Extension
UNIVERSITY OF WISCONSIN-MADISON

Wisconsin State Climatology Office
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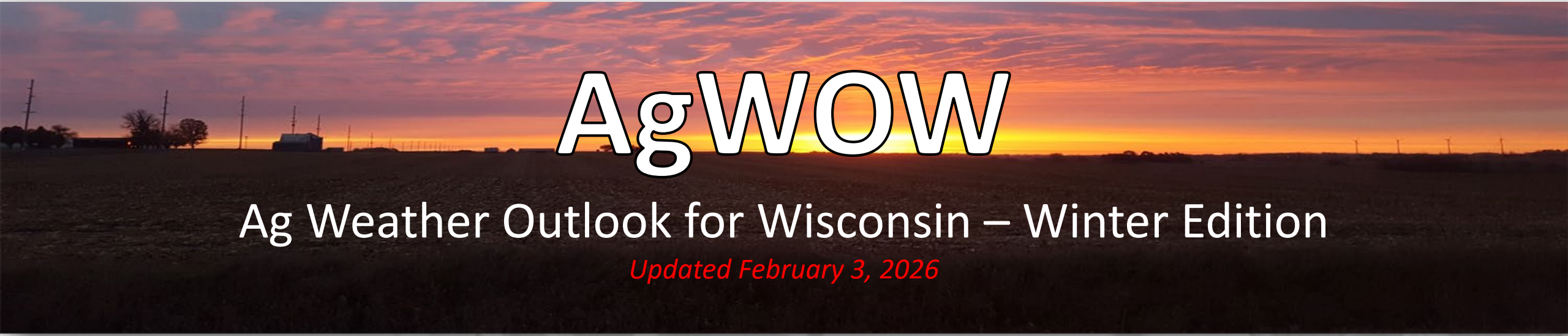
NRCS
Natural Resources Conservation Service



AgWOW

Ag Weather Outlook for Wisconsin – Winter Edition

Updated February 3, 2026

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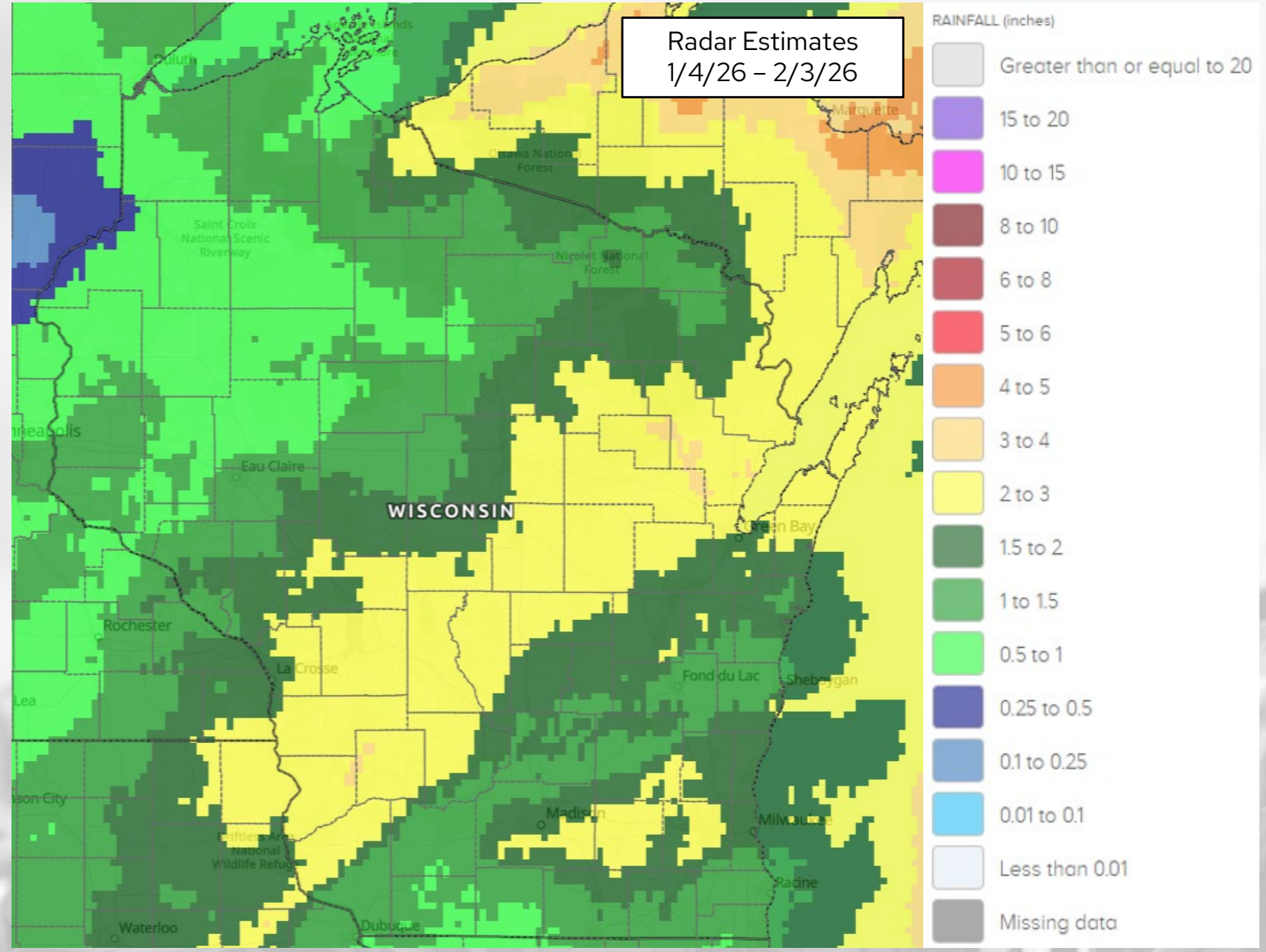
Key Points

Navigate to select slides by clicking on the links below.

1) January was a colder-than-normal month for most of WI, with an Arctic blast during the second half of the month.
2) January started off with higher precip totals, but things turned much drier during the second half of the month.
3) Frost depth is at 1-2 feet for most of WI, and soils have dried out since early January.
4) Outlooks for mid-February indicate a likelihood for the state to be warmer than normal.

- *For this week's agronomic recommendations from UW Extension, click here.*

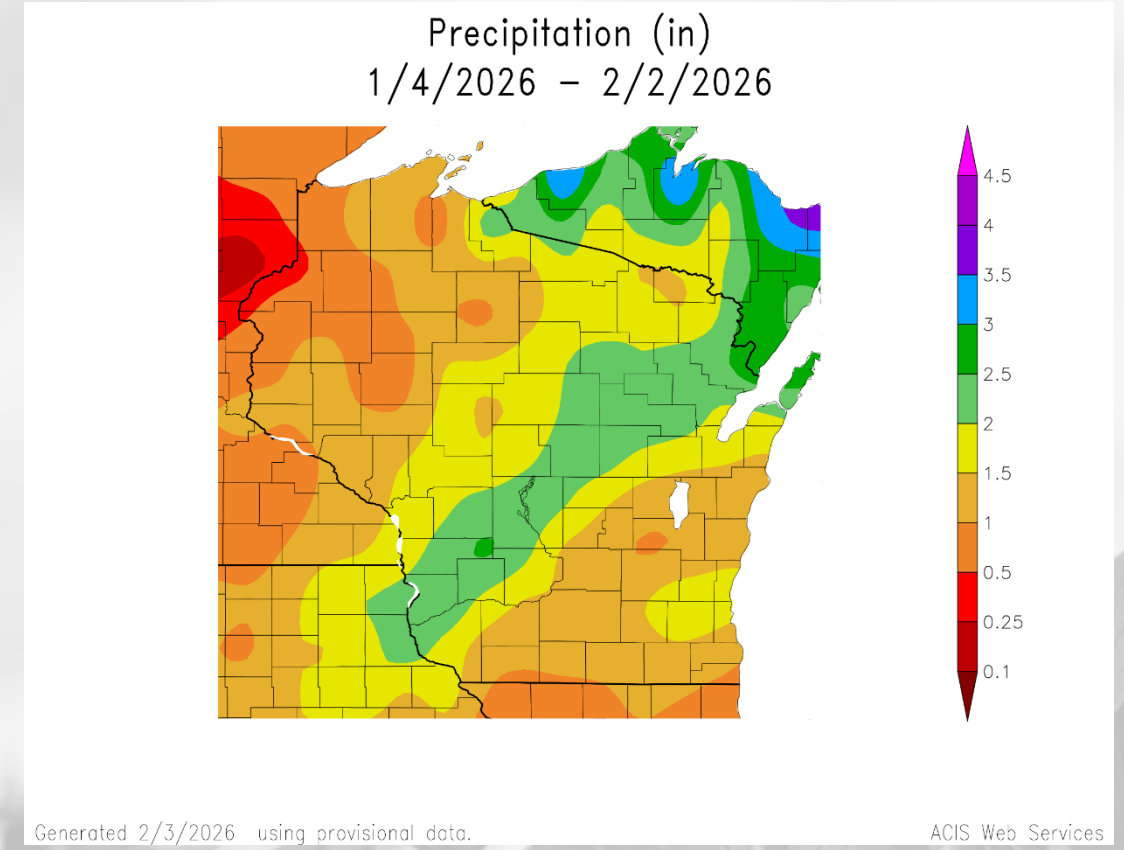
30 Day Precip (rain + melted snow)

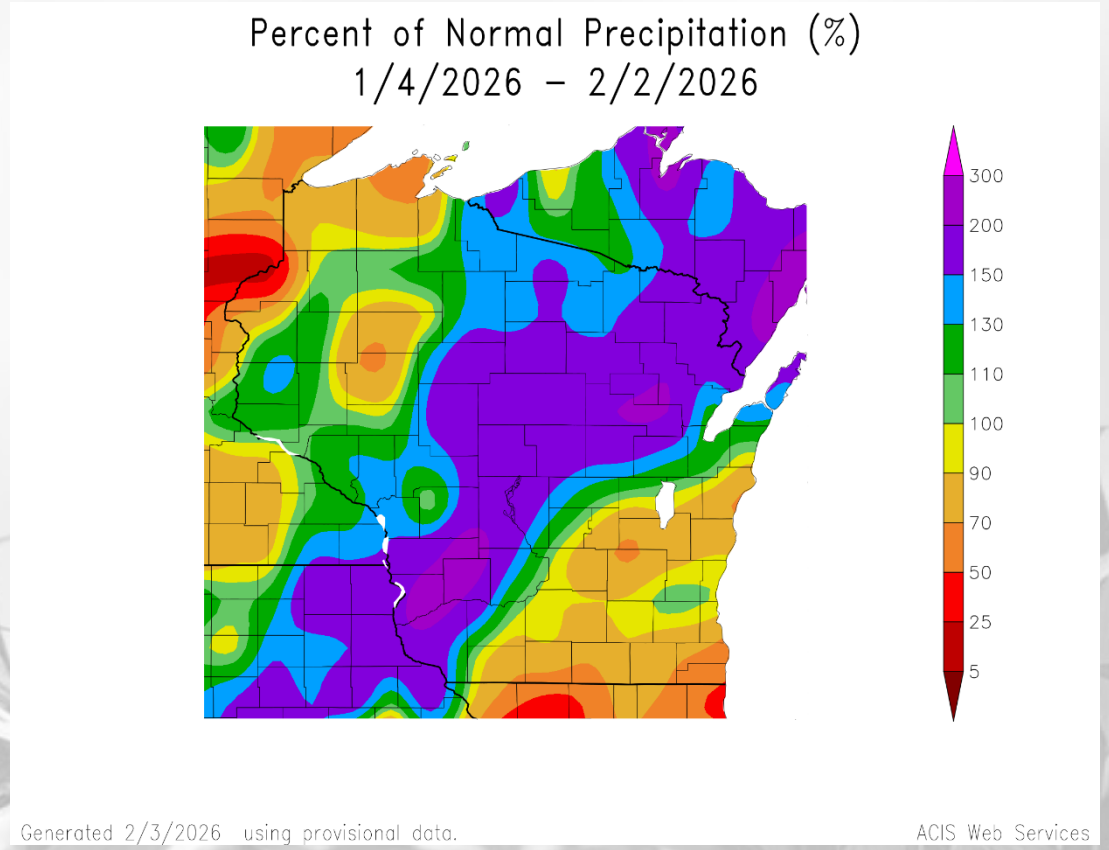


- **2-3”** across a belt stretching from Crawford to Marinette County, with isolated totals over 3”.
- **1.5-3”** between Madison & Milwaukee.
- **1” or less** across most of NW Wisconsin.
- ***NOTE:*** *Most of the precipitation fell during the first half of January.*

https://water.noaa.gov/

30 Day Precip Total/Percent Avg.

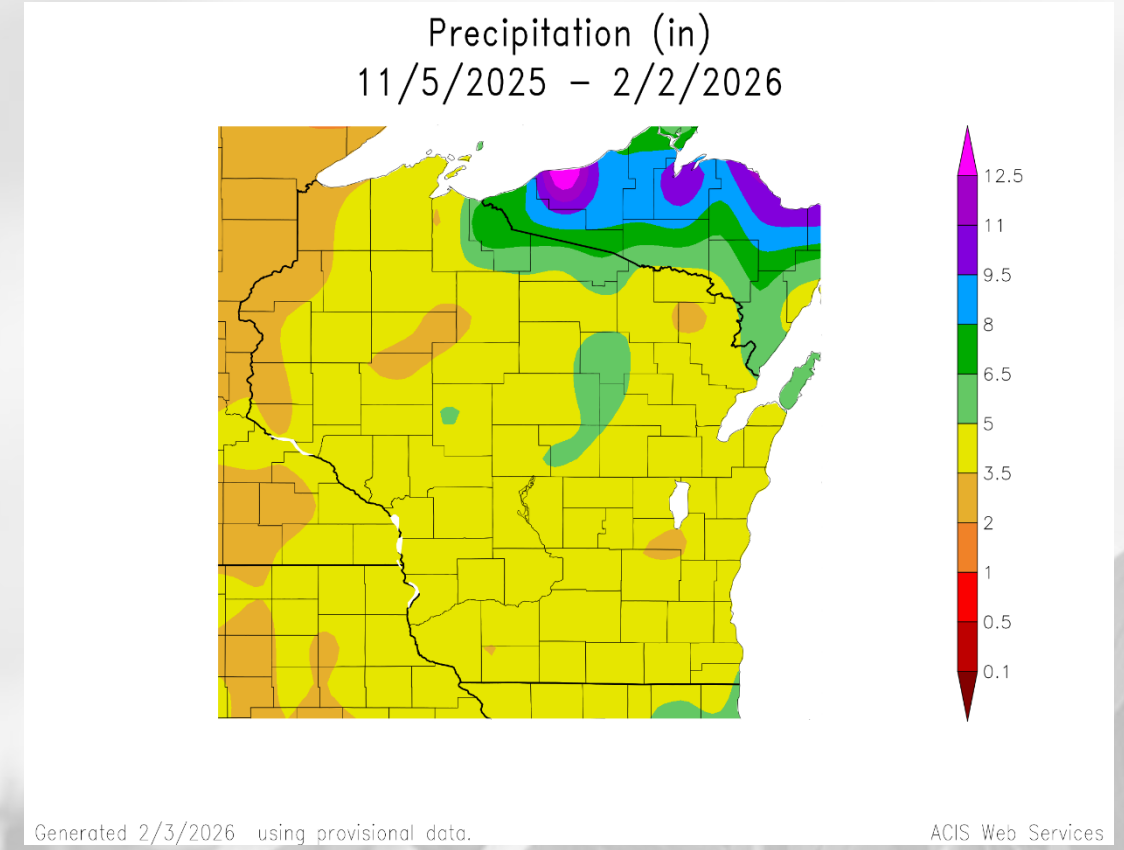


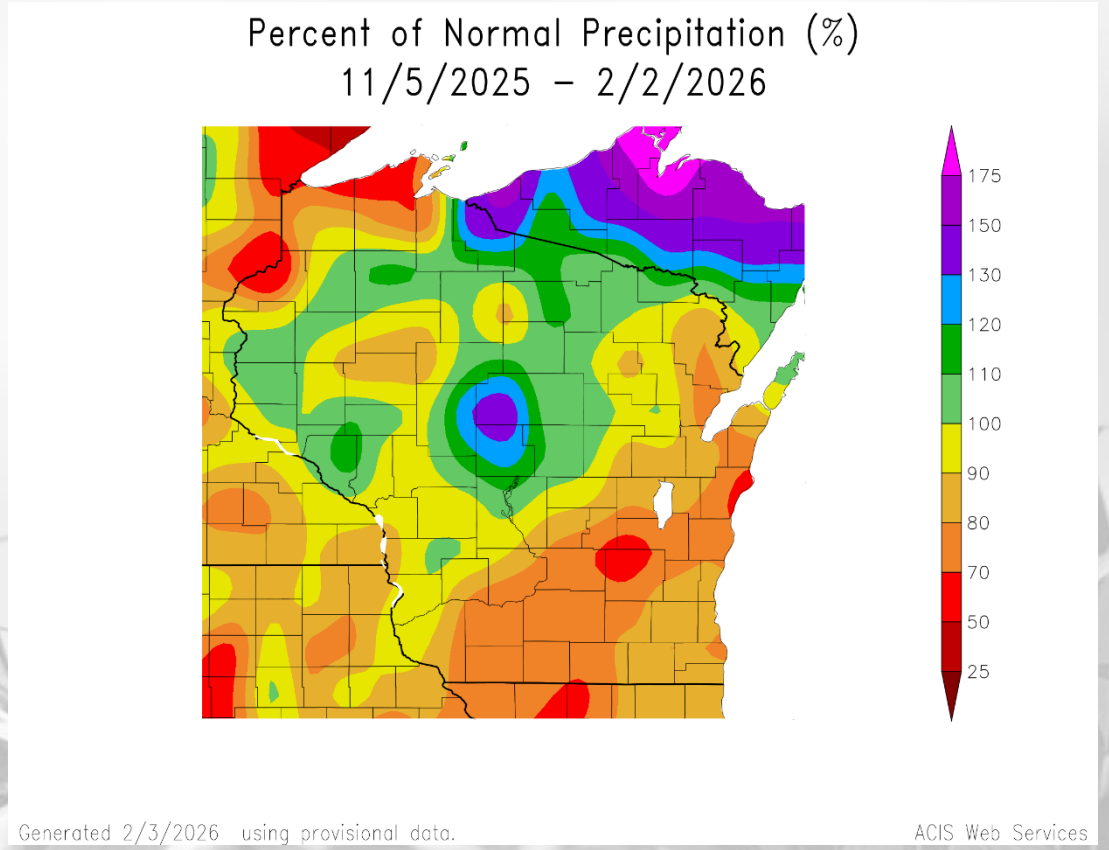


- **Well above normal** in the SW-to-NE belt that received 2" or more → **150+%** of normal common.
- **Near-to-above normal** precipitation in parts of the northwest region.
- **Below normal** precipitation was common across SE counties → **1.5" or less common.**

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

90 Day Precip Total/Percent Avg.

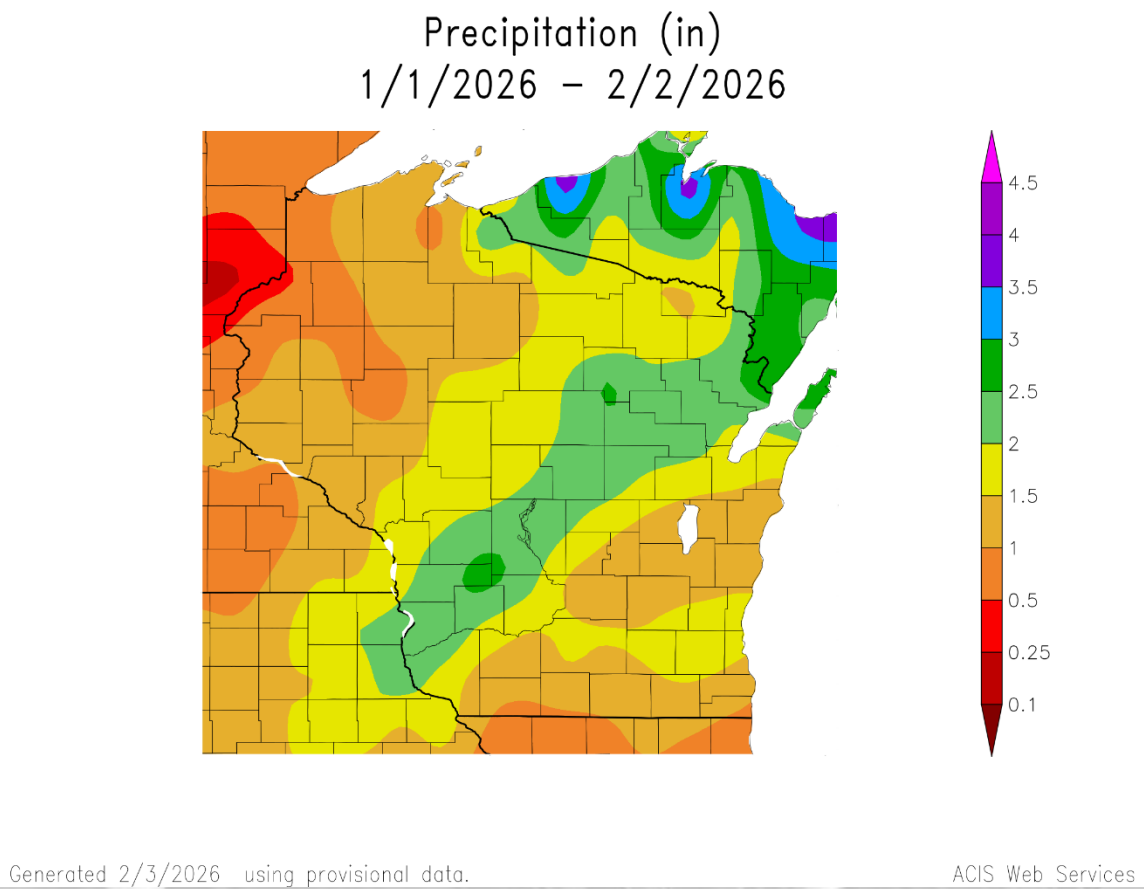


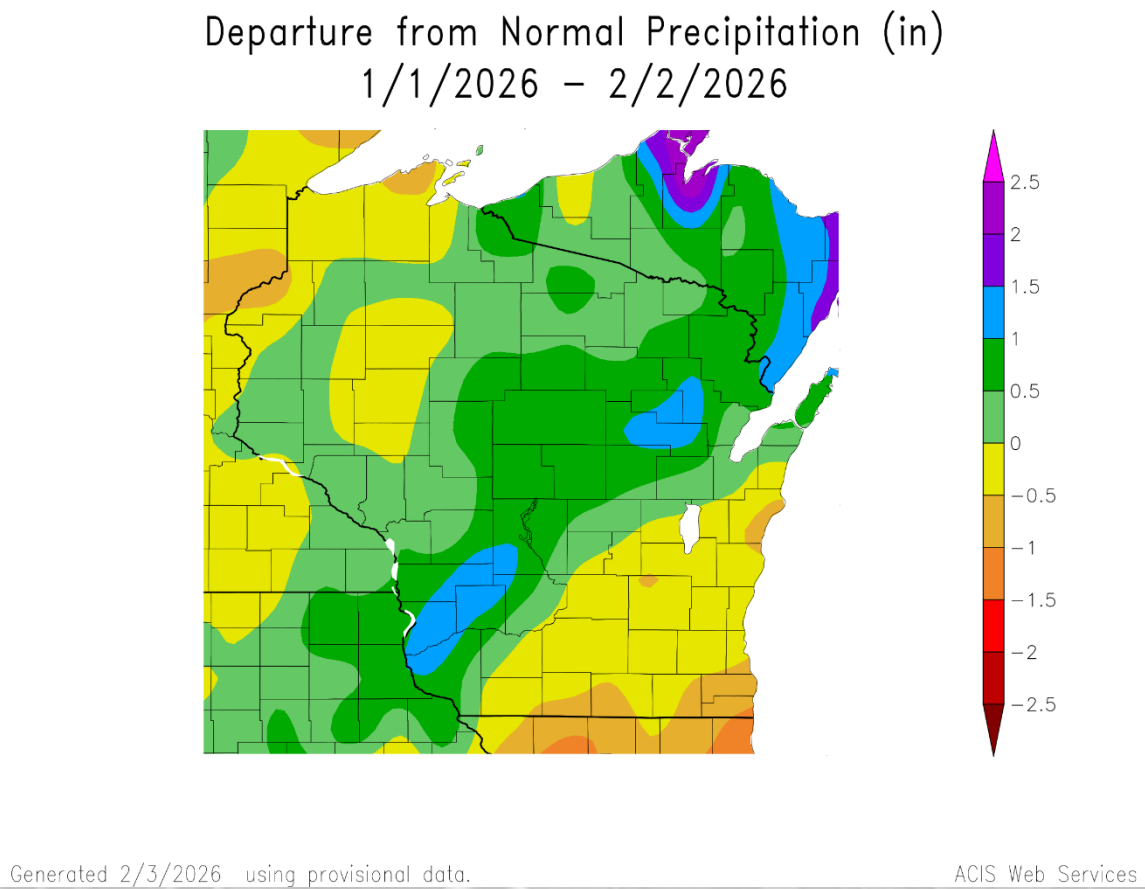


- **Near to below normal** for most of WI over the past 30 days → **5" or less** for many since early November.
- **Above normal** across a large portion of northern WI, particularly in/around **Marathon, Wood, and Iron Counties**.

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

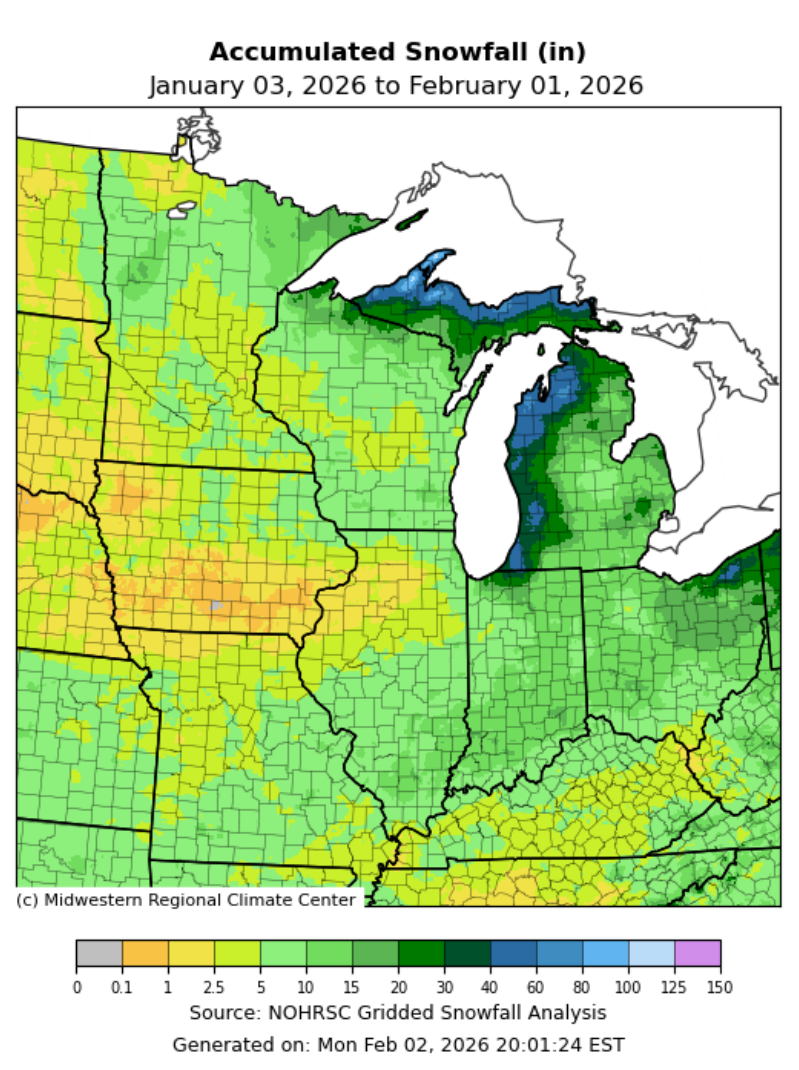
2026 Precipitation (so far)

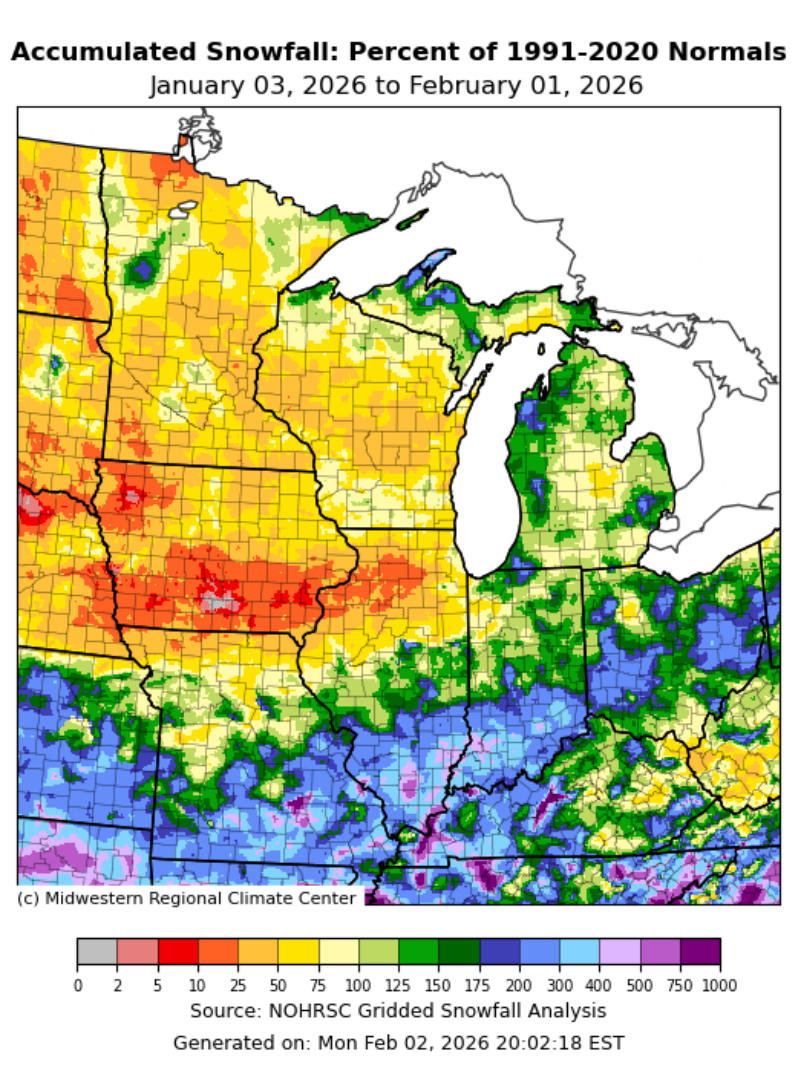




https://hprcc.unl.edu/maps.php?map=ACISClimateMaps

30 Day Snowfall

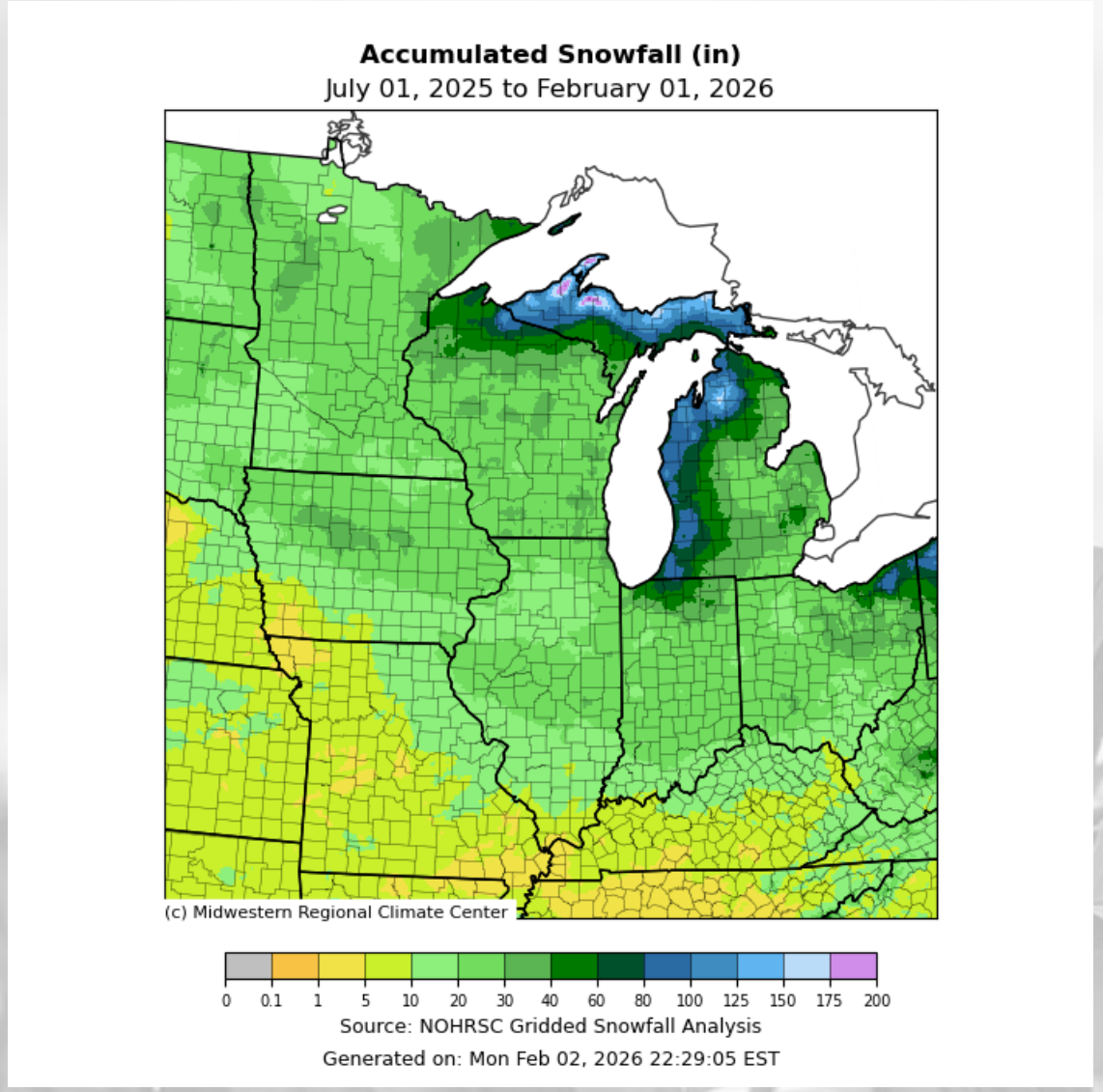


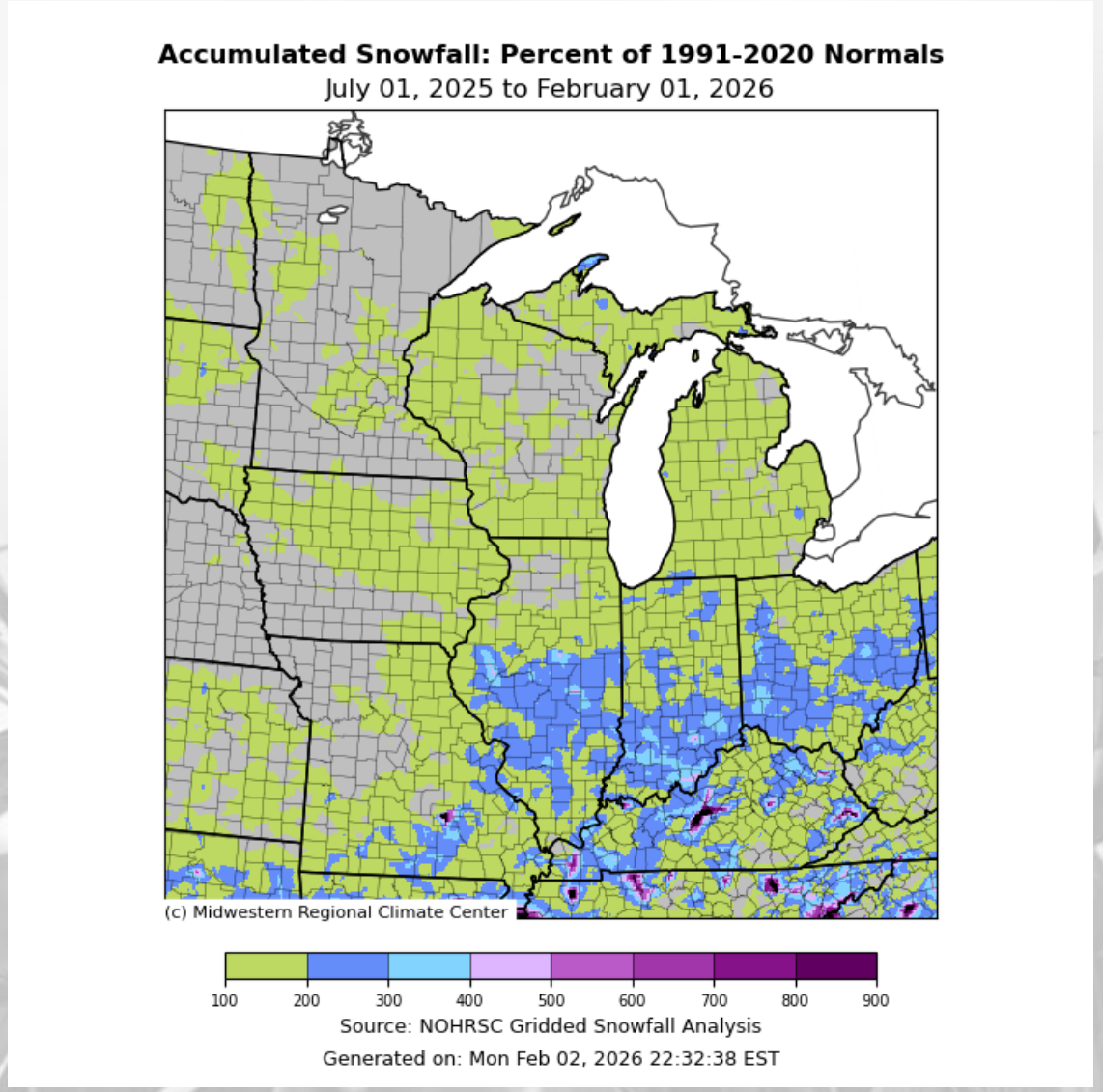


- **5-10" of snowfall** was common across most of the state, with a belt of <5" across the central region.
- **15-20+"** in far northern WI.
- **Below normal** across most of the state, especially in the central region.
  - **25-50%** of normal
- **Closer to normal** in the far south and along Lake Superior.

https://mrcc.purdue.edu/CLIMATE/Maps/

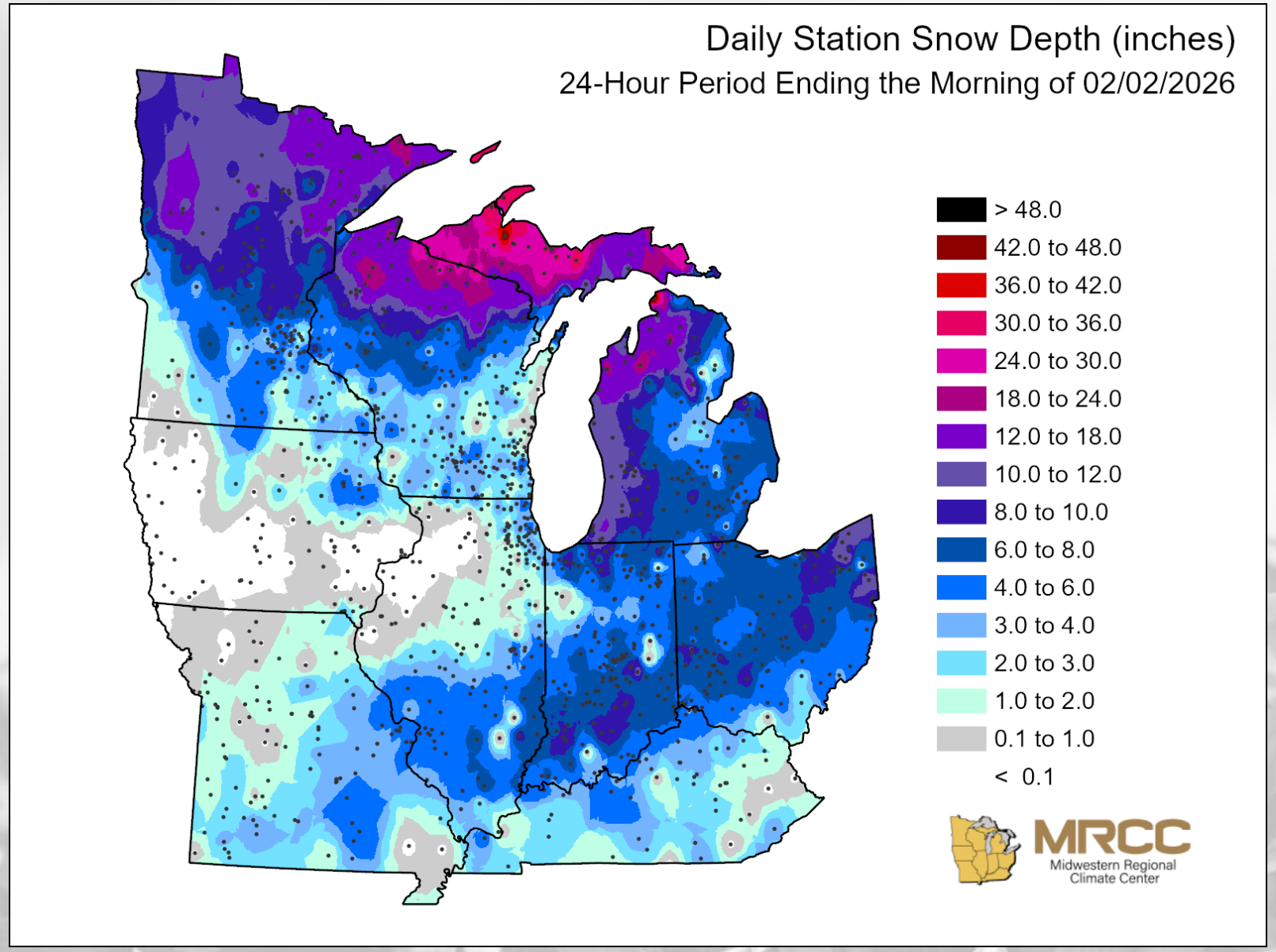
Seasonal Snowfall





https://mrcc.purdue.edu/CLIMATE/Maps/

Current Snow Depth



https://mrcc.purdue.edu/climate_watch/DLY_SNDP_MAPS

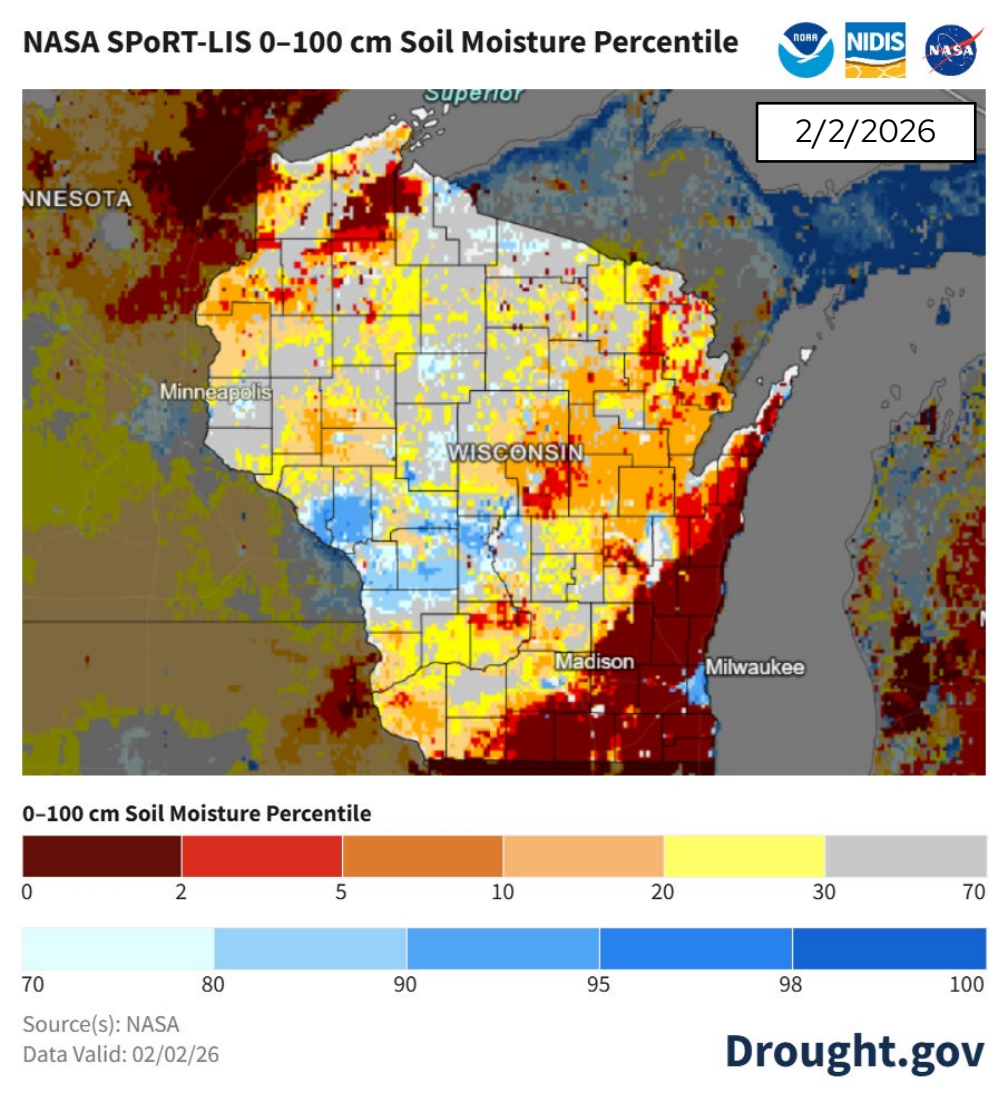
Soil Moisture Models

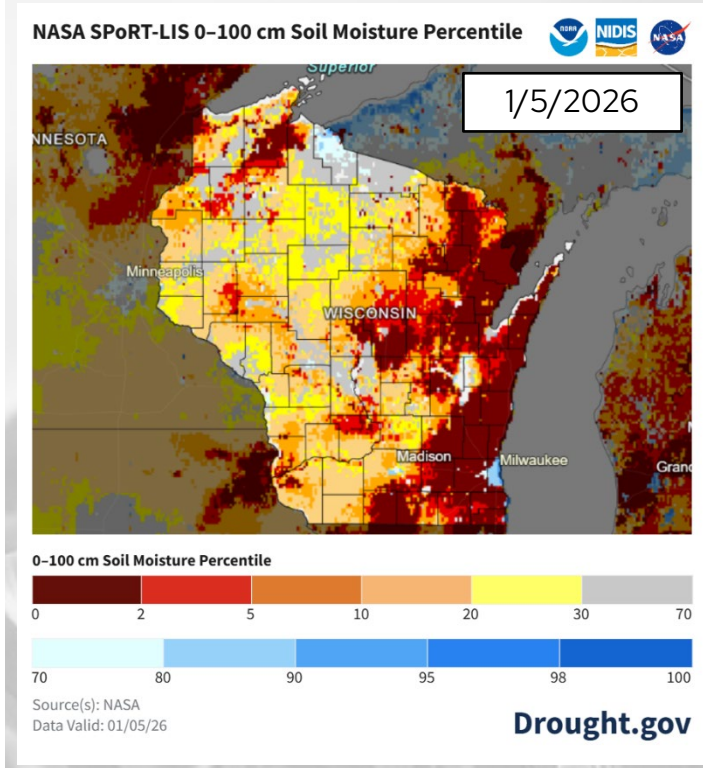
- **Nearer to normal** (compared to early January) across the SW-to-NE belt that had above-normal precip over the past 30 days.

- Abnormal dryness remains in place across the **east and southeast counties.**

Model Notes:
Red areas = top 5 driest in 100 years.
Dark red areas = top 2 driest in 100 years.
Dark blue areas = top 2 wettest 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.

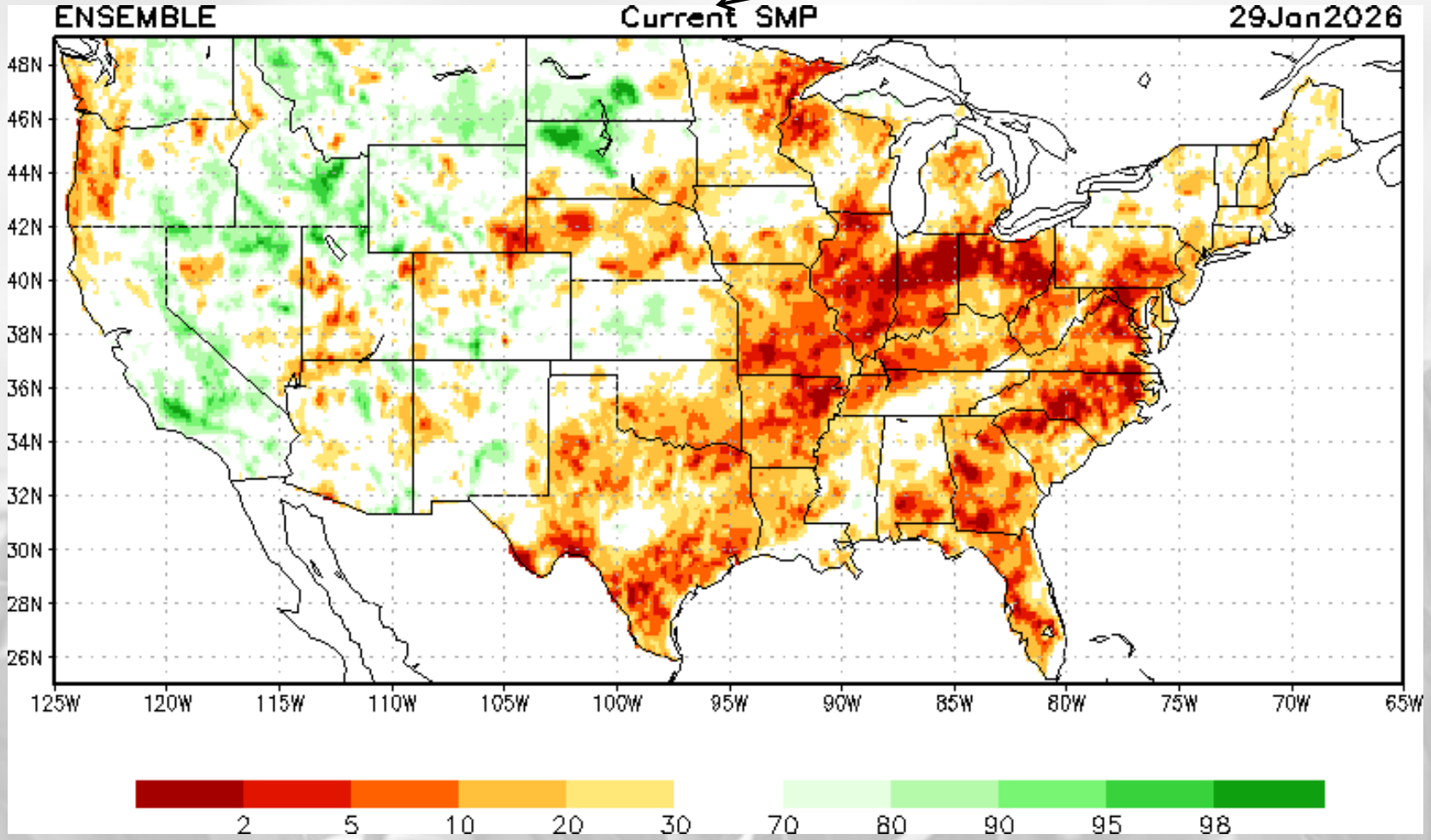




https://weather.ndc.nasa.gov/sport/case_studies/lis_CONUS.html
https://www.drought.gov/states/wisconsin

Soil Moisture Models

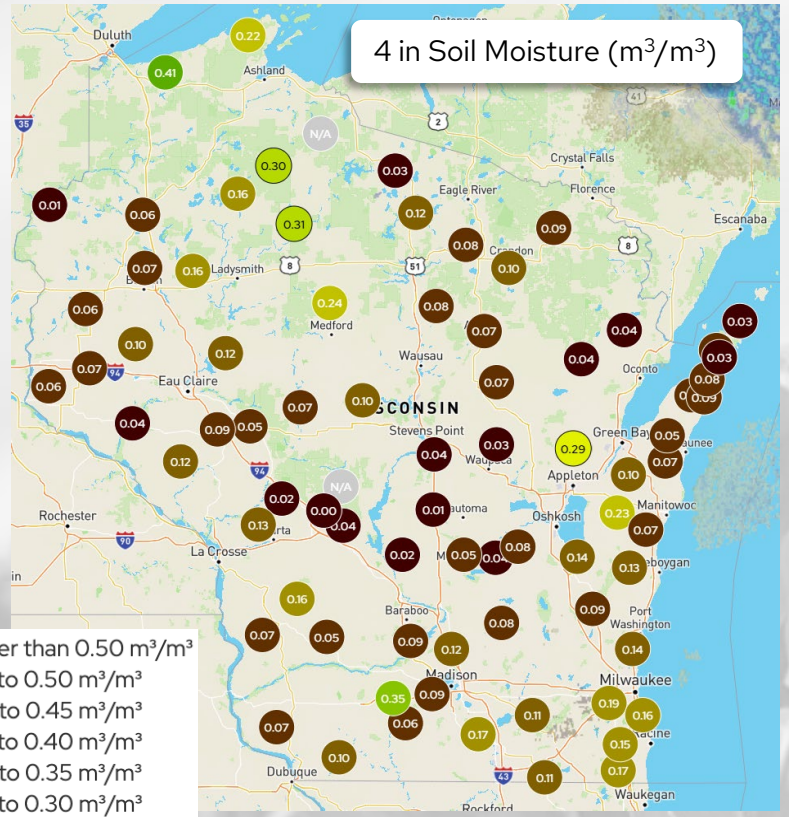
NOTE: this map displays the soil moisture percentile for Jan 29. It was the most recent update as of Feb 3.

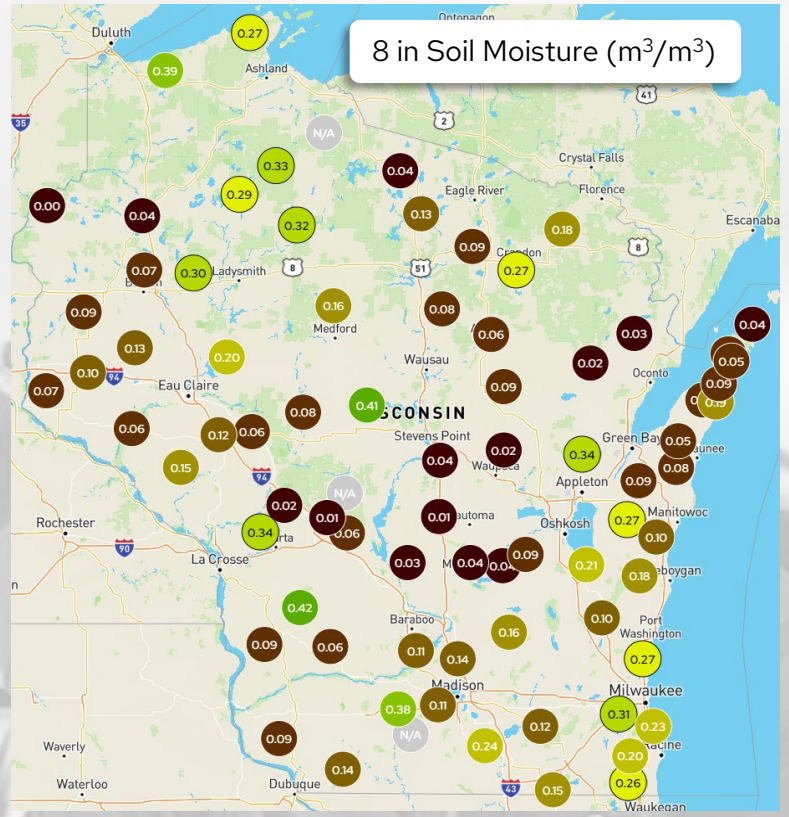


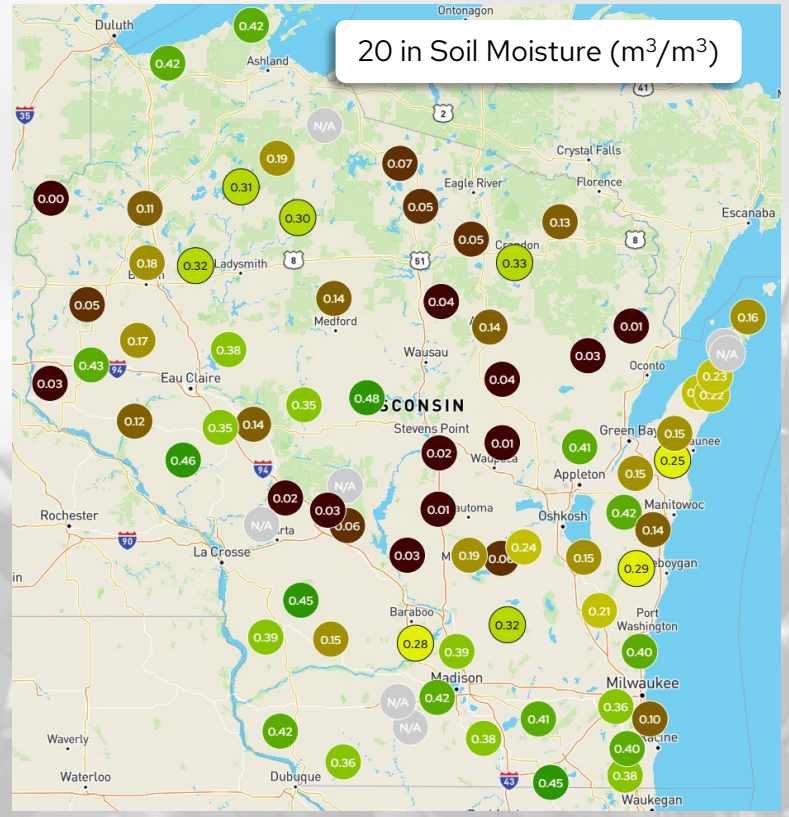
https://www.cpc.ncep.noaa.gov/products/Drought/Monitoring/smp_new.shtml

Wisconet Soil Moisture

Maps showing soil temperature conditions on February 3rd @ 9:00 am.
Units of map values are {Volume of water}/{Volume of soil}.







- greater than 0.50 m^3/m^3
- 0.45 to 0.50 m^3/m^3
- 0.40 to 0.45 m^3/m^3
- 0.35 to 0.40 m^3/m^3
- 0.30 to 0.35 m^3/m^3
- 0.25 to 0.30 m^3/m^3
- 0.20 to 0.25 m^3/m^3
- 0.15 to 0.20 m^3/m^3
- 0.10 to 0.15 m^3/m^3
- 0.05 to 0.10 m^3/m^3
- 0.00 to 0.05 m^3/m^3

https://wisconet.wisc.edu/

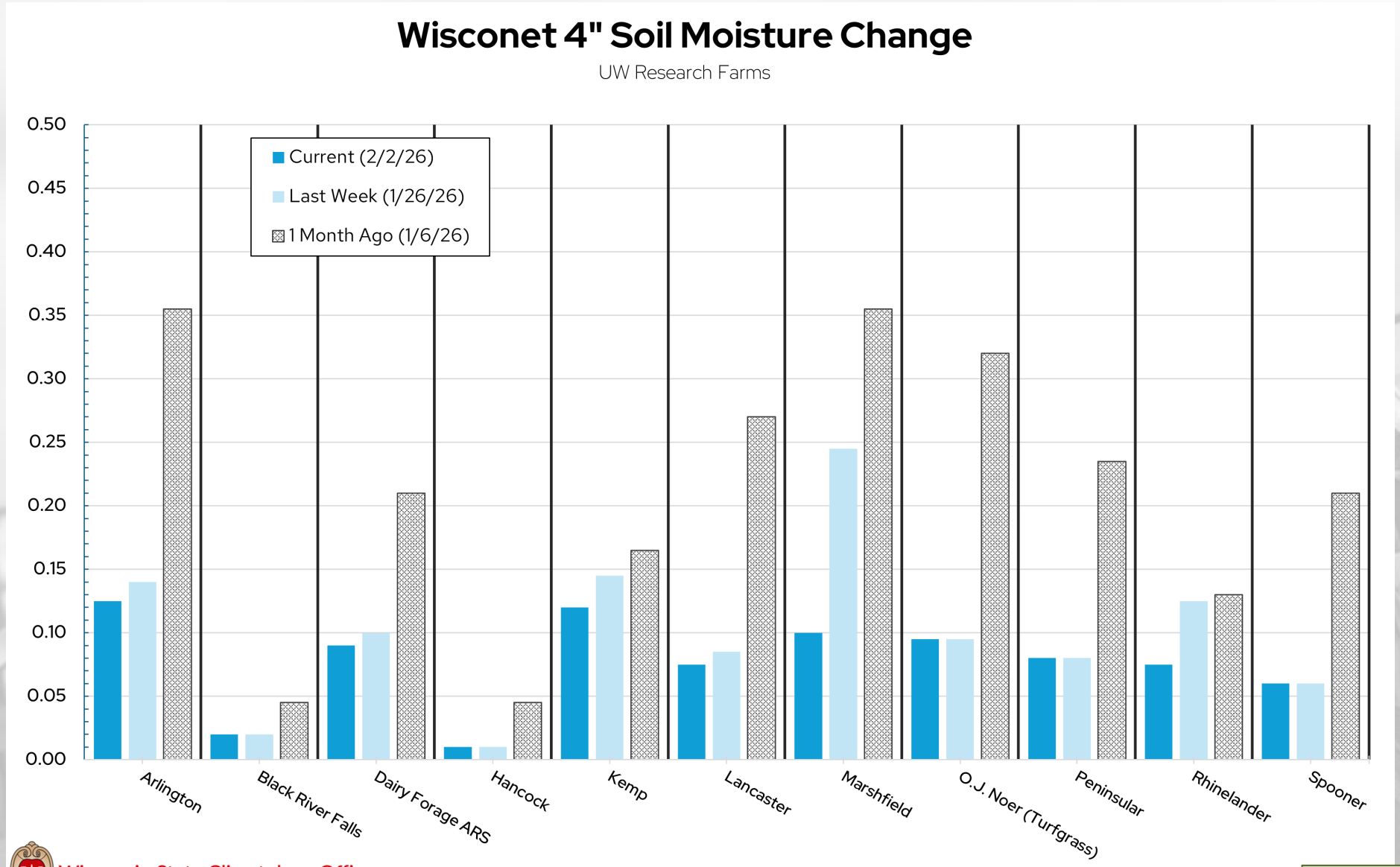
Wisconet Soil Moisture

Change in soil moisture from January 6th (Start) to February 2nd (End).
Units of change values are {Volume of water}/{Volume of soil}.

Research Farm	County	Total Precip (in)	4" Change (Start)	4" Change (End)	8" Change (Start)	8" Change (End)	20" Change (Start)	20" Change (End)
Arlington	Columbia	0.60	0.36	0.13	0.37	0.14	0.41	0.39
Black River Falls	Jackson	1.33	0.05	0.02	0.09	0.02	0.10	0.02
Dairy Forage ARS	Sauk	0.78	0.21	0.09	0.18	0.11	0.30	0.28
Hancock	Waushara	1.62	0.05	0.01	0.07	0.01	0.06	0.01
Kemp	Oneida	0.75	0.17	0.12	0.16	0.13	0.06	0.05
Lancaster	Grant	1.23	0.27	0.08	0.32	0.10	0.40	0.42
Marshfield	Marathon	1.62	0.36	0.10	0.42	0.41	0.49	0.48
O.J. Noer *(Turfgrass)*	Dane	1.26	0.32	0.10	0.37	0.11	0.44	0.42
Peninsular	Door	1.71	0.24	0.08	0.19	0.09	0.23	0.23
Rhinelander	Oneida	0.84	0.13	0.08	0.11	0.09	0.04	0.05
Spooner	Washburn	0.48	0.21	0.06	0.13	0.04	0.12	0.12

https://wisconet.wisc.edu/

Wisconet Soil Moisture



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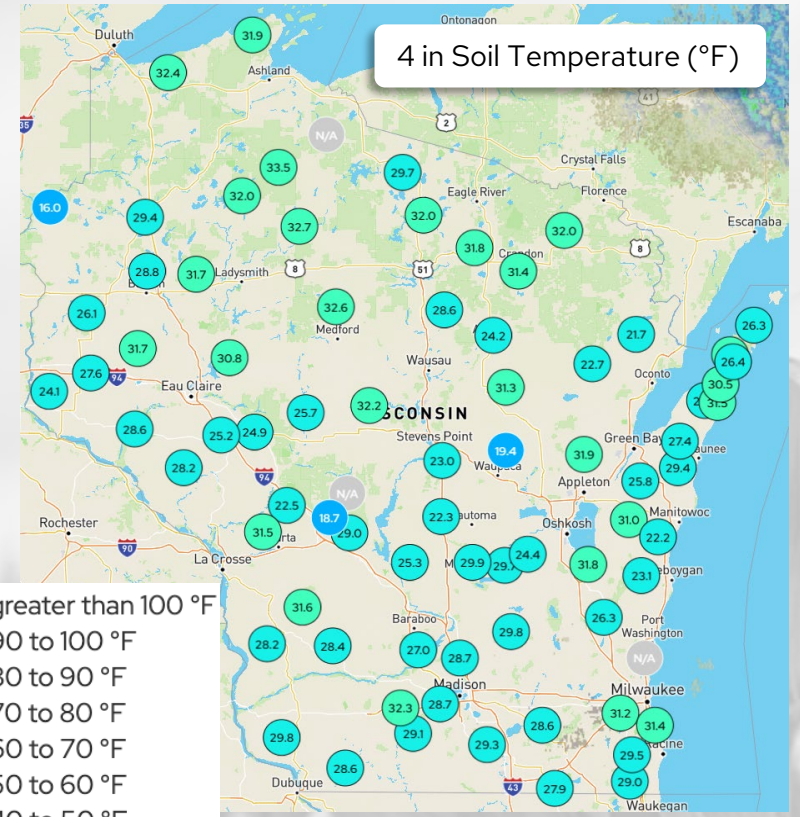
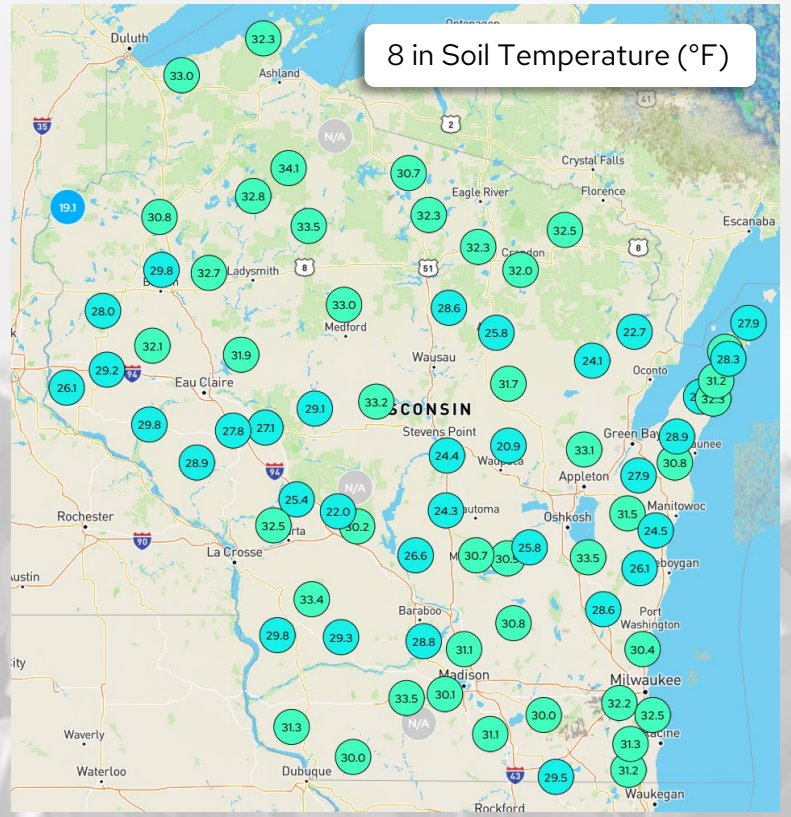
Data Source: Wisconet

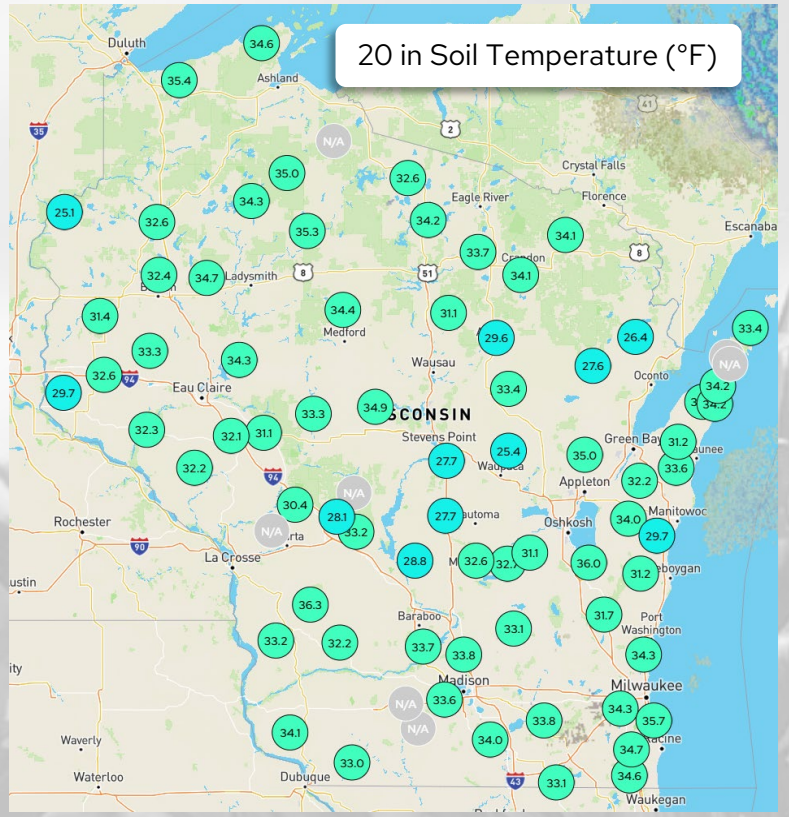
https://wisconet.wisc.edu/

Wisconet Soil Temperature

Maps showing soil temperature conditions on
February 3rd @ 9:00 am.





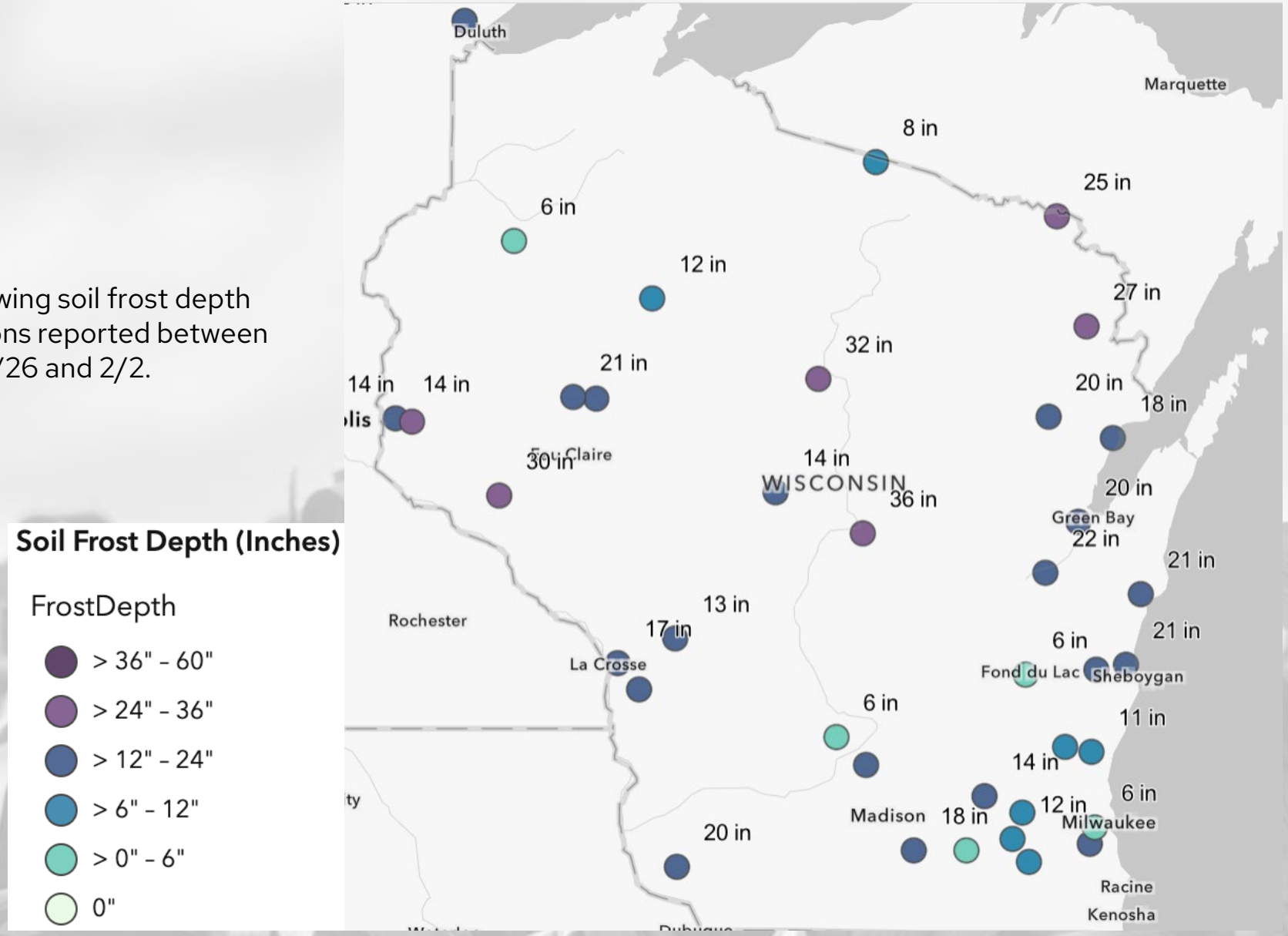


- greater than 100 °F
- 90 to 100 °F
- 80 to 90 °F
- 70 to 80 °F
- 60 to 70 °F
- 50 to 60 °F
- 40 to 50 °F
- 30 to 40 °F
- 20 to 30 °F
- 10 to 20 °F
- less than 10 °F

https://wisconet.wisc.edu/

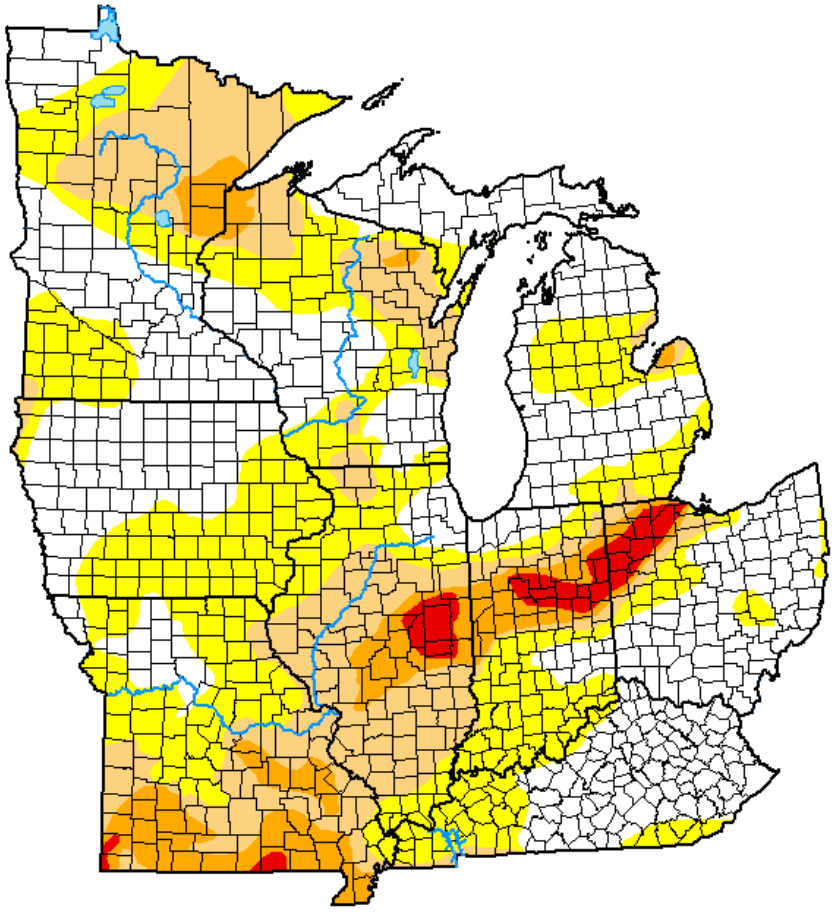
Frost Depth

Map showing soil frost depth observations reported between 1/26 and 2/2.



www.weather.gov/ncrfc/lmi_frostdepthmap

US Drought Monitor



February 3, 2026
(Released Thursday, Feb. 5, 2026)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	40.02	59.98	28.10	9.48	2.13	0.00
Last Week 01-27-2026	40.06	59.94	27.51	9.37	2.06	0.00
3 Months Ago 11-04-2025	34.88	65.12	34.83	11.16	1.36	0.00
Start of Calendar Year 01-06-2026	28.39	71.61	36.73	8.95	1.94	0.00
Start of Water Year 09-30-2025	34.12	65.88	34.69	10.17	0.37	0.00
One Year Ago 02-04-2025	41.23	58.77	31.62	2.46	0.00	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:
Lindsay Johnson
National Drought Mitigation Center

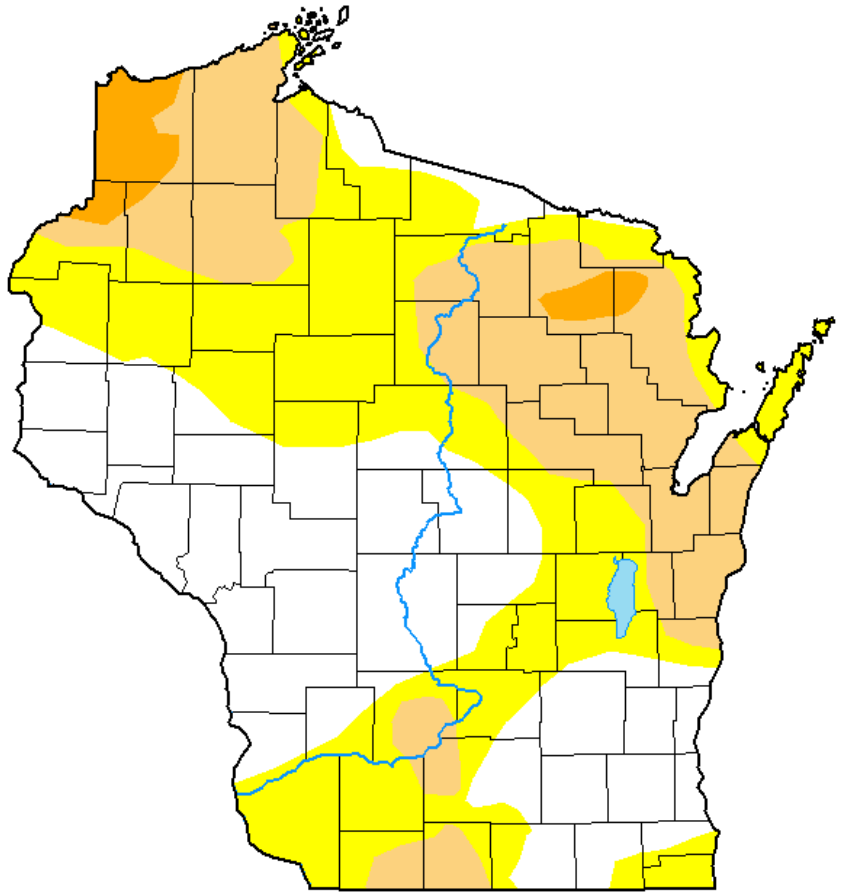
droughtmonitor.unl.edu

- Midwest: Compared to last month:
  - **>8% decrease** in D1 coverage.
- Midwest: **1-2 class improvement** across most of WI and MI, and western KY. **1 class degradation** in southern MO and IN.
- Wisconsin: **1-2 class improvement** across most of the state. D1-D2 remain in place in the NE and NW.
- **71.9%** of the Midwest is drought free (~28.1% in D1-D4).

Note: D0 is not considered drought.

https://droughtmonitor.unl.edu/

US Drought Monitor



February 3, 2026
(Released Thursday, Feb. 5, 2026)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	36.70	63.30	28.02	3.15	0.00	0.00
Last Week 01-27-2026	36.70	63.30	28.02	3.15	0.00	0.00
3 Months Ago 11-04-2025	27.24	72.76	36.31	1.35	0.00	0.00
Start of Calendar Year 01-06-2026	2.76	97.24	53.46	12.62	0.00	0.00
Start of Water Year 09-30-2025	64.44	35.56	0.00	0.00	0.00	0.00
One Year Ago 02-04-2025	15.27	84.73	43.00	0.00	0.00	0.00

Intensity:

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

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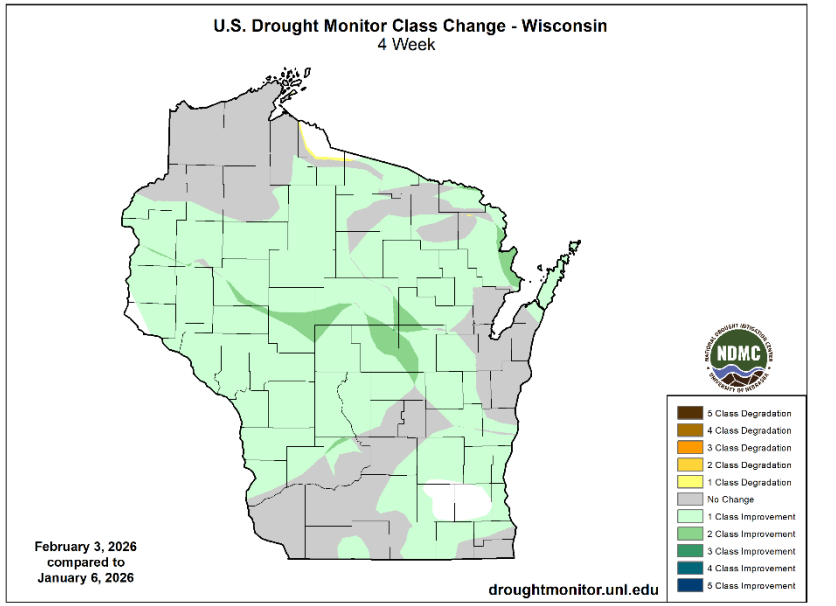
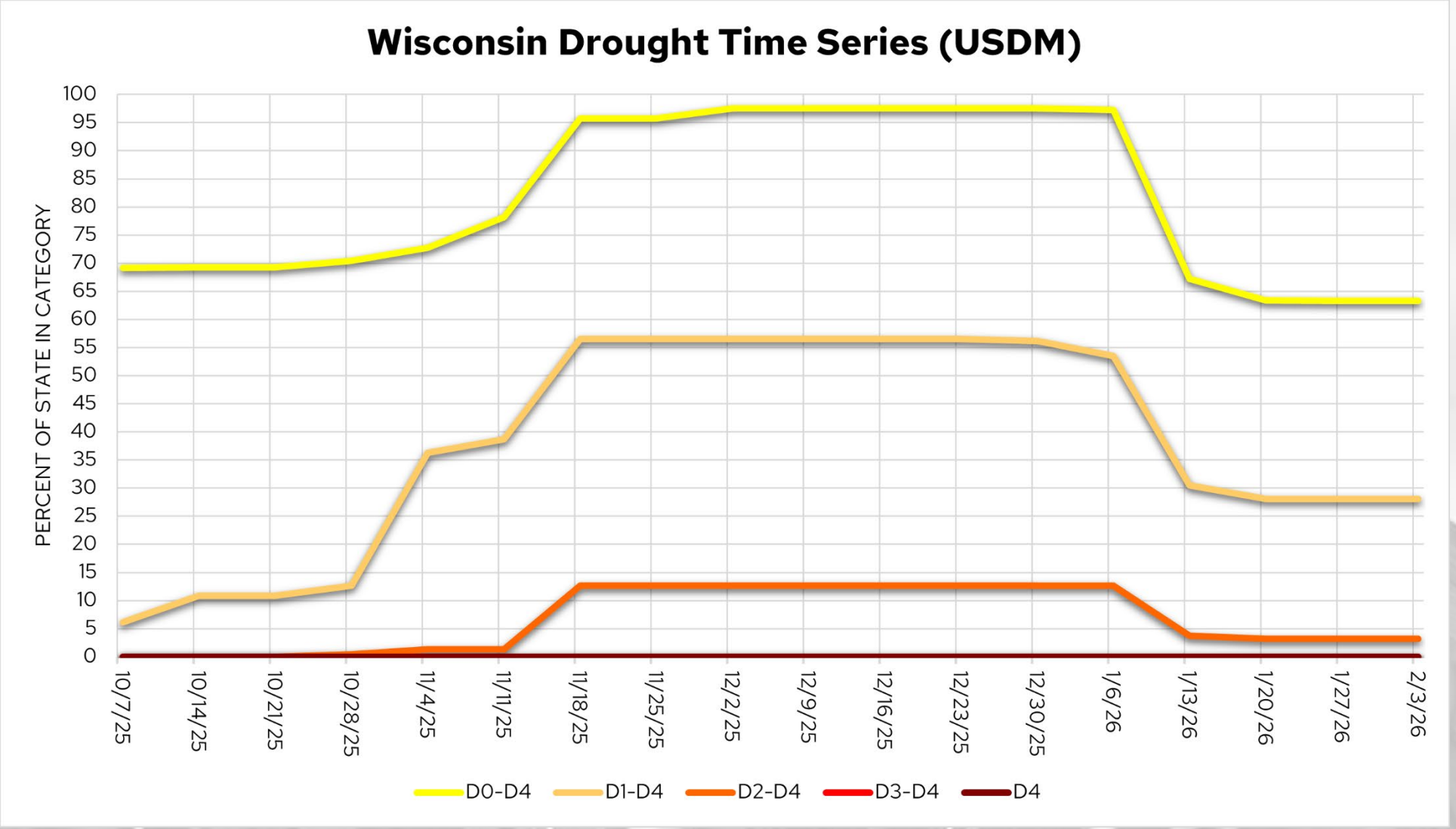
Amount of state in:

- D1-D4 – 28.0% ↓
- D2-D4 – 3.2% ↓
- D3-D4 – 0.0% --
- D4 – 0.0% --

Note: ↑↓ indicate change from last month. Red up arrows indicate increase in drought area; vice-versa for green arrows. -- indicates no change from last month.



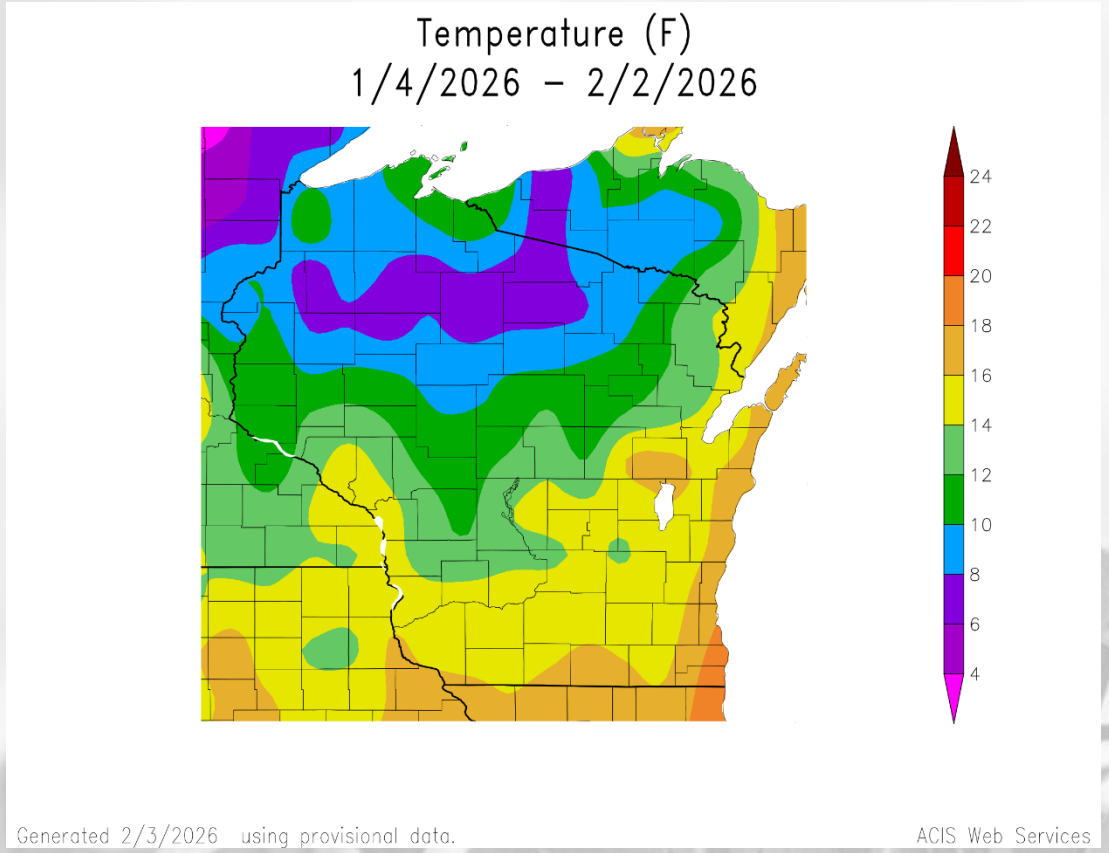
USDM Time Series

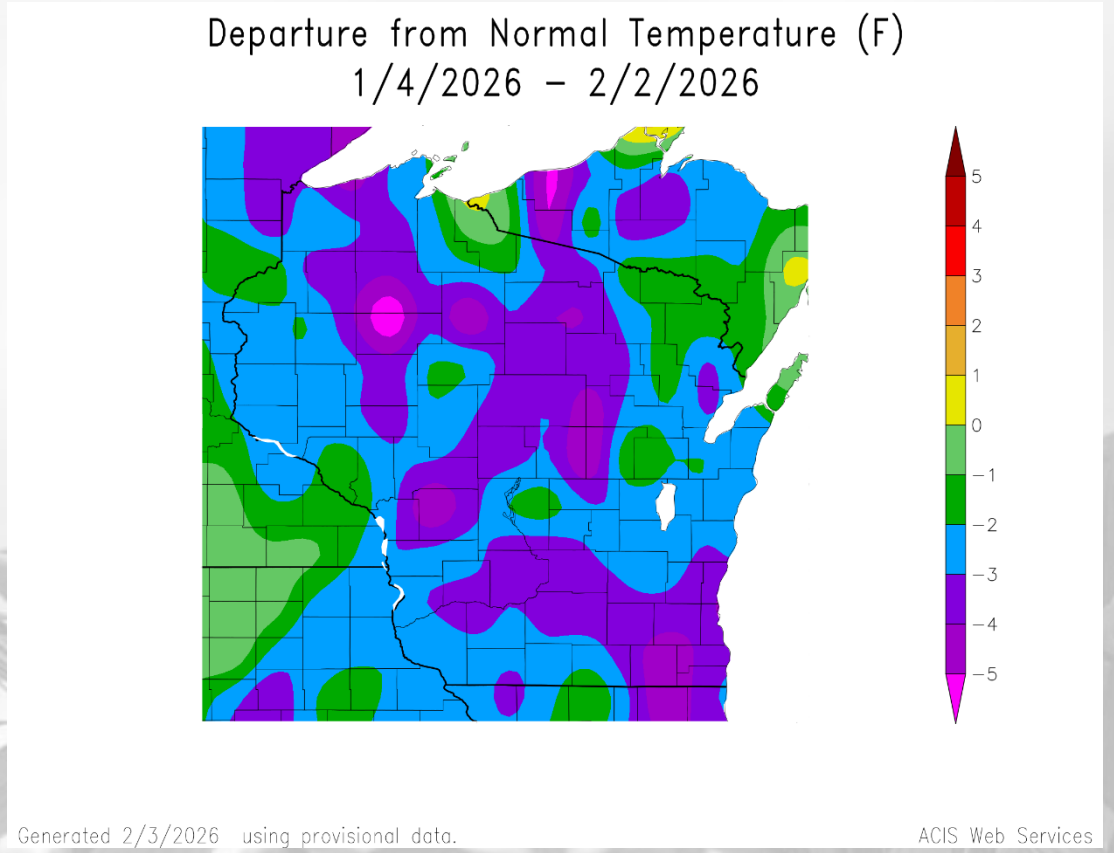


25-35% decrease in D0-D1 coverage since early January, with a **9-10% drop** in D2 coverage.

http://droughtmonitor.unl.edu/

30 Day Temperatures

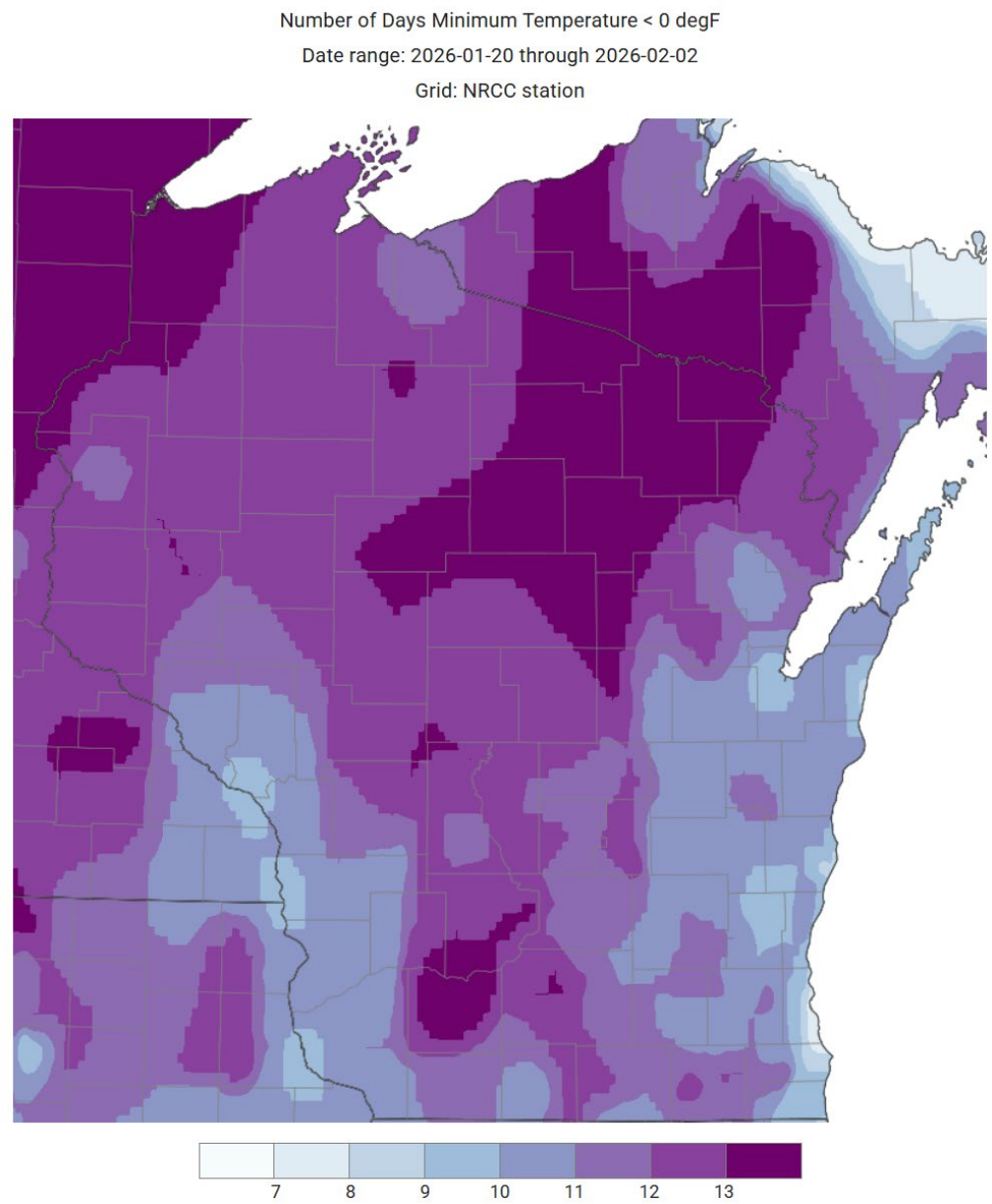




- Average temps. ranged from **14-18°F** in the southern counties; to **6-10°F** for the north.
- **2-5°F below normal** across most of WI.

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

Arctic Blast

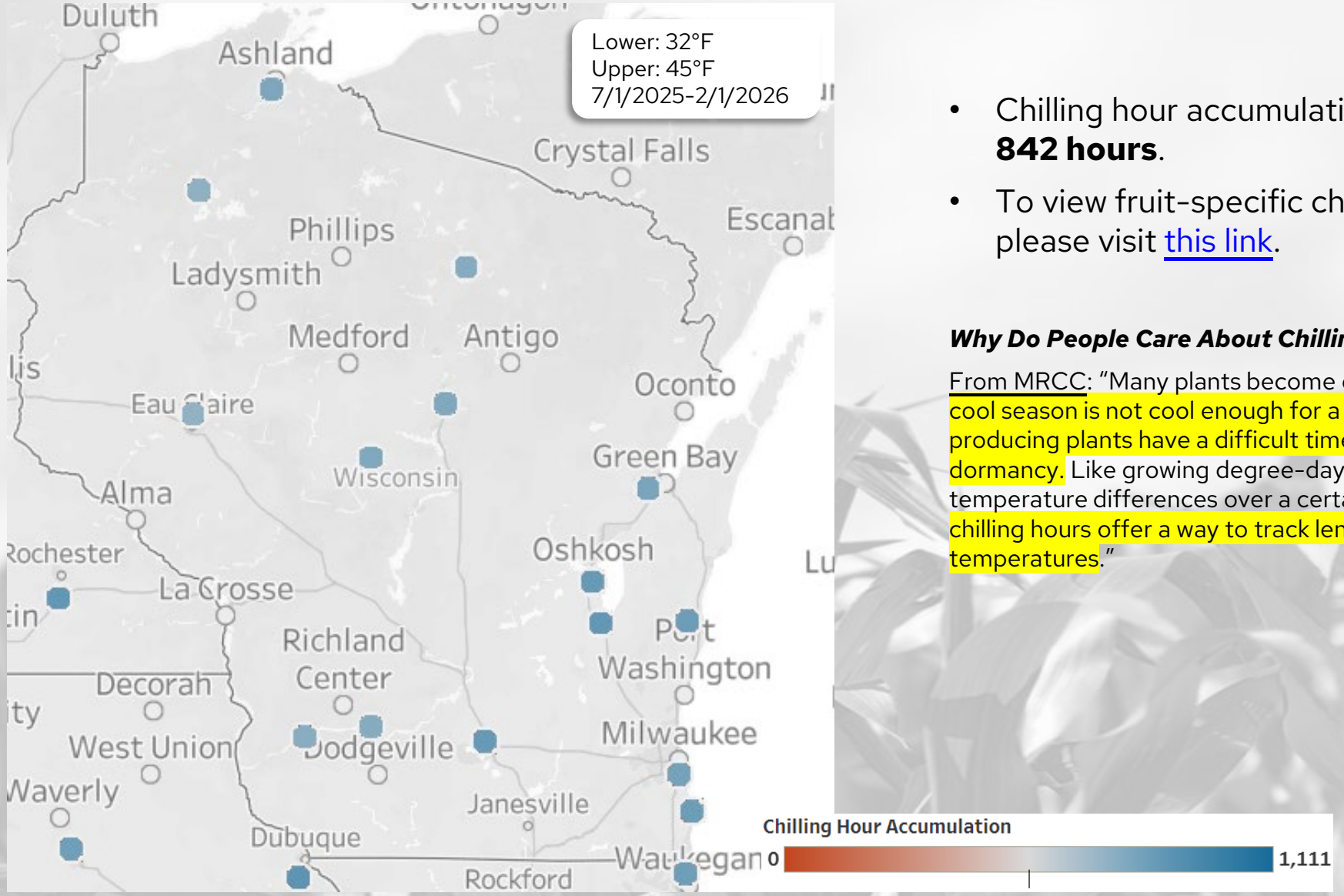


Average low temperature between Jan. 20 and Feb. 2 – this winter compared to normal

City	Average Low (°F) (2026)	Departure from Normal Low (°F) (1991-2020)
Madison	-3.4	-15.0
Milwaukee	3.2	-13.4
La Crosse	-4.8	-14.5
Wausau	-8.6	-15.8
Green Bay	-2.8	-12.8
Eau Claire	-9.4	-16.0
Duluth, MN	-12.4	-15.8
Twin Cities	-3.9	-13.0
Dubuque, IA	-2.1	-13.4

https://scacis.rcc-acis.org/

Chilling Hour Accumulation for Fruit



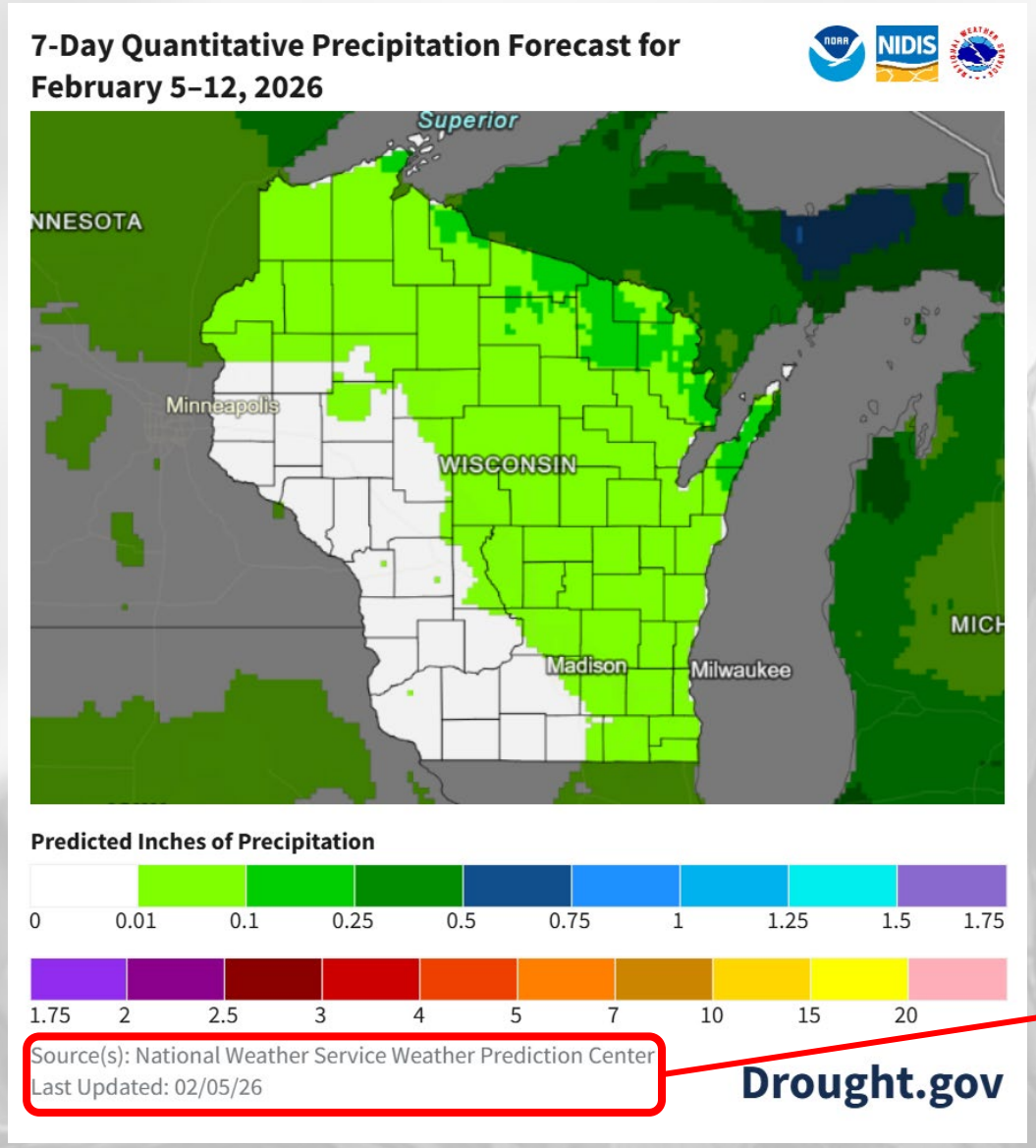
- Chilling hour accumulation in WI ranges from **733 to 842 hours**.
- To view fruit-specific chilling hour requirements, please visit this link.

Why Do People Care About Chilling Hours?

From MRCC: "Many plants become dormant during the cool season. If the cool season is not cool enough for a long enough period, many fruit-producing plants have a difficult time knowing when to overcome dormancy. Like growing degree-day units that are used to track temperature differences over a certain threshold over a period of time, chilling hours offer a way to track length of exposure to optimum dormancy temperatures."

https://mrcc.purdue.edu/ChillingHours

7 Day Precip Forecast

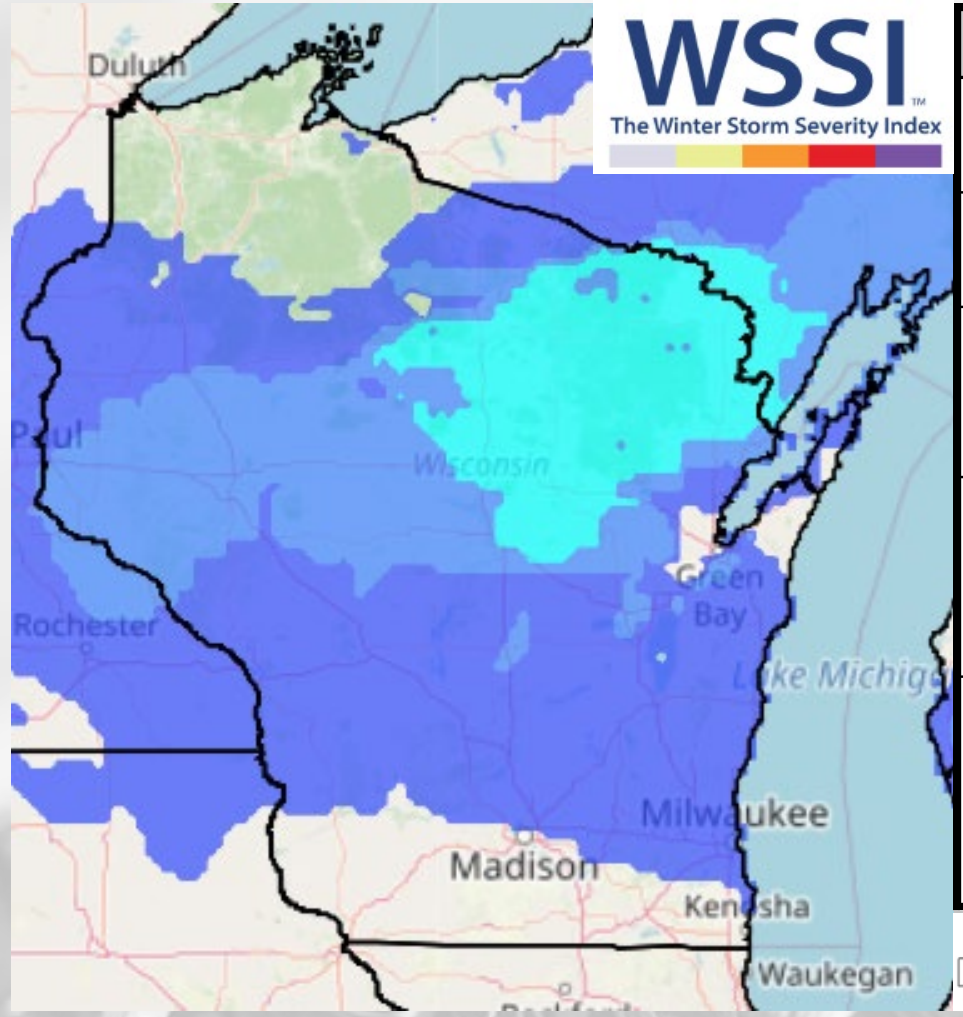


- **When?** → snow system moving in on Saturday afternoon and continuing through midday on Sunday.
- **Where?** → best chances in NE and far N Wisconsin.
- Check your local forecast for details on totals and timing.
- Average precip (1991-2020) for this week: **0.26"**

Forecast for 2/5/26 thru 2/12/26
(Begins at 6am CST)

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

Winter Storm Chances



Potential Winter Storm Impacts

Winter Weather Area
Expect Winter Weather.
- Winter driving conditions. **Drive carefully.**

Minor Impacts
Expect a few inconveniences to daily life.
- Winter driving conditions. **Use caution while driving.**

Moderate Impacts
Expect disruptions to daily life.
- Hazardous driving conditions. **Use extra caution while driving.**
- Closures and disruptions to infrastructure may occur.

Major Impacts
Expect considerable disruptions to daily life.
- Dangerous or impossible driving conditions. **Avoid travel if possible.**
- Widespread closures and disruptions to infrastructure may occur.

Extreme Impacts
Expect substantial disruptions to daily life.
- Extremely dangerous or impossible driving conditions. **Travel is not advised.**
- Extensive and widespread closures and disruptions to infrastructure may occur.
- Life-saving actions may be needed.

Likelihood of Impact

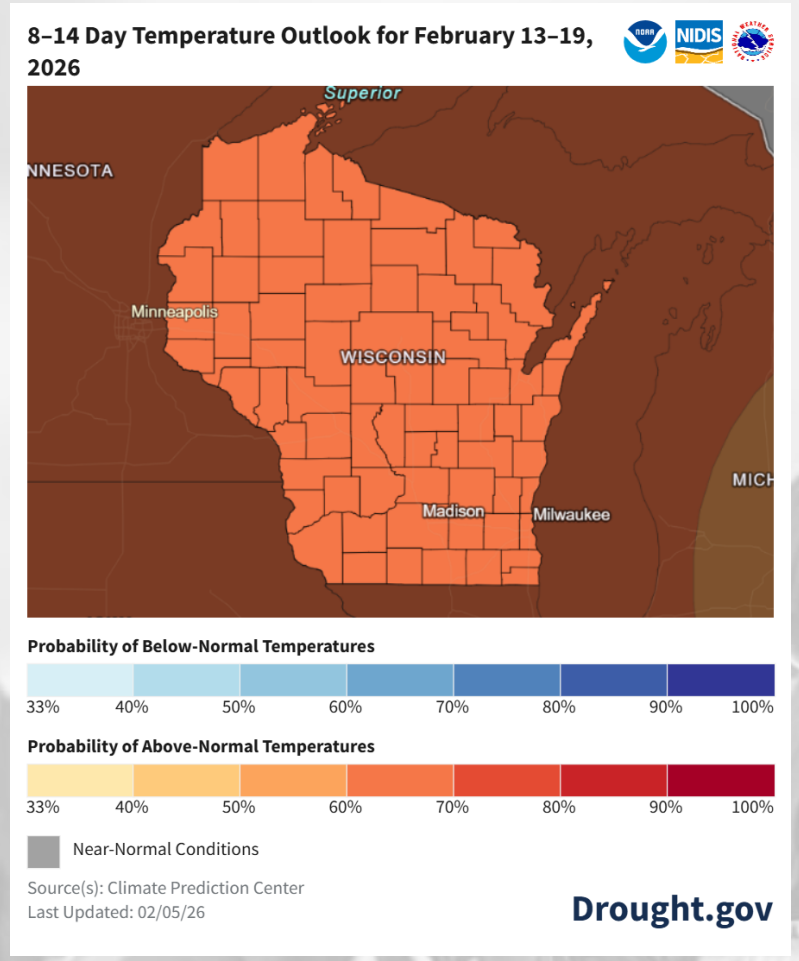
< 5% 5% 10% 20% 30% 40% 50% 60% 70% 80% 90% > 95%

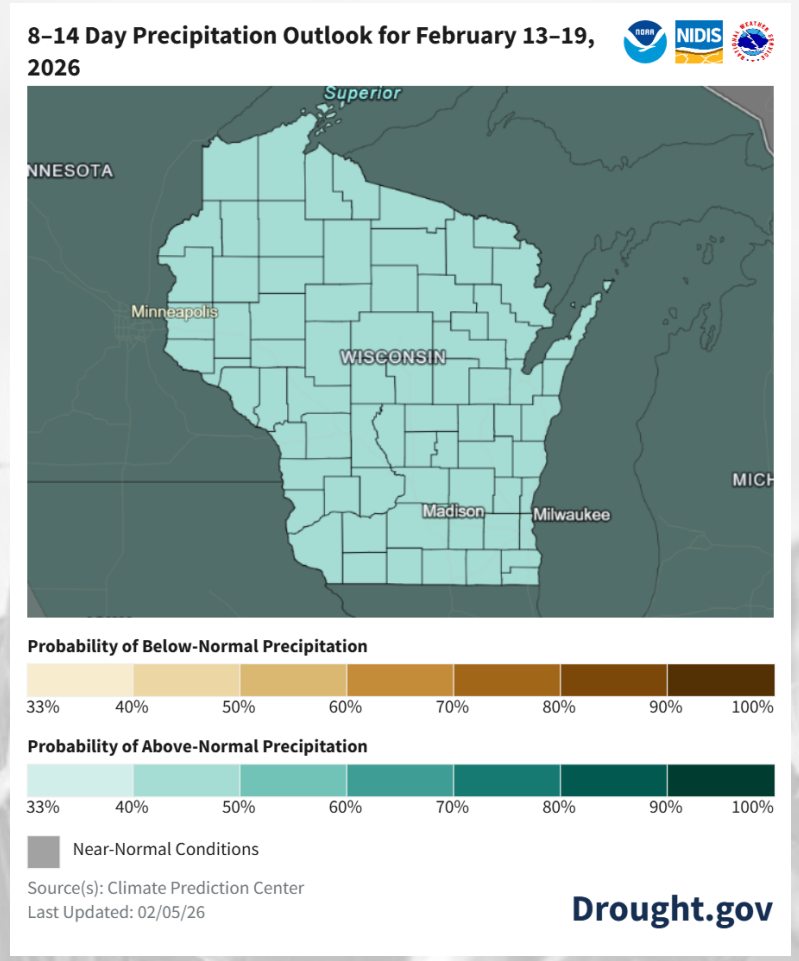
24-Hour chance of moderate winter storm impacts
(2/11 @ 12pm CST – 2/12 @ 12pm CST)

- Check your local forecast for details on totals and timing.
- Average snowfall (1991-2020) for February:
  - Madison: **12.4″**
  - La Crosse: **9.7″**
  - Milwaukee: **12.0″**
  - Green Bay: **11.9″**
  - Wausau: **12.5″**
  - Eau Claire: **11.3″**

https://www.wpc.ncep.noaa.gov/wwd/wssi/prob_wssi.php

8-14 Day Temp & Precip Outlook



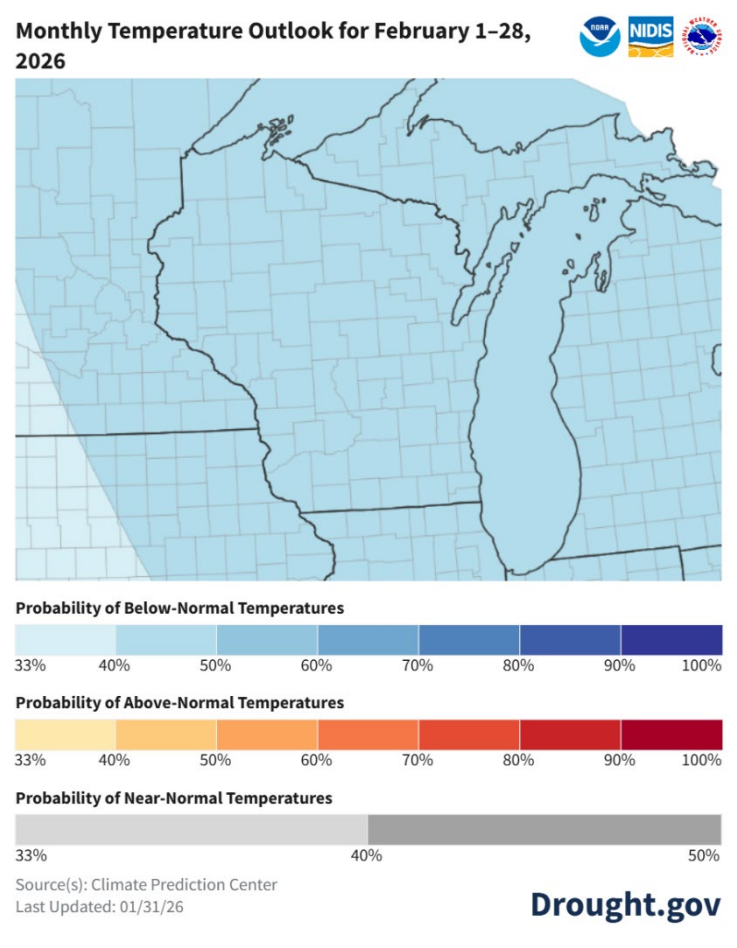


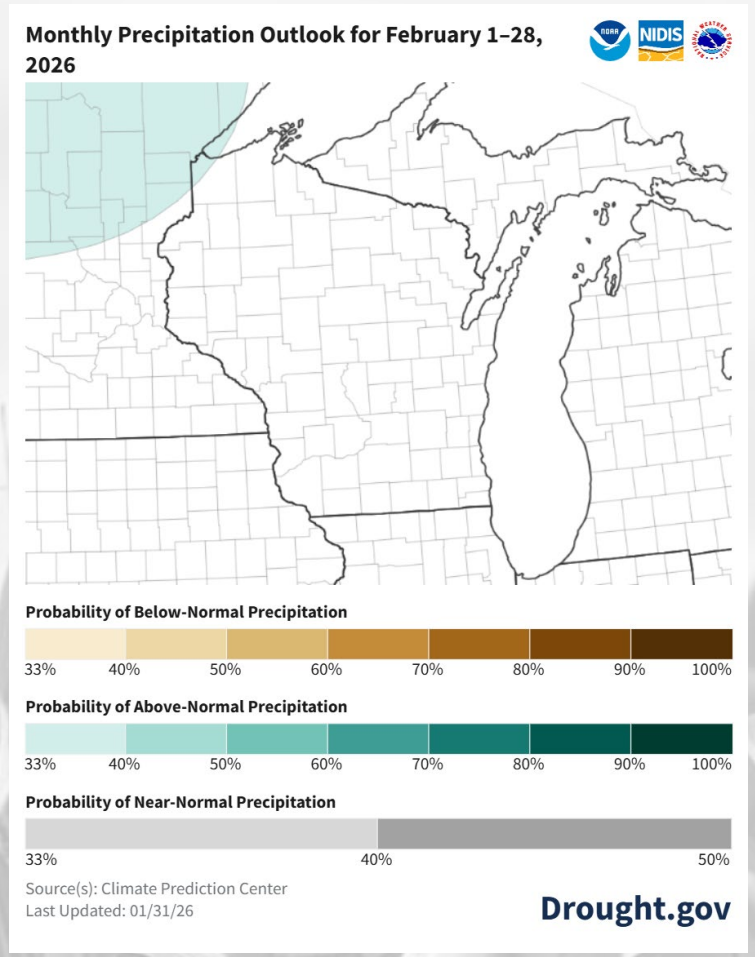
http://www.cpc.ncep.noaa.gov/
https://www.drought.gov/states/wisconsin

Mid-February: Temperatures likely (60-70% odds) to be above normal statewide. A statewide lean (40-50% odds) towards above normal precipitation.

- Statewide normals (1991-2020) for Feb 13-19 are **19.0°F** and **0.28”**.

30 Day Temp & Precip Outlook



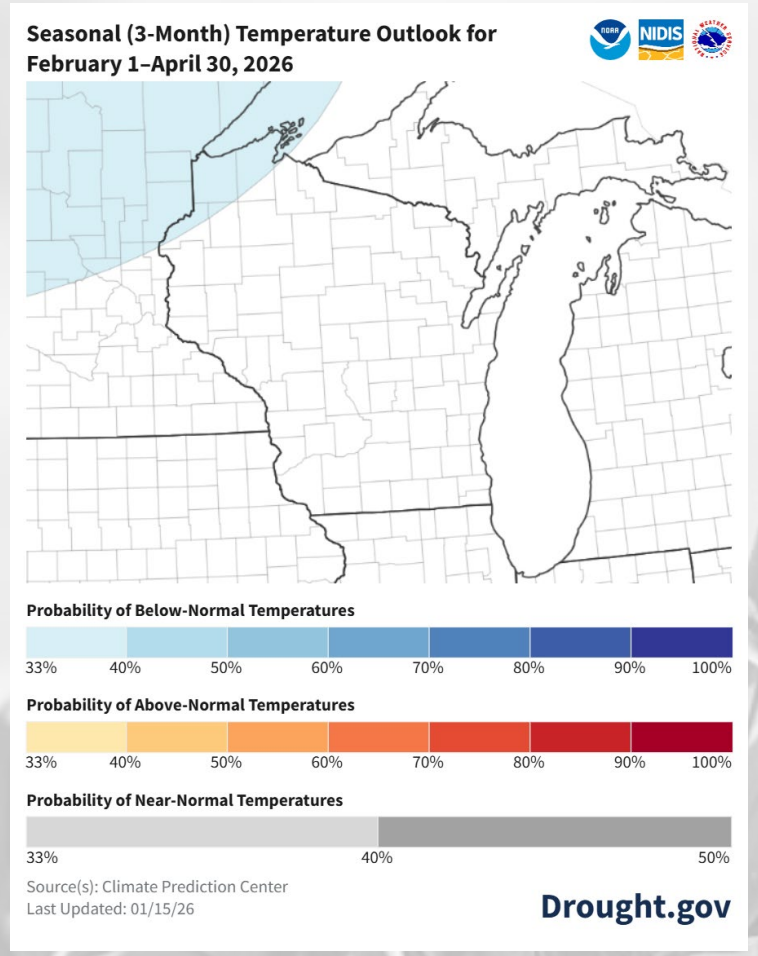


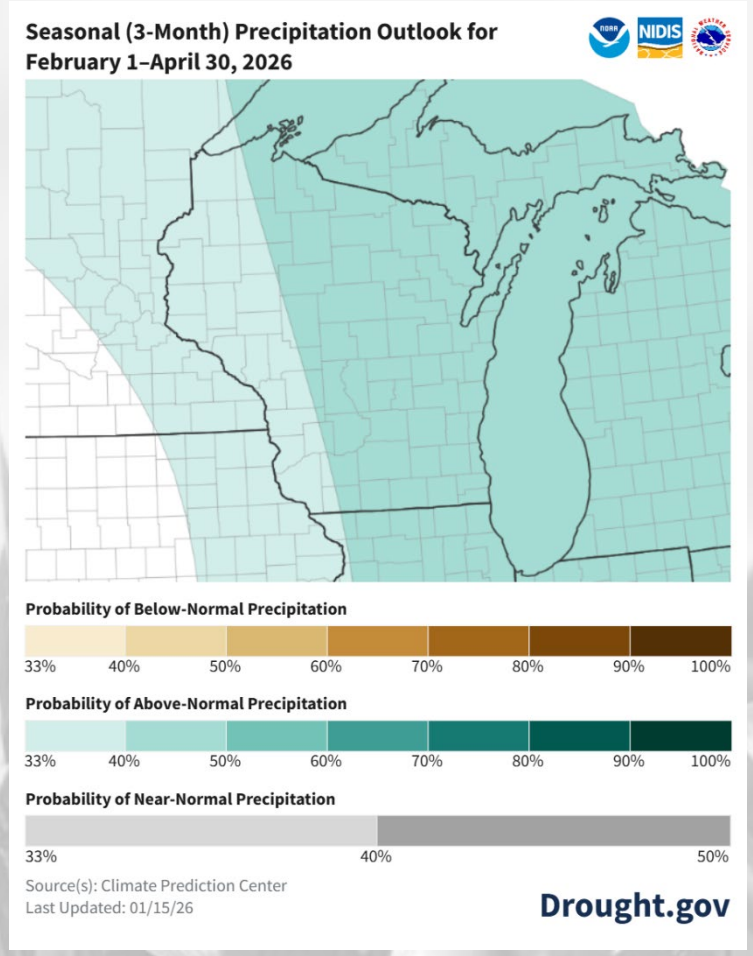
http://www.cpc.ncep.noaa.gov/
https://www.drought.gov/states/wisconsin

Month of February: A statewide lean towards below-normal temperatures (**40-50%** odds). Uncertainty for precipitation statewide (slight above-normal lean near Duluth).

- Statewide normals (1991-2020) for February: **19.1°F, 1.14”** of precip, and **11.5”** of snowfall.

90 Day Temp & Precip Outlook





http://www.cpc.ncep.noaa.gov/
https://www.drought.gov/states/wisconsin

Late Winter into Spring: A statewide lean towards above-normal precipitation (**33-40%** odds west; **40-50%** elsewhere). Uncertainty for temperature (except far NW, slight below normal lean).

- Statewide normals (1991-2020) for Feb-Apr: **30.9°F, 6.16”** of precip, and **23.8”** of snowfall.

Take-Home Points

One-Month Conditions

- **Temperatures** were **2-5°F below normal** across most of WI, with an **Arctic cold snap** during the second half of January.
- **Precipitation** totals were **near to above normal** for most of WI over the past 30 days, but most of this precipitation fell during the first half of January.
- **Snowfall** totals have been **75% or less of normal** across most of WI, with totals of **5-15" common**. Season snowfall totals have been at or above average for most of the state.

Impact

- Soil moisture levels at 4" depth showed **a substantial decrease** from early January levels across UW research farm stations (Wisconet) following a dry and cold second half of January. The east and southeast remain **abnormally dry** for this time of year.
- Frost in the **top 12" of soil** is common across WI, with some northern stations reporting a frost depth **deeper than 2 feet**.
- Chilling hours for Wisconsin's perennial fruits range from **733 to 842 accumulated hours**.
- Drought coverage **decreased substantially** from a month ago, but remains in place in parts of the NE, NW, and S.

Outlook

- Precip over the next 7 days is most likely in the **far north and northeast regions**.
- Climate probabilities for Mid-February indicate that temperatures are likely (60-70% odds) to be **above normal statewide** with a lean (40-50% odds) towards above normal precipitation.
- The outlook for February shows a lean toward **below-normal** temperatures and **uncertainty** for precipitation statewide.
- The outlook for Feb-Apr indicates a statewide lean towards **above-normal** precipitation and **uncertainty** for temperatures.

Agronomic & Vegetable Considerations

Field Crop

Field Conditions

- Prolonged snow cover during cold stretches has been beneficial to perennial or overwintering crops. Decreasing snow cover may pose a risk if temperatures dip for an extended period of time.
- If winter grazing, move cattle out of sensitive areas if fields get muddy from snow melt to keep cattle clean.

Manure Applications

- Reminder of Wisconsin's NR 151 Runoff Rules with the timing of manure spreading and current runoff levels. Check DATCP Runoff Risk Advisory Forecast.

Vegetable

High tunnel management:

- During the winter when high tunnels are closed and row covers are on, plants can be exposed to high levels of relative humidity. This moisture provides conditions that are conducive to disease development. Leafy vegetables are especially susceptible to powdery mildew and downy mildew, but other diseases can occur as well. Make sure to remove row cover a couple of times a week especially during sunny or warmer days to reduce the moisture build up around plants that promote disease.
- **Aphids** are a common pest on winter greens. The common species in high tunnels- green peach aphid, potato aphid, and fox glove aphid- are able to **survive temperatures as low as 5°F**. Management options include the release of lady beetles and green lacewings under row covers, insecticides either alone or in combination with beneficial insects, and weed management to reduce alternative hosts.
- Be on the lookout for **winter cutworms** feeding on your winter greens and overwintered crops. These cutworms are very cold hardy and can be found actively feeding anytime the temperature is above freezing. Damage often resembles foliar feeding by other caterpillars leaving holes in leaves although they can also clip plants at the base of the stem. If you would like to learn more about this pest and management options, listen to this 30 minute webinar from UNH.

User Survey

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

LINK TO SURVEY

Your feedback will help us better serve your ag-weather data needs through AgWOW.

If you have any trouble accessing or filling out the survey, please email Josh Bendorf at jbendorf@wisc.edu.

Thank you!!
-The AgWOW Team

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