Monthly Report of River and Flood Conditions

Report for January 2022

NWS FORM E-5 U.S. DEPARTMENT OF COMMERCE NOAA, NATIONAL WEATHER SERVICE **MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS** TO: NATIONAL WEATHER SERVICE (W/OH12x1) HYDROMETEOROLOGICAL INFO CENTER 1325 EAST-WEST HIGHWAY, RM 7116 SILVER SPRING, MD 20910	HSA OFFICE: **Marquette, MI** REPORT FOR (MONTH / YEAR): **January 2022** DATE: **February 7, 2022** SIGNATURE: **Ryan Connelly, Asst. Hydro Program Manager** **Robin J. Turner, 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).	

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

Summary

It was a cold and dry month across Upper Michigan with the exception of one multi-day heavy lake effect snow event early in the month. Precipitation and snowfall statistics at Ironwood, Quincy Hill, WFO Marquette, and Munising are skewed somewhat by this heavy lake effect snow event and not representative of how dry the month was after that first week. For example, at WFO Marquette, 66% of the month's precipitation and 54% of the month's snowfall fell in a four-day period between January 4-7. Average temperatures for the month were generally 4-7 degrees below normal. With it being a cold and dry month, and area rivers becoming frozen if they were not already, there was no flooding in this HSA during the month of January.

Location	Precipitation	% of Normal	Snowfall
WFO Marquette	2.76”	118%	49.5”
Marquette City	1.13”	61%	14.3”
Quincy Hill	3.22”	M	39.0”
Ironwood	1.97”	101%	38.4”
Iron Mountain	0.73”	54%	10.2”
Manistique	0.66”	39%	12.0”
Munising	3.23”	91%	55.8”
Stambaugh	0.51”	47%	10.1”

NOTE: Precipitation after 8 AM EST December 31st was counted in January stats for all but the WFO Marquette site due to the reporting structure of our cooperative observers.

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Flooding Conditions

There were no flooding concerns during the month of January.

River Conditions

Basin streamflow was around normal last month.

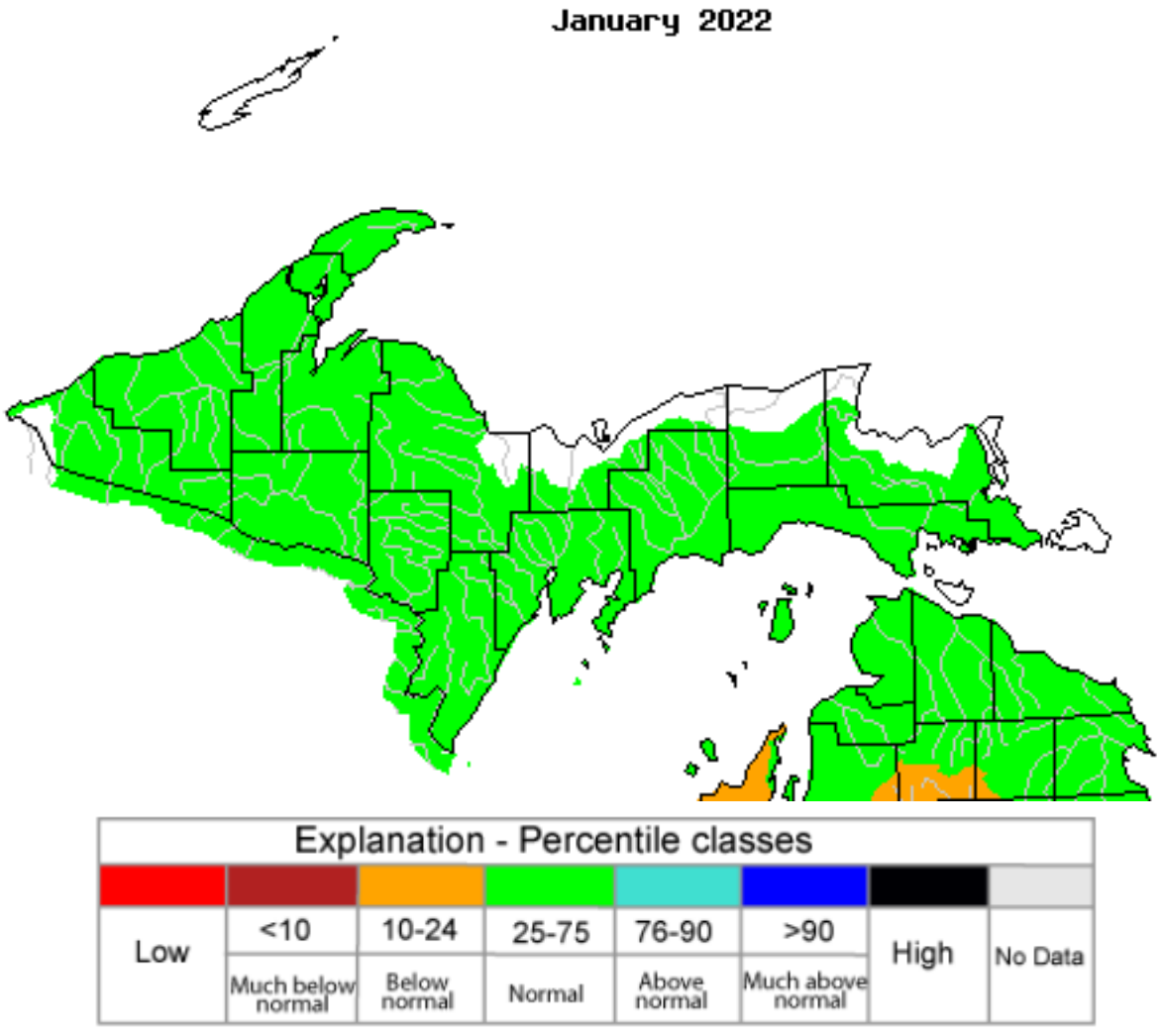

Figure 1: USGS monthly average streamflow in March 2021 across Upper Michigan

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Snowpack Conditions

With it being a mostly dry month, snow depth is now below normal in most of Upper Michigan. A few pockets of above-normal depth remain in areas that saw heavy snowfalls back-to-back in mid-December.

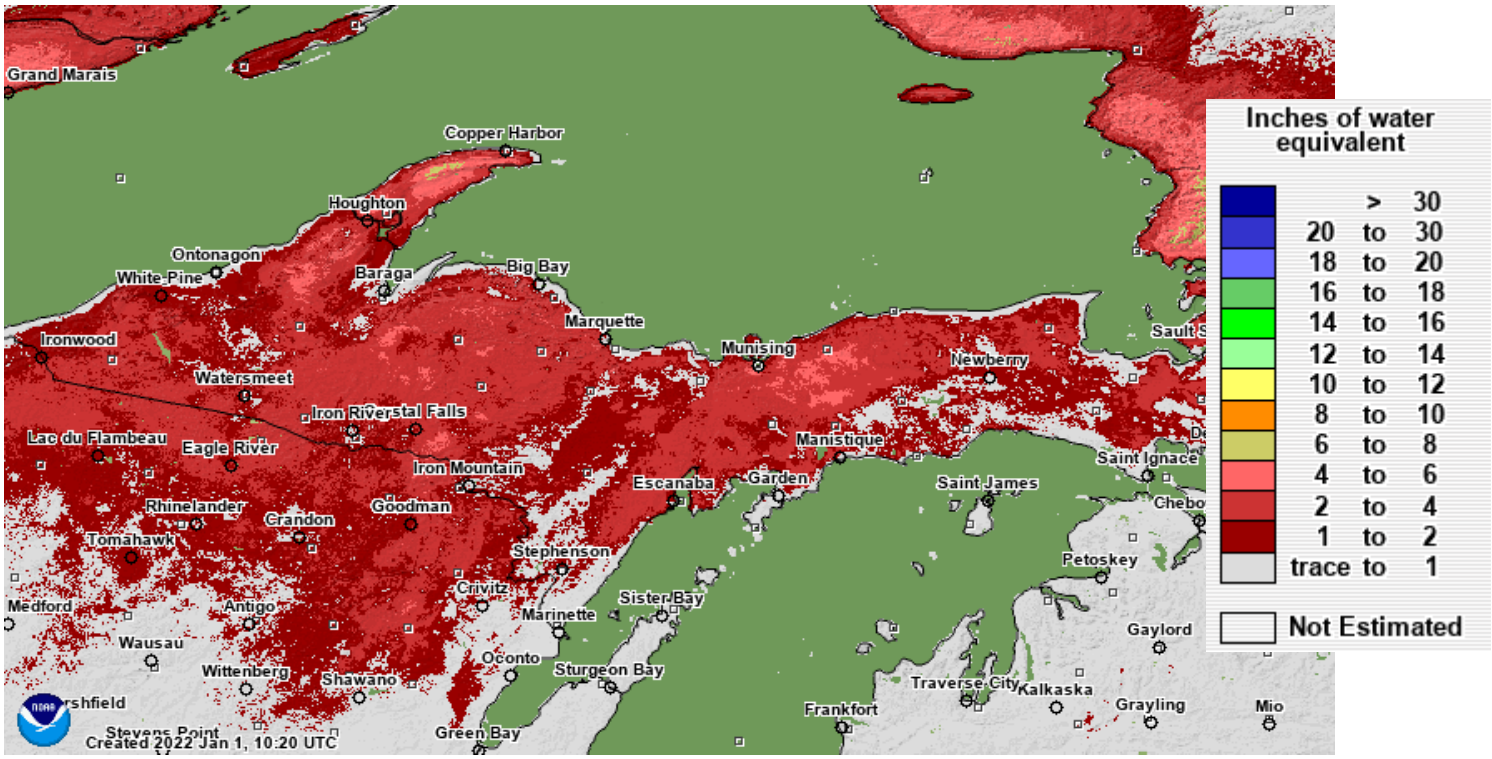
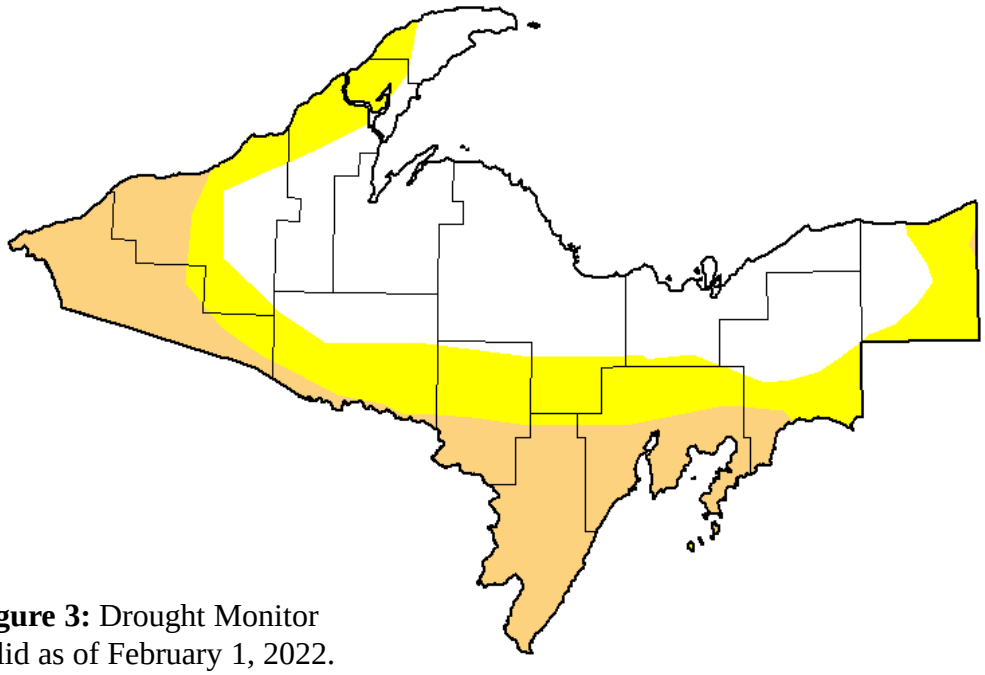


Figure 2: Current modeled snowpack snow water equivalent on January 1st.

Drought Discussion

Western and southern portions of Upper Michigan remain in Moderate Drought, as they have for the past few months. For the latest drought status, please visit http://www.drought.gov.



February 1, 2022

(Released Thursday, Feb. 3, 2022)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	45.20	54.80	27.69	0.00	0.00	0.00
Last Week 01-25-2022	45.20	54.80	27.69	0.00	0.00	0.00
3 Months Ago 11-02-2021	18.11	81.89	35.49	0.51	0.00	0.00
Start of Calendar Year 01-04-2022	26.00	74.00	35.44	0.51	0.00	0.00
Start of Water Year 09-28-2021	51.73	48.27	6.70	0.49	0.00	0.00
One Year Ago 02-02-2021	74.43	25.57	0.00	0.00	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:

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National Drought Mitigation Center

droughtmonitor.unl.edu

Figure 3: Drought Monitor valid as of February 1, 2022.

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Media Links

None.

Hydro Products Issued

Product	Number
Hydrologic Outlook (ESF)	1
Flood Watch (FFA)	0
Flood Warning (FLW)	0
Flood Advisories and Statements (FLS)	0
Flash Flood Warning (FFW)	0
Flash Flood Statement (FFS)	0
Hydrologic Summary (RVA)	31
Daily River Forecasts (RVD)	0

Precipitation Summary

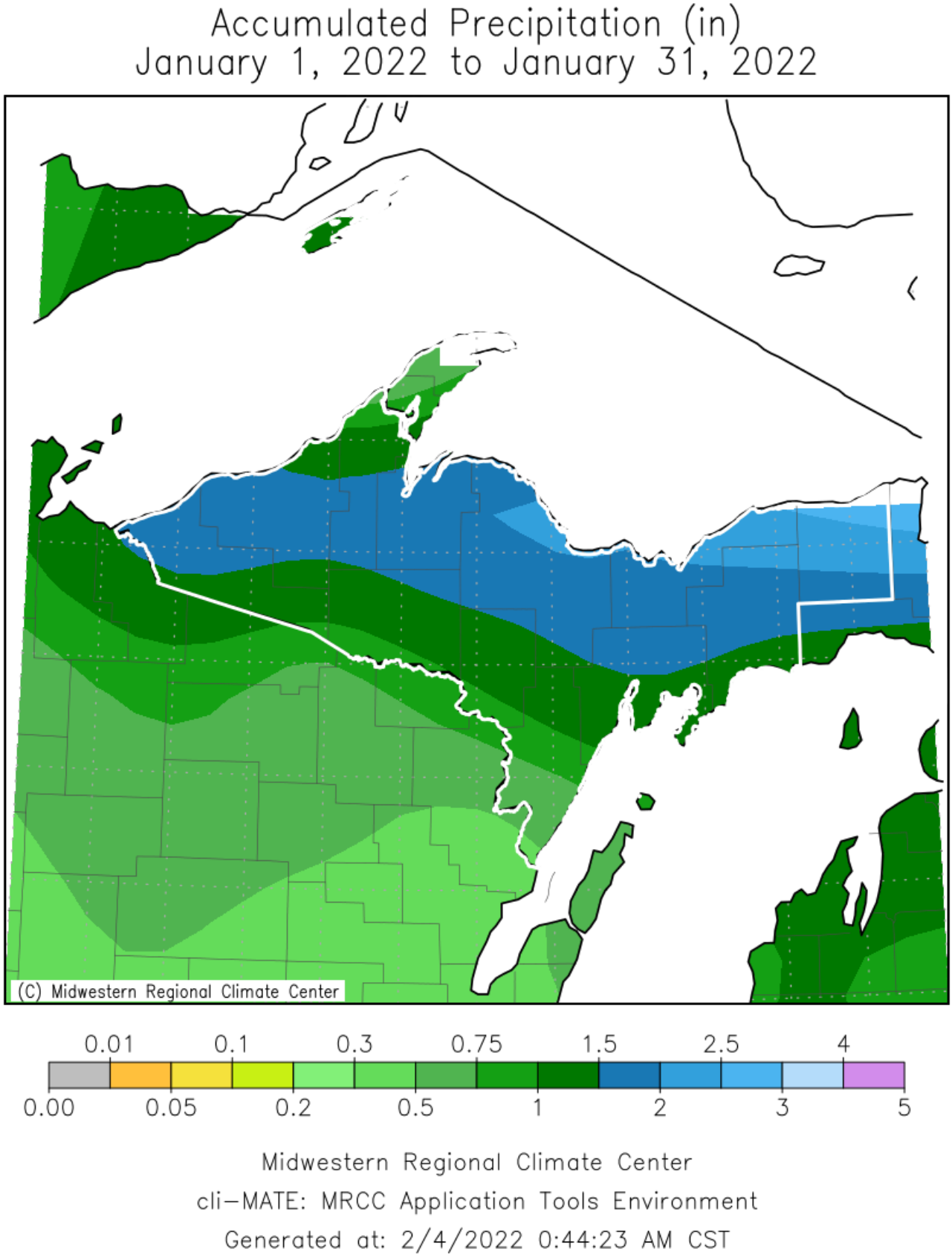

Figure 4: January 2021 Monthly Precipitation Totals.

Precipitation Summary Continued

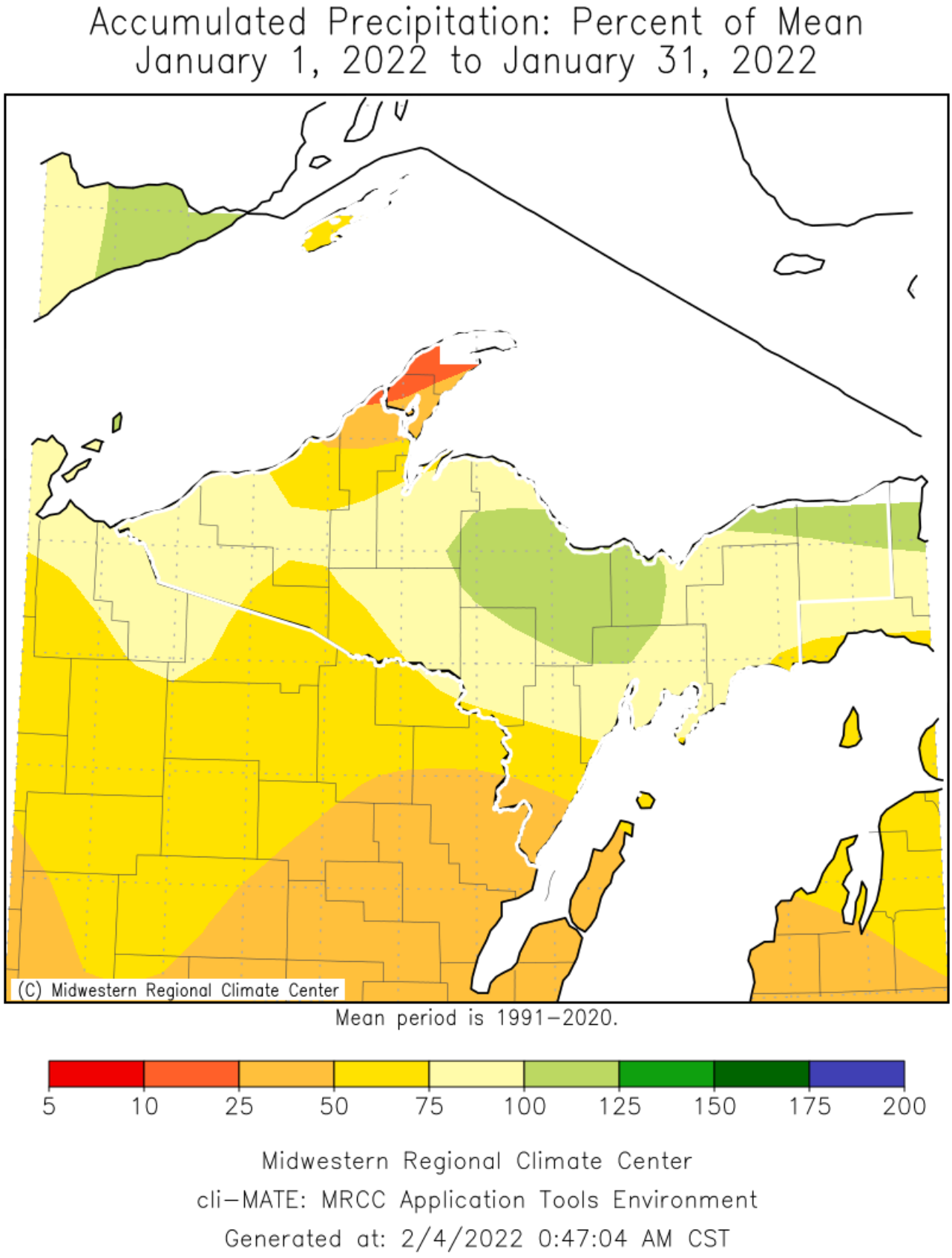

Figure 5: January 2021 Percent of Normal of Accumulated Precipitation.

Soil Moisture Anomaly

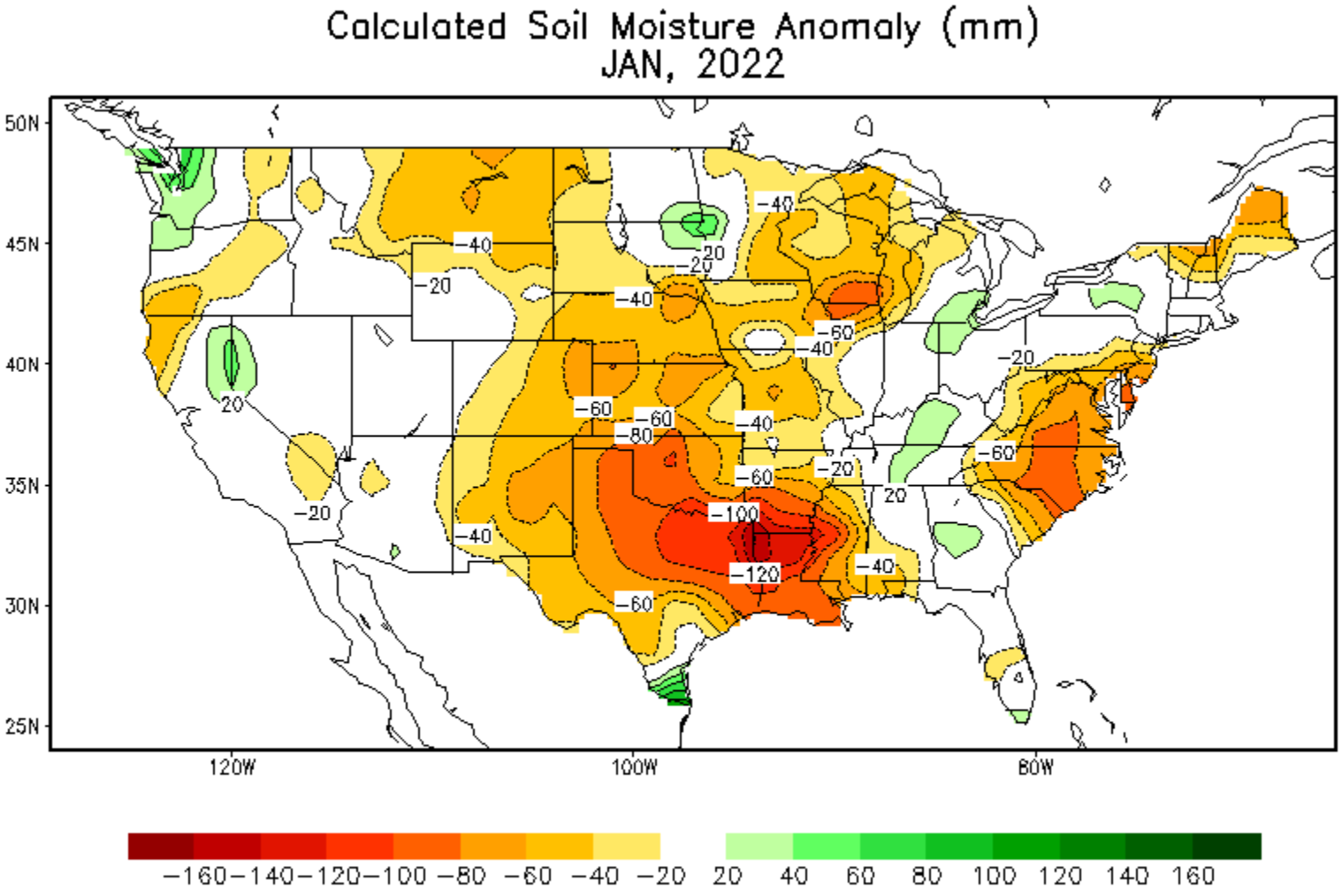

Figure 6: Climate Prediction Center's monthly average soil moisture anomaly for January 2021.