

Wisconsin Ag Climate Outlook

Week of May 6, 2024

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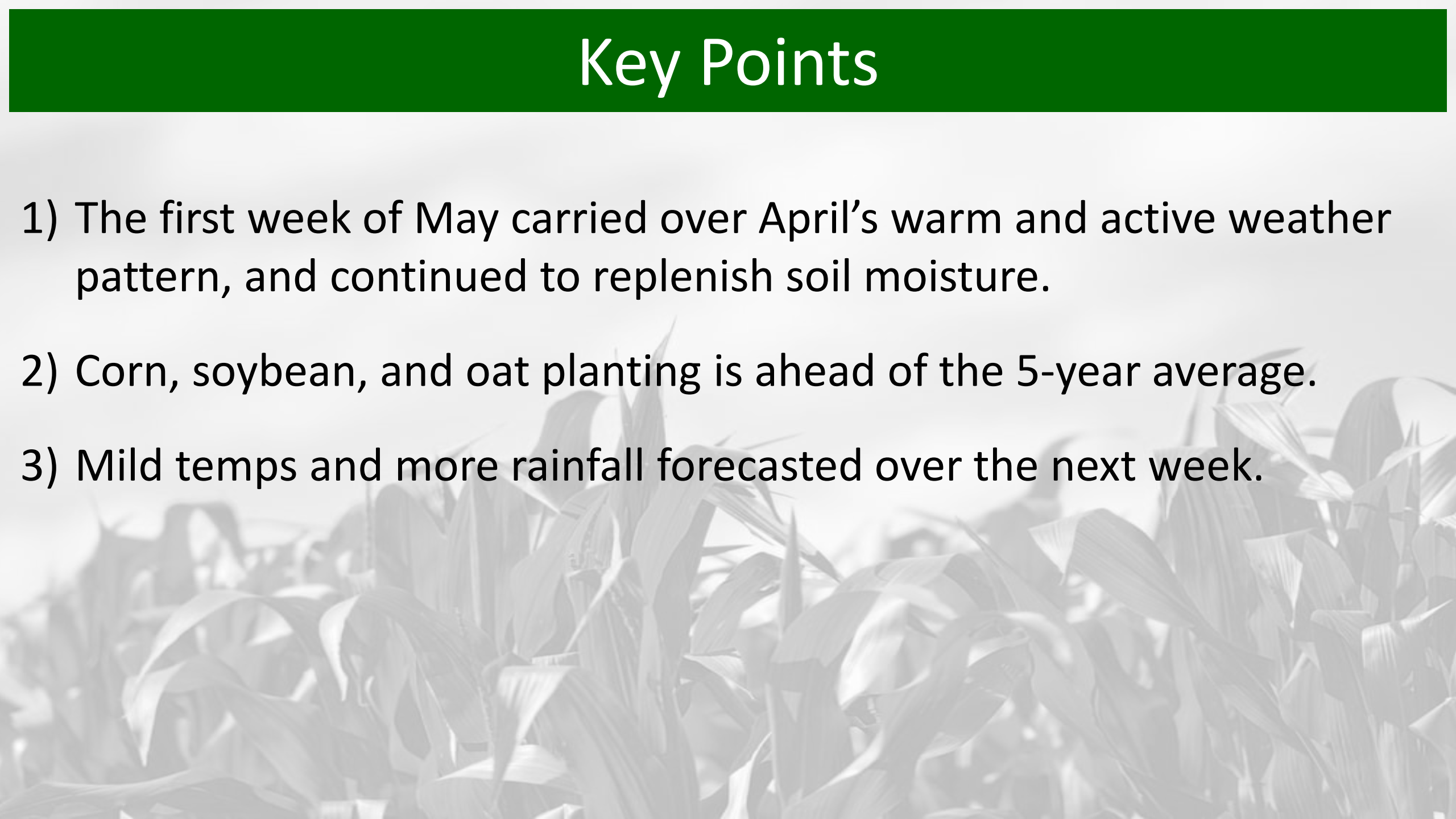
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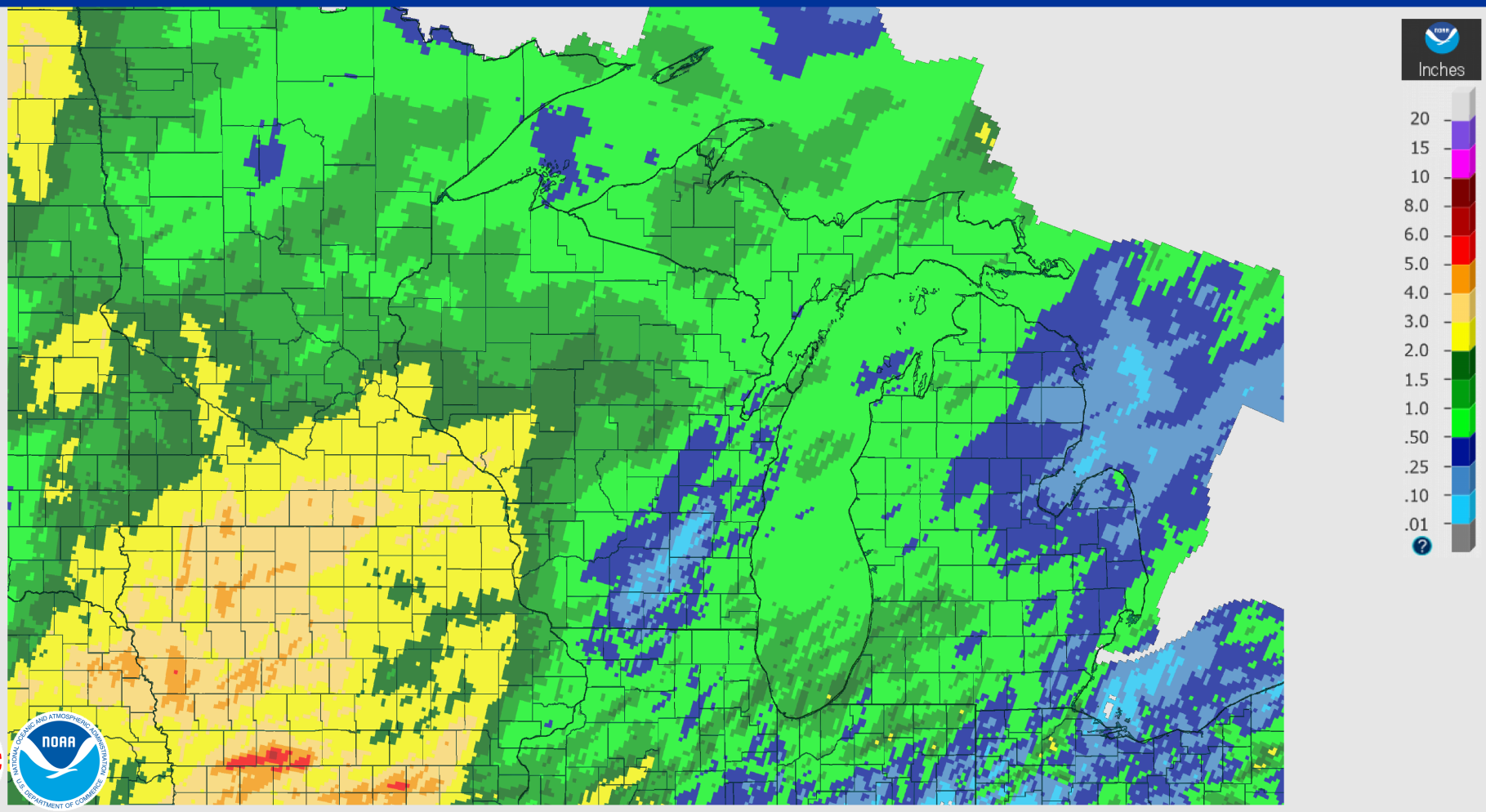
Key Points

- 1) The first week of May carried over April's warm and active weather pattern, and continued to replenish soil moisture.
 - 2) Corn, soybean, and oat planting is ahead of the 5-year average.
 - 3) Mild temps and more rainfall forecasted over the next week.
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7 Day Precip

May 07, 2024 7-Day Observed Precipitation

Created on: May 07, 2024 - 17:33 UTC
Valid on: May 07, 2024 12:00 UTC



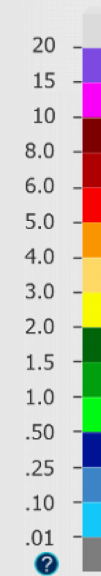
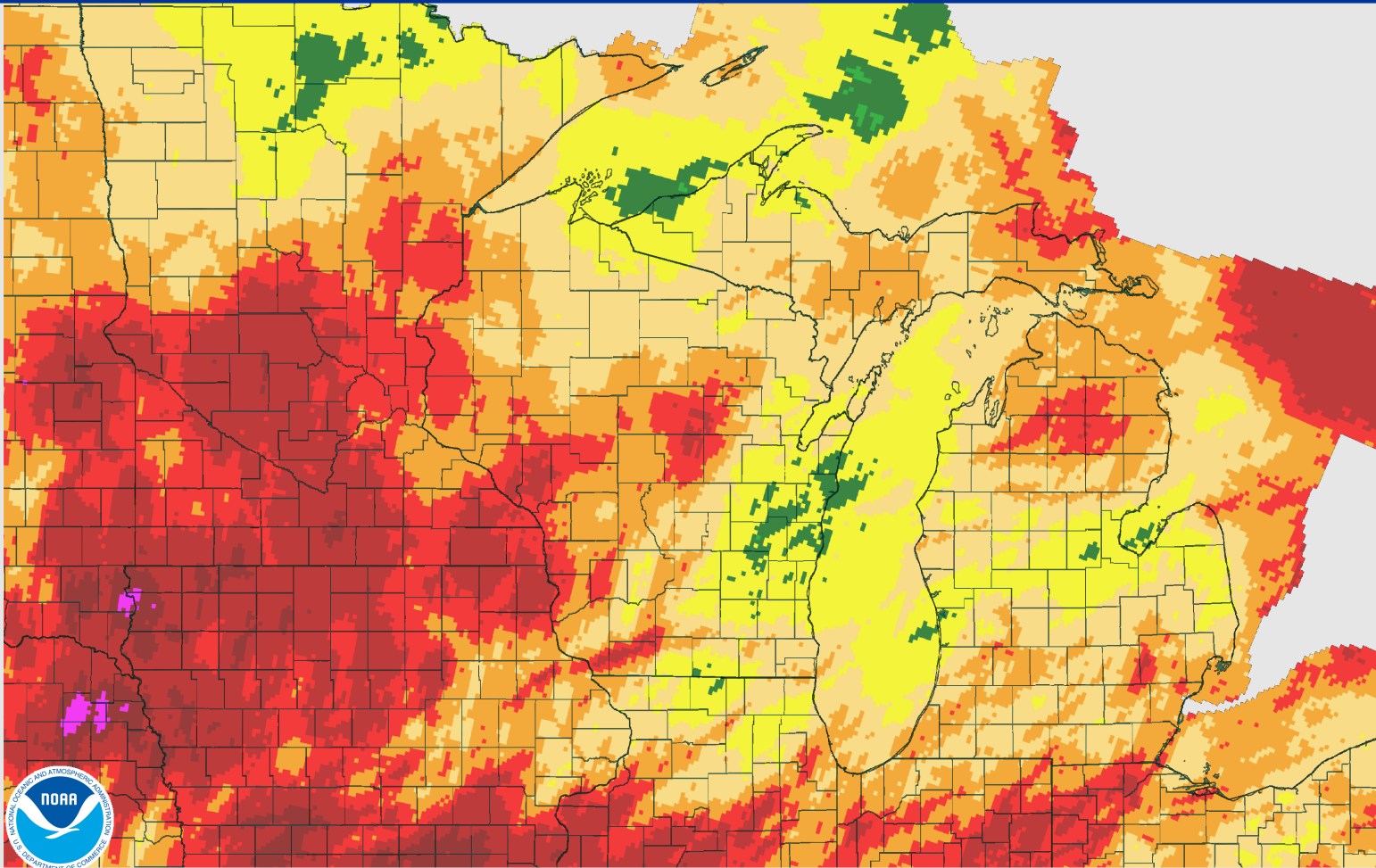
- Majority of the state saw **0.5-2"** of precip last week.
- West-central saw **>2"** of precip, while east- and south-central saw **<0.5"**.

30 Day Precip

May 07, 2024 30-Day Observed Precipitation

Created on: May 07, 2024 - 17:36 UTC

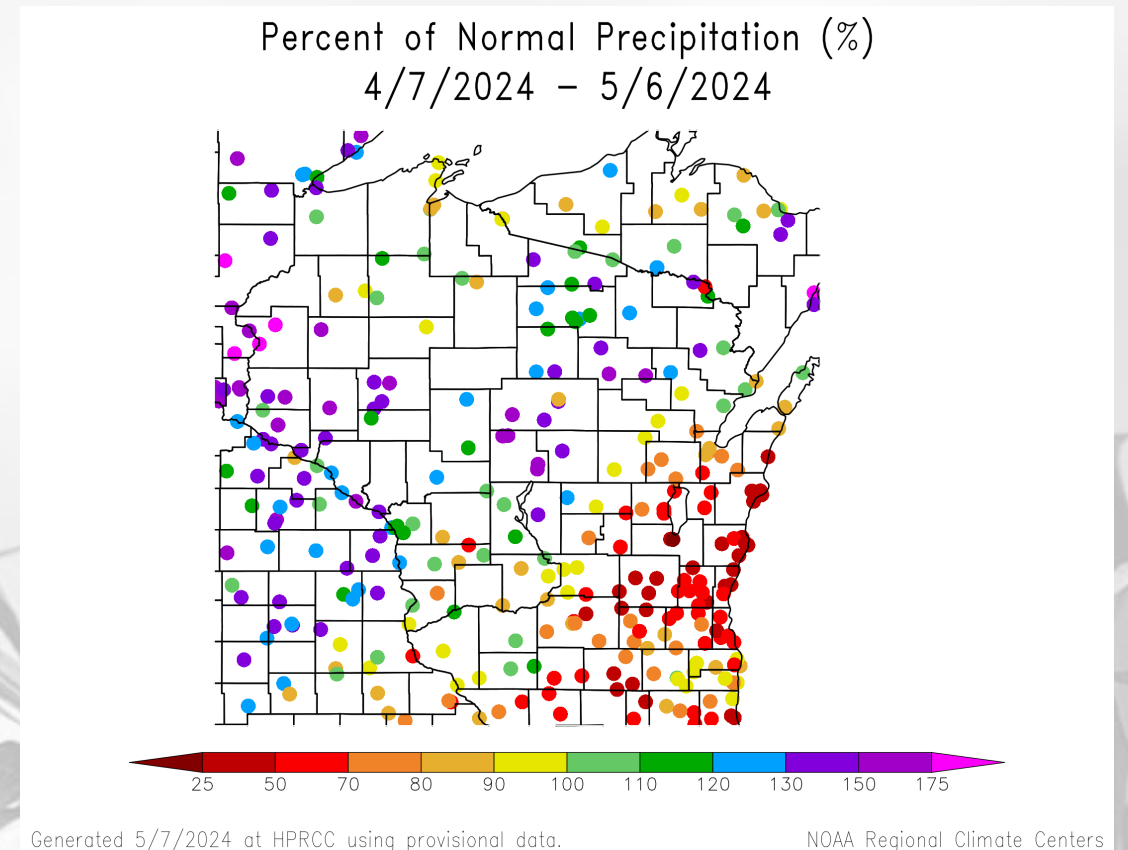
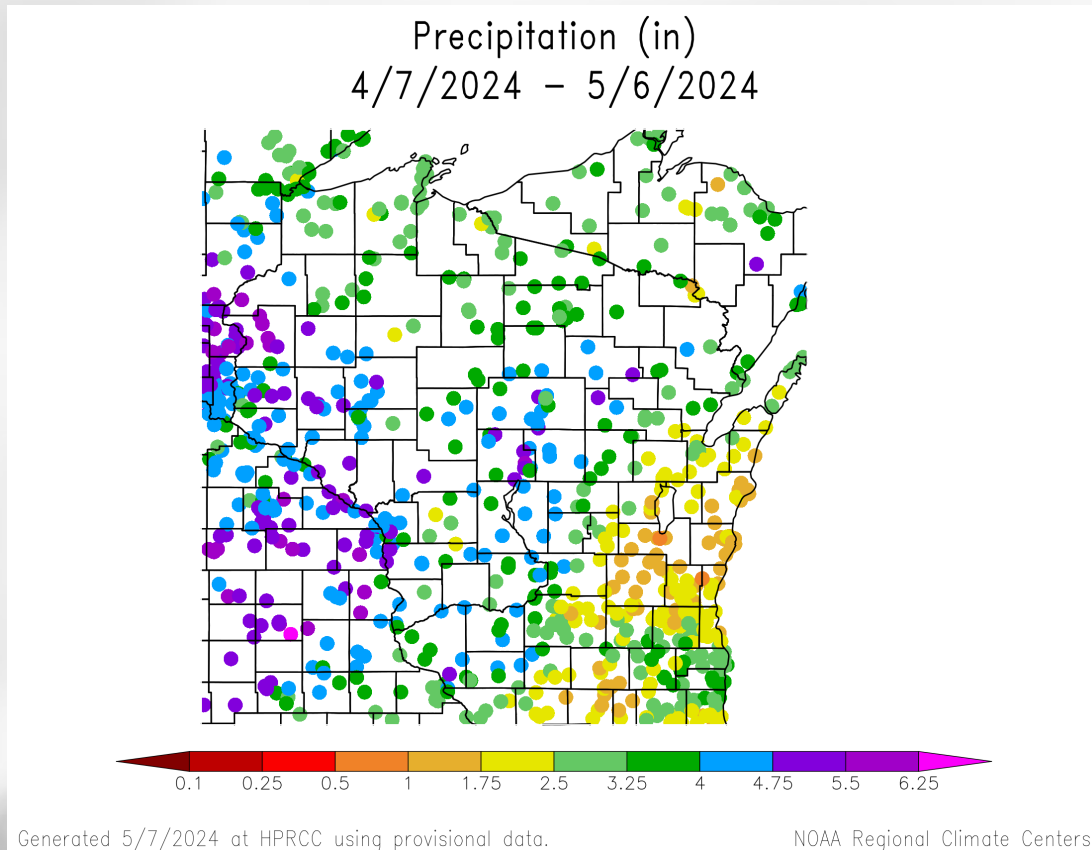
Valid on: May 07, 2024 12:00 UTC



- Most of the state has seen **2-5+''** of precip over the past month.
- Highest amounts (**>5''**) in the central and west-central part of the state.



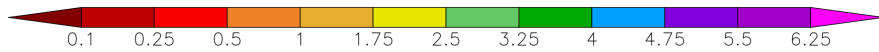
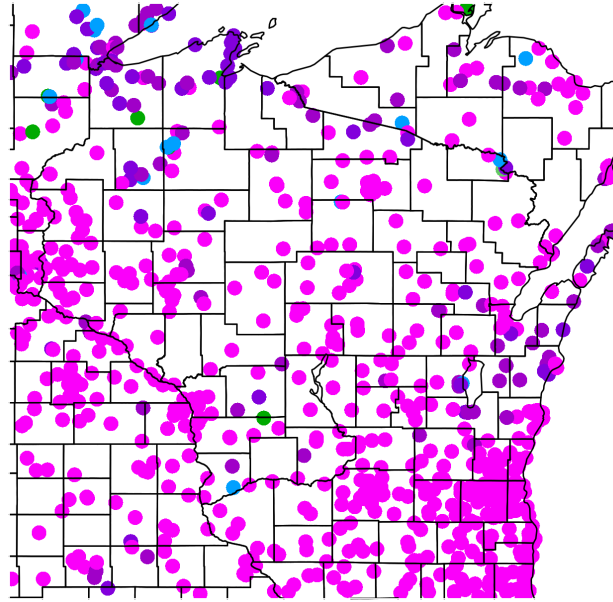
30 Day Precip Total/% Avg.



- **2.5+”** common across the state.
- Highest precip totals in the central, west-central, and northwest; lowest in the east-central and southeast.
- How stations across the state compare to normal varies, except for the east-central and southeast (<**70%** of normal).

90 Day Precip Total/% Avg.

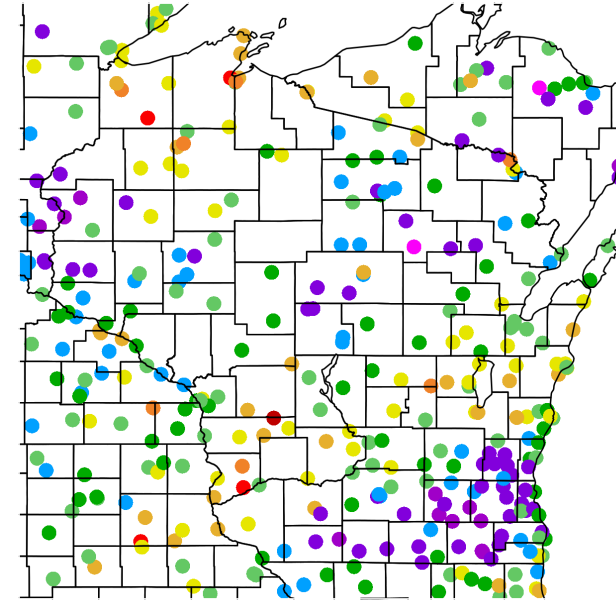
Precipitation (in)
2/7/2024 – 5/6/2024



Generated 5/7/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
2/7/2024 – 5/6/2024



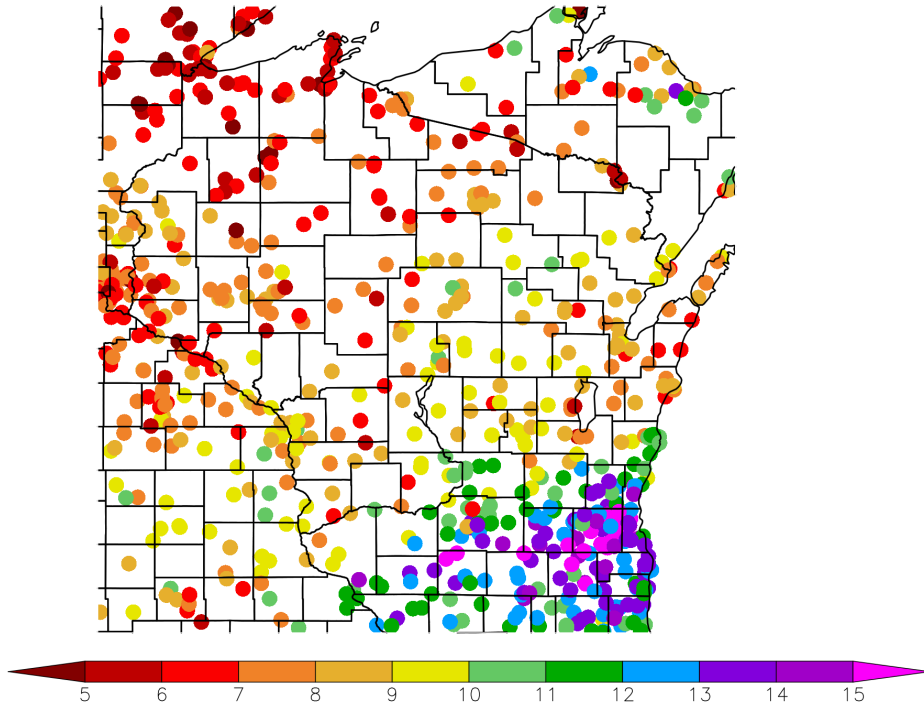
Generated 5/7/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

- Nearly the entire state has seen 6.25+” over the last 90 days.
 - Unfortunately, the color bar on these maps does not surpass 6.25”.
 - By using the [MRCC cli-MATE tool](#), we can see much of the state saw **7.5-10”**, and a majority of the far southern counties saw **10-12.5”**.
- Again, a variety of percent of normal across the state.
 - We see lingering drought effects in the southwest (<100% of normal) and the heavier precipitation in the southeast (>130% of normal).

2024 Precipitation (so far)

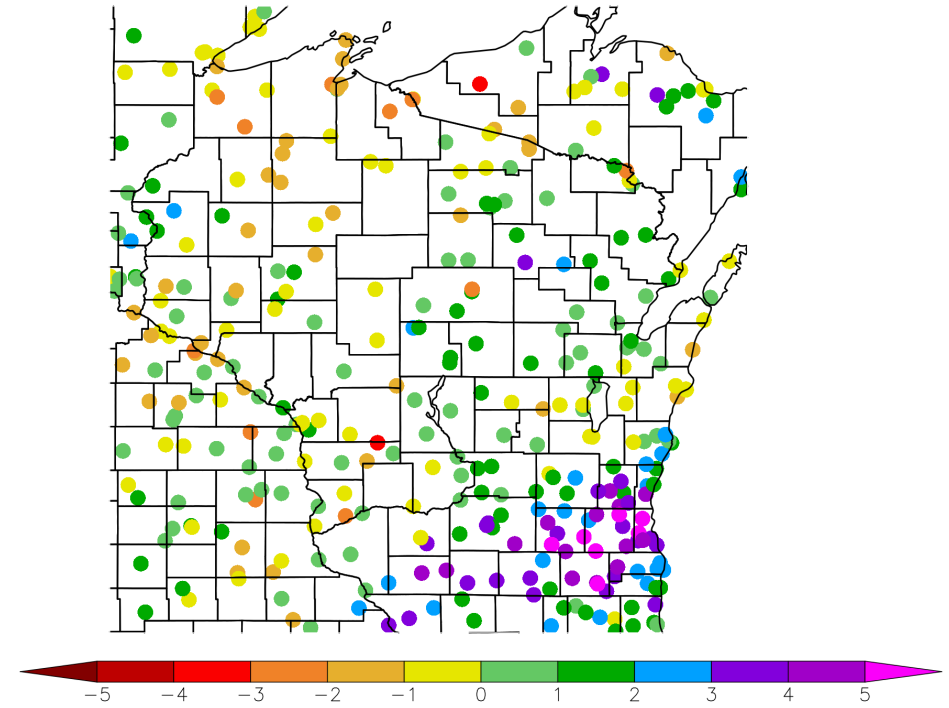
Precipitation (in)
1/1/2024 - 5/4/2024



Generated 5/5/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Precipitation (in)
1/1/2024 - 5/2/2024

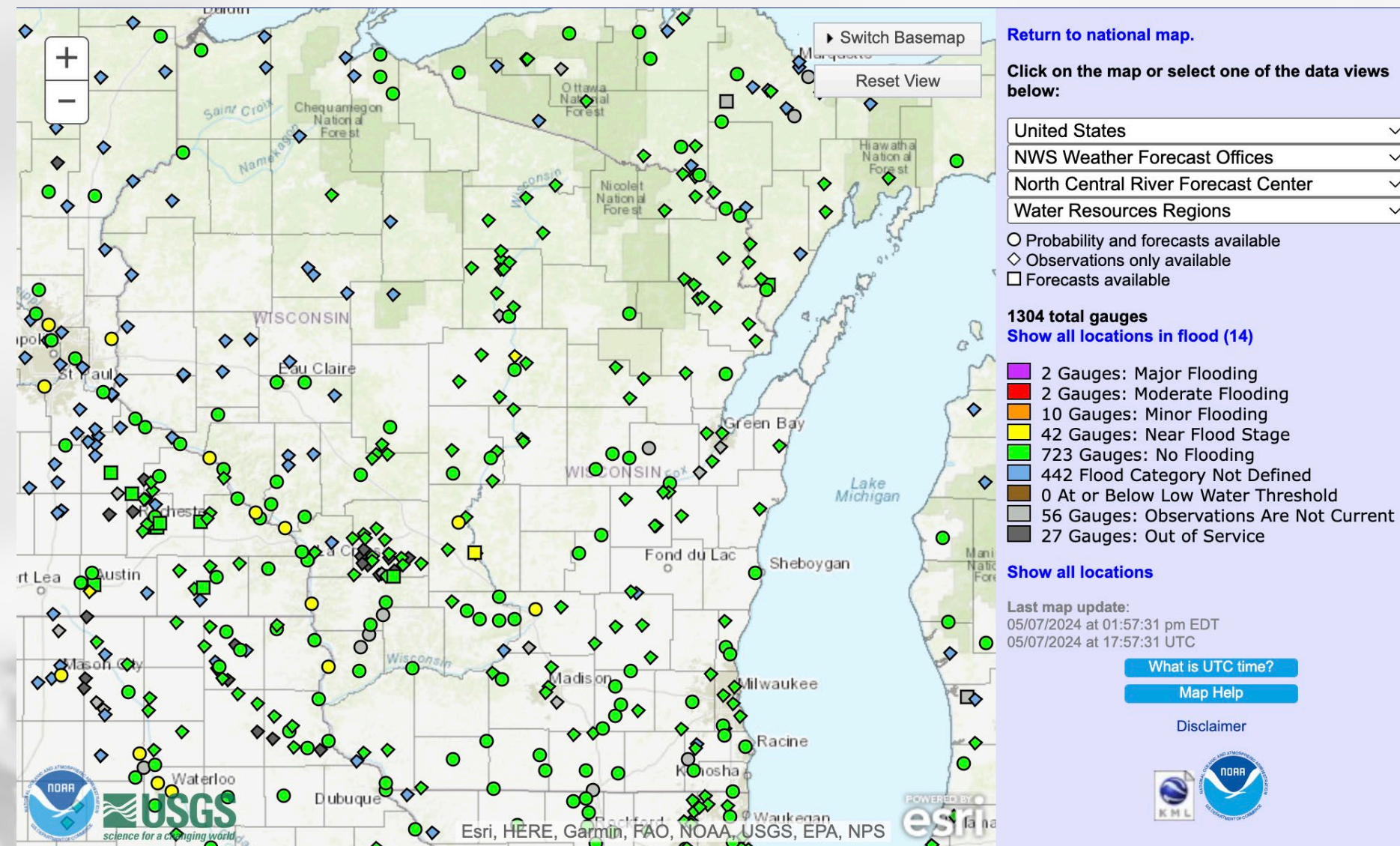


Generated 5/3/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

River Levels



- Only a few gauges remain near flood stage (yellow). The majority are running at normal levels.

<https://water.weather.gov/ahps/>

Soil Moisture Models

- Overall, near-normal soil moisture conditions for the state.
- Model still indicating a very parched Door County. The 2024 precip anomalies don't look consistent with this dryness. However, this could be an indication of high evapotranspiration levels.

Model Notes:

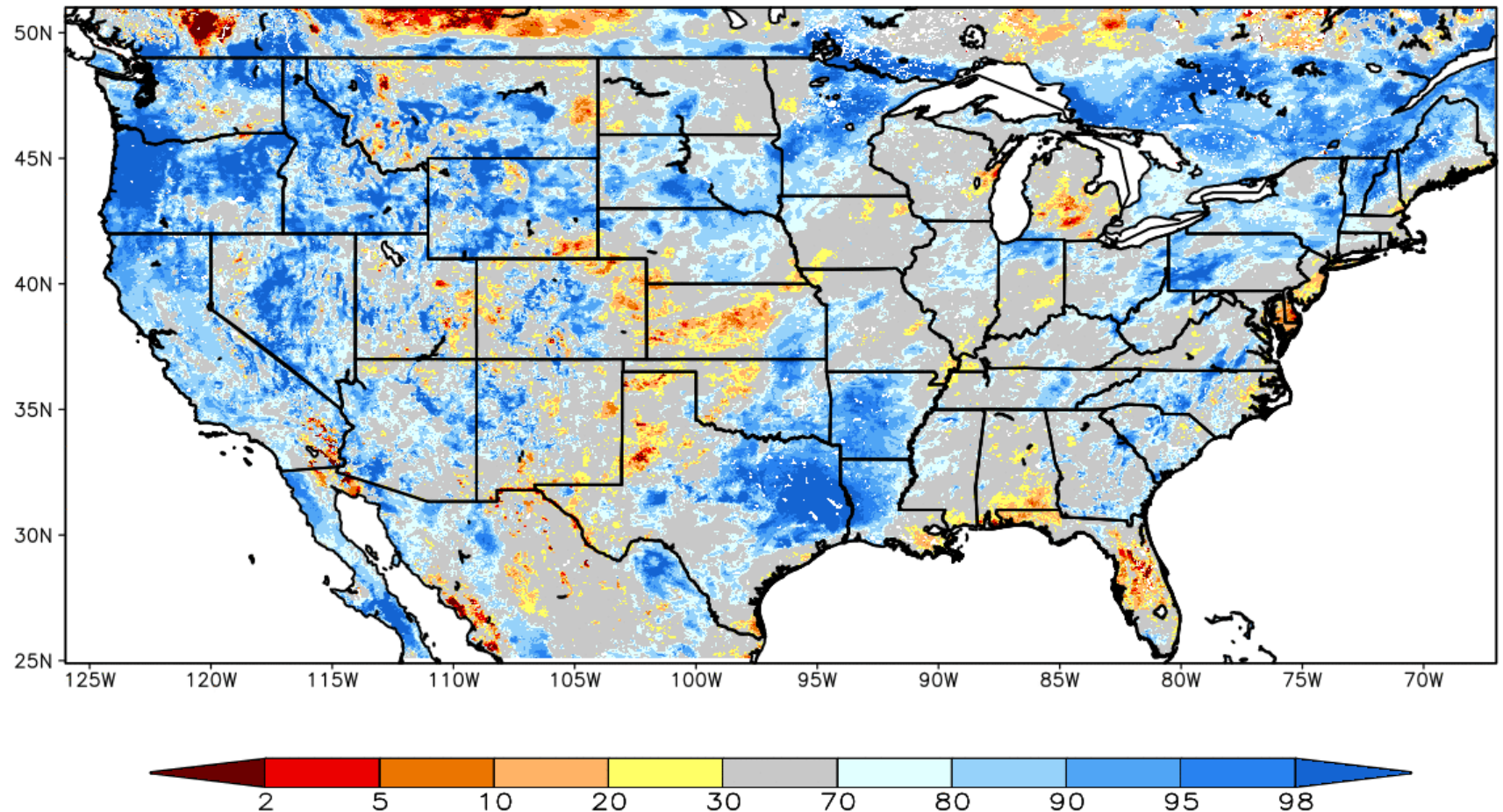
Red areas = top 5 driest in 100 years.

Dark red areas = top 2 driest in 100 years.

It's worth noting that each soil moisture model has their own characteristics and input variables, so there tends to be variation between models. Thus, it's worthwhile to look at multiple models opposed to just one.

https://weather.msfc.nasa.gov/sport/case_studies/lis_CONUS.html

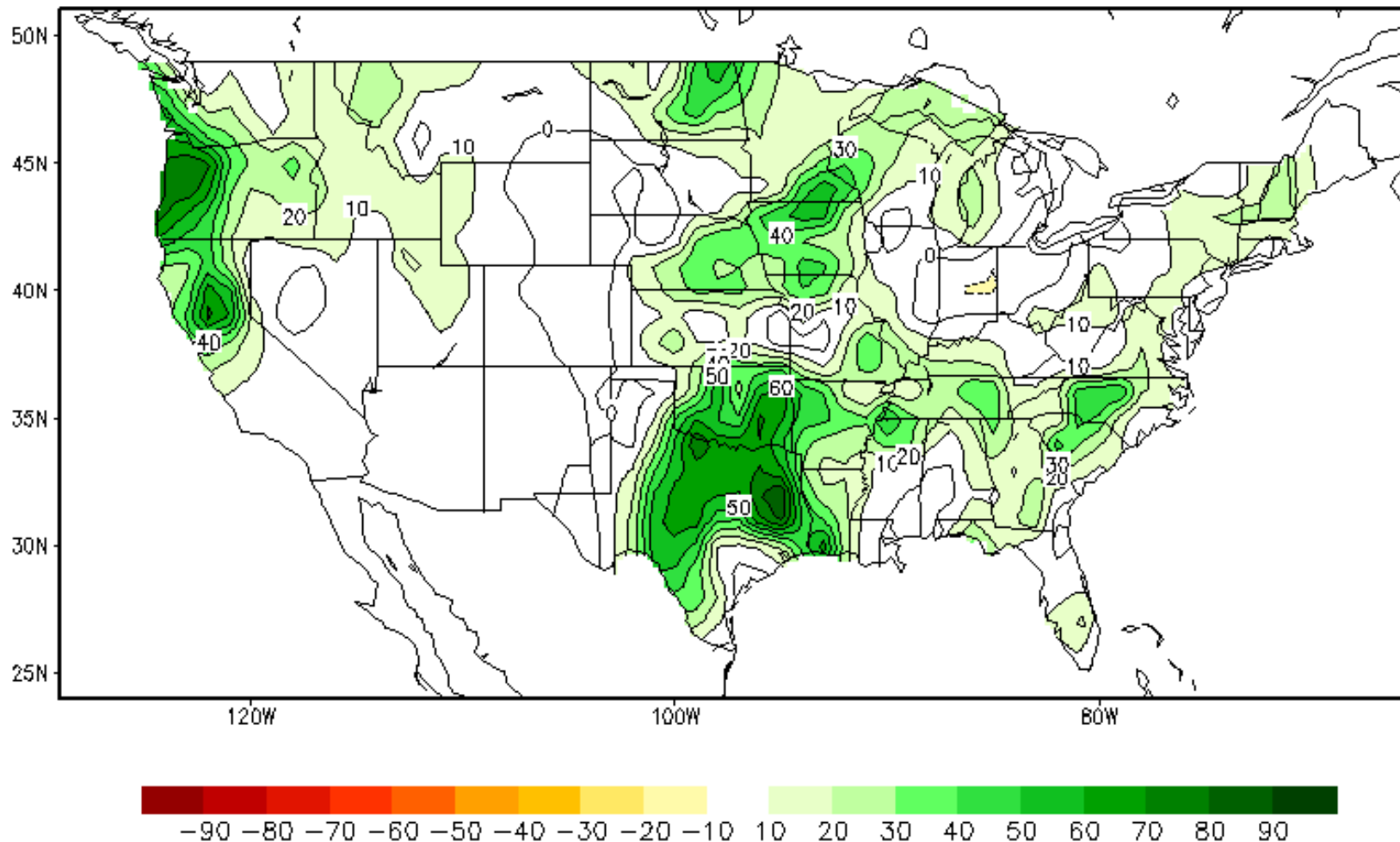
SPoRT-LIS 0-100 cm Soil Moisture percentile valid 07 May 2024



***NOTE**
Experimental

Soil Moisture Models

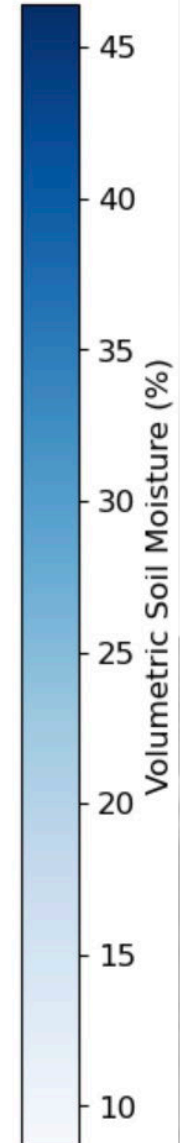
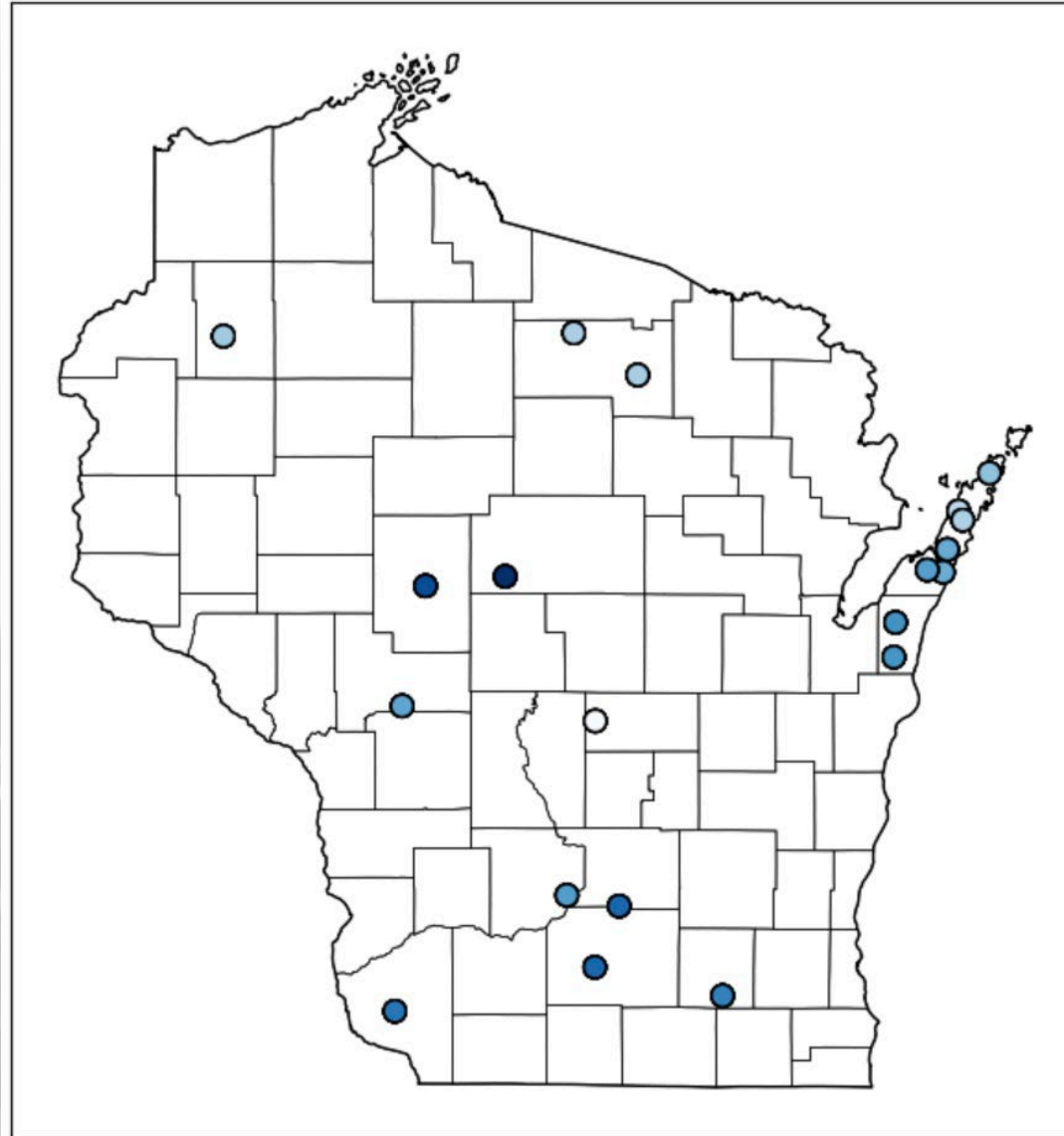
Calculated Soil Moisture Anomaly Change
MAY 06, 2024 from APR.30



- **Moisture improvement** over the last week where precip totals were higher, particularly west-central WI.

Soil Moisture - Wisconet

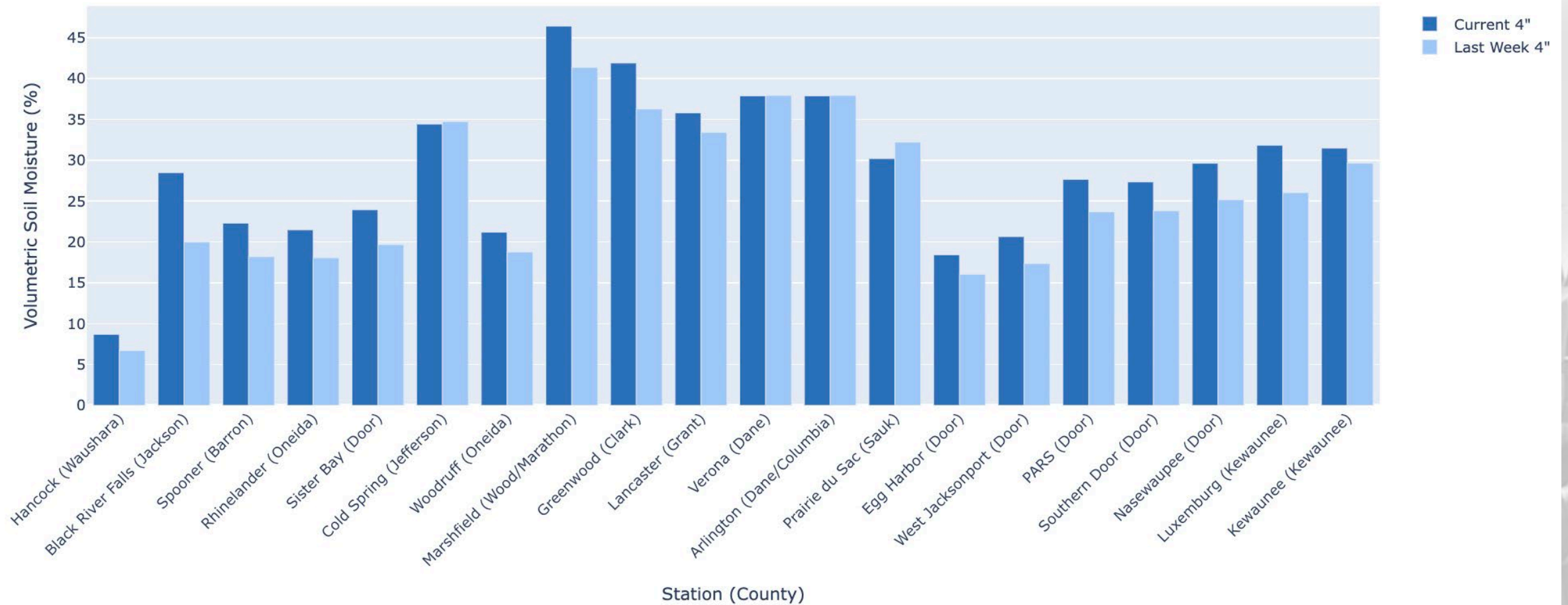
Wisconet 4" Soil Moisture



7-day average ending on 5/6.

Soil Moisture - Wisconet

Wisconet 4" Soil Moisture



Current: 7-day average ending on 5/6

Last Week: 7-day average ending on 4/30

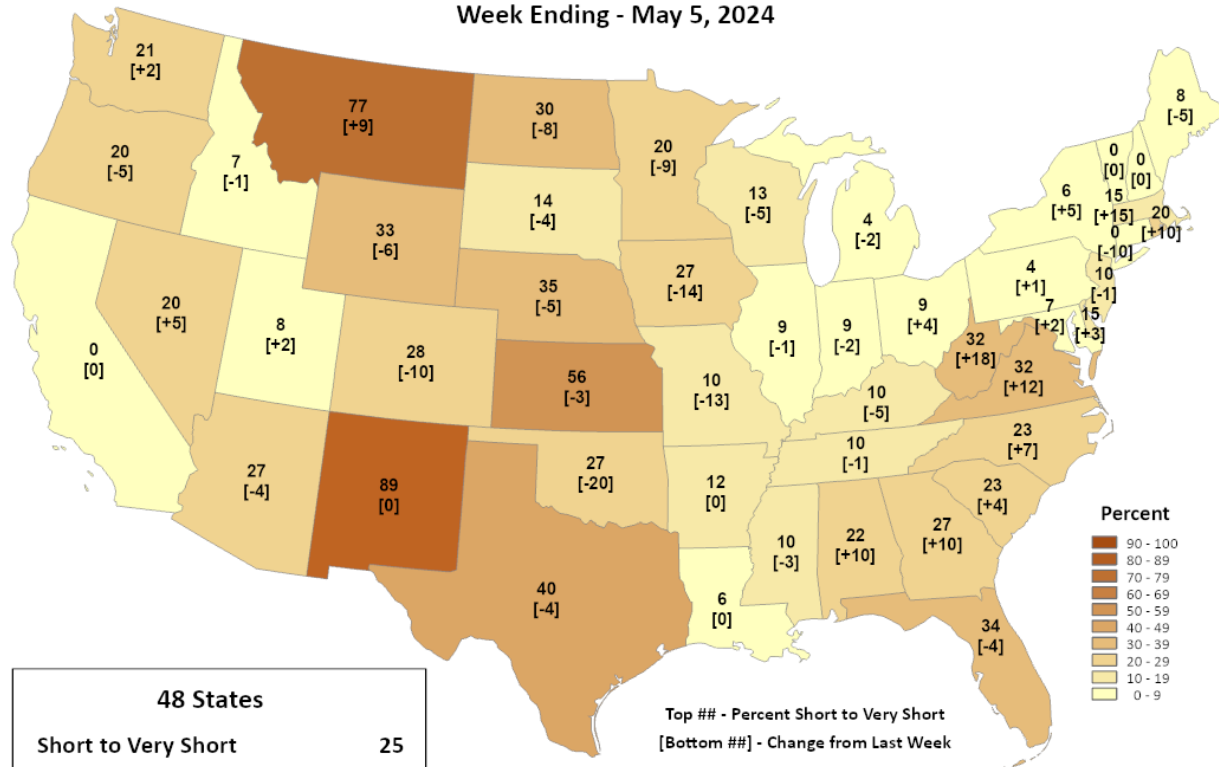
<https://wisconet.wisc.edu/>

NASS Subsoil Moisture



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

Subsoil Moisture Percent Short to Very Short Week Ending - May 5, 2024



48 States	
Short to Very Short	25
Change from Last Week	-4

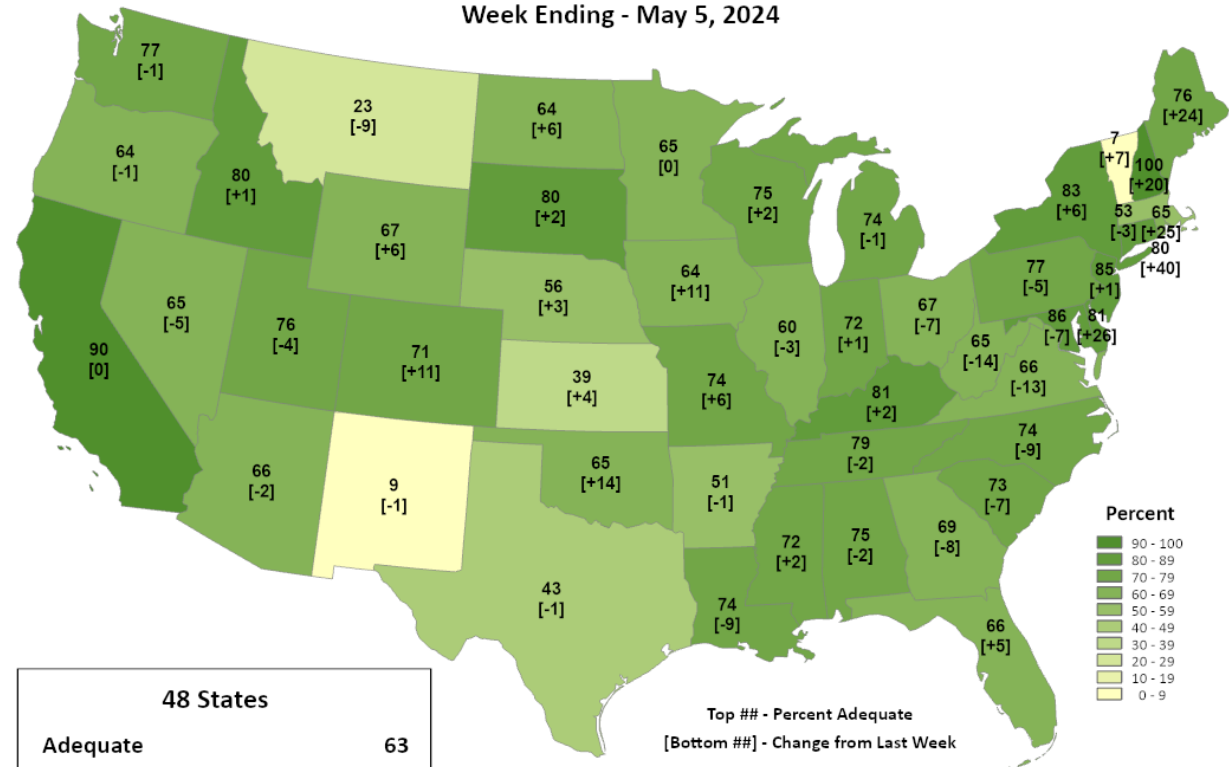
Top ## - Percent Short to Very Short
[Bottom ##] - Change from Last Week

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 - May 5, 2024



48 States	
Adequate	63
Change from Last Week	+2

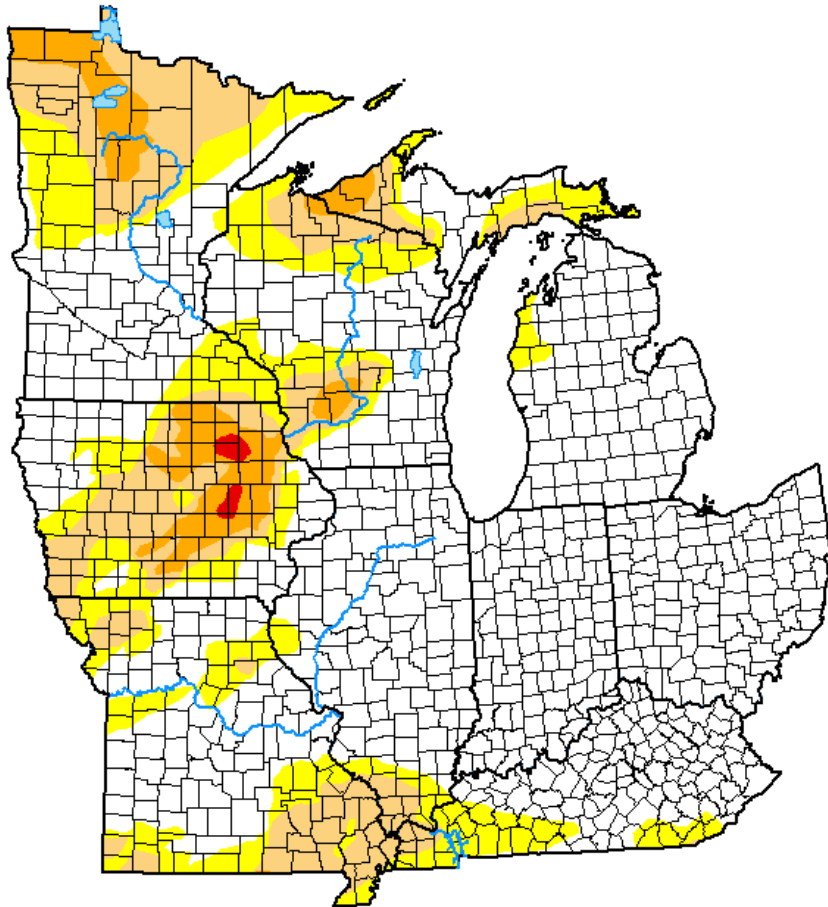
Top ## - Percent Adequate
[Bottom ##] - Change from Last Week

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

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

US Drought Monitor

U.S. Drought Monitor Midwest



April 30, 2024
(Released Thursday, May. 2, 2024)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	65.57	34.43	18.32	4.95	0.28	0.00
Last Week 04-23-2024	58.41	41.59	23.36	6.34	0.30	0.00
3 Months Ago 01-30-2024	46.17	53.83	23.15	10.28	2.14	0.00
Start of Calendar Year 01-02-2024	22.92	77.08	50.25	20.76	4.20	0.00
Start of Water Year 09-26-2023	16.82	83.18	54.98	23.81	6.21	0.13
One Year Ago 05-02-2023	71.09	28.91	7.72	2.58	0.16	0.06

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

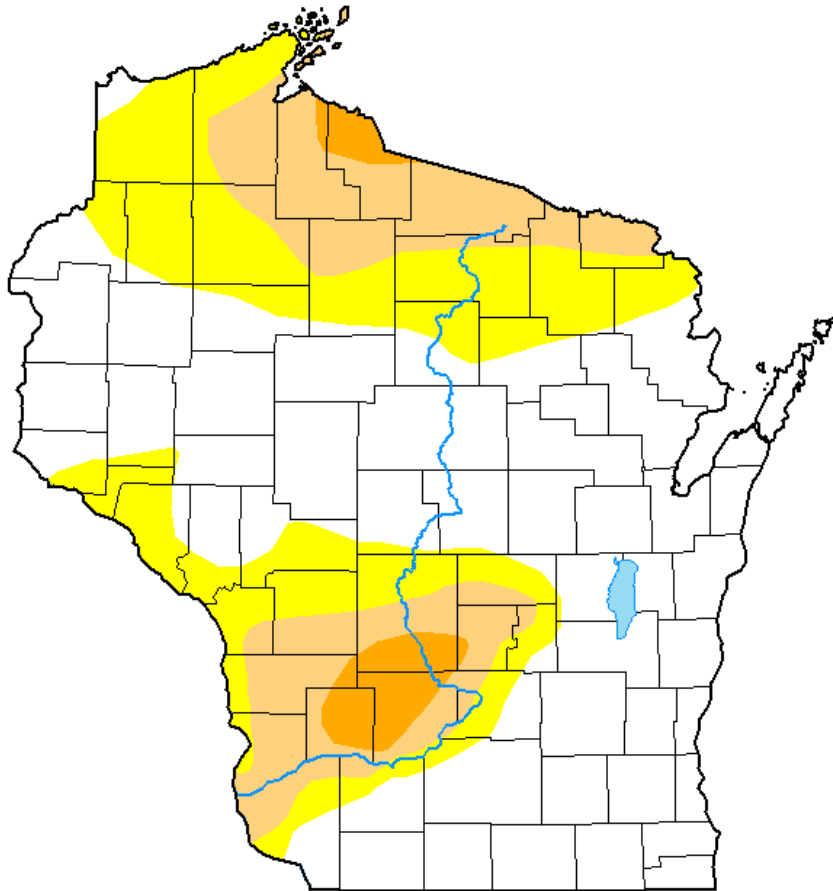
- Compared to last week:
 - 1-class improvements in drought category in MN, IA, and MO.
- Eastern half of the Midwest remains relatively drought-free.
- Majority of drought is west of the Mississippi River.
- Continued improvement in D2/3 level in eastern IA.
 - 201st consecutive week of IA having at least D1 conditions somewhere in the state.

Note: D0 is not considered drought.

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

US Drought Monitor

U.S. Drought Monitor Wisconsin



April 30, 2024

(Released Thursday, May 2, 2024)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	56.73	43.27	19.01	3.29	0.00	0.00
Last Week 04-23-2024	56.39	43.61	19.02	3.29	0.00	0.00
3 Months Ago 01-30-2024	33.63	66.37	35.52	14.93	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 05-02-2023	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:



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National Drought Mitigation Center



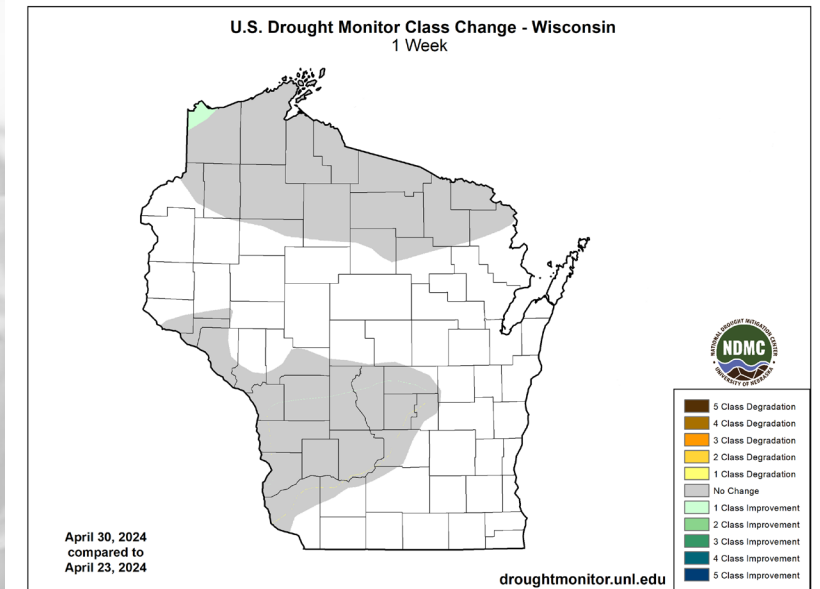
droughtmonitor.unl.edu

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

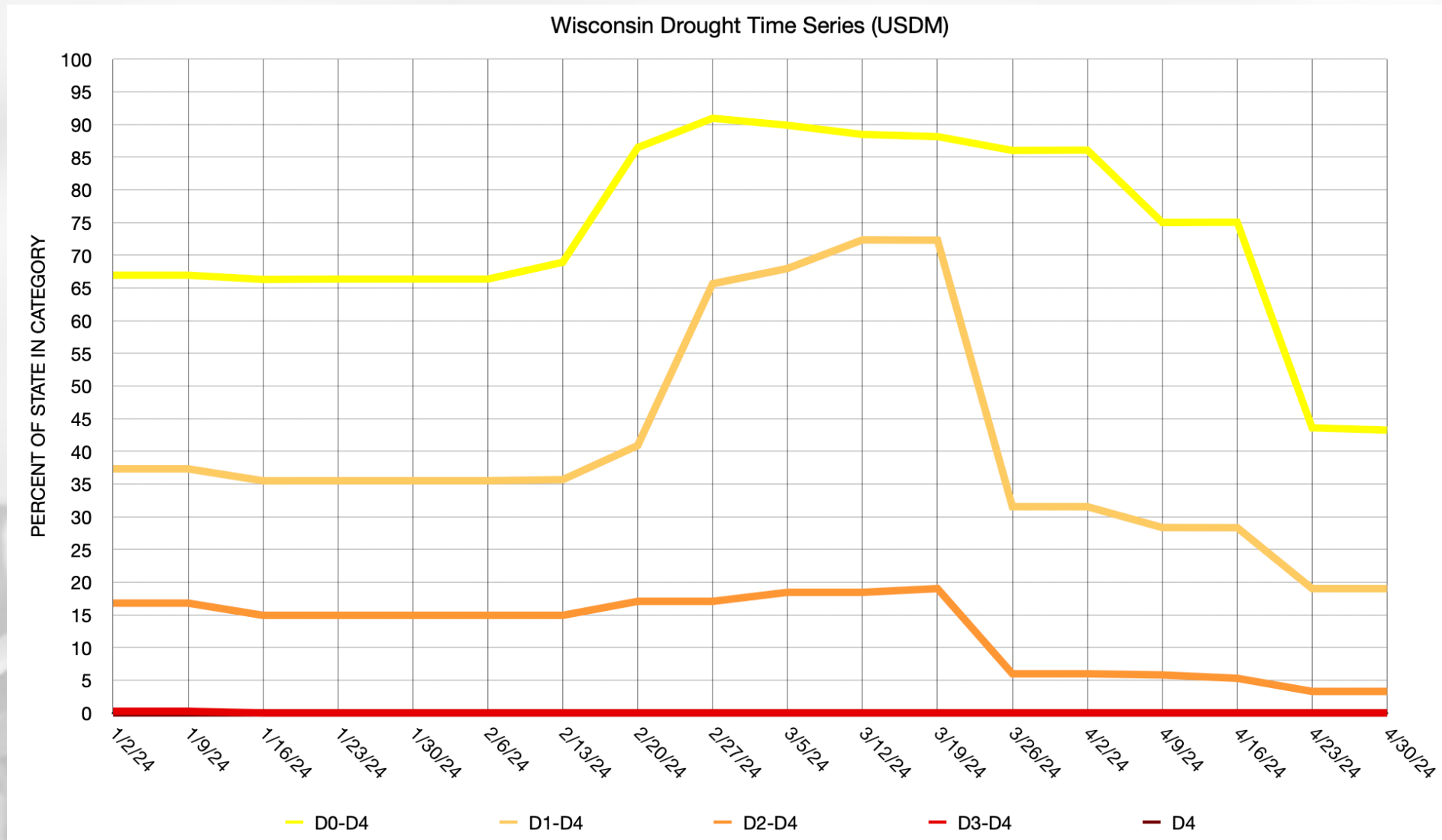
Amount of state in:

- **D1-D4** – 19.0% --
- **D2-D4** – 3.3% --
- **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.



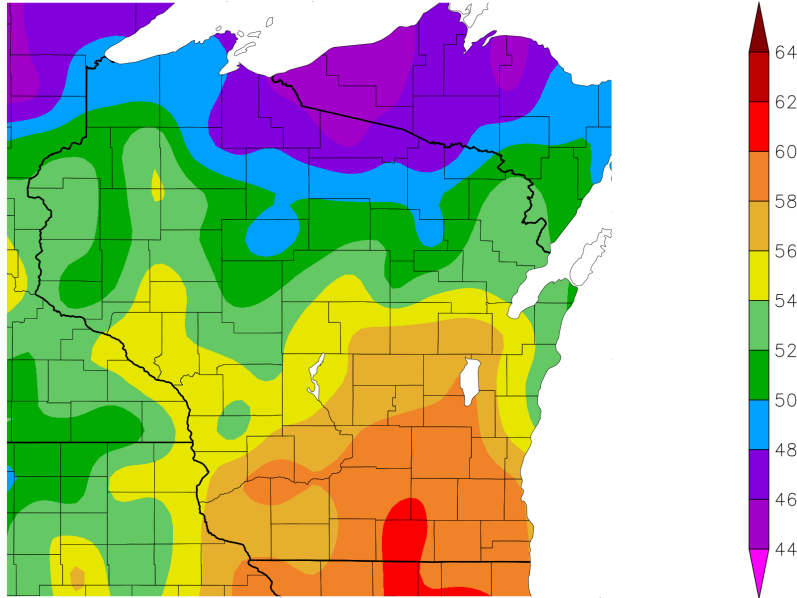
USDM Time Series



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

7 Day Temperatures

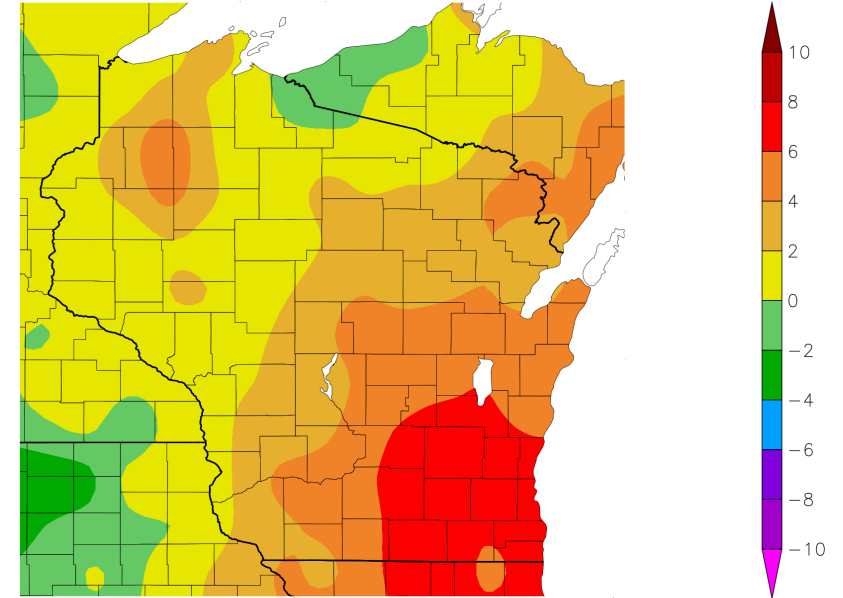
Temperature (F)
4/30/2024 - 5/6/2024



Generated 5/7/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Temperature (F)
4/30/2024 - 5/6/2024



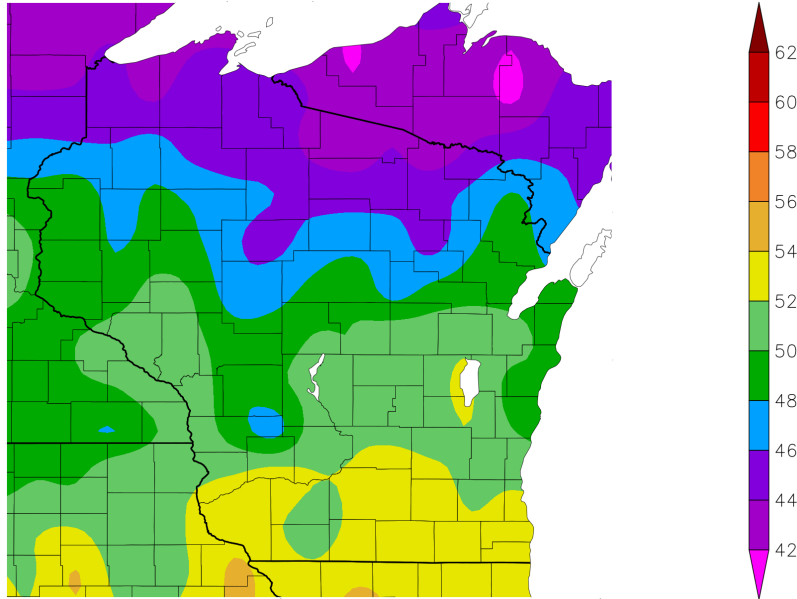
Generated 5/7/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

- Average temps ranged from **46-60°F** over the last week, which was **0-8°F** above normal.

30 Day Temperatures

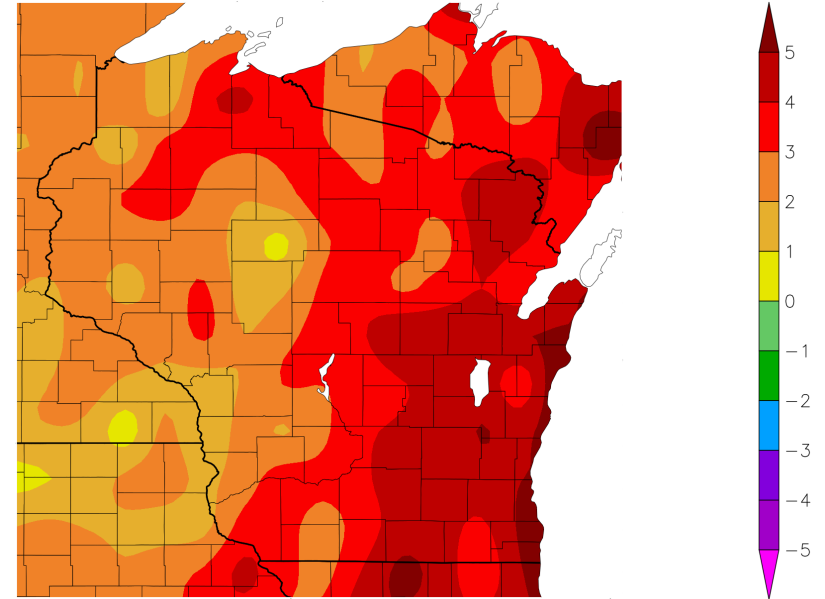
Temperature (F)
4/7/2024 – 5/6/2024



Generated 5/7/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Temperature (F)
4/7/2024 – 5/6/2024



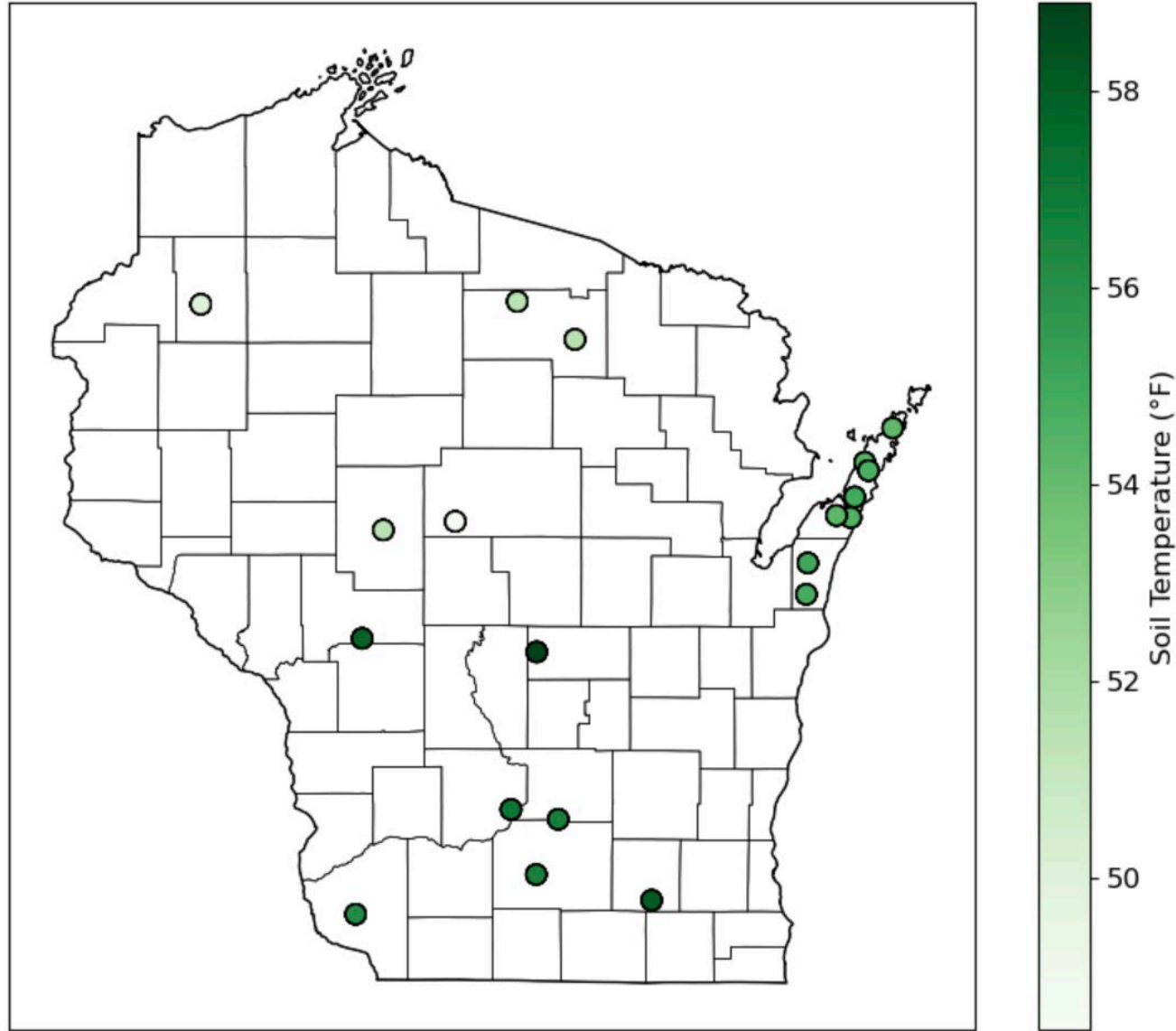
Generated 5/7/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

- Temp for the past month ranged from **50-54°F** in the S to **44-48°F** in the N, with temps **1-5+°F** statewide.

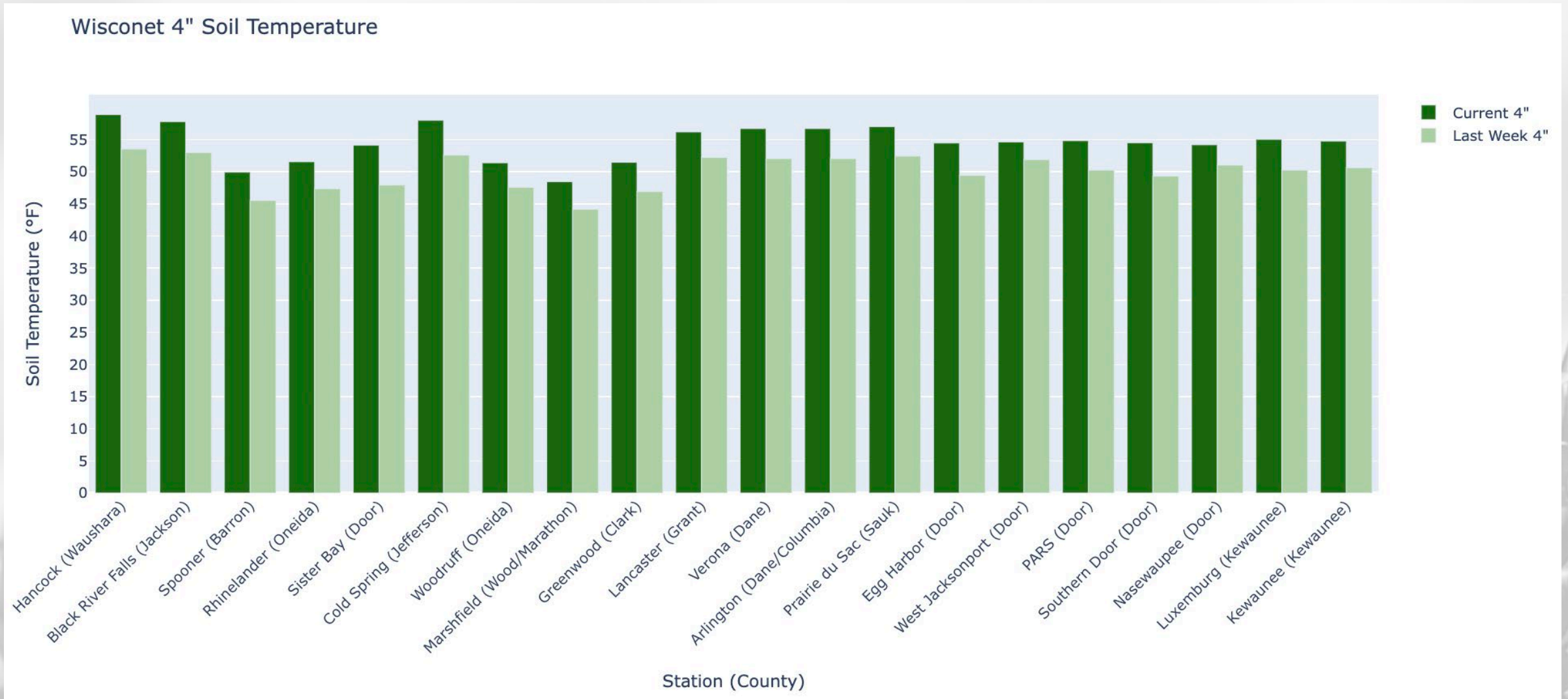
Soil Temperature - Wisconet

Wisconet 4" Soil Temperature



7-day average ending on 5/6.

Soil Temperature - Wisconet



Current: 7-day average ending on 5/6

Last Week: 7-day average ending on 4/30

<https://wisconet.wisc.edu/>

NASS Crop Progress – Corn

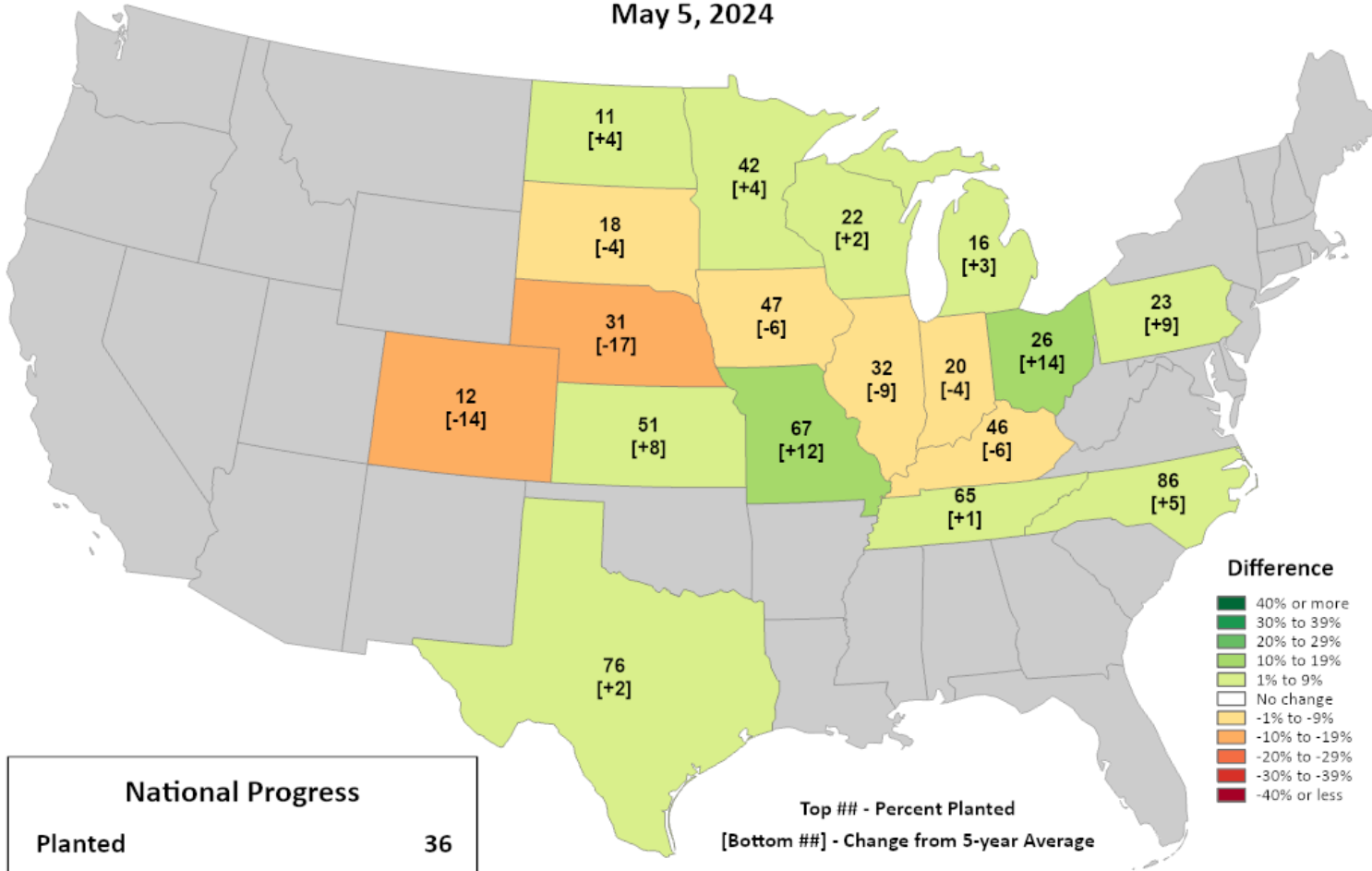


This product was prepared by the
 USDA Office of the Chief Economist (OCE)
 World Agricultural Outlook Board (WAOB)

Corn Progress

Percent Planted

May 5, 2024



National Progress	
Planted	36
Change from 5-year Average	-3

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

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

- Planting is running **at or ahead** of the 5-year average in WI and other upper-Midwest states.
- Wisconsin → **22% complete;**
2% ahead of the 5-year average.

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

NASS Crop Progress – Soybean

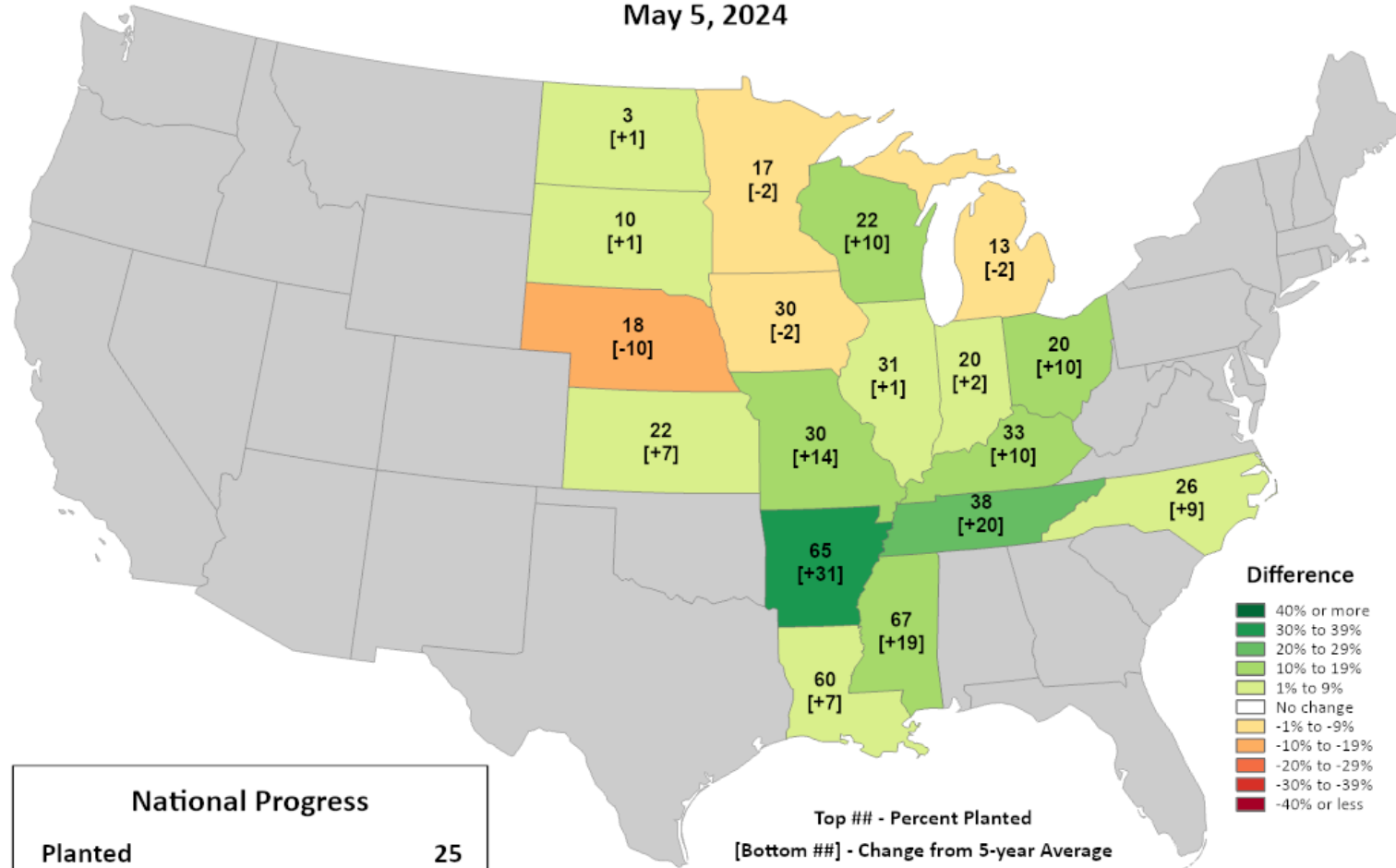


This product was prepared by the
USDA Office of the Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)

Soybeans Progress

Percent Planted

May 5, 2024



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

- Planting is running **at or ahead** of the 5-year average in WI and lower-Midwest states.
- Wisconsin → **22% complete**; **10%** ahead of the 5-year average.

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

NASS Crop Progress – Oats

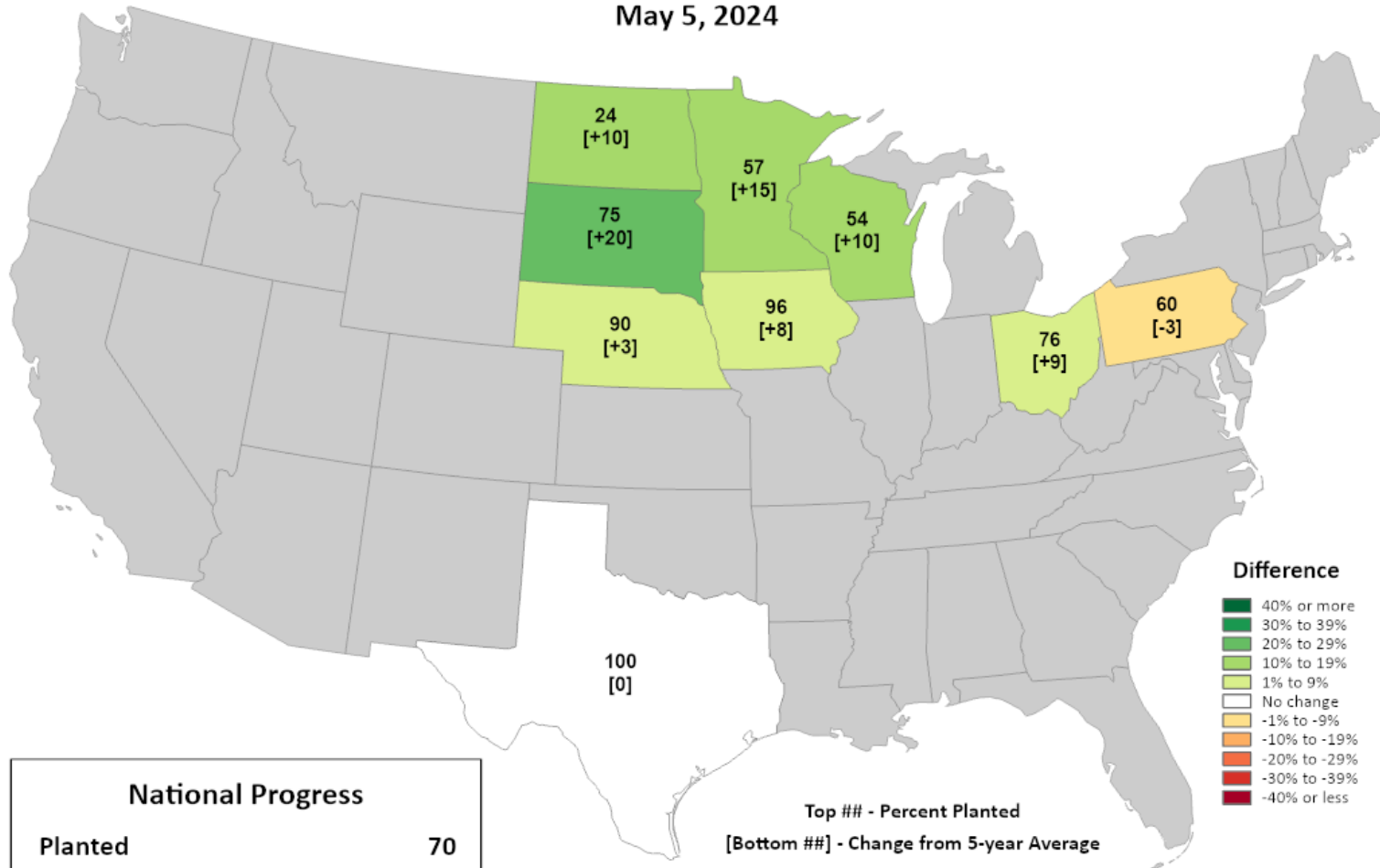


This product was prepared by the
USDA Office of the Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)

Oats Progress

Percent Planted

May 5, 2024



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

- Planting is running **at or ahead** of the 5-year average in WI and states to the west.
- Wisconsin → **55% complete**; **10%** ahead of the 5-year average.

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

NASS Crop Progress – Winter Wheat

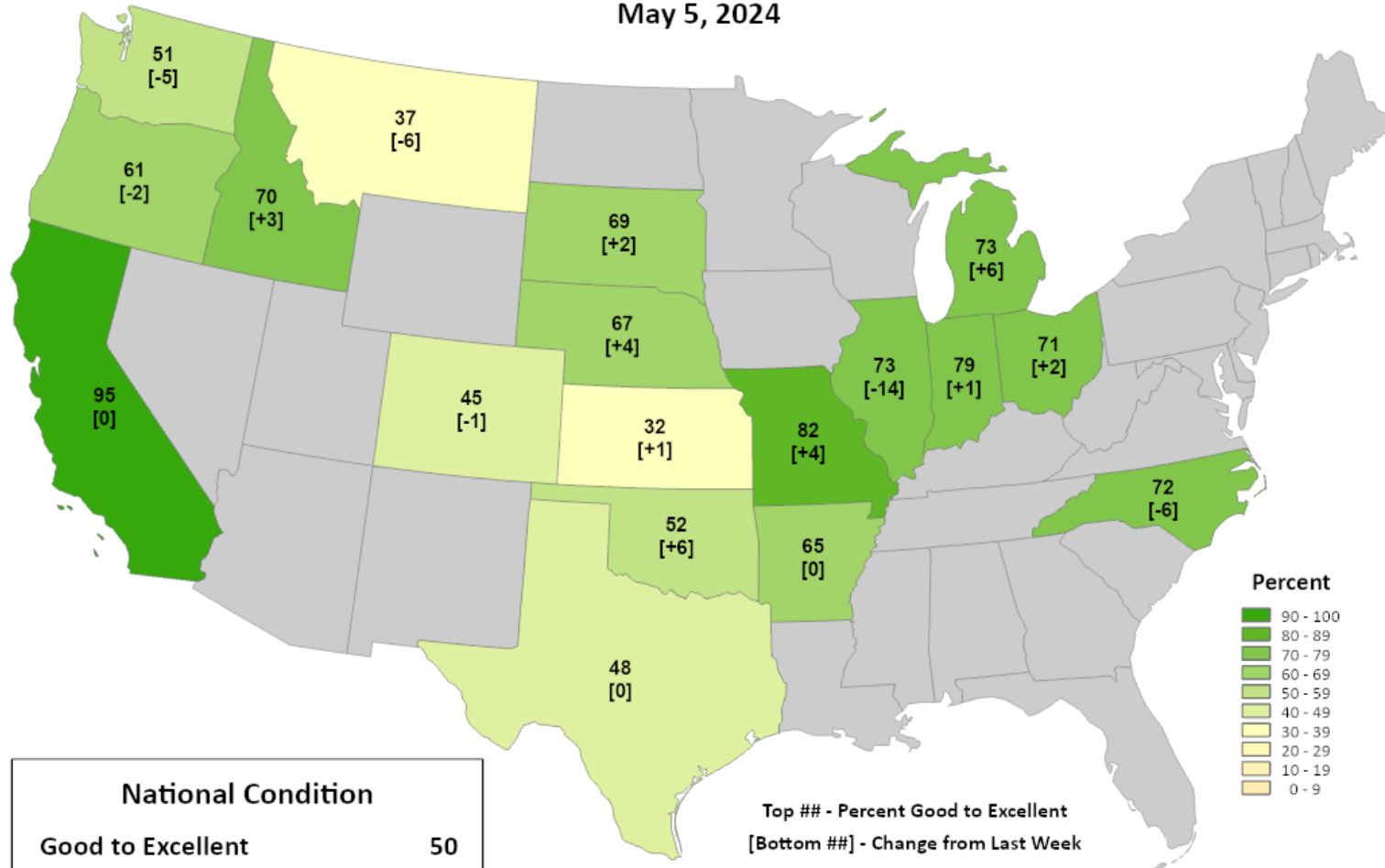


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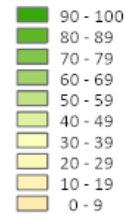
Winter Wheat Conditions

Percent Good to Excellent

May 5, 2024



Percent



National Condition

Good to Excellent	50
Change from Last Week	+1

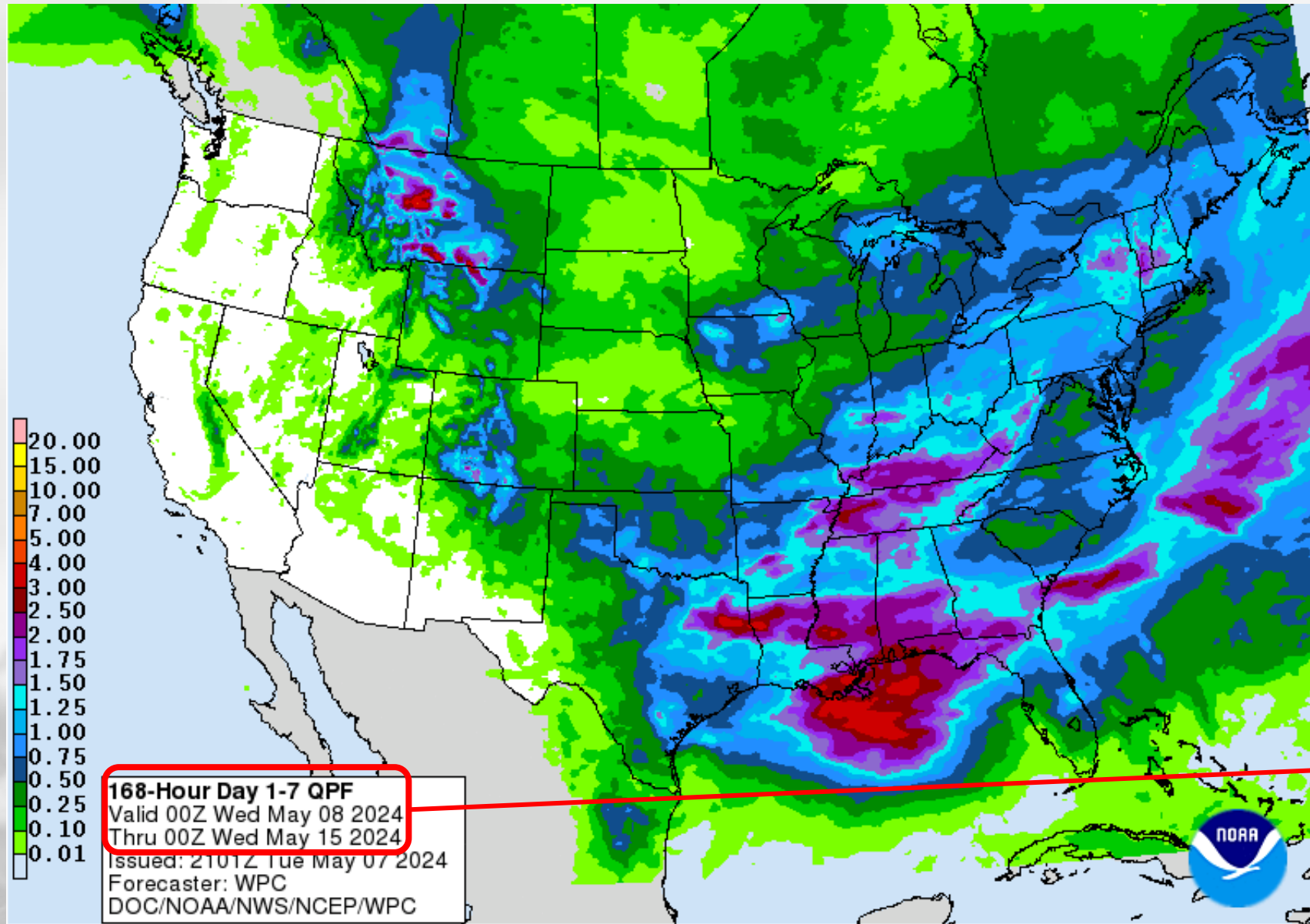
Top ## - Percent Good to Excellent
[Bottom ##] - Change from Last Week

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

- In states around Wisconsin, winter wheat condition is **>70-80%** good to excellent.
 - Slight improvement from last week, except for IL.

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

7 Day Precip Forecast



- A couple of rounds of rain forecasted for Wed (5/8) night into Thu (5/9) as well as Fri (5/10) into Sat (5/11)

Forecast for 5/7/24 thru 5/14/24
(00Z = 7pm CDT)

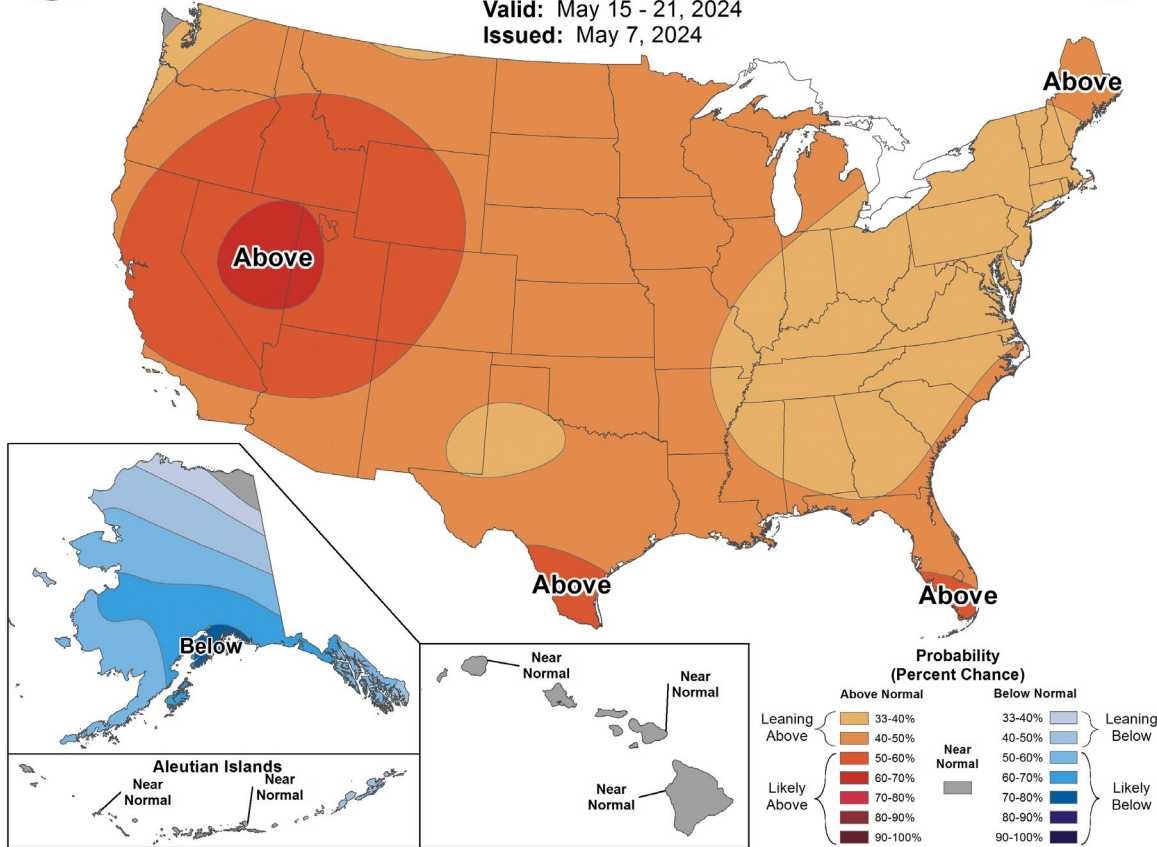
<https://www.wpc.ncep.noaa.gov/qpf/p168i.gif>

8-14 Day Temp & Precip Outlook



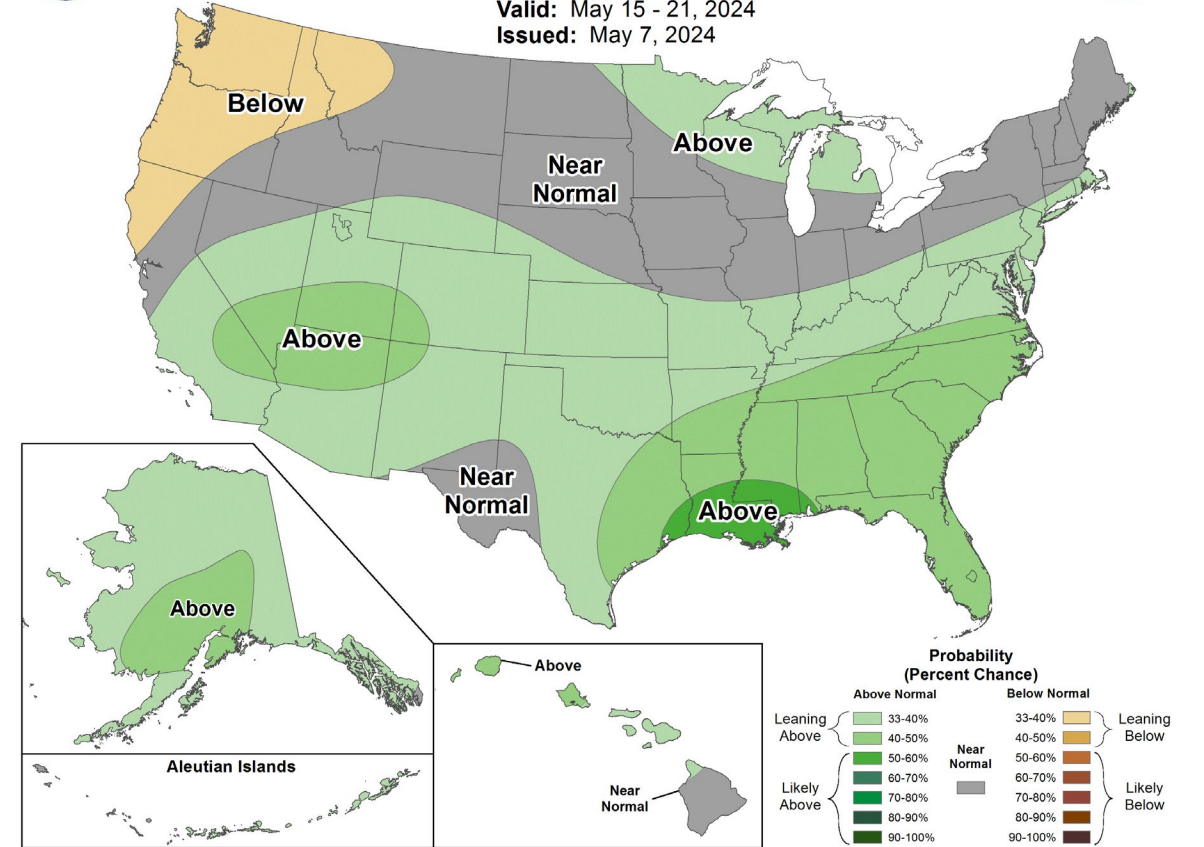
8-14 Day Temperature Outlook

Valid: May 15 - 21, 2024
Issued: May 7, 2024



8-14 Day Precipitation Outlook

Valid: May 15 - 21, 2024
Issued: May 7, 2024



Mid-May: Temperatures leaning above normal. Precipitation leaning above normal to the north and near normal to the south.

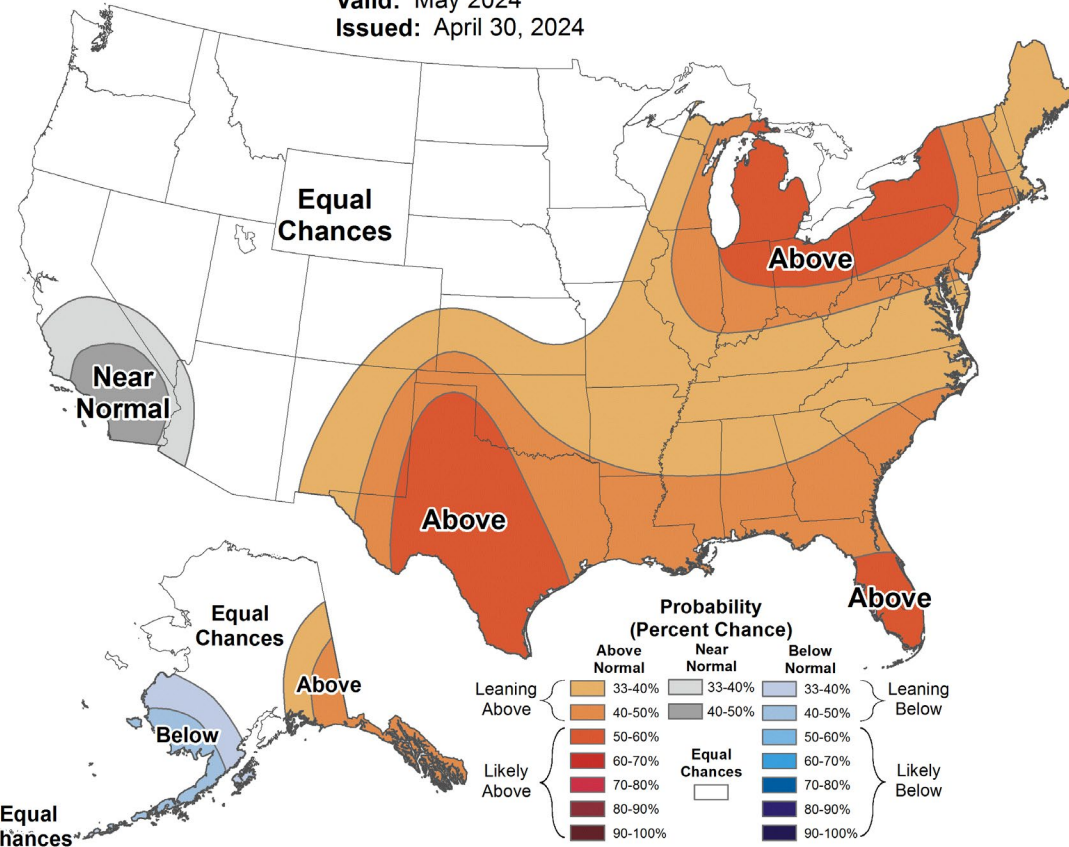
30 Day Temp & Precip Outlook



Monthly Temperature Outlook



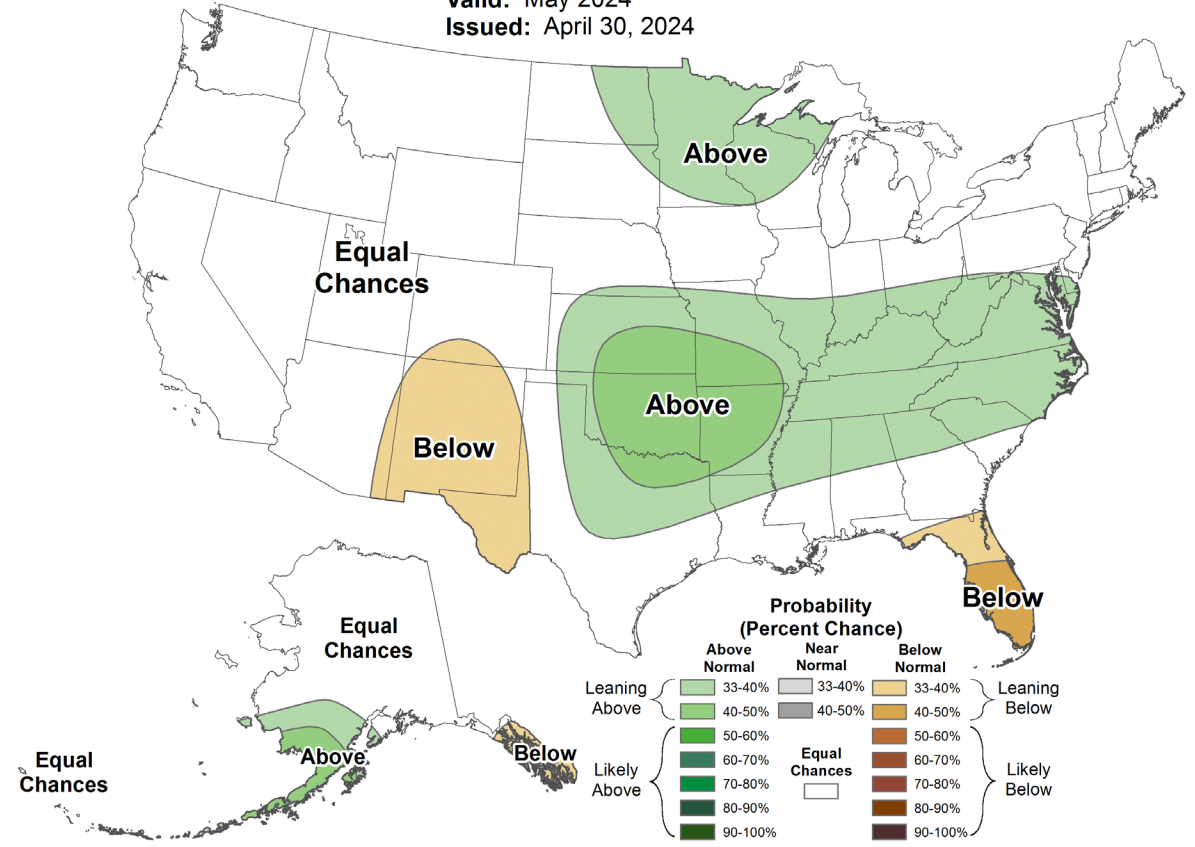
Valid: May 2024
Issued: April 30, 2024



Monthly Precipitation Outlook



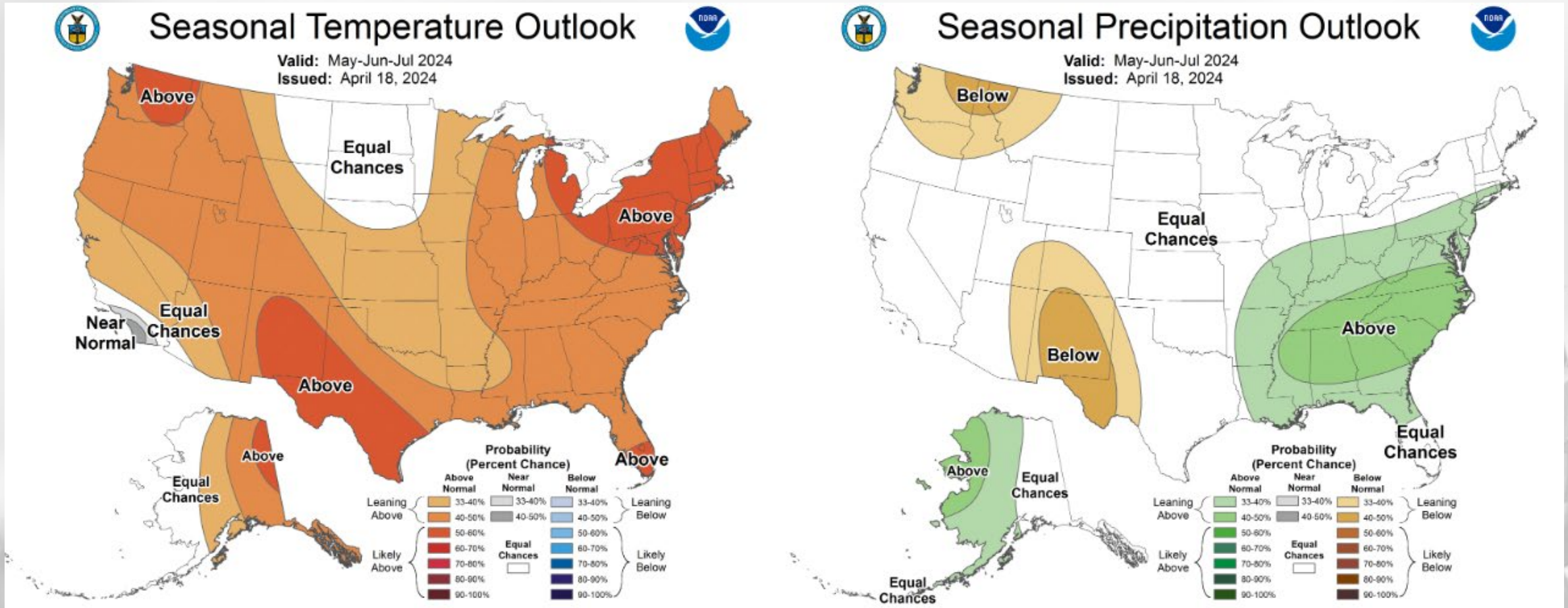
Valid: May 2024
Issued: April 30, 2024



Month of May: Temperatures leaning above normal for the eastern half of Wisconsin, and equal chances for the western half. Precipitation is leaning above normal for the northern half, and equal chances for the southern half.

<http://www.cpc.ncep.noaa.gov/>

90 Day Temp & Precip Outlook



Late Spring into Summer: Temperatures leaning towards above normal. Precipitation indications are for equal chances of above/at/below normal.

Take-Home Points

Current Conditions

- May continues the active weather pattern, where much of the state saw at least 0.5” of rain.
- May also continued the warmer-than-normal temps, averaging 46-60°F over the last week.

Impact

- Improvements in soil moisture at most Wisconet stations.
- 7-day average soil temperatures are 50+°F at all but two Wisconet stations.
- US Drought Monitor remains unchanged for WI since last week.
- Corn, soybean, and oat planting continue to run ahead of the 5-year average pace.

Outlook

- The rainy trend is forecasted to continue this next week.
- Mid-May is leaning towards warmer-than-normal, with potentially wetter conditions to the north.
- The warmer-than-normal conditions have the potential to persist into early summer.
 - *A transition to La Niña is expected by June.*

Agronomic Considerations

Planting Considerations

- Soil temperatures are now adequate for planting throughout the state.
- Soil moisture is adequate or even high in most places. Be cautious about planting into muddy conditions, especially with more rain forecasted.
- Cover crop termination:
 - If local soil conditions are dry, consider an earlier cover crop termination to reduce evapotranspiration.
 - If local soil conditions are wet, consider delaying cover crop termination until crop planting or later to manage excess soil moisture for planting.

Nutrient & Herbicide Applications

- Consider using a [preplant nitrate test](#) to assess if there is nitrogen left over from last year due to long-term drought conditions.
- Observe soil moisture conditions before doing fieldwork so as to avoid soil compaction.
- Read herbicide labels from products used last year to assess if carryover is a possibility due to warmth and lack of moisture.

Manure Applications

- Be mindful of the possibility of runoff and plan manure applications accordingly, check the DATCP runoff risk advisory forecast [here](#).
- Early season manure applications into warm soil conditions may lead to increased mineralization/nitrification and potential for N loss if receive “typical” heavy spring rainfall events, particularly if not applied to a growing cover crop or if the cash crop will not be planted soon after application.

Pest Management

- Black cutworm and True armyworm flights are now arriving and increasing. WI had conducive weather patterns for the migration of moths, which can be carried on low-level jet stream currents from overwintering areas in TX and Mexico to WI in only two days. Sign up to receive text alerts when pests are in your region [here](#).
- Alfalfa weevil damage is increasing in the southern part of the state.

Breaking Dormancy

- Be aware that we are not past the average spring freeze date for Northern Wisconsin, even though it may seem unlikely now. mrcc.purdue.edu/freeze/freezedatetool

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>

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Photo Credit: USDA



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