

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): July 2020
	DATE: August 13th, 2020
	SIGNATURE: Jordan Wendt, Hydrology 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.

July Summary

For as much precipitation as there was in July, it remained relatively quiet hydrologically across Upper Michigan. WFO Marquette set a new record for total precipitation in the month of July with a few other locations setting new records well, with about 10 other sites having a top 10 rainfall month (depending on their period of record). There were a few instances along Lake Michigan and US-2 where 1-3 inches of rain fell, leading to localized flooding in low-lying and poor drainage areas, but the water quickly receded as rainfall diminished. Likewise, training thunderstorms led to similar flooding conditions near Watersmeet near the end of July.

Location	Precipitation	% of normal	Snowfall
WFO Marquette	6.32"	223%	0.0"
Marquette City	6.71"	238%	0.0"
Quincy Hill	5.60"	M	0.0"
Ironwood	5.64"	138%	0.0"
Iron Mountain	5.36"	154%	0.0"
Manistique	8.49"	279%	0.0"
Munising	5.32"	163%	0.0"
Stambaugh	9.24"	222%	0.0"

NOTE: Rainfall after 8am EST June. 30th was counted in July stats for all but the WFO Marquette site due to the reporting structure of our cooperative observers.

July Flooding Conditions

No river flooding concerns occurred during the month of July across Upper Michigan. There were a few instances of heavy rainfall leading to localized ponding of water and a few minor washouts.

July River Conditions

River levels in the NWS Marquette Hydrologic Service Area were near-normal in most basins and above normal across the Menominee and Manistique basins due to well-above normal precipitation during the month of July (Figure 1 & 3).

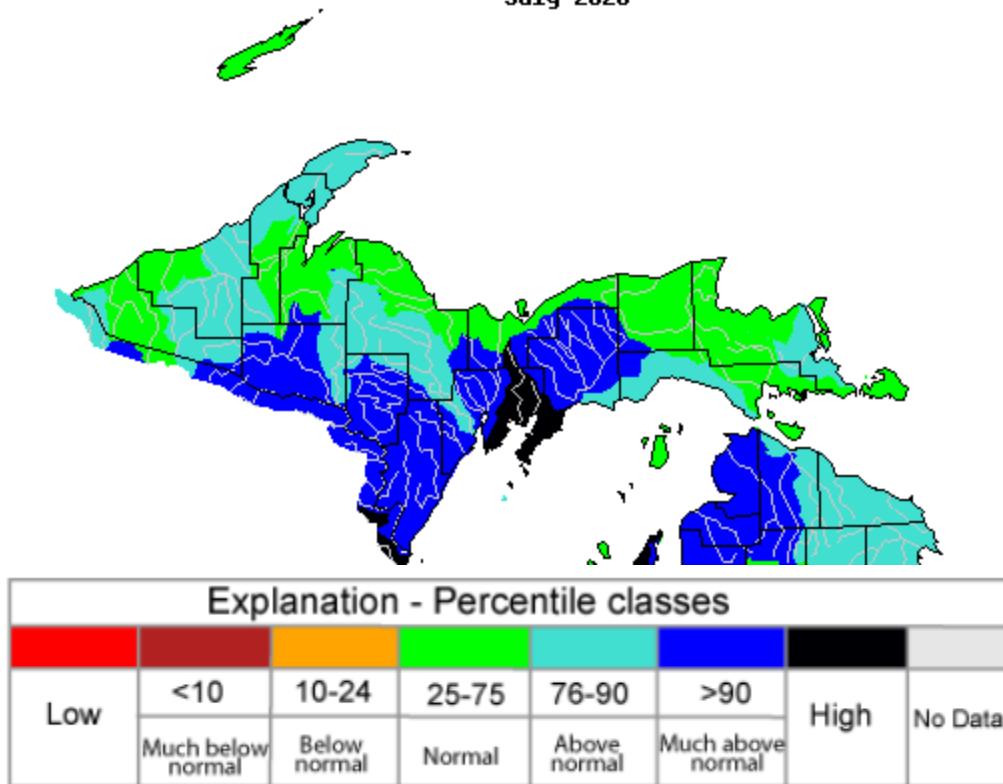


Figure 1: USGS monthly average streamflow in July 2020 across Upper Michigan

Snowpack Discussion

Snowpack across Upper Michigan has ended for the season.

Drought Discussion

There were no portions of drought depicted in Upper Michigan at the end of July. There was one portion of “Abnormally Dry” conditions for Keweenaw County as well as far northern Houghton County. These locations did receive near to above normal precipitation during the month of July, leading to status quo versus degrading into D1. For the latest drought status, please go to <http://www.drought.gov>.

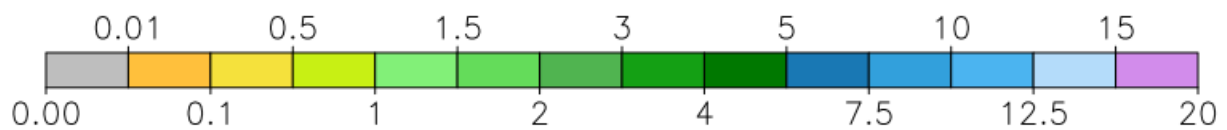
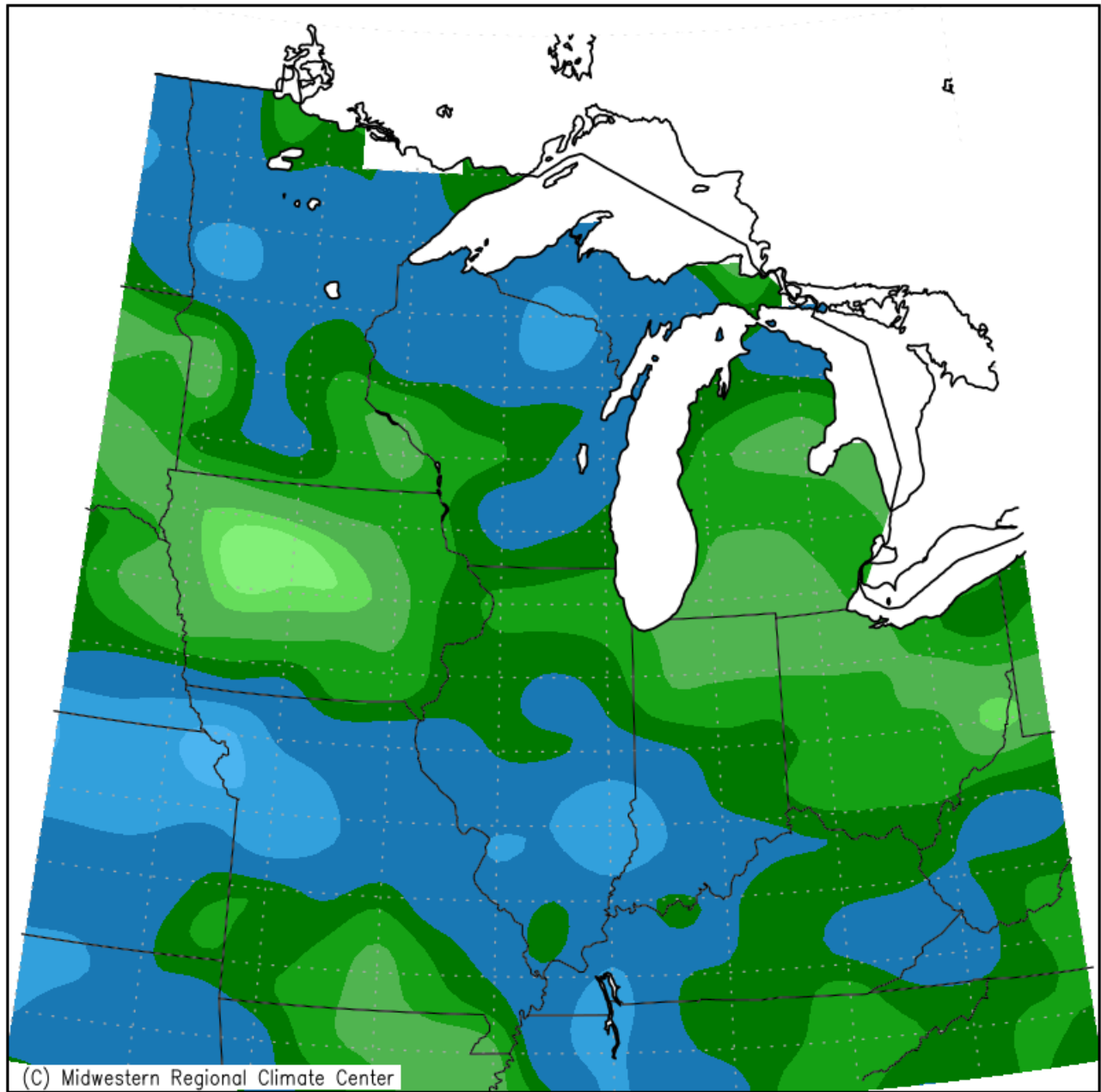
Media Links

None.

July Hydro Products Issued

- 1 – Hydrologic Outlook (ESF)
- 0 – Flood Watch (FFA)
- 0 – Flood Warning (FLW)
- 12 – Flood Advisories and Statements (FLS)
- 2 – Flash Flood Warning (FFW)
- 2 – Flash Flood Statement (FFS)
- 31 – Hydrologic Summary (RVA)
- 29 – Daily River Forecasts (RVD)

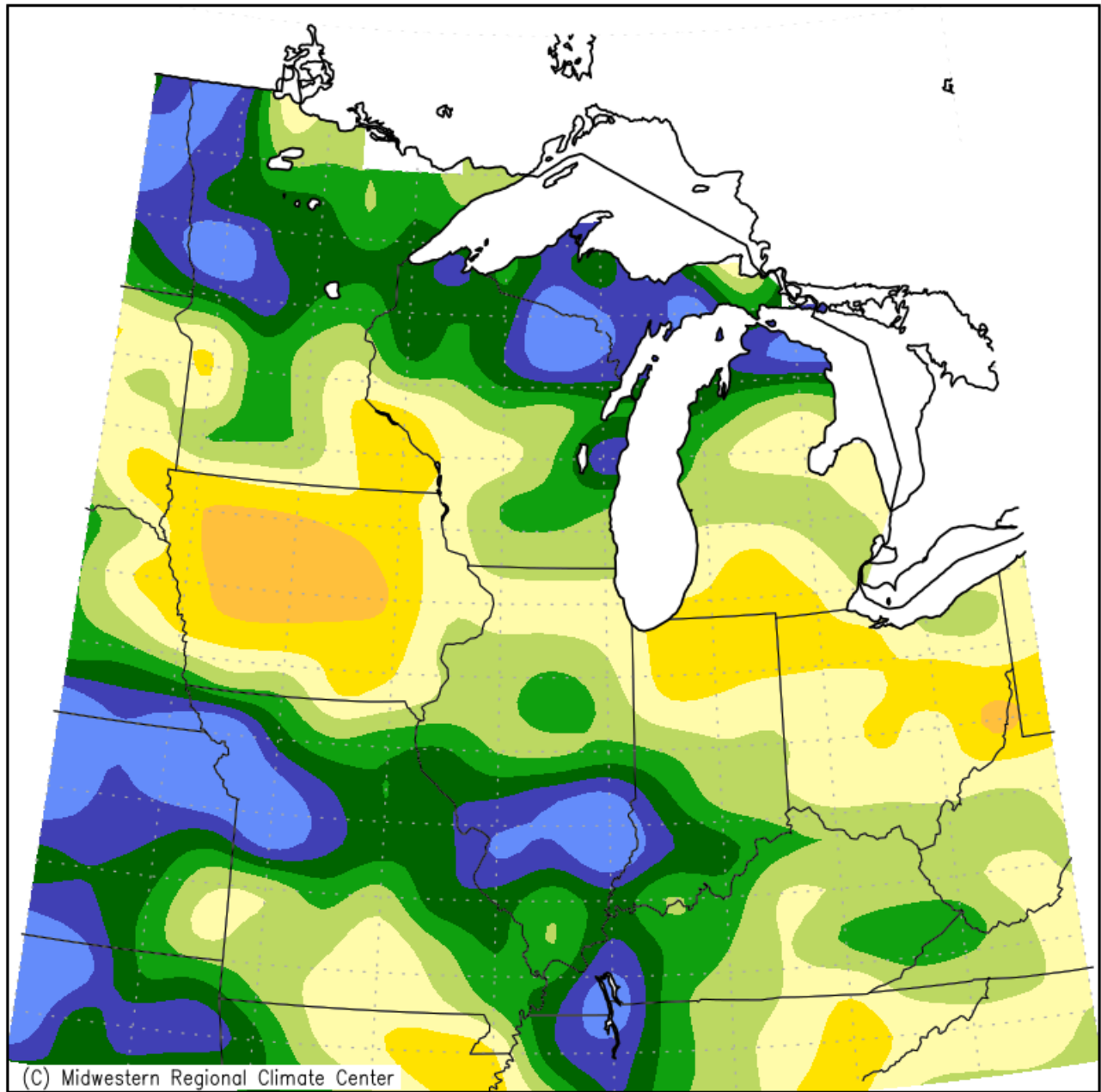
Accumulated Precipitation (in) July 1, 2020 to July 31, 2020



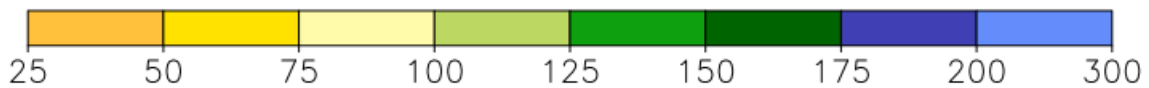
Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana–Champaign

Figure 2. July 2020 Monthly Precipitation Totals.

Accumulated Precipitation: Percent of Mean July 1, 2020 to July 31, 2020



Mean period is 1981–2010.



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Figure 3. July 2020 Percent of Normal of Accumulated Precipitation

Calculated Soil Moisture Anomaly (mm) JUL, 2020

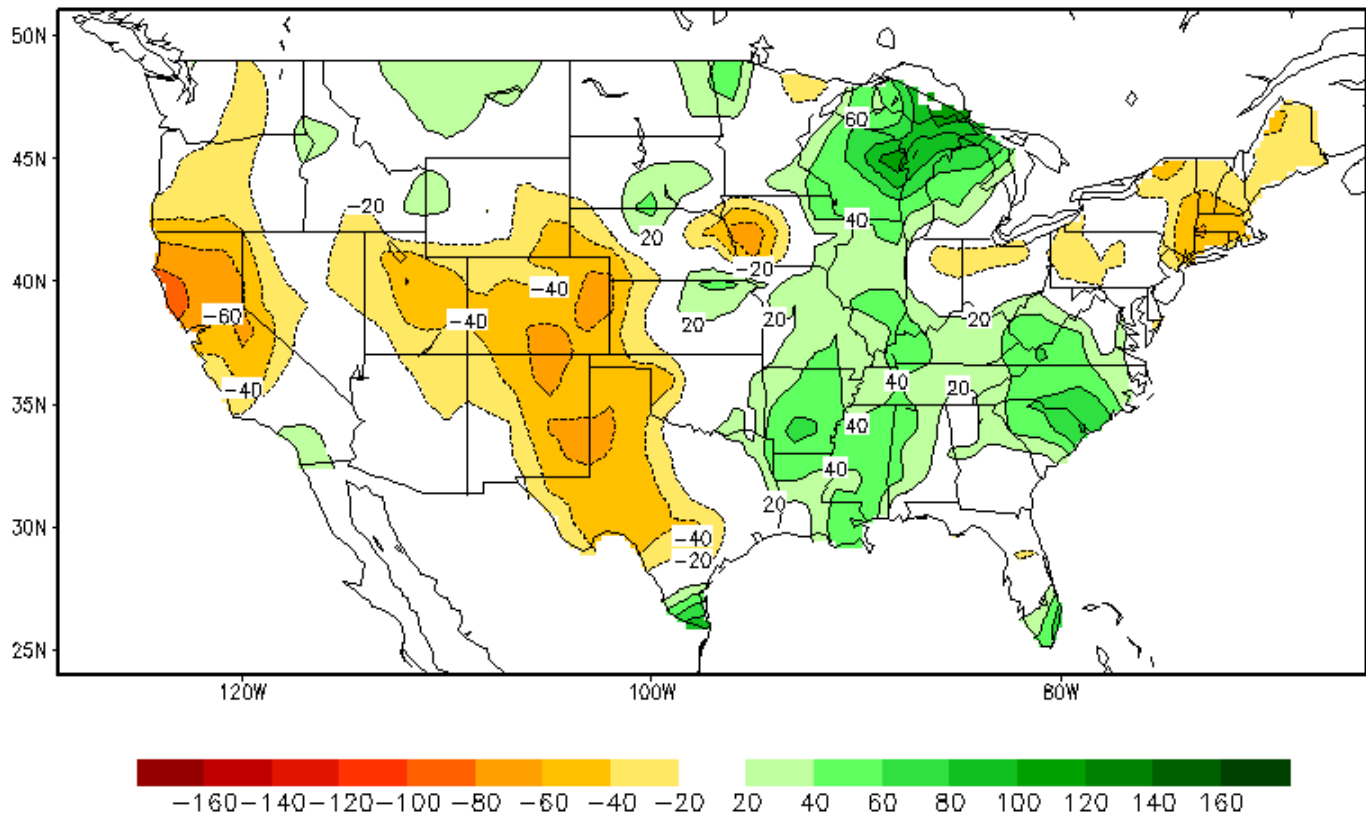


Figure 4: Climate Prediction Center monthly average soil moisture anomaly for July 2020