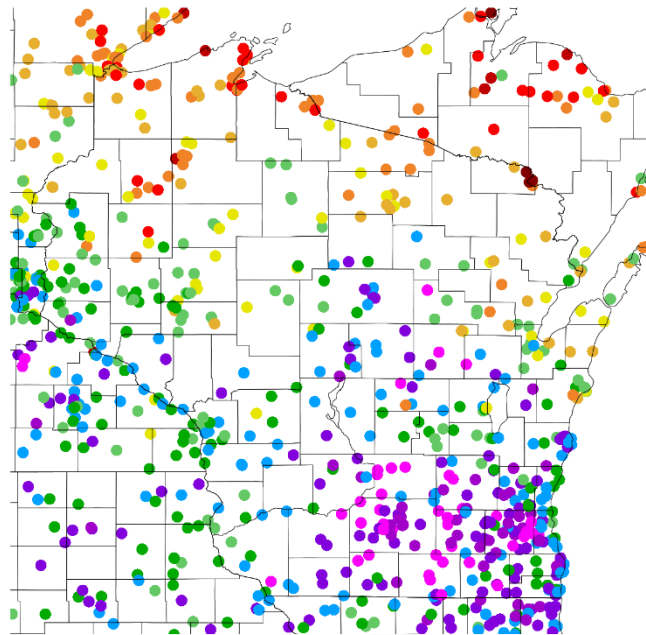
90 Day Precip Total/% Avg.



- **Over 2 feet** of precip accumulated between Madison & Portage; **20+”** common in the SC region.
- Lowest totals in the north and along Lake Michigan → **10-14”** (red/orange dots) common.
- Majority of stations are at **110% or more** of normal; **150%** across middle of the state.

2024 Precipitation (so far)

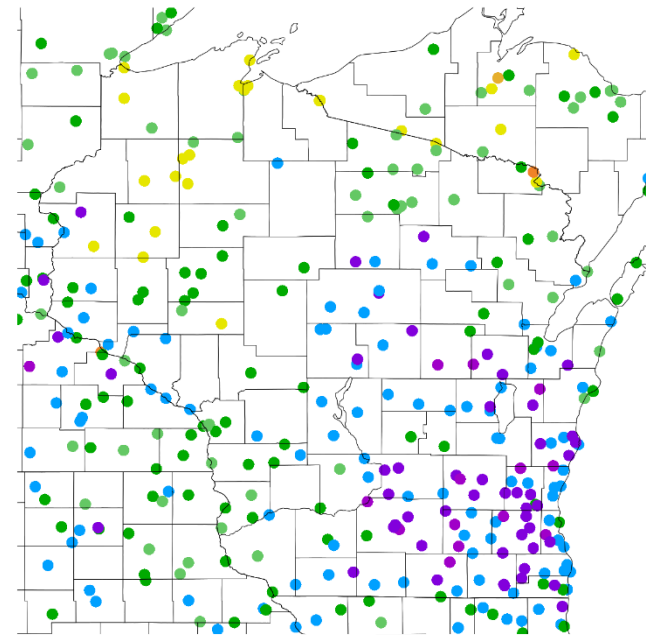
Precipitation (in)
1/1/2024 – 8/18/2024



Generated 8/19/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Precipitation (in)
1/1/2024 – 8/18/2024



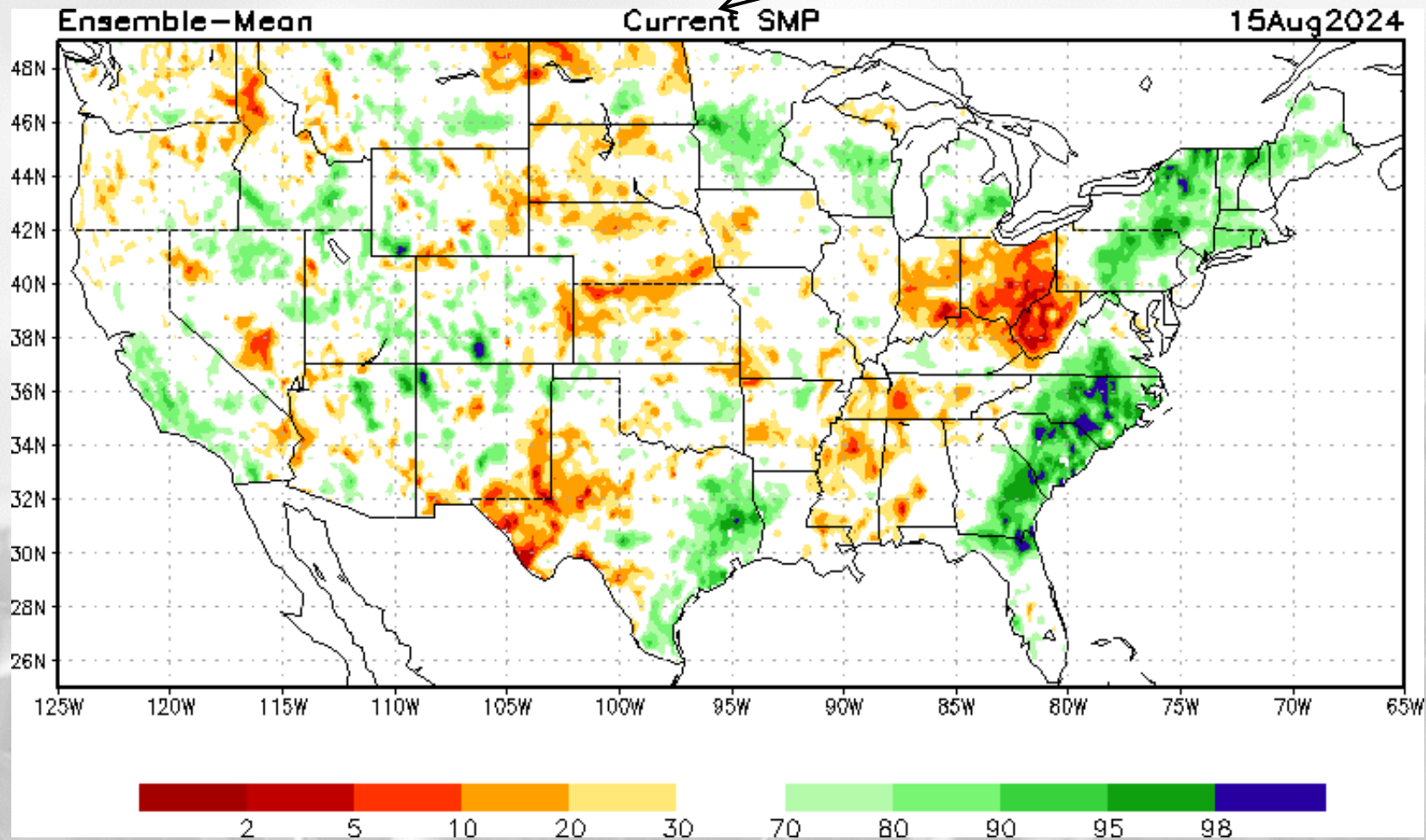
Generated 8/19/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

<https://hprcc.unl.edu/maps.php?map=ACISClimateMaps>

Soil Moisture Models

NOTE: this map displays the soil moisture percentile for August 15. It was the most recent update on August 20.



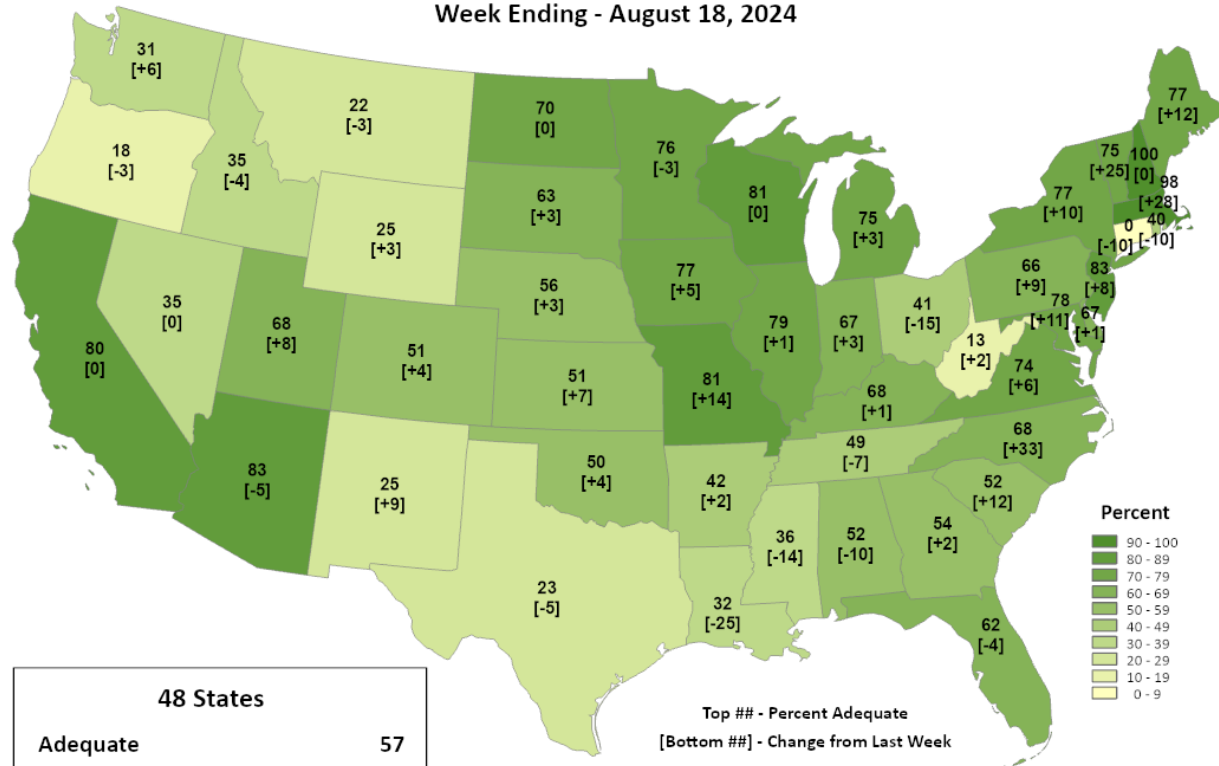
https://www.cpc.ncep.noaa.gov/products/Drought/Monitoring/smp_new.shtml

NASS Topsoil & Subsoil Moisture



This product was prepared by the
USDA Office of the Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)

Topsoil Moisture Percent Adequate Week Ending - August 18, 2024



48 States	
Adequate	57
Change from Last Week	0

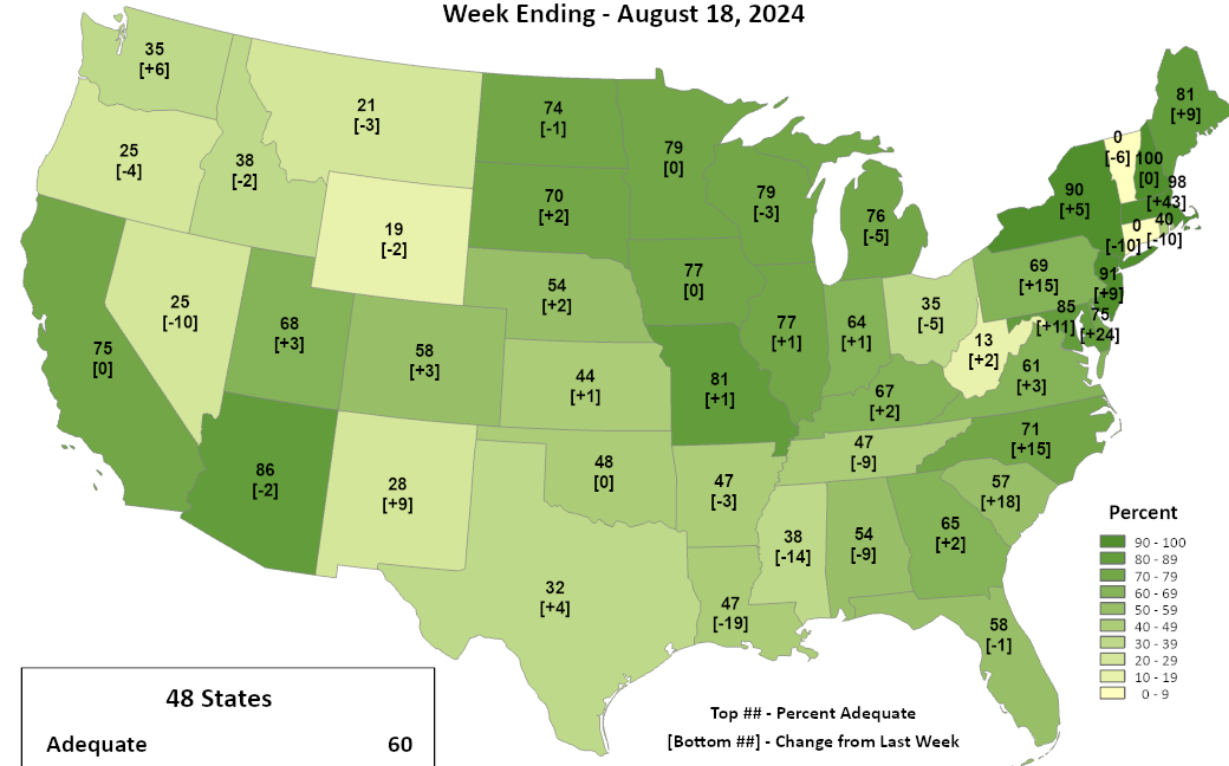
Top ## - Percent Adequate
[Bottom ##] - Change from Last Week

Data obtained from USDA National Agricultural Statistics Service weekly Crop Progress reports.



This product was prepared by the
USDA Office of the Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)

Subsoil Moisture Percent Adequate Week Ending - August 18, 2024



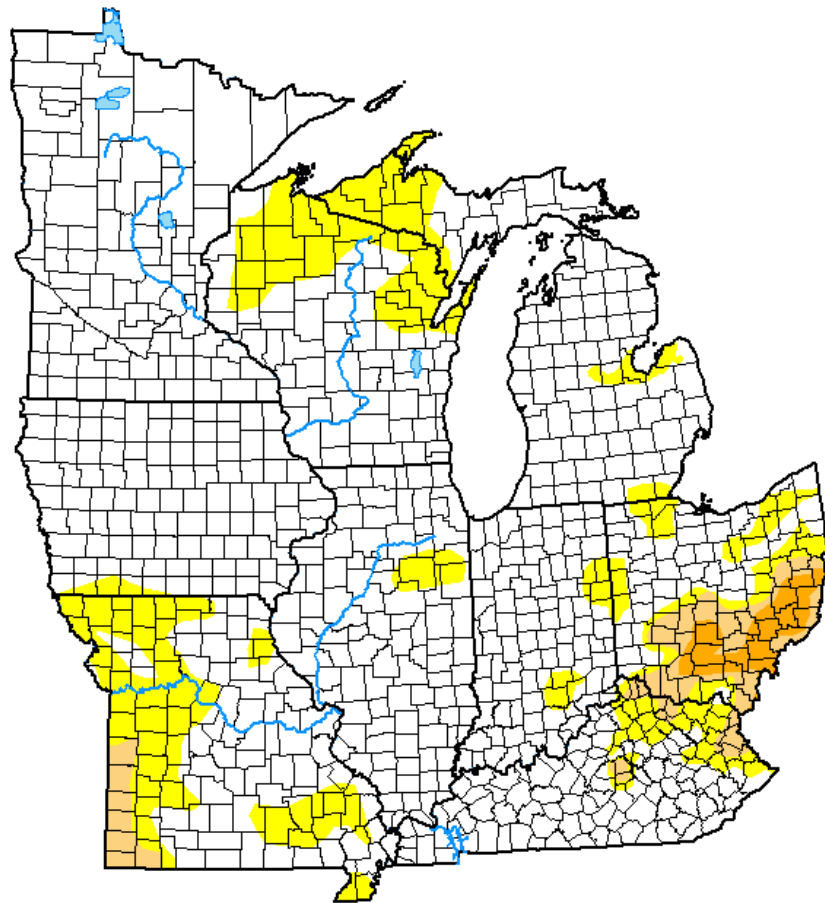
48 States	
Adequate	60
Change from Last Week	+2

Top ## - Percent Adequate
[Bottom ##] - Change from Last Week

Data obtained from USDA National Agricultural Statistics Service weekly Crop Progress reports.

US Drought Monitor

U.S. Drought Monitor Midwest



August 13, 2024
(Released Thursday, Aug. 15, 2024)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	80.24	19.76	4.29	1.33	0.01	0.00
Last Week <small>08-06-2024</small>	82.04	17.96	3.36	1.15	0.00	0.00
3 Months Ago <small>05-14-2024</small>	79.46	20.54	7.64	2.22	0.00	0.00
Start of Calendar Year <small>01-02-2024</small>	22.92	77.08	50.25	20.76	4.20	0.00
Start of Water Year <small>09-26-2023</small>	16.82	83.18	54.98	23.81	6.21	0.13
One Year Ago <small>08-15-2023</small>	34.32	65.68	40.07	15.74	2.52	0.07

Intensity:



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:

Curtis Riganti
National Drought Mitigation Center



droughtmonitor.unl.edu

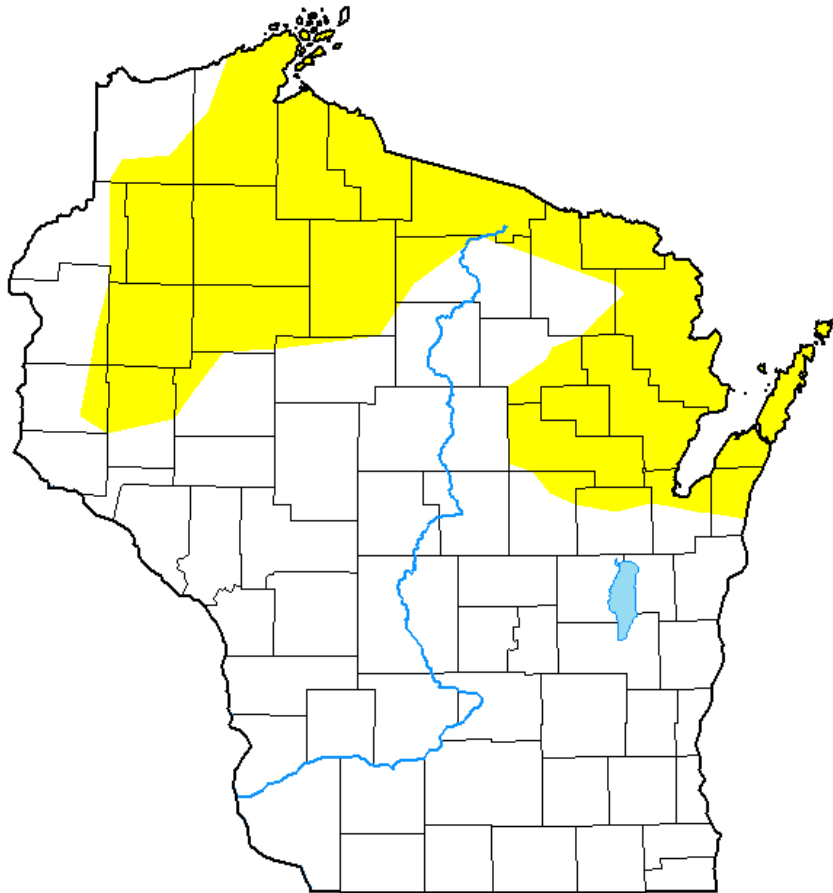
- Compared to last week:
 - **Similar** to last week, with the worst drought in the state of OH
- **4.3%** of the Midwest is categorized in D1 (moderate) drought.
- **1.3%** in D2 drought, all in OH.
- **19.8%** of the Midwest is in D0 (abnormally dry) conditions, down from **18%** last week.

Note: D0 is not considered drought.

<http://droughtmonitor.unl.edu/>

US Drought Monitor

U.S. Drought Monitor Wisconsin



August 13, 2024

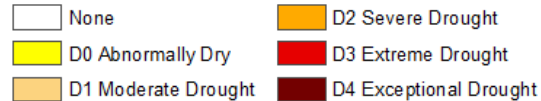
(Released Thursday, Aug. 15, 2024)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	68.33	31.67	0.00	0.00	0.00	0.00
Last Week 08-06-2024	71.12	28.88	0.00	0.00	0.00	0.00
3 Months Ago 05-14-2024	71.90	28.10	7.93	2.52	0.00	0.00
Start of Calendar Year 01-02-2024	33.04	66.96	37.34	16.80	0.26	0.00
Start of Water Year 09-26-2023	2.04	97.96	80.86	37.74	6.77	0.00
One Year Ago 08-15-2023	3.31	96.69	78.35	42.85	11.29	0.66

Intensity:



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:

Curtis Riganti
National Drought Mitigation Center



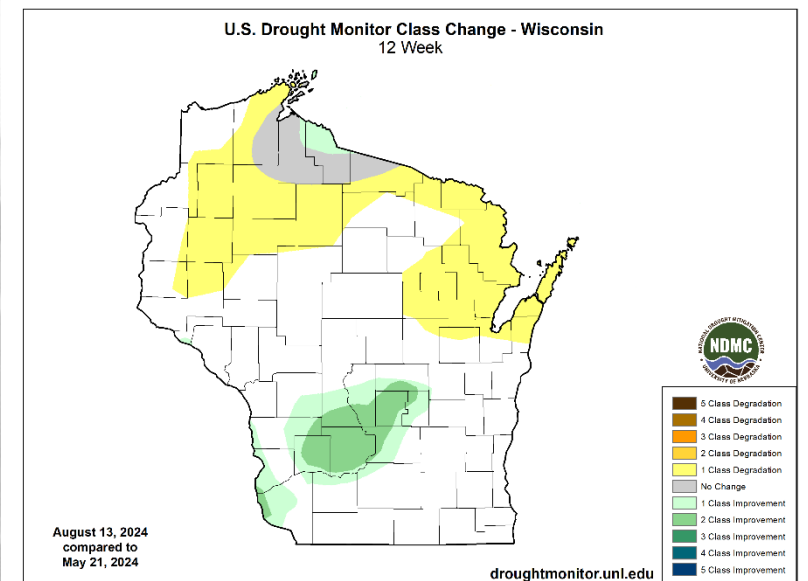
droughtmonitor.unl.edu

<http://droughtmonitor.unl.edu/>

Amount of state in:

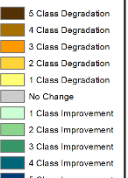
- **D1-D4** – 0.0% --
- **D2-D4** – 0.0% --
- **D3-D4** – 0.0% --
- **D4** – 0.0% --

Note: ↑ ↓ indicate change from last week. Red up arrows indicate increase in drought area; vice-versa for green arrows.

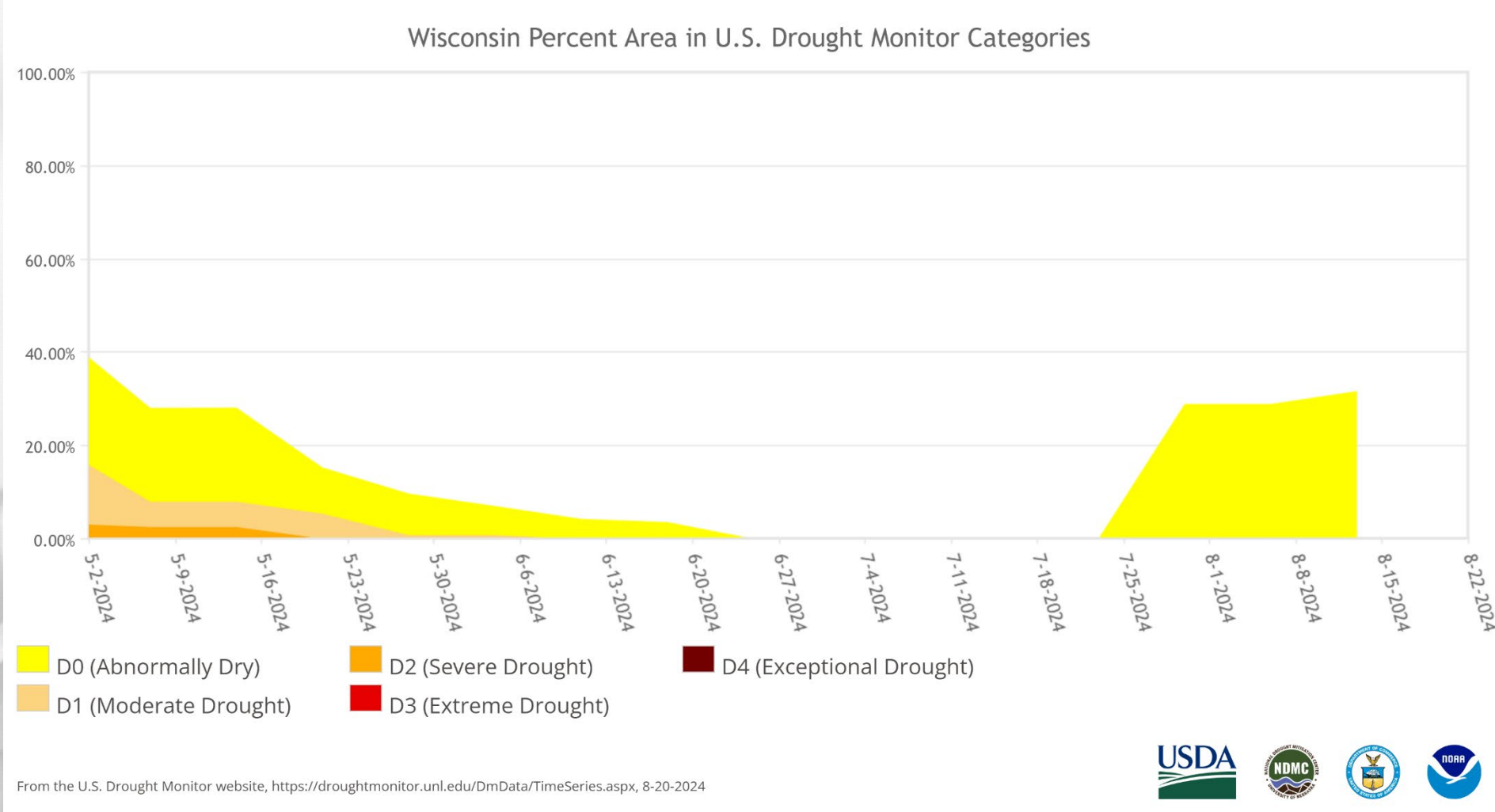


August 13, 2024
compared to
May 21, 2024

droughtmonitor.unl.edu

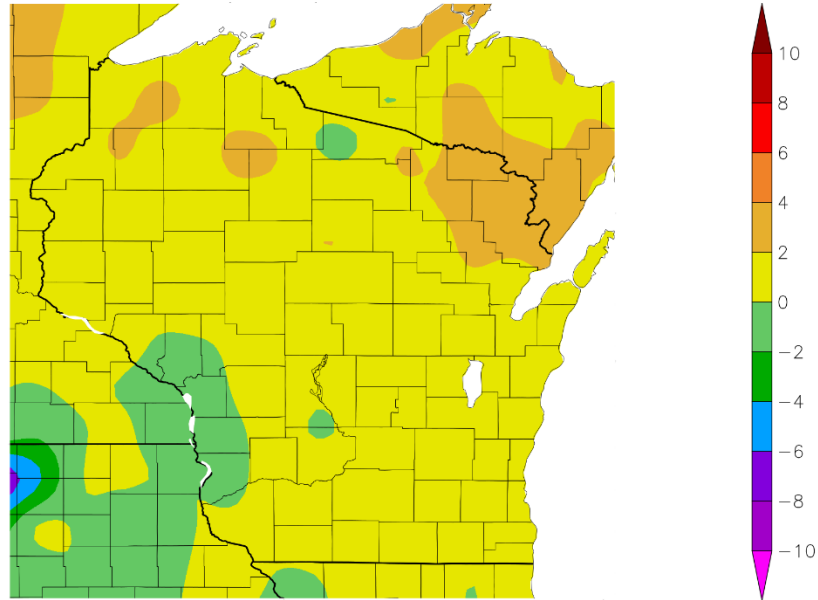


USDM Time Series



7 Day Temperatures

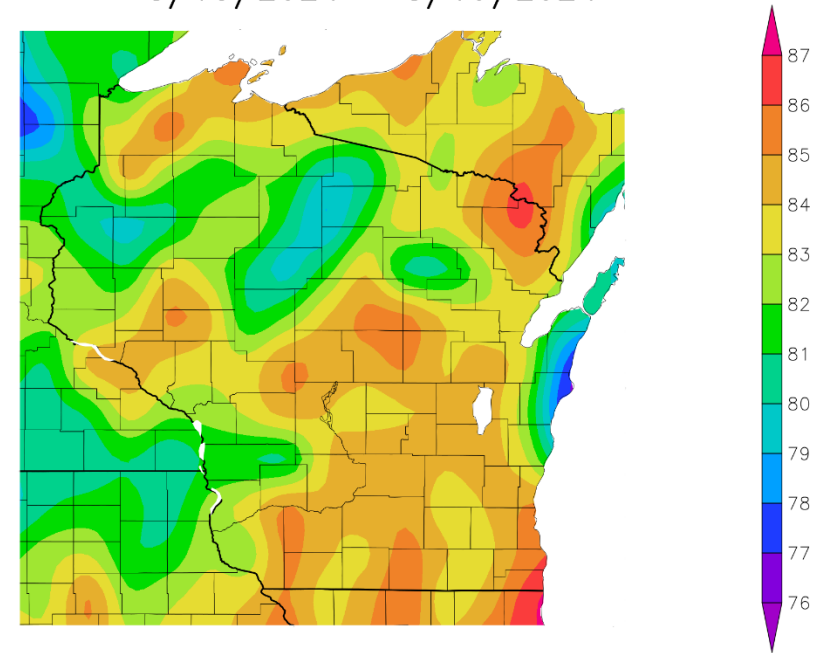
Departure from Normal Temperature (F)
8/13/2024 – 8/19/2024



Generated 8/20/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Highest 1-Day Maximum Temperature (F)
8/13/2024 – 8/19/2024



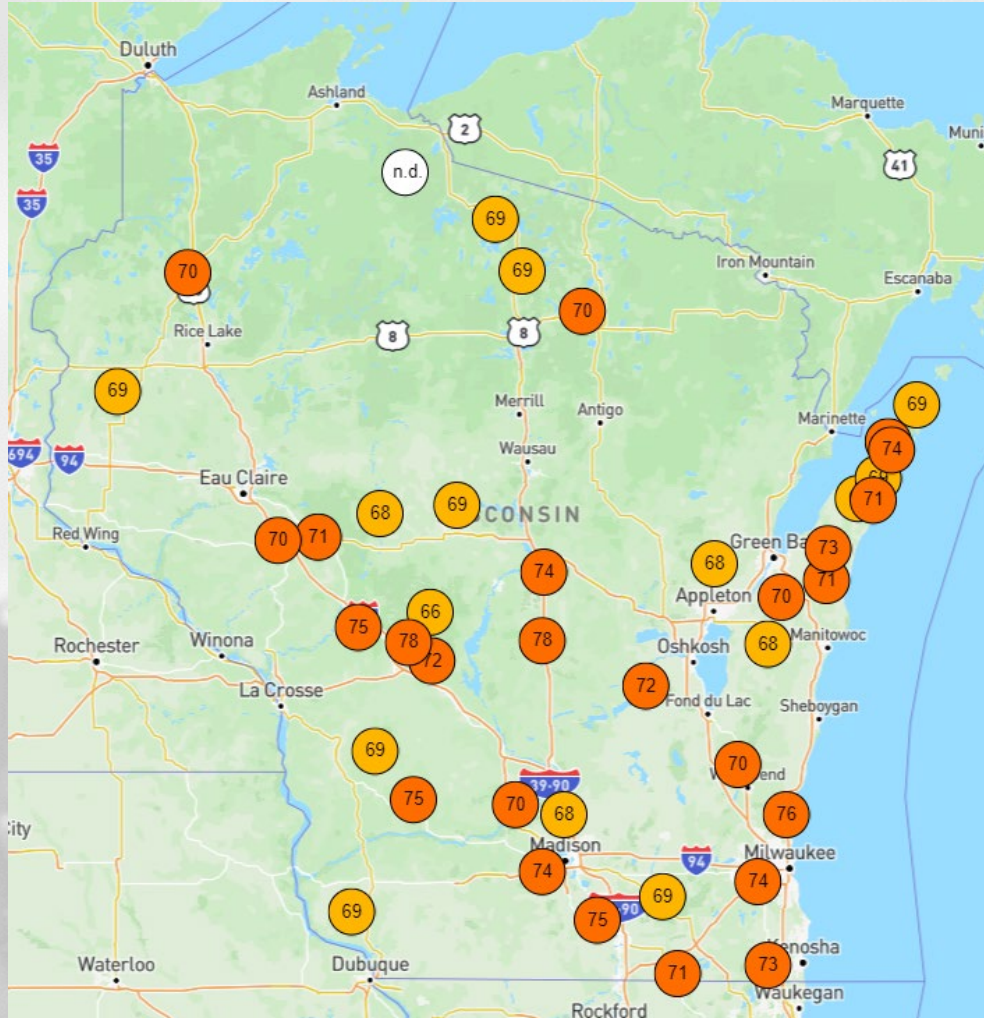
Generated 8/20/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

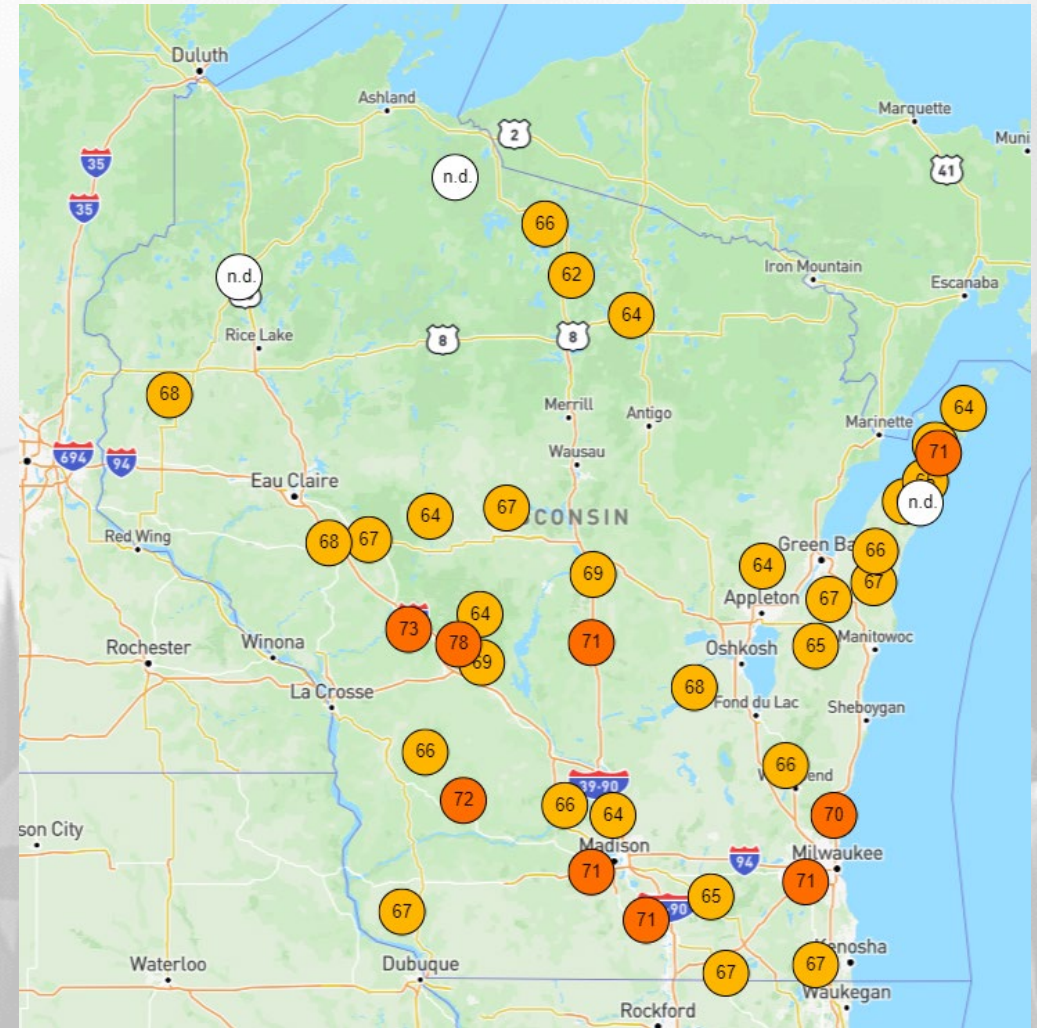
- Last week was **near to slightly above normal** statewide, except for the La Crosse area.
- Weekly 1-day maximums in the **low-to-mid 80's** for most, with pockets reaching the **upper 80's**.

Wisconet Soil Temp (4" Depth)

Friday, August 9th @ MIDDAY

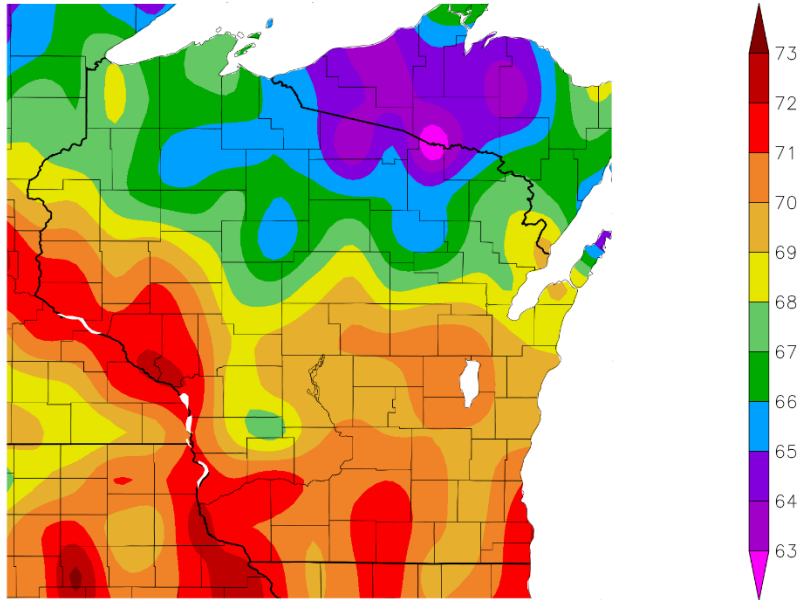


Tuesday, August 20th @ MIDDAY



30 Day Temperatures

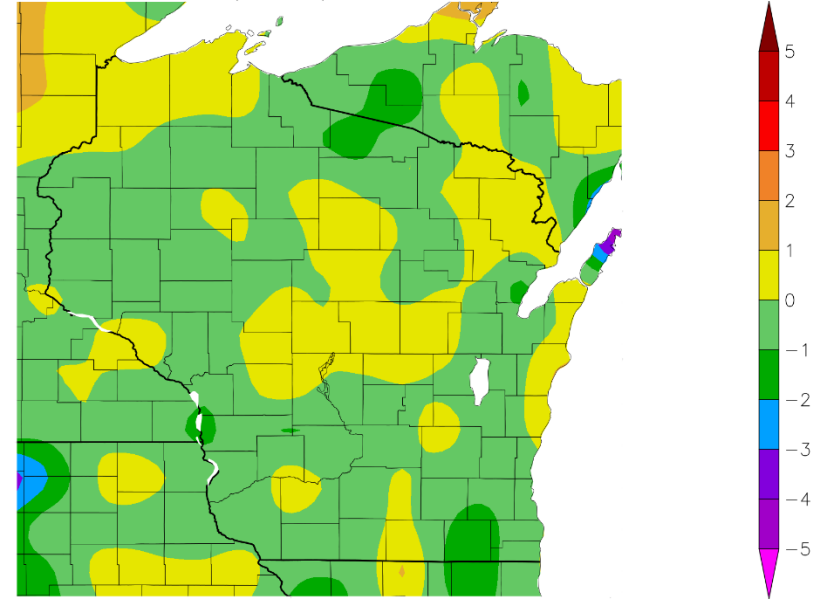
Temperature (F)
7/21/2024 – 8/19/2024



Generated 8/20/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Temperature (F)
7/21/2024 – 8/19/2024



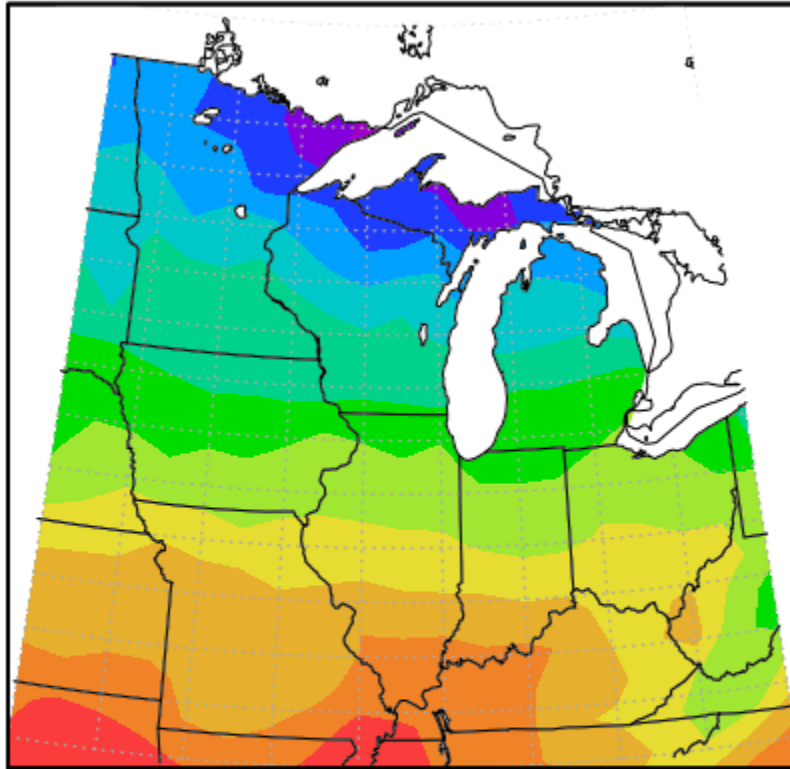
Generated 8/20/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

- Temperatures for the past month ranged from **70-73°F** in the S & W to **63-67°F** in the far N.
 - **Near normal** (-/+1°F) for most locations of the state compared to climatological (1991-2020) average.
 - Slightly **below average** by 1-2°F for spots in the N and SE.

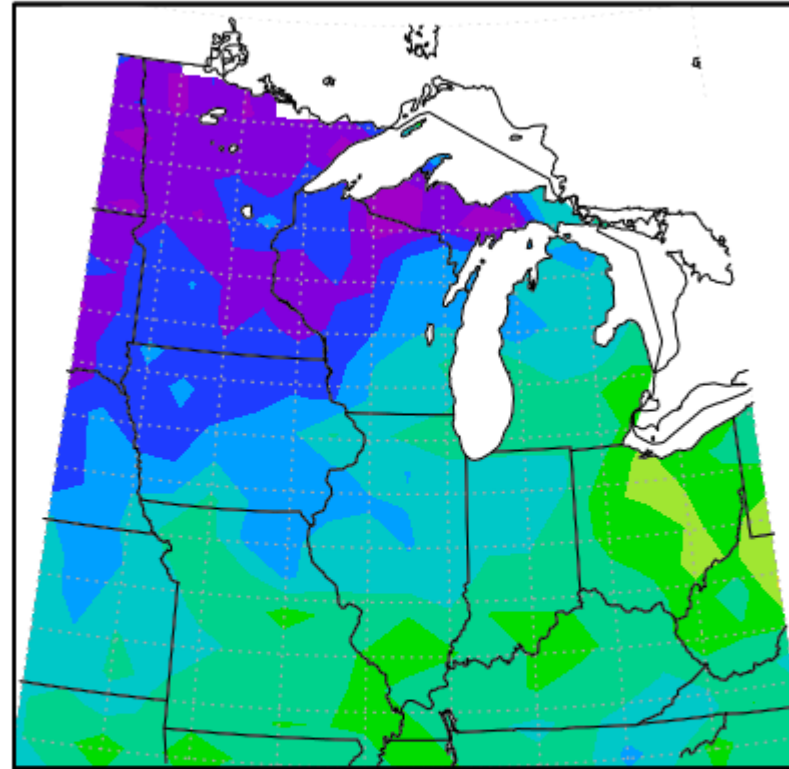
Growing Degree Days (Base = 50°F; Since April 1)

Total MGDD from 4/1/2024 to 8/19/2024



Midwestern Regional Climate Center
Purdue University

MGDD Departure, 4/1/2024 to 8/19/2024



Midwestern Regional Climate Center
Purdue University
Normals Period, 1991-2020

- **2000-2400** GDD in the S to **1400-1800** GDD in the N.
- SC/SE WI is **100-150** GDD further ahead of the average; **within -/+50** of average in the W/NW and far north.

To calculate GDD for your corn variety and planting date, use this [tool](#).

To see specific degree models for pests in your location, use the [Vegetable Disease & Insect Forecasting Network](#).

https://mrcc.purdue.edu/climate_watch

NASS Crop Progress – Corn

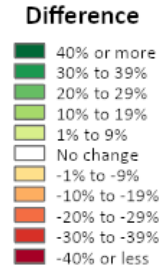
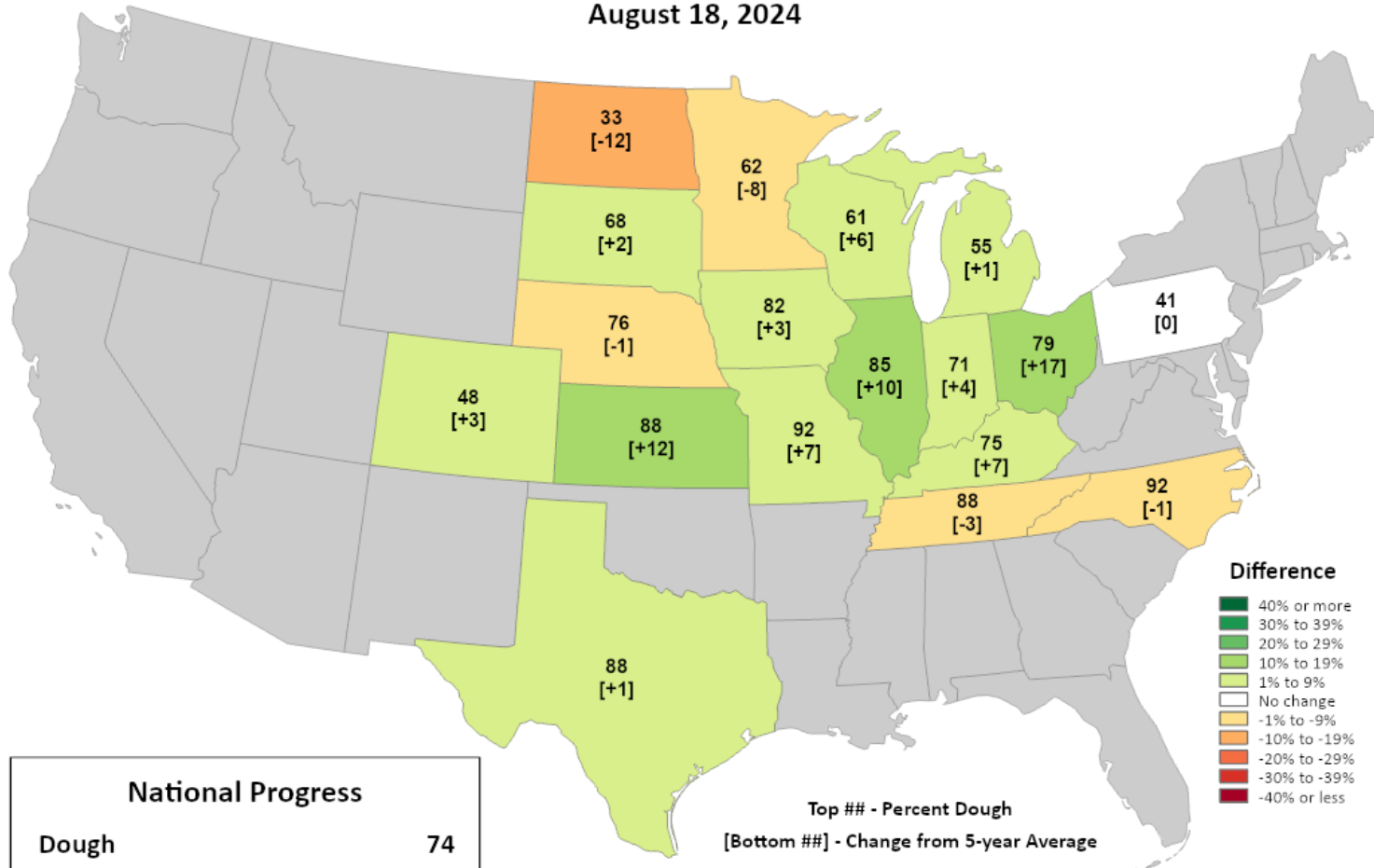


This product was prepared by the
USDA Office of the Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)

Corn Progress

Percent Dough

August 18, 2024



National Progress	
Dough	74
Change from 5-year Average	+3

Top ## - Percent Dough
[Bottom ##] - Change from 5-year Average

Data obtained from USDA National Agricultural Statistics Service weekly Crop Progress reports.

- Silking is **over 90% complete** in WI corn fields, up 6% from last week and 3% behind 5-year average
 - Doughing → **61% complete**
 - Up **25%** from last week and ahead of 5-year average
 - Dented – **16% complete**, 7% ahead of average

NASS Crop Progress – Soybean

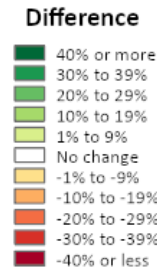
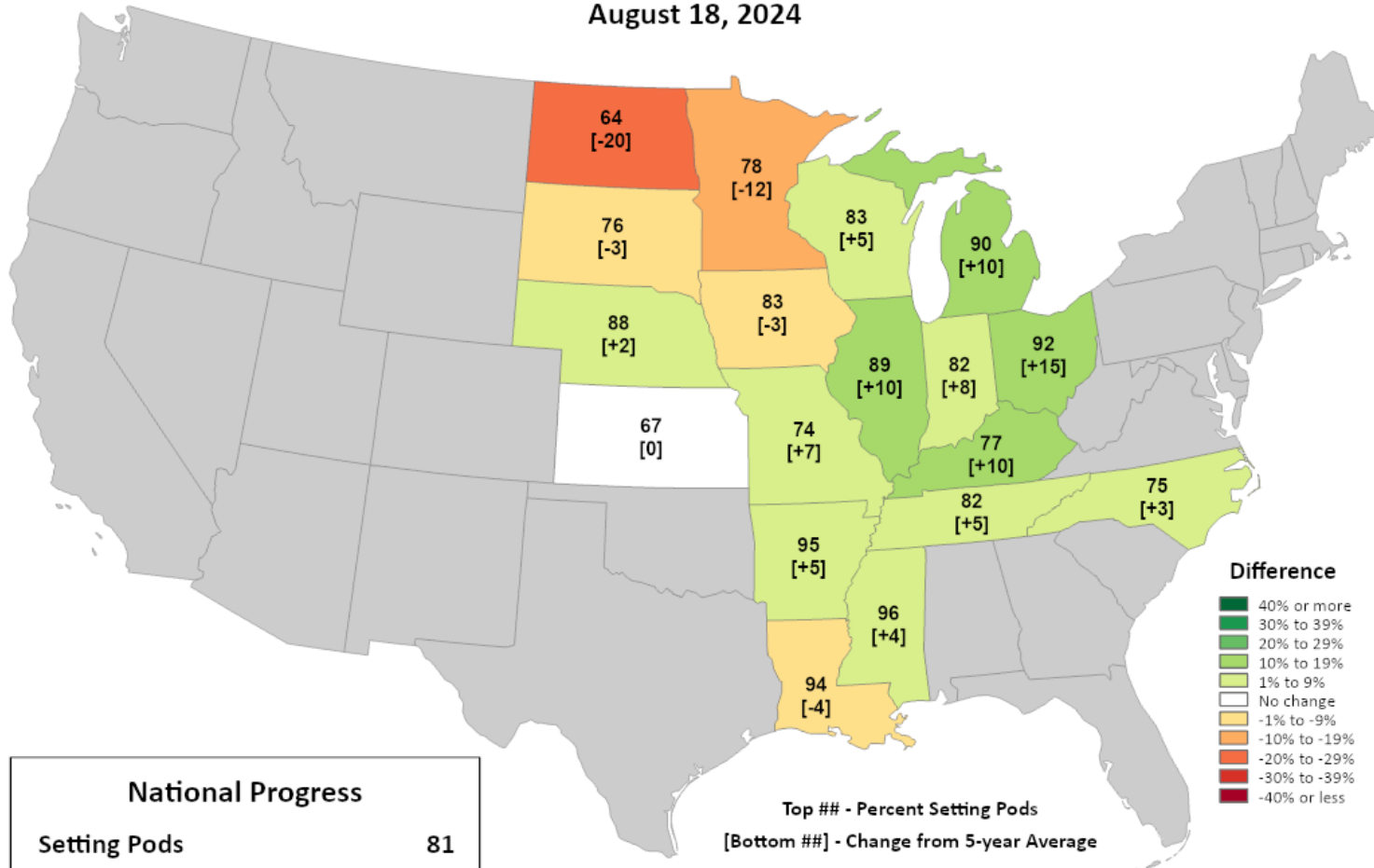


This product was prepared by the
USDA Office of the Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)

Soybeans Progress

Percent Setting Pods

August 18, 2024



Top ## - Percent Setting Pods
[Bottom ##] - Change from 5-year Average

Data obtained from USDA National Agricultural Statistics Service weekly Crop Progress reports.

National Progress	
Setting Pods	81
Change from 5-year Average	+1

- Soybean setting pods is running slightly **ahead of normal pace** in WI and points to the E/S.
 - In WI, setting pods is **83% complete**. 5% ahead of the 5-year average pace & up **17%** from last week.
- Bloom has now caught up to normal pace with **95% of soybeans blooming**.

<https://agindrought.unl.edu/Other.aspx>

NASS Crop Condition

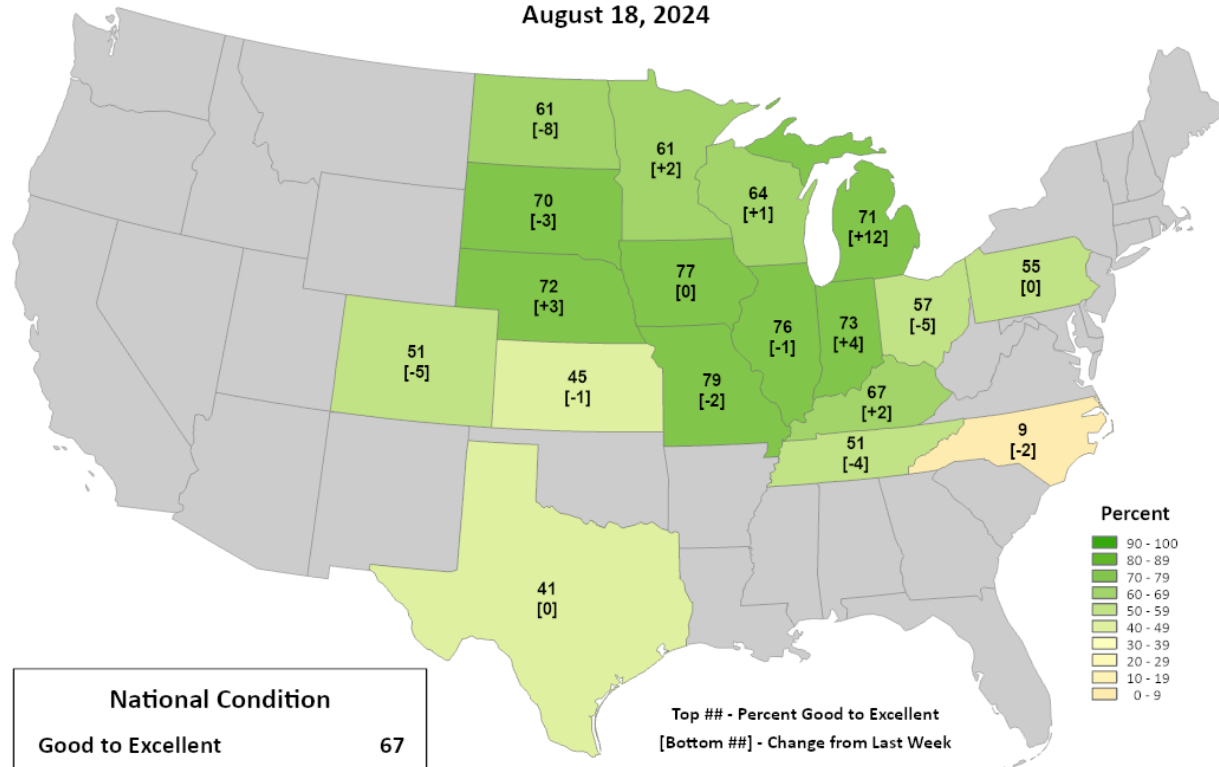


This product was prepared by the
USDA Office of the Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)

Corn Conditions

Percent Good to Excellent

August 18, 2024



National Condition	
Good to Excellent	67
Change from Last Week	0

Top ## - Percent Good to Excellent
[Bottom ##] - Change from Last Week

Data obtained from USDA National Agricultural Statistics Service weekly Crop Progress reports.

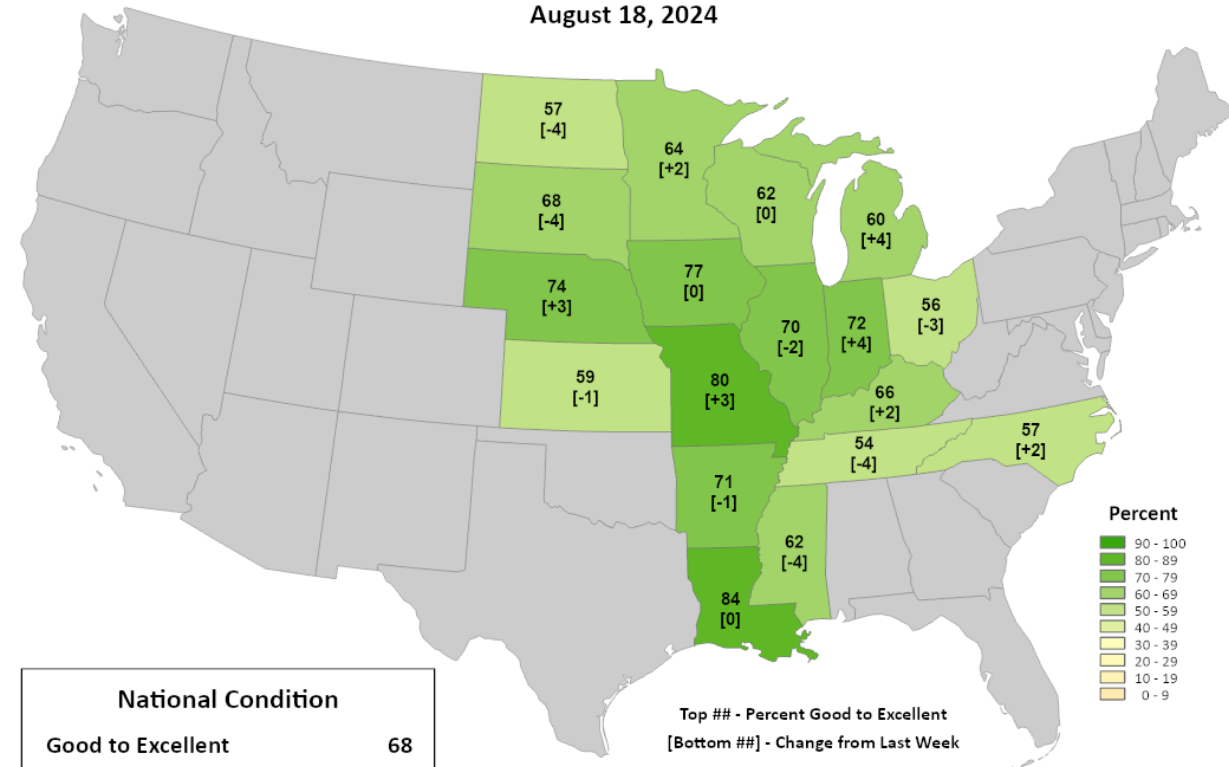


This product was prepared by the
USDA Office of the Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)

Soybean Conditions

Percent Good to Excellent

August 18, 2024



National Condition	
Good to Excellent	68
Change from Last Week	0

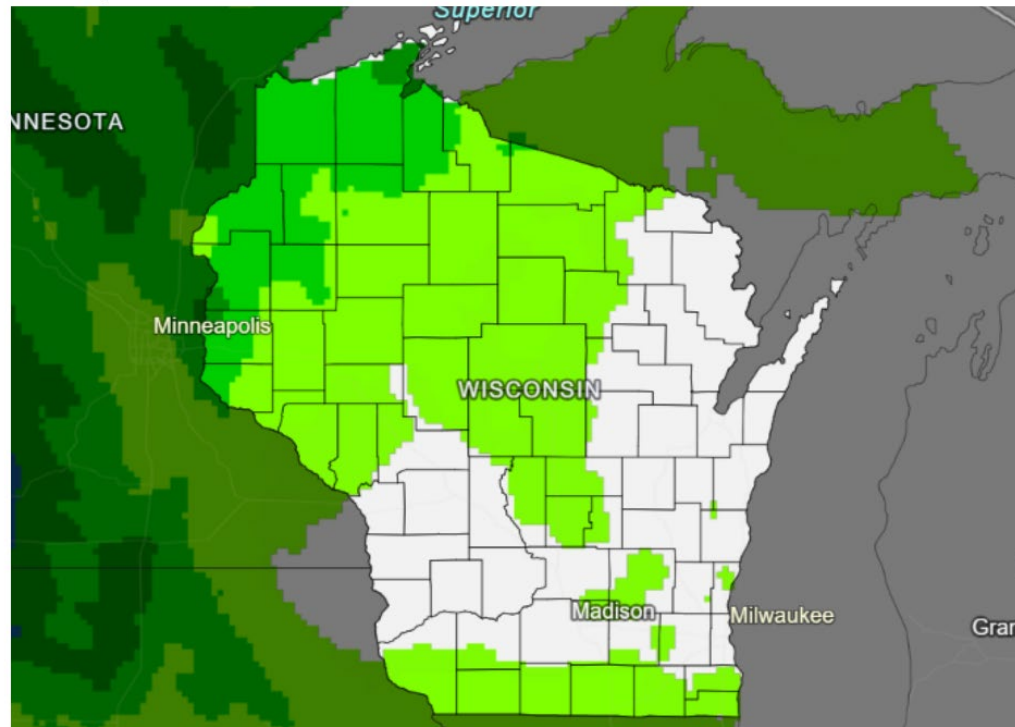
Top ## - Percent Good to Excellent
[Bottom ##] - Change from Last Week

Data obtained from USDA National Agricultural Statistics Service weekly Crop Progress reports.

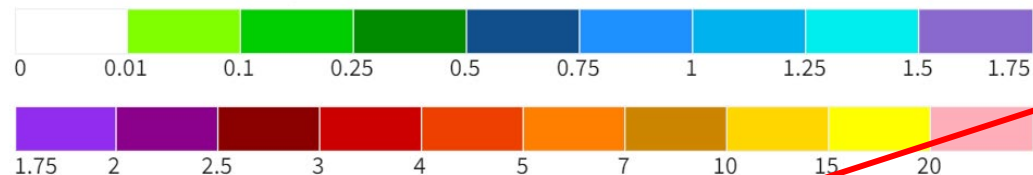
<https://agindrought.unl.edu/Other.aspx>

7 Day Precip Forecast

7-Day Quantitative Precipitation Forecast for August
20-27, 2024



Predicted Inches of Precipitation



Source(s): National Weather Service Weather Prediction Center
Last Updated: 08/20/24

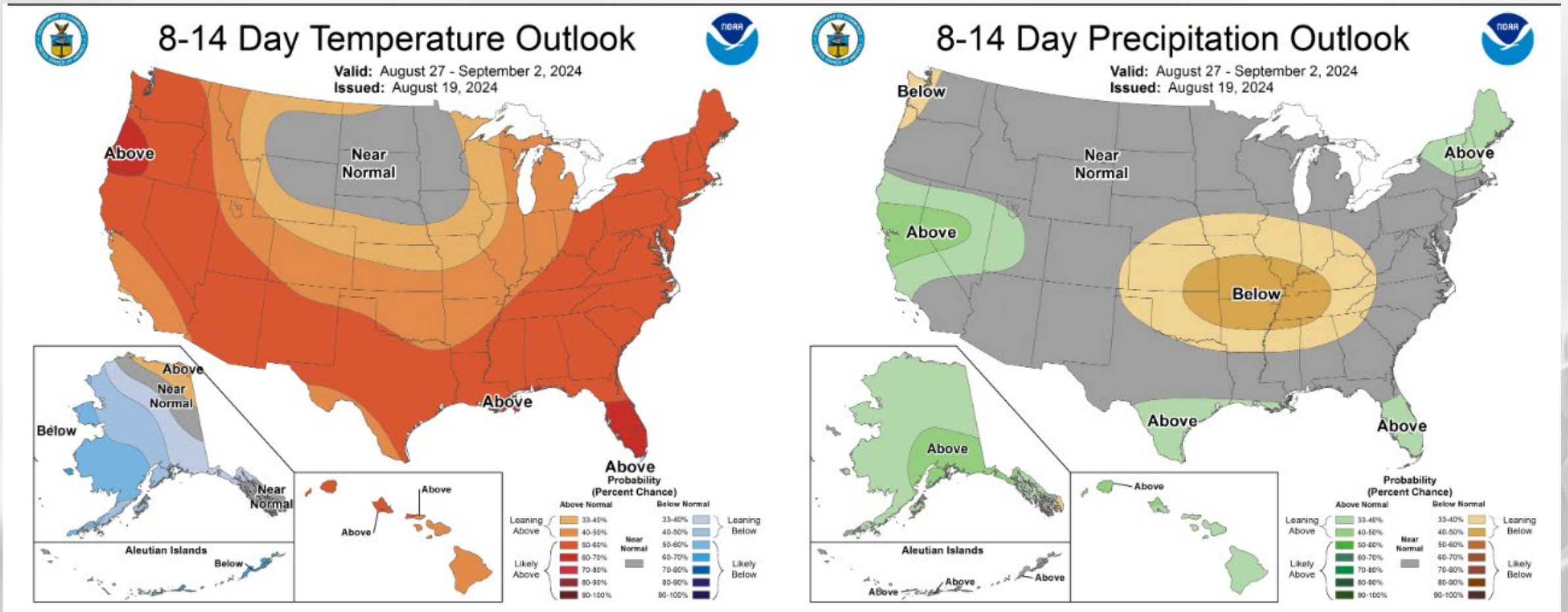
Drought.gov

- Very little rain forecast for the next week.
- Greatest chance in the far NW

Forecast for 8/20/24 thru 8/27/24
(Begins at 7am CDT)

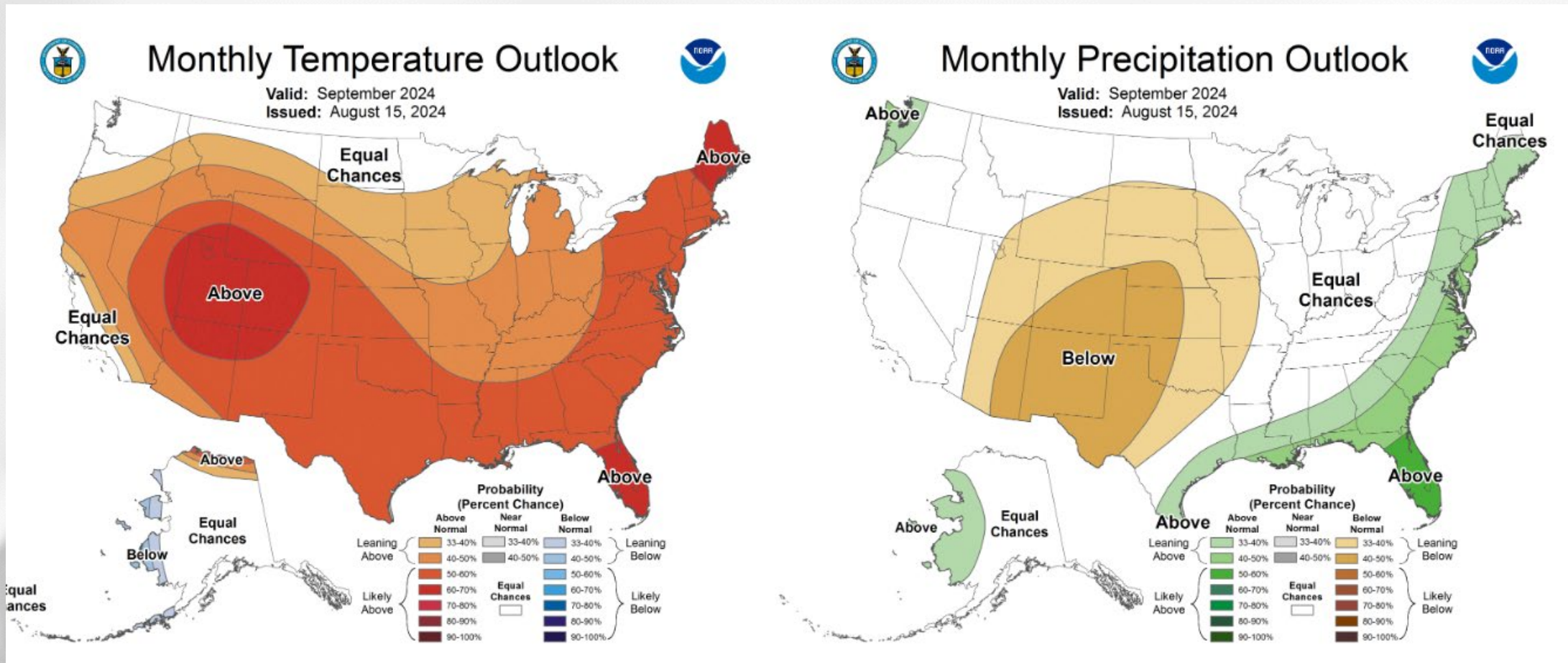
<https://www.wpc.ncep.noaa.gov/qpf/p168i.gif>
<https://www.drought.gov/states/wisconsin>

8-14 Day Temp & Precip Outlook



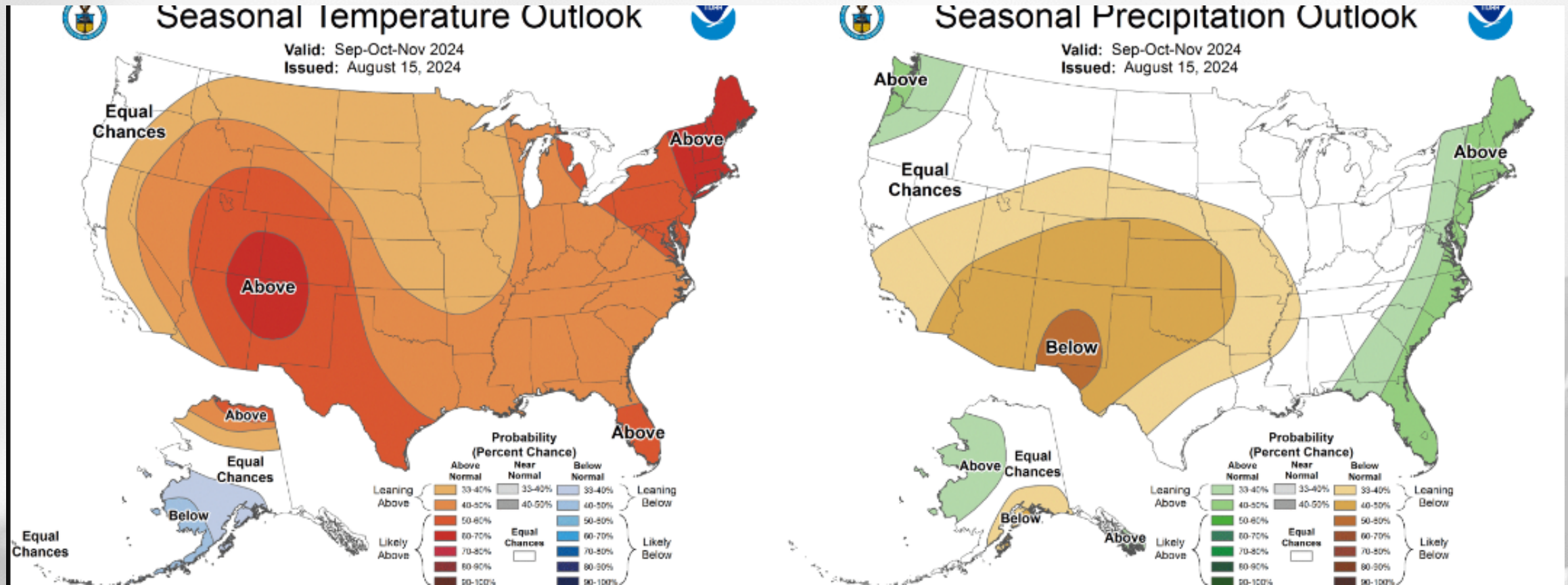
Late August: Temperatures leaning above normal. Precipitation leaning near normal.

30 Day Temp & Precip Outlook



Month of September: Temperatures leaning above. Precipitation equal chances.

90 Day Temp & Precip Outlook



Fall: Temperatures leaning towards above normal. Precipitation uncertainty with equal chances.

Take-Home Points

Current Conditions:

- August has been **near normal** temperatures for the majority of WI.
- Weekly precip totals were **0.5” for most** locations in WI, with some **scattered pockets of 2” or more**.

Impact:

- Soil moisture levels remain at **~80% adequate** in the state, with no USDM drought categories (D0 is not drought) in the state.
 - **Corn** is at 64% good to excellent, over 90% silking, over 60% doughing, and 16% dented.
 - **Soybeans** are at 62% good to excellent, 95% blooming, and 83% setting pods.
- GDDs are approaching **2400 (1800) units** in the southern (northern) counties, running **ahead of normal pace** in the S & E.

Outlook:

- **Little chance of rain** across WI this next week, with a higher likelihood in the **N/NW**.
- Temperatures leaning **above normal** heading into September, with most in the state leaning towards **near normal** precip.
- The warmer-than-normal conditions have a higher probability to **continue** through August into early fall with a La Niña pattern taking shape.

Agronomic Considerations

Crop Development

- Scouting for crop stage and development of issues is very important this year as the wet spring means that there is a lot of variability in fields and across farms.
- As short season crops come off, consider diverse cover crop mixes to help mitigate any compaction that may have occurred this spring.

Manure Applications

- Low runoff risk in the next week. Check the DATCP runoff risk advisory forecast [here](#).
- After wheat harvest there is an opportunity for manure and cover crops, see info [here](#).

Pest Management

- Fall armyworm flights are underway. Sign up to receive text alerts when pests are in your region [here](#).
- Japanese beetles have emerged, monitor for defoliation thresholds, see [here](#) for management information.
- Conditions have been right in many places for tar spot and white mold, information available [here](#).
- Time to scout for soybean aphid, see more info [here](#).
- Scout for corn rootworm beetle to determine pressure on next year's continuous corn.

Forage Management

- Look out for herbicide carryover, volunteers in late summer seeding of alfalfa wheat. [Read more.](#)
- Corn Silage Harvest - look for local opportunities for stalk chopping to gauge moisture content, scout fields to understand which may be ready first. For varying planting dates, plan for a segregated, longer season harvest to optimize forage quality.

User Survey

Are you a regular user of the Wisconsin Ag Climate Outlook (WACO)? Or maybe you are viewing these slides for the first time this week? Either way, we want to hear **your** feedback on this new resource! Please take a few minutes and fill out this survey:

[LINK TO SURVEY](#)

Your feedback will help us better serve your ag-climate data needs through WACO.

If you have any trouble accessing or filling out the survey, please email Josh Bendorf at Joshua.Bendorf@usda.gov.

Thank you!!

-The WACO Team

Citizen Science Opportunity

CoCoRaHS – Community Collaborative Rain, Hail, & Snow Network

The Mission

(From cocorahs.org)

- Provide accurate high-quality precipitation data for end-users;
- Increasing the density of precipitation data available throughout the country;
- Encouraging citizens to have fun participating in meteorological science and heightening their awareness about weather;
- Providing weather education opportunities.



Sign Up Here:

<https://cocorahs.org/Content.aspx?page=application>

Contact Info

Photo Credit: USDA



Natasha Paris

Crops Educator – Adams, Green Lake,
Marquette, Waushara Cos.

natasha.paris@wisc.edu

Kristin Foehringer

NRCS State Working Lands Climate Smart
Specialist

kristin.foehringer@usda.gov

Dennis Todey

Director, Midwest Climate Hub

dennis.todey@usda.gov

Josh Bendorf

Ag Climatologist Fellow, Midwest Climate Hub

joshua.bendorf@usda.gov

Steve Vavrus

State Climatologist of Wisconsin

sjvavrus@wisc.edu

Bridgette Mason

Assistant State Climatologist of Wisconsin

bmmason2@wisc.edu