



Monthly Hydrometeorological Report

Report for April 2025

NWS FORM E-5	U.S. DEPARTMENT OF COMMERCE NOAA, NATIONAL WEATHER SERVICE	HSA OFFICE: Marquette, MI
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS		REPORT FOR (MONTH / YEAR): April 2025
TO: NATIONAL WEATHER SERVICE (W/OH12x1) HYDROMETEOROLOGICAL INFO CENTER 1325 EAST-WEST HIGHWAY, RM 7116 SILVER SPRING, MD 20910		DATE: May 12th, 2025
		SIGNATURE: Daniel Jablonski, HPM Ryan Metzger, MIC
When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOM E-41).		

An X inside this box indicates no flooding occurred within this Hydrologic Service Area.

Summary

April was a continuation of the wet pattern in Upper Michigan which began in March of this year. Near to above normal precipitation was observed (Table 1), particularly in the east highlighted by Figure 6. This was the third wettest April on record at Munising. That said, April yielded mostly below normal snowfall save for Ironwood where 123% of normal snowfall was observed during the month (Table 1). With normal springtime snow melt and above normal precipitation, streamflow was near to above normal (Figure 1) and there were some minor flooding concerns in the second half of the month. Minor river flooding occurred on the Sturgeon River near Alston and Chassell. There also was flooding damage near Arfelin Lake as well as Pictured Rocks Munising Falls Trail. From a calendar year perspective, April continued to lift observing sites higher in their records for year-to-date precipitation. In particular, Ironwood now is at their 9th wettest year-to-date on record observing 12.38 inches, WFO Marquette is at their 6th wettest (14.88 inches), and Munising is continuing to observe their wettest year on record with 19.45 inches of liquid precipitation (Table 2). Temperatures so far this year have generally remained within one degree of normal, much colder than last year at this point in the year (Table 3).

Location	Precipitation	% of Normal Precip / Snow	Snowfall
WFO Marquette	4.42"	140% / 82%	11.0"
Marquette City	3.06"	123% / 41%	3.5"
Quincy Hill	3.55"	M	10.7"
Ironwood	4.01"	153% / 123%	13.5"
Iron Mountain	3.77"	151% / 73%	3.5"
Manistique	2.57"	108% / 65%	2.0"
Munising	5.71"	227% / 83%	6.5"
Stambaugh	3.57"	138% / 97%	5.7"

Table 1. Observed liquid equivalent precipitation, percent of normal, and snowfall at long-term climate sites across Upper Michigan for April 2025.



Year-to-Date Precipitation Summary

Location	Precipitation	% of Normal	Rank	Last Year
WFO Marquette (Records: 1962-2023)	14.88"	141%	6 th Wettest	12.22"
Marquette City (Records: 1875-2023)	8.62"	109%	65 th Wettest	6.73"
Ironwood (Records: 1901-2023)	12.38"	151%	9 th Wettest	7.56"
Iron Mountain (Records: 1902-2023)	8.96"	137%	16 th Wettest	8.11"
Manistique (Records: 1938-2023)	8.90"	124%	17 th Wettest	7.86"
Munising (Records: 1912-2023)	19.45"	202%	Wettest	12.36"
Stambaugh (Records: 1900-2023)	9.40"	152%	13 th Wettest	6.64"

Table 2. Total observed precipitation at long-term climate sites across Upper Michigan for January through April 2025.

Year-to-Date Temperature Summary

Location	Avg Temp	Departure	Rank	Last Year
WFO Marquette (Records: 1962-2023)	22.8°F	+0.1°F	29 th Warmest	28.9°F
Marquette City (Records: 1875-2023)	26.5°F	-0.1°F	66 th Warmest	31.5°F
Ironwood (Records: 1901-2023)	21.8°F	-1.0°F	50 th Coldest	28.0°F
Iron Mountain (Records: 1902-2023)	25.5°F	+0.6°F	49 th Warmest	31.4°F
Manistique (Records: 1938-2023)	25.7°F	+0.2°F	44 th Warmest	29.7°F
Munising (Records: 1912-2023)	25.2°F	+0.1°F	48 th Warmest	30.5°F
Stambaugh (Records: 1900-2023)	20.8°F	-1.7°F	40 th Coldest	28.0°F

Table 3. Average temperature observed at long-term climate sites across Upper Michigan for January through April 2025.



Flooding Conditions

There were minor river flooding concerns on the Sturgeon River near Alston and Chassell during late April. Seasonal snowmelt resulted in river rises on the Chocolay River, bringing water into the M-28 access parking lot starting April 22nd. On April 25th there was flooding damage to an access road to the Arfelin Lake boating access site due to recent rainfall and seasonal snowmelt. There also was flooding damage at the Pictured Rocks Munising Falls Trail on April 28th due to the combination of seasonal snowmelt and heavy rainfall.

Media Links

Pictured Rocks Munising Falls Trail: <https://www.manisteenews.com/news/article/pictured-rocks-munising-falls-closure-20302405.php>
Arfelin Lake Boating Access Site: <https://www.uppermichiganssource.com/2025/04/25/dnr-temporarily-closes-boating-access-site-arfelin-lake-marquette-county/>

River Conditions

Northern river basins observed above normal average streamflow in April whereas the southern basins observed near normal average streamflow.

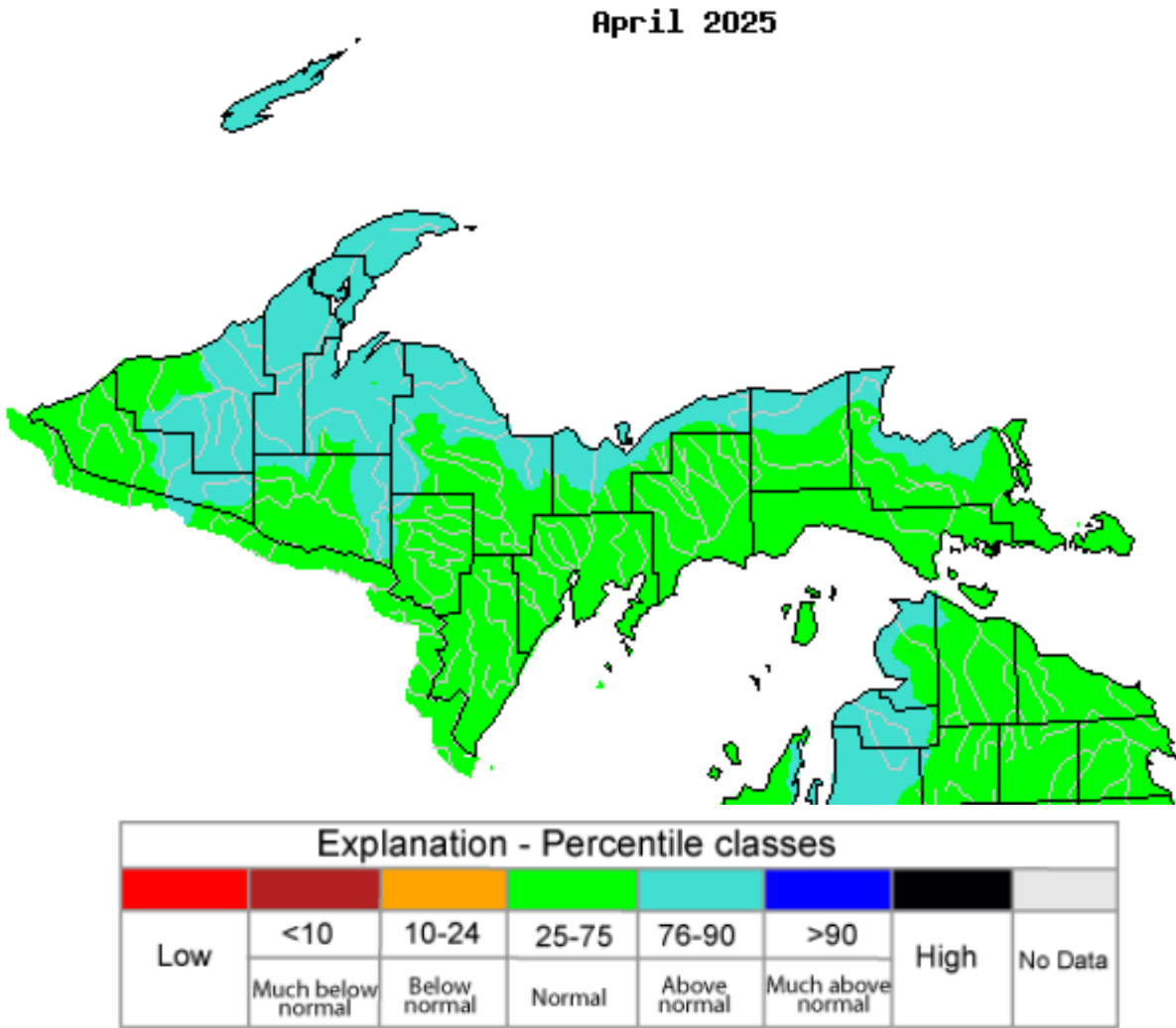


Figure 1: USGS monthly average streamflow in April 2025 across Upper Michigan.



Snowpack SWE (Snow Water Equivalent) Conditions

There is limited SWE left in Upper Michigan as of the end of April, mainly in the high terrain of the Keweenaw and Michigamme Highlands. That said, there are pockets of lingering SWE in the east where the season favored lake effect snow occurred. Highest remaining values are located in the Keweenaw between 8-12 inches.

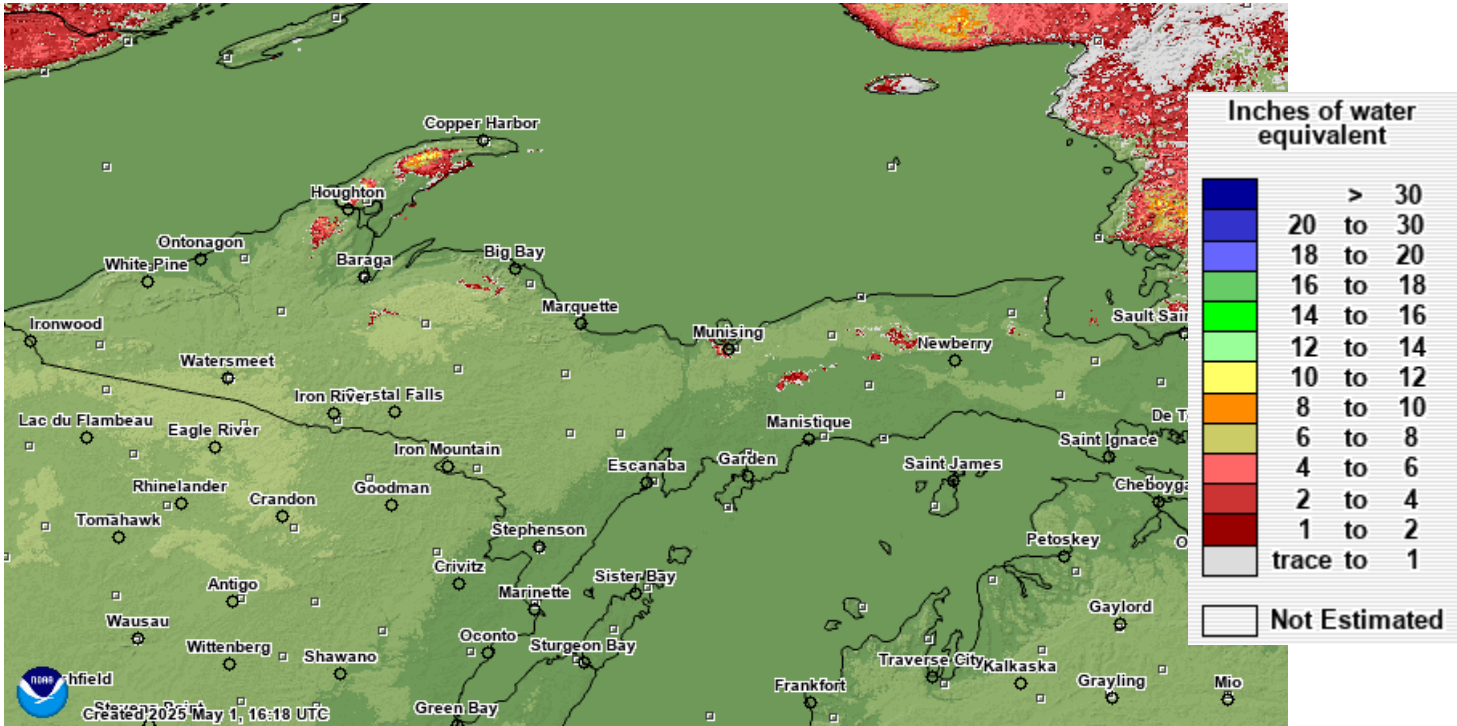


Figure 2: Current modeled snowpack snow water equivalent on May 1st, 2025.

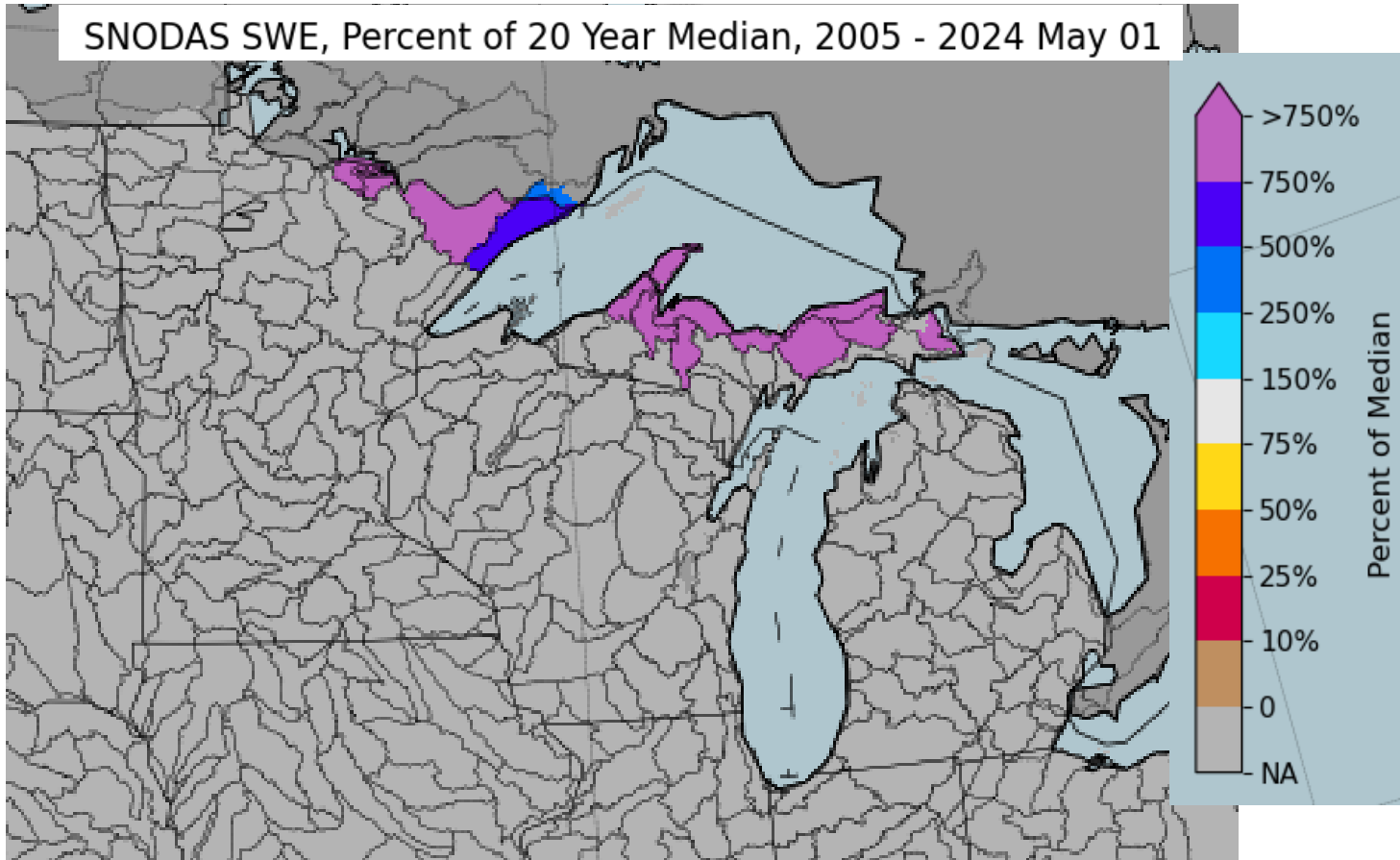


Figure 3: Modeled snow water equivalent for drainage basins on May 1st, 2025 as a percent of 20-year median.



Drought Discussion

There currently are no drought conditions. For the latest drought status, please visit <http://www.drought.gov>.

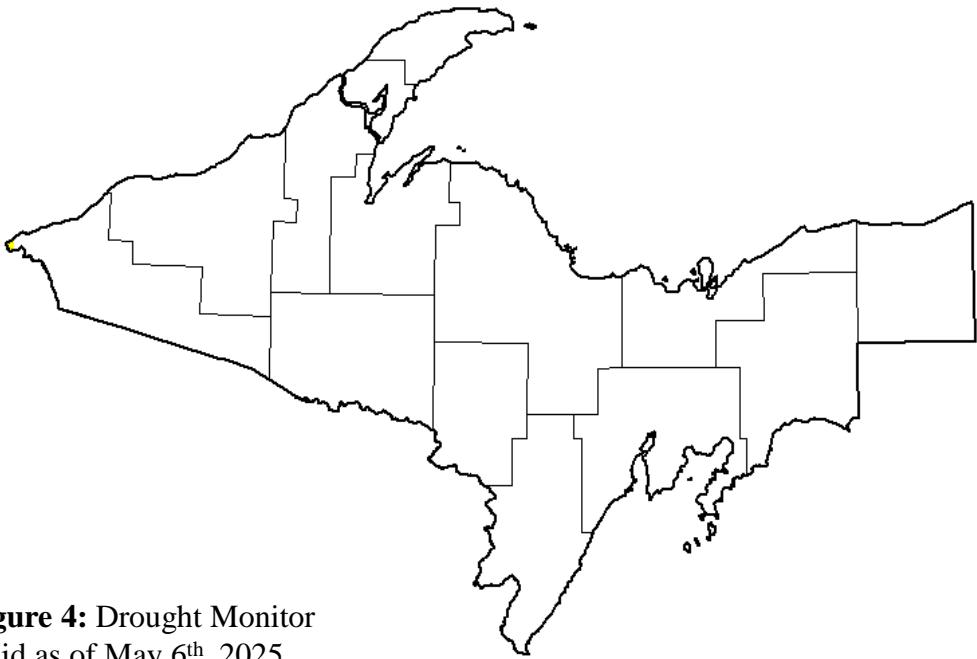


Figure 4: Drought Monitor valid as of May 6th, 2025.

May 6, 2025
(Released Thursday, May. 8, 2025)
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	99.97	0.03	0.00	0.00	0.00	0.00
Last Week 04-29-2025	99.97	0.03	0.00	0.00	0.00	0.00
3 Months Ago 02-04-2025	56.54	43.46	17.85	0.00	0.00	0.00
Start of Calendar Year 01-07-2025	57.50	42.50	17.85	0.00	0.00	0.00
Start of Water Year 10-01-2024	1.50	98.50	64.78	40.63	0.00	0.00
One Year Ago 05-07-2024	55.29	44.71	18.34	3.90	0.00	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>

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CPC/NOAA



Hydro Products Issued

Product	Number
Hydrologic Outlook (ESF)	1
Flood Watch (FFA)	0
Flood Warning (FLW)	4
Flood Advisories and Statements (FLS)	70
Flash Flood Warning (FFW)	0
Flash Flood Statement (FFS)	0
Hydrologic Summary (RVA)	30



Precipitation Summary

Accumulated Precipitation (in) April 01, 2025 to April 30, 2025

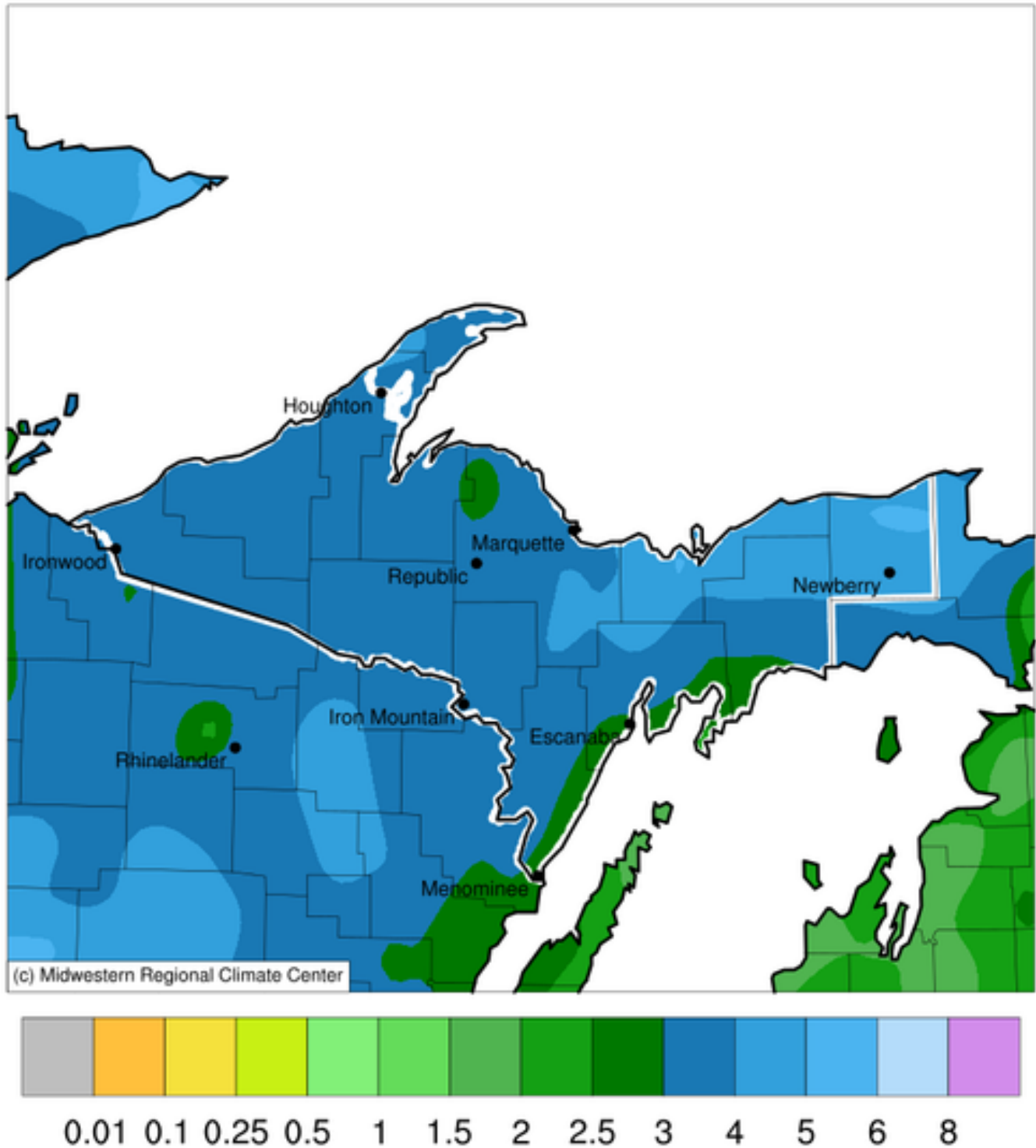


Figure 5: April 2025 Monthly Precipitation Totals. Image generated May 1st, 2025 from the Midwestern Regional Climate Center.



Precipitation Summary Continued

Accumulated Precipitation (in): Percent of 1991-2020 Normals
April 01, 2025 to April 30, 2025

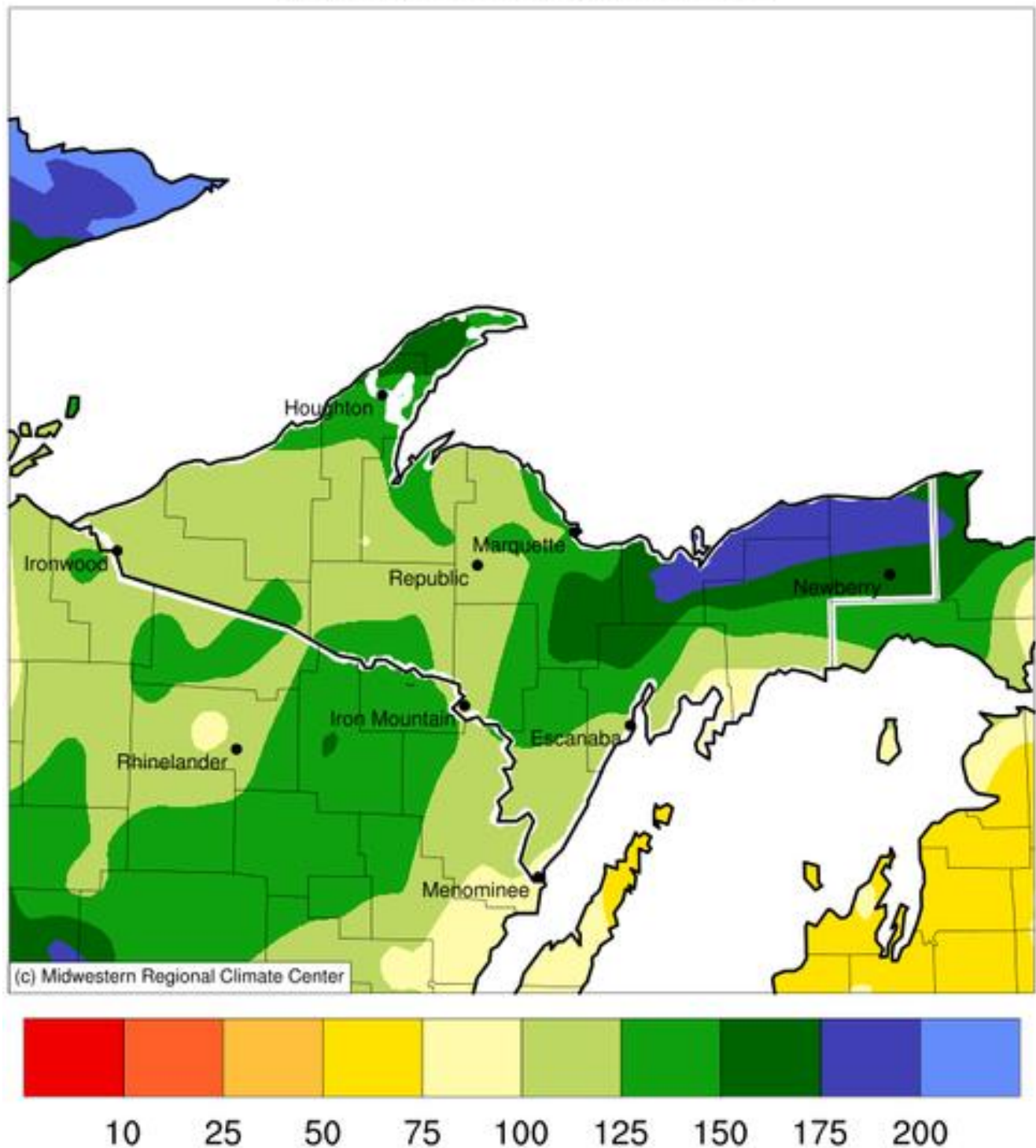


Figure 6: April 2025 Percent of Normal of Accumulated Precipitation. Image generated May 1st, 2025 from the Midwestern Regional Climate Center.



Soil Moisture Anomaly

Calculated Soil Moisture Anomaly (mm)
APR, 2025

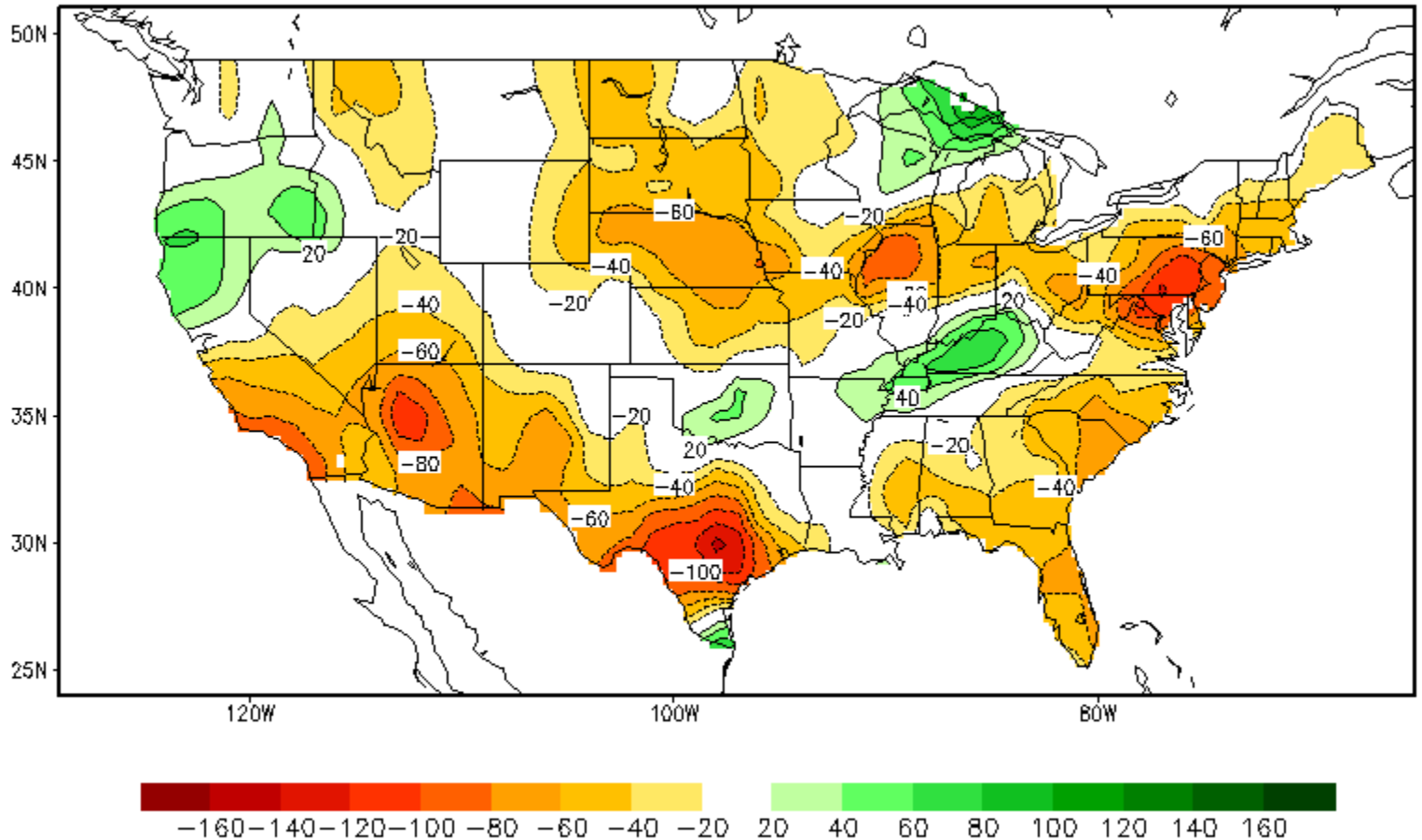


Figure 7: Climate Prediction Center's monthly average soil moisture anomaly for April 2025.



Shallow and Deep Soil Moisture Percentiles

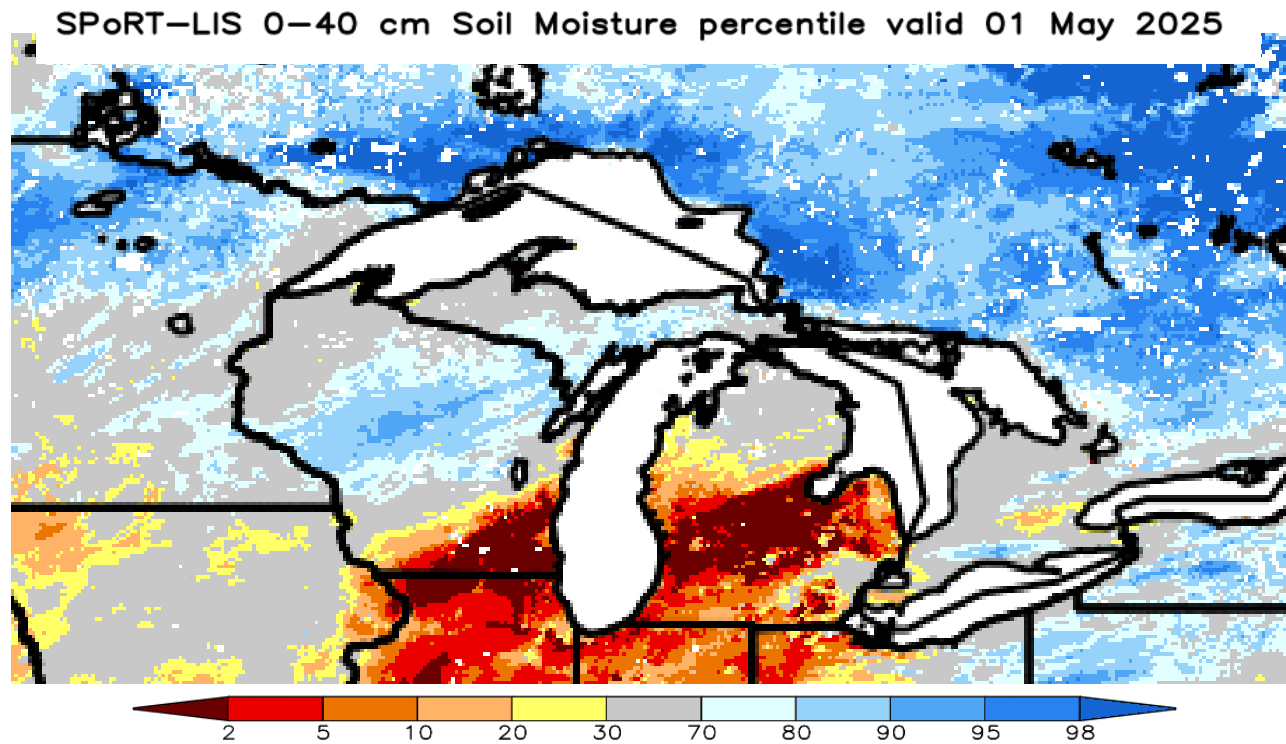


Figure 8: NASA's Short-term Prediction Research and Transition (SPoRT) Center's shallow (0-40 cm) soil moisture percentile valid May 1st, 2025.

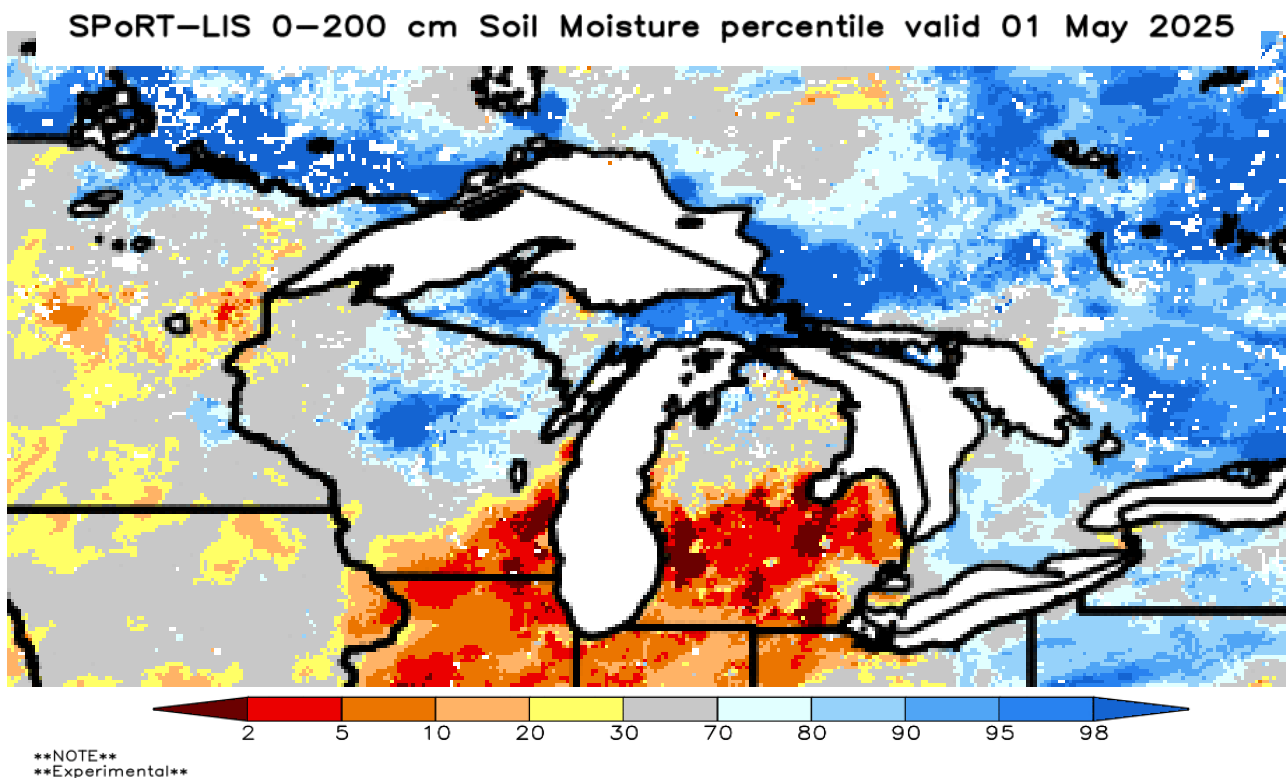


Figure 9: NASA's Short-term Prediction Research and Transition (SPoRT) Center's deep (0-200 cm) soil moisture percentile valid May 1st, 2025.