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): **April 2025**
TO:	NATIONAL WEATHER SERVICE (W/OS31) HYDROMETEOROLOGICAL INFO CENTER 1325 EAST-WEST HIGHWAY, RM 13468 SILVER SPRING, MD 20910	DATE: May 9th 2025
		SIGNATURE: Bruce Smith MIC Andrew Dixon, Service Hydrologist Joe Ceru, Meteorologist

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

April began very wet. Most of the month's moisture came on April 2nd. Lansing received over 2 inches of rain. Rivers rose across the region with over twenty points cresting above action stage and five river forecast points reaching minor flood stage.

Rivers then fell through the middle of the month when another minor event brought flows back up above the median average flow. However, flows continued to drop through the rest of the month ending with the month with below normal flows. However median flows overall were at to above normal for most of Lower Michigan with much of the drought conditions through Lower Michigan alleviated.

Flood Conditions

Early in the month a significant rainfall event brought flooding to almost a dozen river forecast points. Heavy rainfall fell on the 2nd, with 1.42 inches of rain at Grand Rapids and 2.22 inches at Lansing. With widespread rainfall across the region there was a significant river response that caused 21 forecast points to rise above action stage and 5 to rise above flood stage. The forecast points in and around Lansing saw the largest rises, with the East Lansing gauge on the Red Cedar River rising above minor flood stage with a crest of 7.84 ft early on April 5th. The Holt gauge on Sycamore Creek crested at 890 CFS at 8.83ft which is just below moderate flood stage and preliminarily one of the top 5 crests at the Holt gauge and in the 90th percentile of events. It rose above the minor flood stage on the 3rd and didn't fall until the 5th.

As the water moved downstream it brought the Thornapple River gauge at Hastings just above flood stage. The Grand River at Lansing went to action stage and crested just below flood stage. That happened at the Comstock Park gauge as well.

By the 9th, most rivers fell below action stage, with the main exception being the Vicksburg gauge at the Portage River. Vicksburg rose to flood stage on the 3rd, fell below flood stage on the 7th and remained above action stage until the 19th.

The rest of the month had fairly low flows and a steady drop through the middle of the month. While there were minor events the more significant of those was the event on the 21st that brought small rises to some rivers but all remained below action stage.

While many locations ended the month below normal (see **River Conditions**), overall the monthly streamflow conditions were around to above normal for much of Lower Michigan.(Figure 3). That is shown in the drought conditions where by the end of the month the drought conditions have improved (Figure 5). The drought conditions have been reduced to mostly the US 127 corridor and southwest of Saginaw Bay.

Flood Stage Report

Multiple river forecast points exceeded the flood stage during the month. Thus, the NWS Form E-3 “Flood Stage Report” was created.

River Conditions

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

Location	River	% of Normal
Scottville	Pere Marquette	73
Whitehall	White	73
Evart	Muskegon	83
Mt. Pleasant	Chippewa	43
Lansing	Grand	56
Grand Rapids	Grand	67
East Lansing	Red Cedar	132
Hastings	Thornapple	89
Battle Creek	Battle Creek	68
Battle Creek	Kalamazoo	66

General Hydrologic Information

April precipitation amounts for Grand Rapids, Lansing, and Muskegon, Michigan were, 2.77, Missing, and 2.47 inches, respectively (Figure 1). Monthly departures were -1.22, Missing, and -1.00 inches, respectively. Percent of mean precipitation for April 2025 is shown in Figure 2. Temperatures for the month of April at Grand Rapids, Lansing and Muskegon were warmer than normal. The monthly average temperature departures for these sites were 0.5, 0.9, and 0.3 degrees Fahrenheit, respectively.

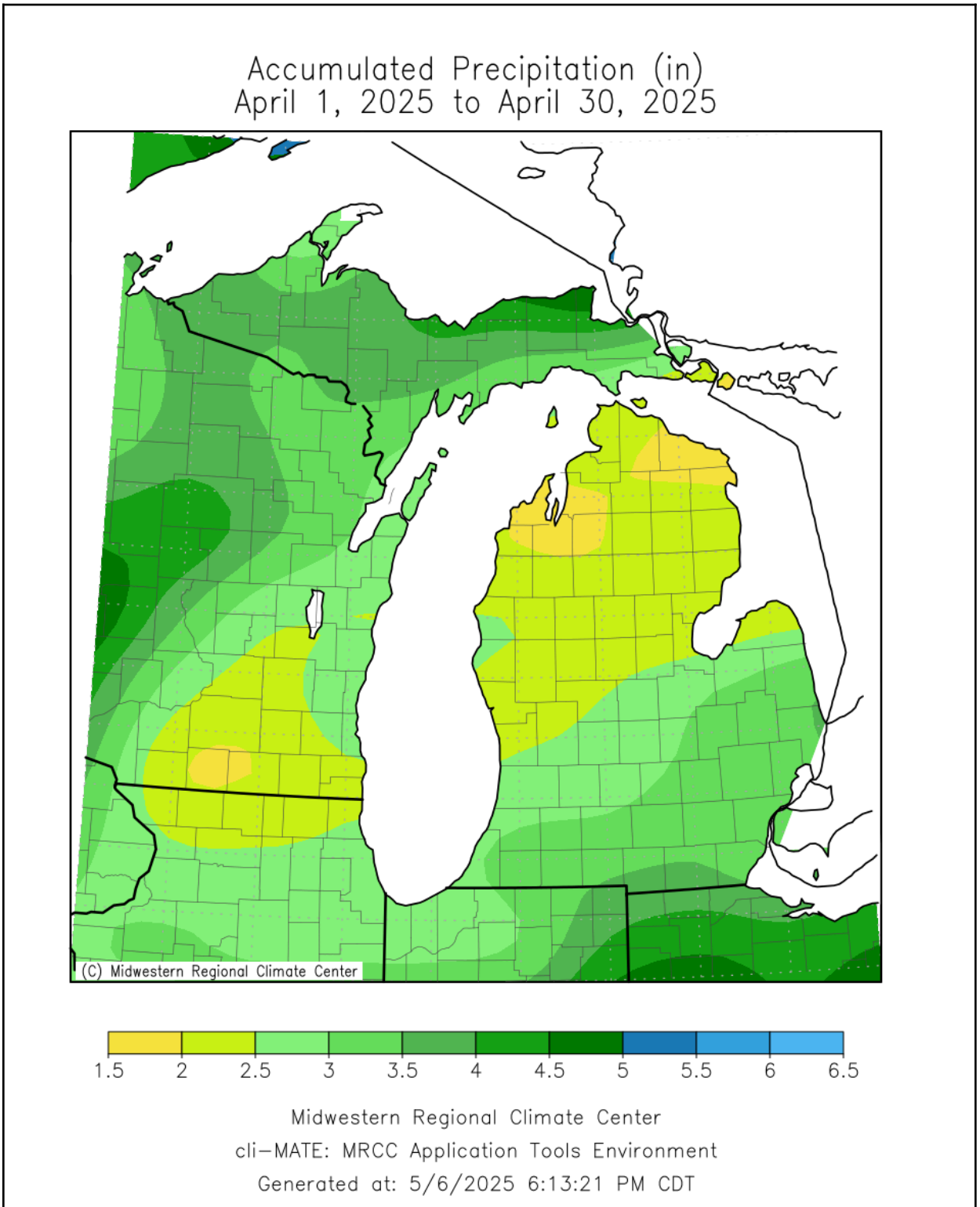

Figure 1. April 2025 Monthly Precipitation Totals. Widespread precipitation across the southern half of Lower Michigan.

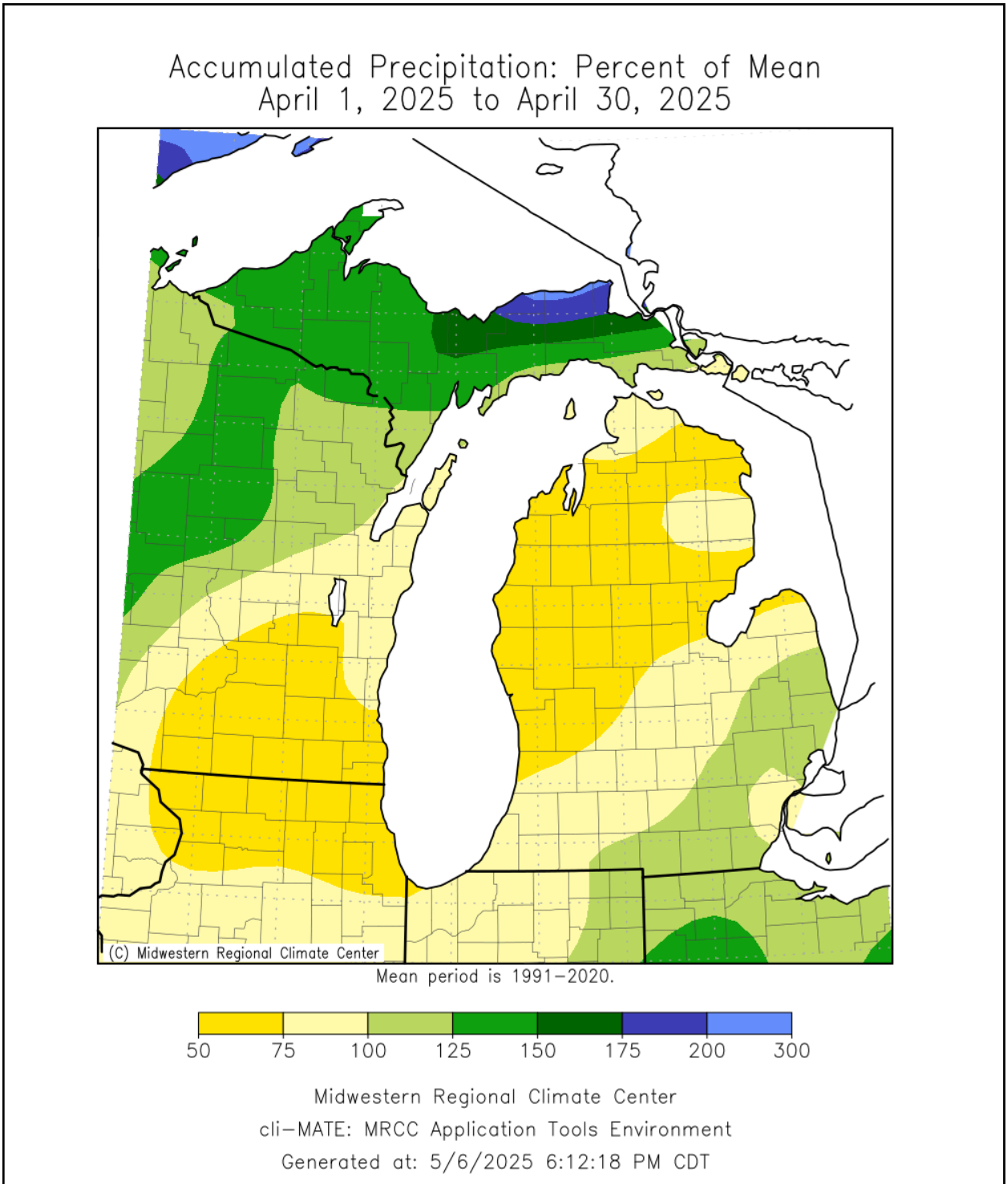

Figure 2.April 2025 Percent of Mean of Accumulated Precipitation.

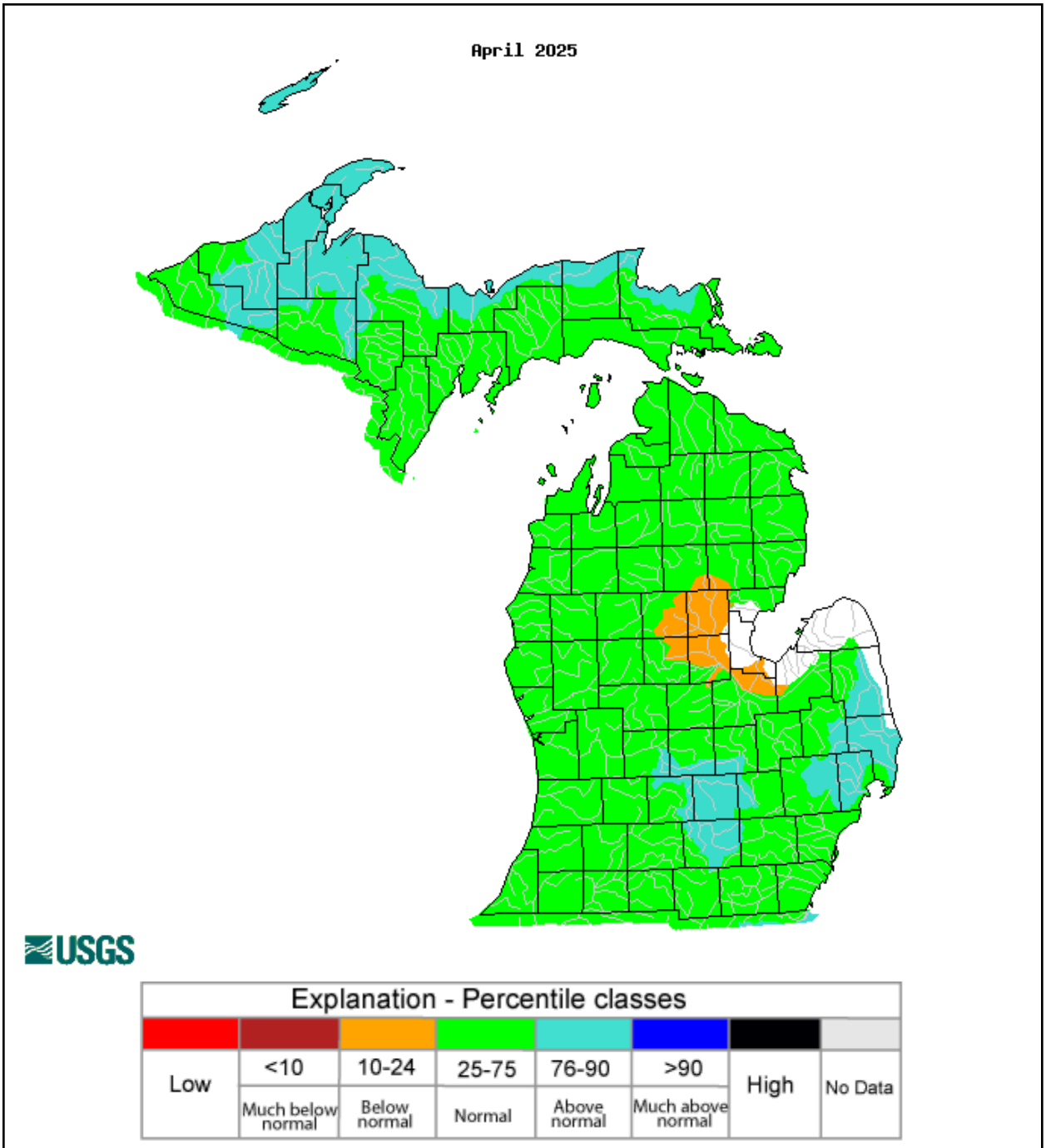

Figure 3. USGS monthly streamflow for April grouped by significant hydrologic units. Most river basins in southern Lower Michigan are normal except in and around the Red River, which is above normal watershed.

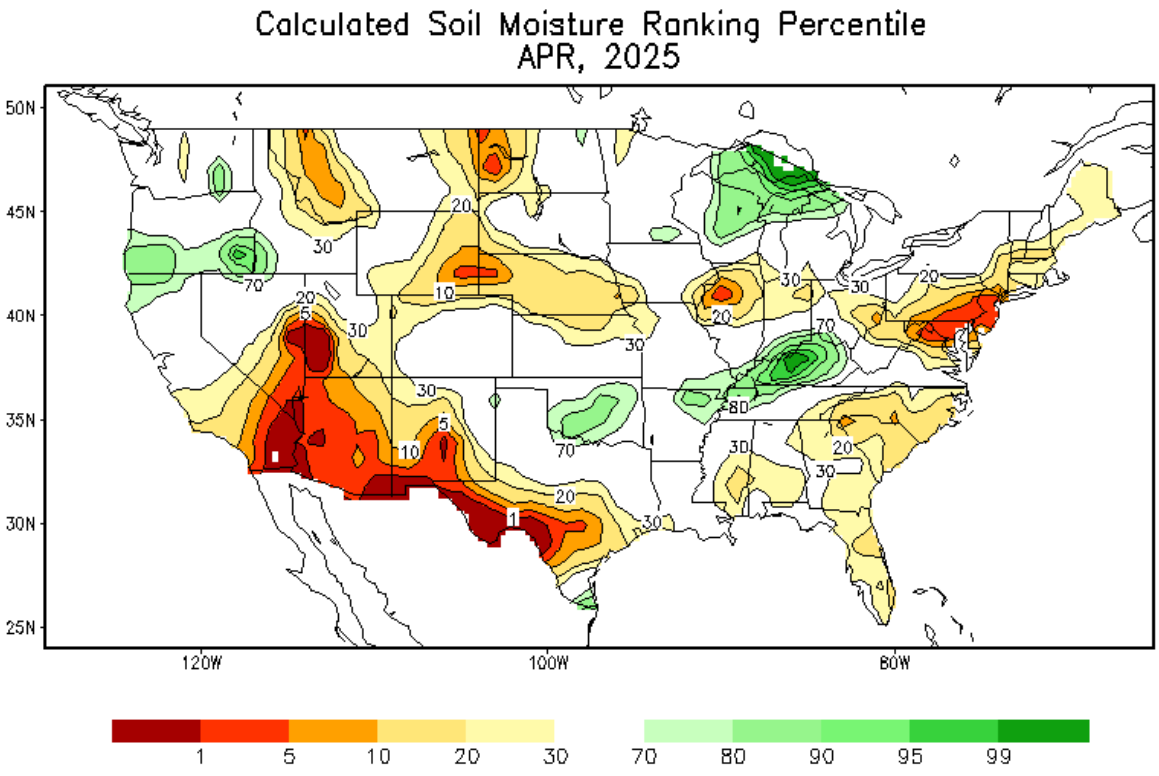

Figure 4.Calculated Soil Moisture Percentile for April 2025. Soil moisture is normal across southern lower Michigan.

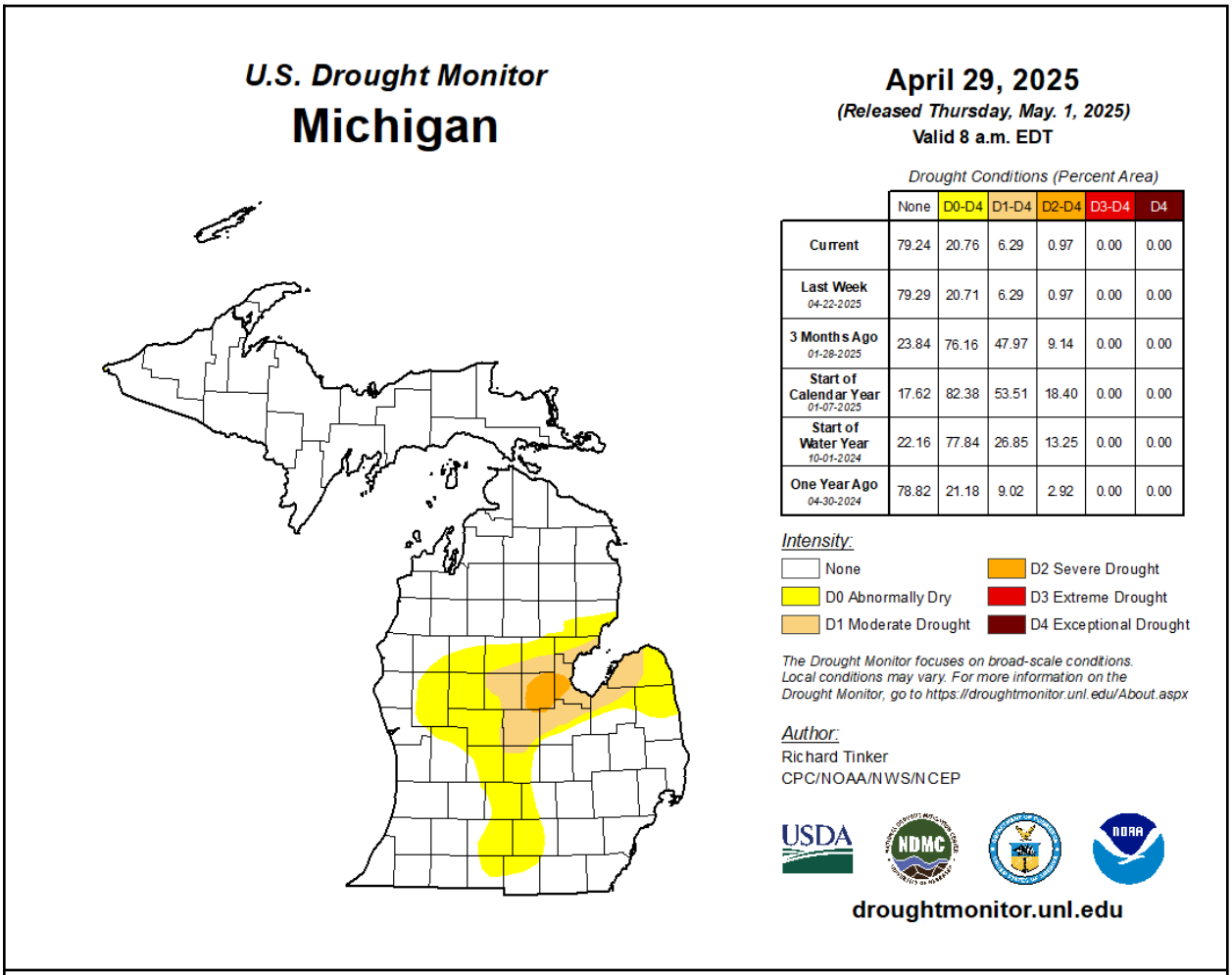

Figure 5.U.S. Drought Monitor effectively shows most of lower Michigan with little drought except regions in Central Michigan still in a D0 to D1 Drought, especially southwest of Saginaw Bay.

Hydrologic Products issued this month

31 Hydrologic Summaries (ARBRVAGRR)
1 Probabilistic Hydrologic Outlook (ARBESFGRR)
1 Event-driven Hydrologic Outlook (ARBESFGRR1)
2 Areal Flood Advisory Statements (ARBFLSGRR)
6 Flood Warning Statements (ARBFLWGRR)
1 Flood Watch Statements (ARBFFAGRR)
0 River Statements (ARBRVSGRR)

News Articles and Related Documentation

https://www.woodtv.com/news/kalamazoo-county/flooding-causes-road-closures-in-kalamazoo/

https://www.fox17online.com/news/local-news/kzoo-bc/kalamazoo/multiple-streets-closed-in-kalamazoo-due-to-flooding-more-closures-possible