NWS FORM E-5	**U.S. Department of Commerce** NOAA, NATIONAL WEATHER SERVICE	**HSA OFFICE:** **Grand Rapids, MI**
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS		REPORT FOR (MONTH & YEAR): **May 2025**
TO:	NATIONAL WEATHER SERVICE (W/OS31) HYDROMETEOROLOGICAL INFO CENTER 1325 EAST-WEST HIGHWAY, RM 13468 SILVER SPRING, MD 20910	DATE: June 15, 2025
		SIGNATURE: Bruce Smith, MIC Andrew Dixon, Service Hydrologist

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 that no flooding occurred within this hydrologic service area.

Summary

May 2025 started warm and wet, and ended cold and drier than normal. The overall effect of this was a month that felt more like late spring than early summer. Frequent rounds of moderate rain in the first 2 weeks occurred, but none resulted in any flooding. With longer days and rapidly increasing evapotranspiration from forests, lawns, and other plants, it was hard to get significant rises on the rivers even from a wet start to the month.

Flood Conditions

All 3 of the major river systems in West Michigan (Kalamazoo, Grand, and Muskegon) generally started the month around the 25th percentile water volumes for this time of year (Meaning that the water was higher than this year 3 out of 4 years, and lower than this year 1 out of 4 years). Minor rain events during the first half of the month generally brought all of these river systems up to near average by the middle of the month, but dropped back down to that similar 25th percentile level as May turned into June.

Flood Stage Report

No forecast points exceeded flood stage during the month. Thus, the NWS Form E-3 “Flood Stage Report” was not issued.

River Conditions

The end of May percentage of normal flow for selected rivers is listed below:

Location	River	% of Normal
Scottville	Pere Marquette	91
Whitehall	White	90
Evart	Muskegon	92
Mt. Pleasant	Chippewa	85
Lansing	Grand	107
Grand Rapids	Grand	91
East Lansing	Red Cedar	108
Hastings	Thornapple	83
Battle Creek	Battle Creek	75
Battle Creek	Kalamazoo	70

General Hydrologic Information

May precipitation amounts for Grand Rapids, Lansing, and Muskegon, Michigan, were 3.35, 4.54, and 2.75 inches, respectively (Figure 1). Monthly departures were -0.65, +0.88, and -0.63 inches, respectively. Yearly departures were -2.92, -0.49, and -3.02 inches for Grand Rapids, Lansing and Muskegon, respectively. Percent of mean precipitation for May 2025 is shown in Figure 2.

Temperatures for the month of May at Grand Rapids, Lansing and Muskegon ended below normal, due to the cold snap in the 3rd week. The monthly average temperature departures for these sites were -2.2, -2.3, and -2.7 degrees Fahrenheit, respectively.

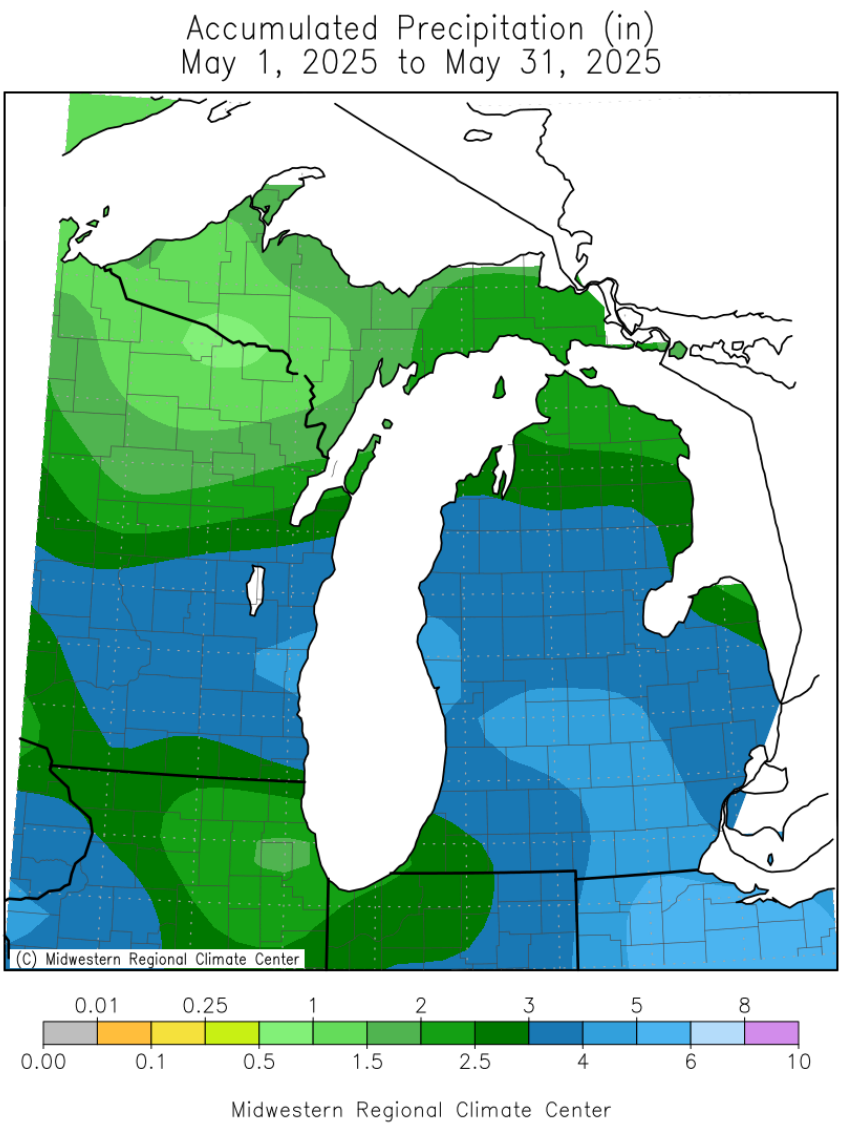

Figure 1. May 2025 Monthly Precipitation Totals.

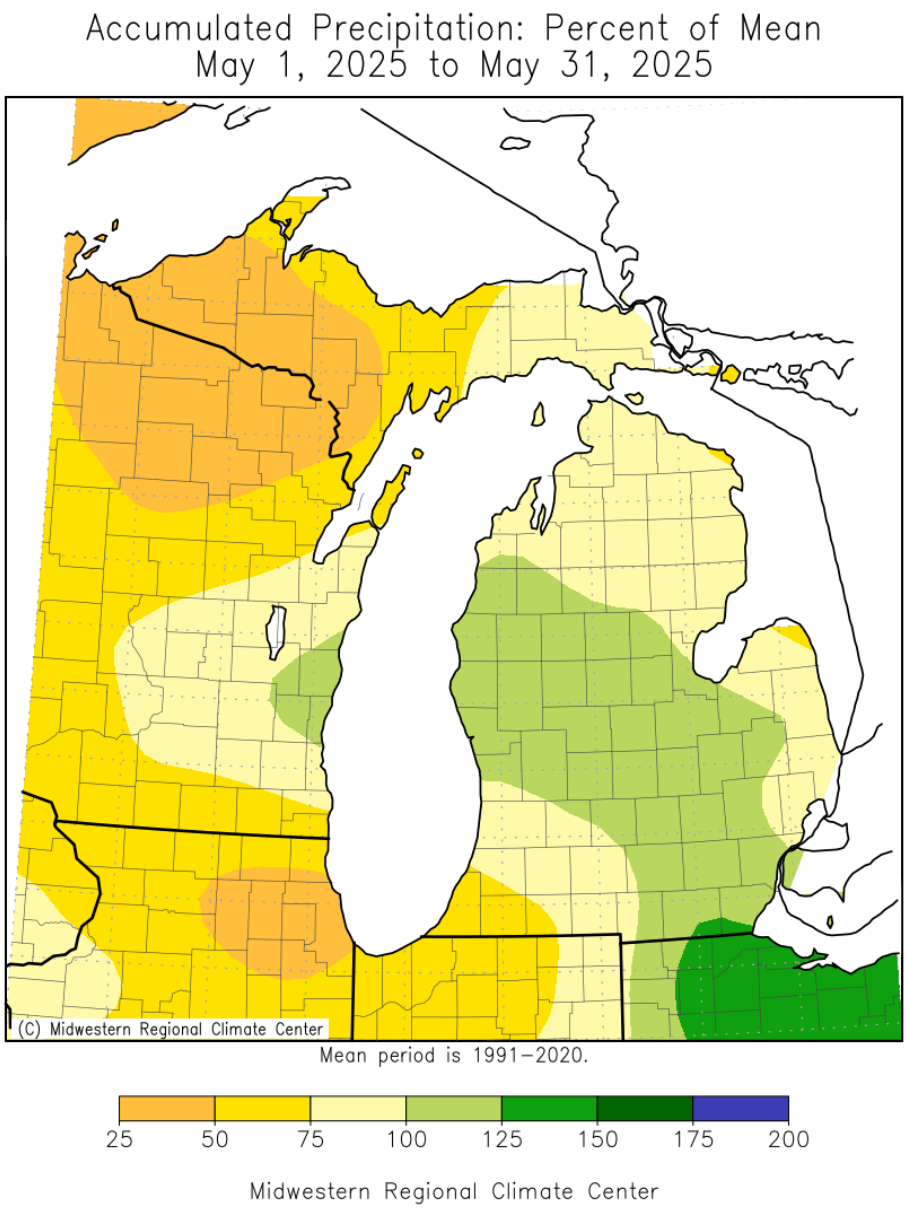

Figure 2. May 2025 Percent of Mean of Accumulated Precipitation.

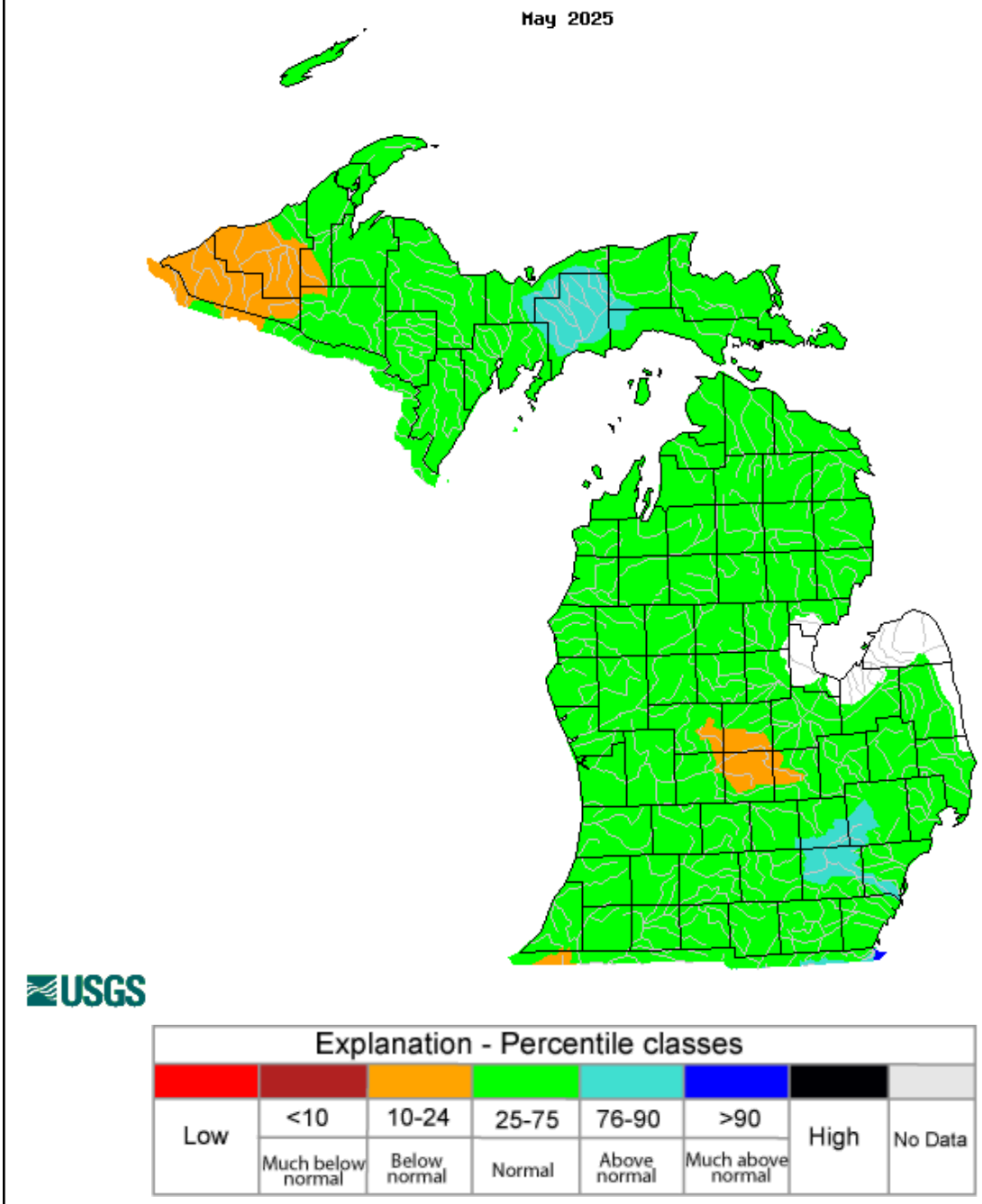

Figure 3. USGS monthly streamflow for May 2025, grouped by significant hydrologic units. Note streamflows generally within a normal range for this time of year across most of Lower Michigan.

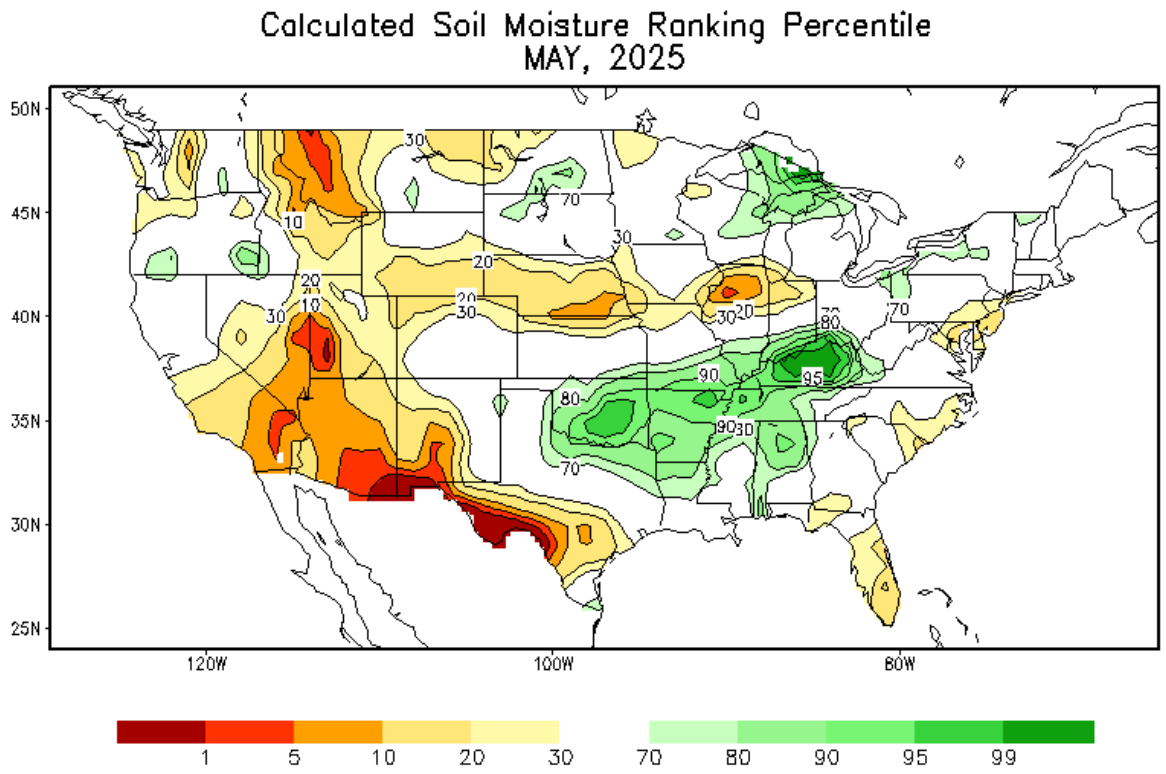

Figure 4. Chart of monthly values of soil moisture, by percentile ranking. This data supports the idea that soil moisture values are not wet enough to undo any of the long-term drought seen in parts of central Lower Michigan, but also not dry enough to result in significantly expanding areas of drought.

Hydrologic Products issued this month

0 Hydrologic Summaries (ARBRVAGRR)
1 Probabilistic Hydrologic Outlook (ARBESFGRR)
0 Event-driven Hydrologic Outlook (ARBESFGRR)
0 Daily River Forecasts (ARBRVDGRR)
0 Areal Flood Advisory Statements (ARBFLSGRR)
0 Flood Warning Statements (ARBFLWGRR)
0 Flood Watch Statements (ARBFFAGRR)
0 River Statements (ARBRVSGRR)

News Articles and Related Documentation

None