

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): October 2020
	DATE: November 2nd, 2020
	SIGNATURE: Jordan Wendt, 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

Another above-normal precipitation month for much of Upper Michigan, with river stages across the UP remaining above-normal, but there were no flooding concerns. The NWS office in Negaunee Township set a new record for most snowfall in October, but it was only the 9th wettest October on record in terms of total precipitation. A small snowpack remains in the lake-effect snowbelts, but should melt within the first week of November as above-normal temperatures are strongly favored to begin the month.

Location	Precipitation	% of normal	Snowfall
WFO Marquette	6.23"	162%	22.1"
Marquette City	5.74"	183%	4.7"
Quincy Hill	5.98"	M	12.1"
Ironwood	4.08"	102%	9.7"
Iron Mountain	M	M	M
Manistique	3.52"	101%	0.5"
Munising	5.84"	138%	4.2"
Stambaugh	3.41"	111%	7.9"

NOTE: Rainfall after 8am EST September 31st was counted in October stats for all but the WFO Marquette site due to the reporting structure of our cooperative observers.

Flooding Conditions

No river flooding concerns occurred during the month of October across Upper Michigan.

River Conditions

Most basin's streamflow across Upper Michigan remained above-normal with the exception of the Brule and Escanaba basins, which averaged much above-normal. (Figure 1).

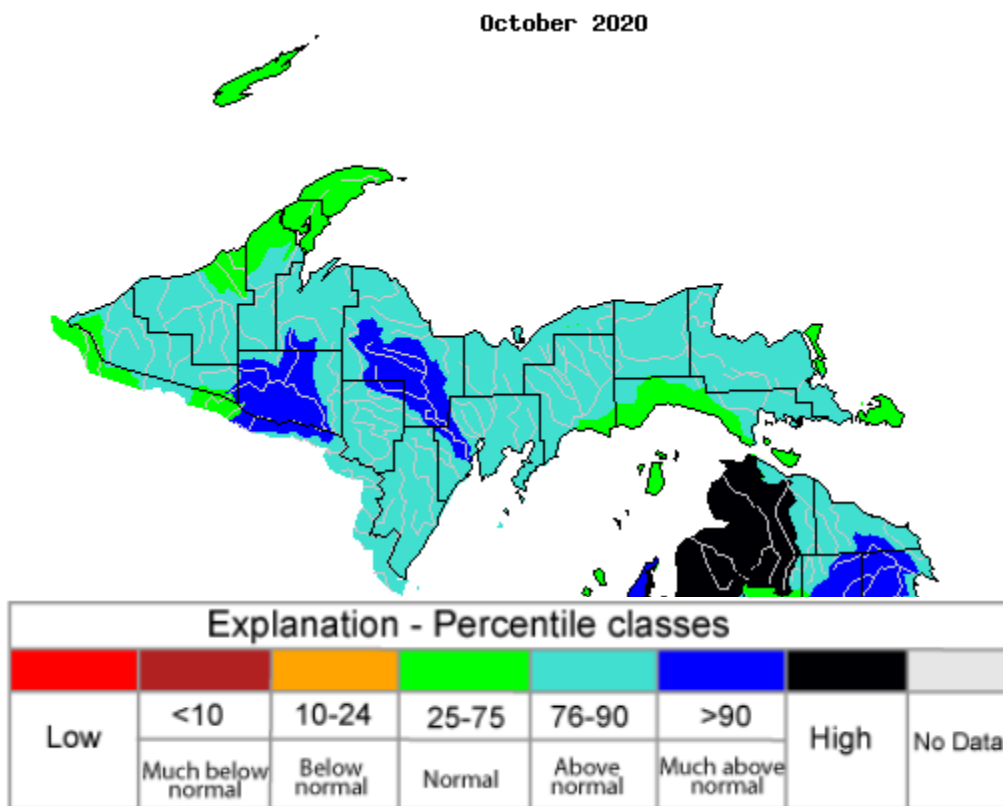


Figure 1: USGS monthly average streamflow in October 2020 across Upper Michigan

Snowpack Discussion

Just to get my feet wet with the snowpack discussions, much of the lake-effect snowbelt regions have a trace to around 4 inches of snow depth, with up to an inch of water equivalent...mainly in the highlands of Marquette and Baraga counties.

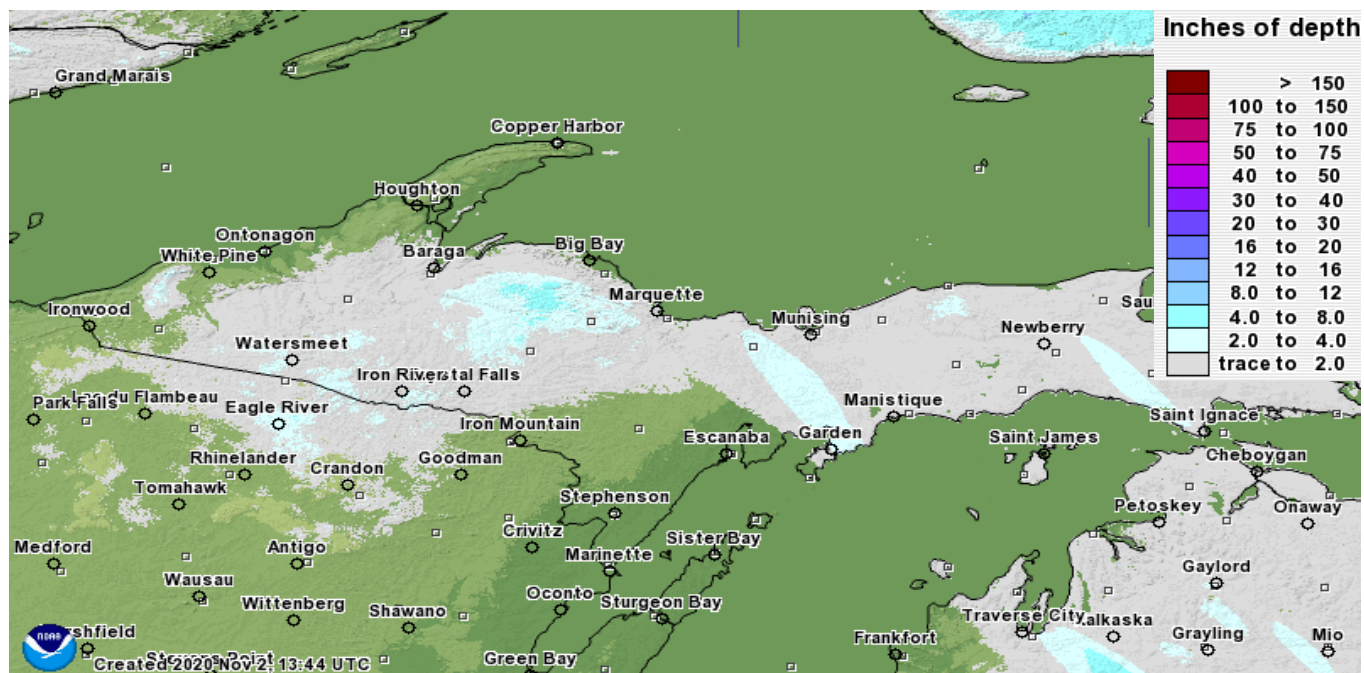


Figure 2: National Operational Hydrologic Remote Sensing Center's modeled snow depth

Drought Discussion

There were no areas of drought across Upper Michigan in October, or at this time. For the latest drought status, please go to <http://www.drought.gov>.

Media Links

None.

Hydro Products Issued

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

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

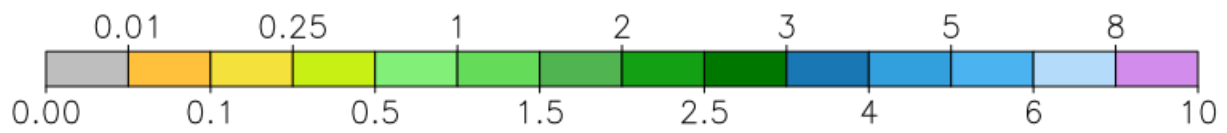
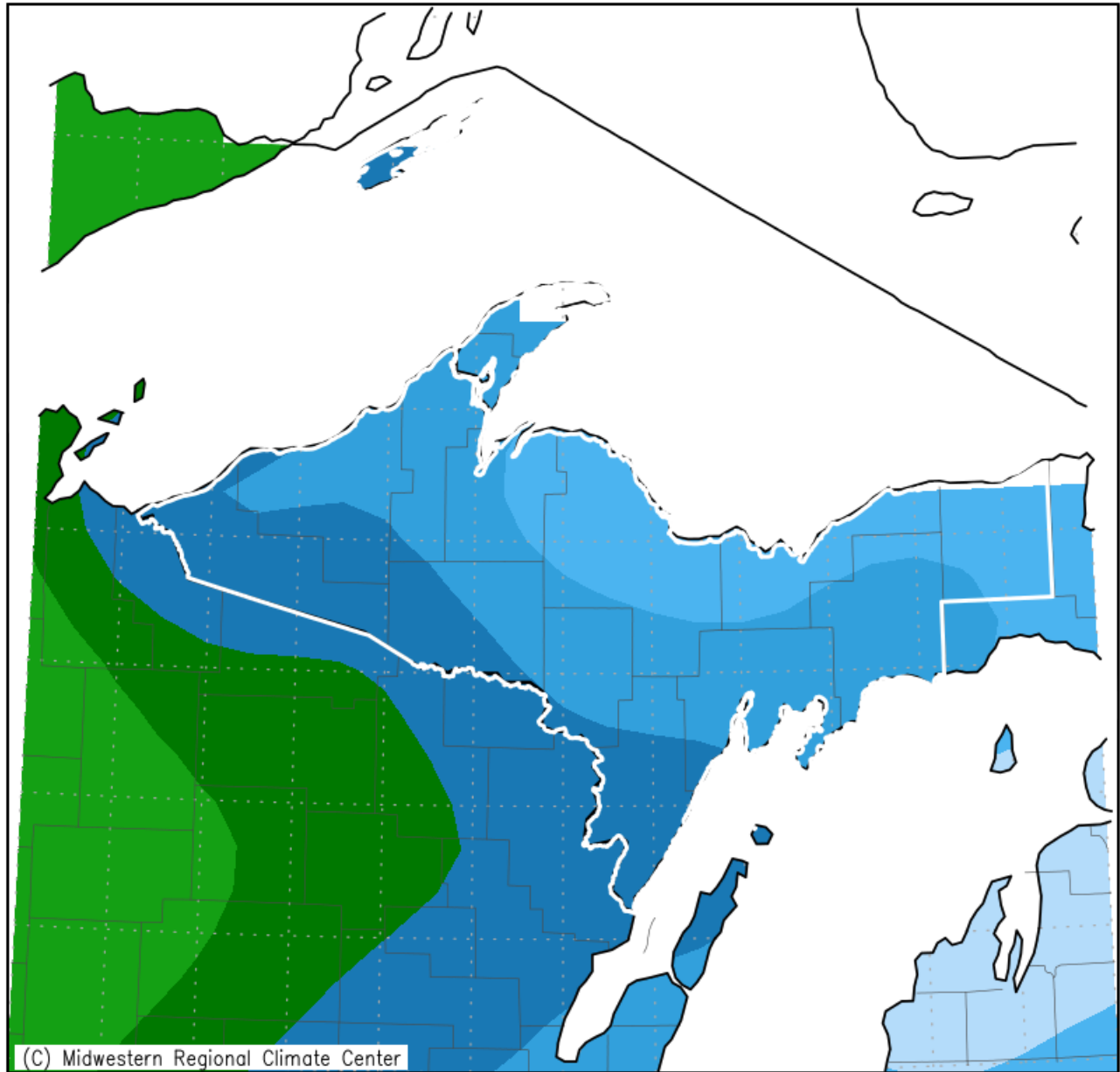
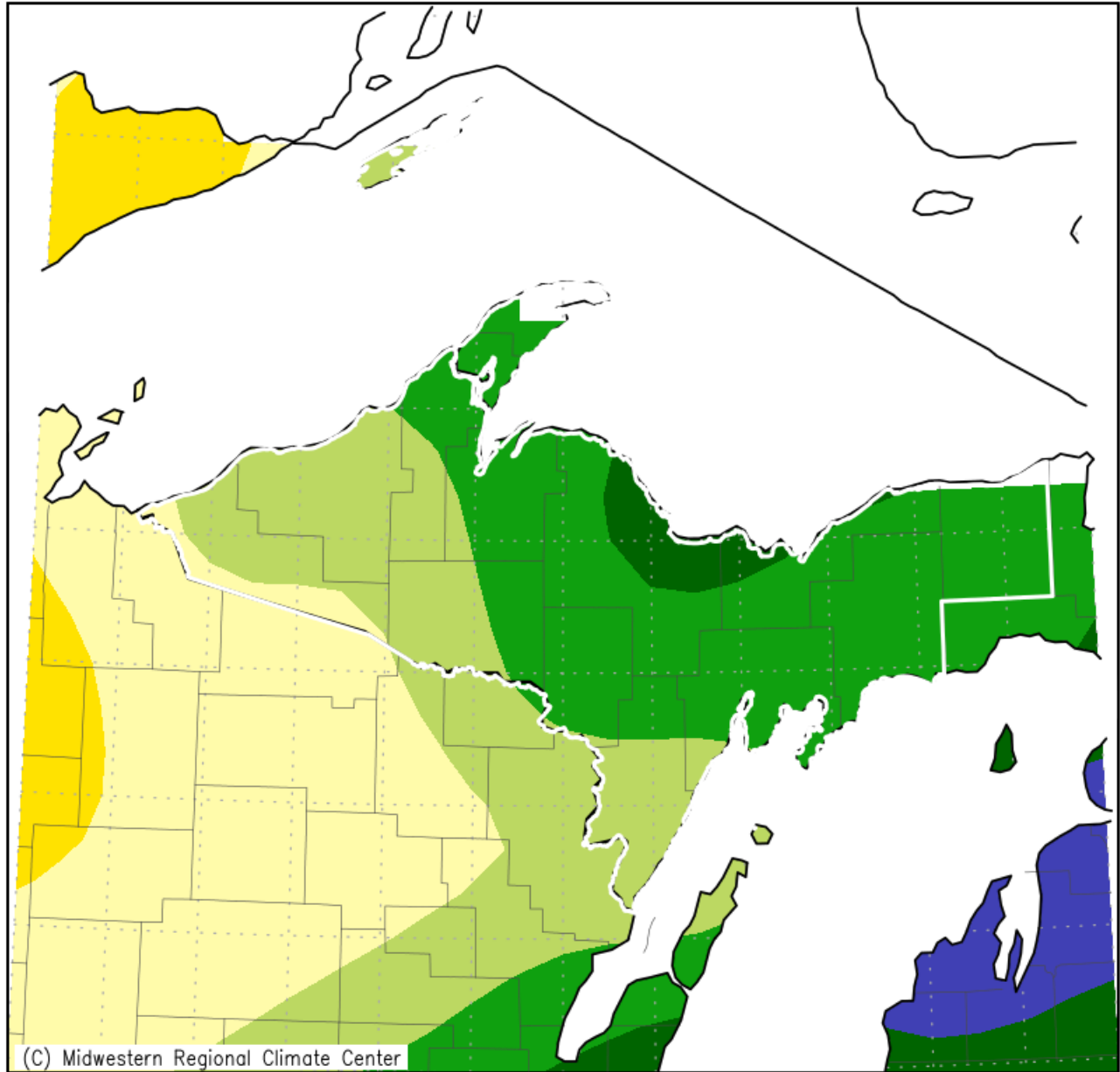


Figure 3: October 2020 Monthly Precipitation Totals.

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



Mean period is 1981–2010.

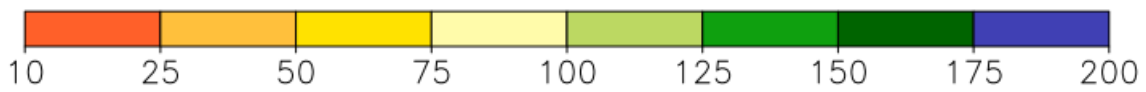


Figure 4. October 2020 Percent of Normal of Accumulated Precipitation

Calculated Soil Moisture Anomaly (mm) OCT, 2020

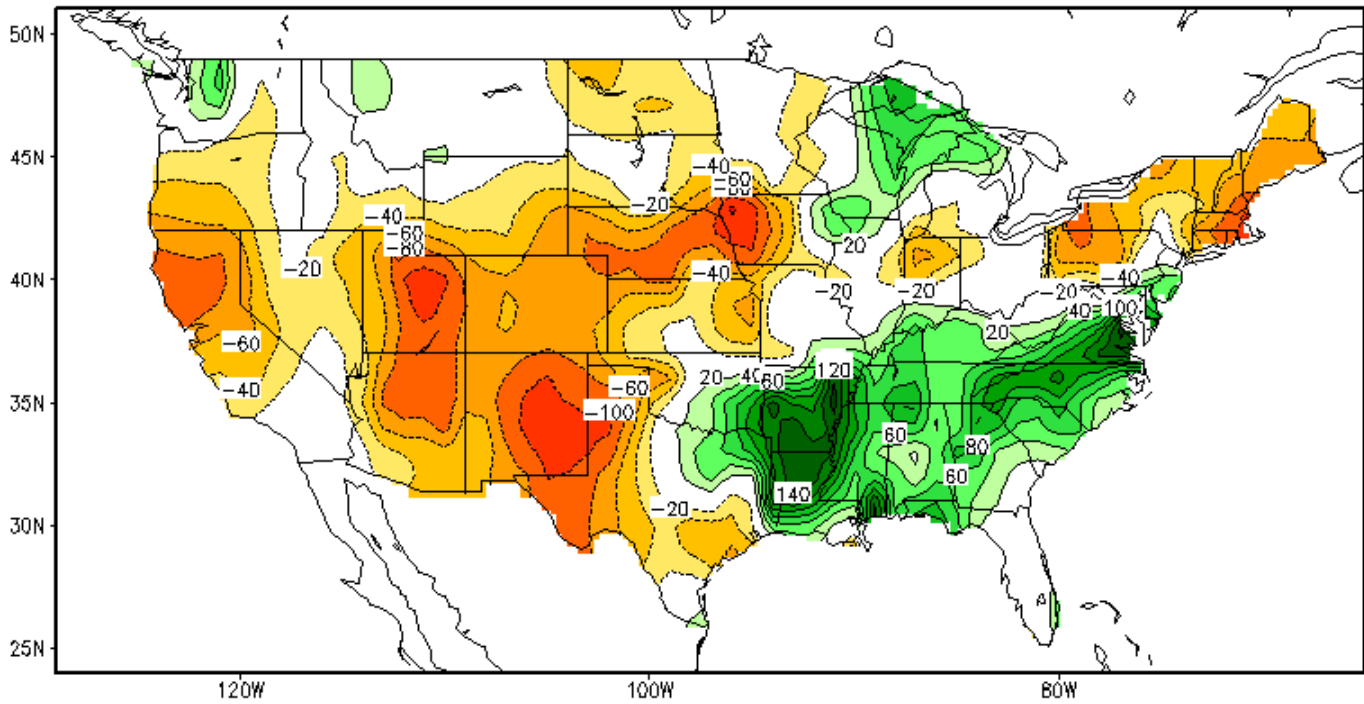


Figure 5: Climate Prediction Center's monthly average soil moisture anomaly for October 2020