**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	OFFIC	E:
Marc	uette,	ΜI

REPORT FOR (MONTH/YEAR):

April 2020

DATE: May 14th, 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).

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

## **April Summary**

Despite the above normal precipitation across the central and east, April was fairly typical. With the second half of April remaining below normal for temperatures, the fast start to melting in the first half of April slowed down...and then even added 18 inches of wet snow at the office. Melting resumed slowly after this snow storm, and then the east half of Upper Michigan received 0.50 to 1.00 inches of rain late in the month, which helped push a few rivers into action stage and one river into warning stage briefly. Soil moisture remained high through the month of April, but with the dry conditions to start May, there has been a little improvement already.

Location	Precipitation	% of normal	Snowfall
WFO Marquette	3.92"	130%	21.6"
Marquette City	2.89"	118%	11.3"
Quincy Hill	1.62"	M	13.3"
Ironwood	2.59"	98%	10.7"
Iron Mountain	3.39"	144%	8.2"
Manistique	2.80"	117%	T"
Munising	3.25"	148%	15.7"
Stambaugh	3.54"	158%	8.9"

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

# **April Flooding Conditions**

One river, ALSM4 or Sturgeon River nr Alston, reached flood stage late in the month from 1630EDT April 29<sup>th</sup> until 0845 EDT April 30<sup>th</sup>. During this time there were minimal impacts found and reported. A few roads downstream from this site became briefly inundated with a few inches of water of the road.

### **April River Conditions**

River levels across the NWS Marquette Hydrologic Service Area were above-normal across the central basins and slightly above normal across much of the remaining area.

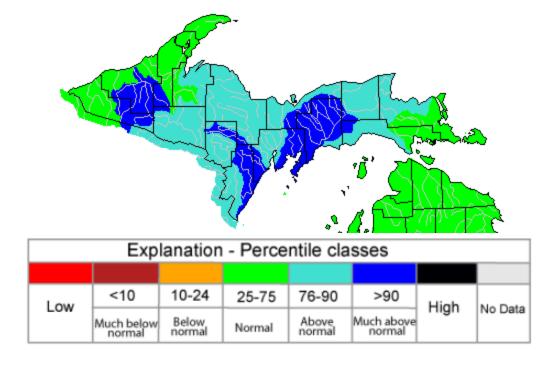


Figure 1: USGS monthly average streamflow in April 2020 across Upper Michigan

# **Snowpack Discussion**

Snowpack significantly decreased through the month of April, which is normal. This snowmelt was the primary factor in area rivers running above normal across the central portions of Upper Michigan.

### **Drought Discussion**

No drought conditions are depicted in the Upper Peninsula. For the latest drought status, please go to <a href="http://www.drought.gov">http://www.drought.gov</a>.

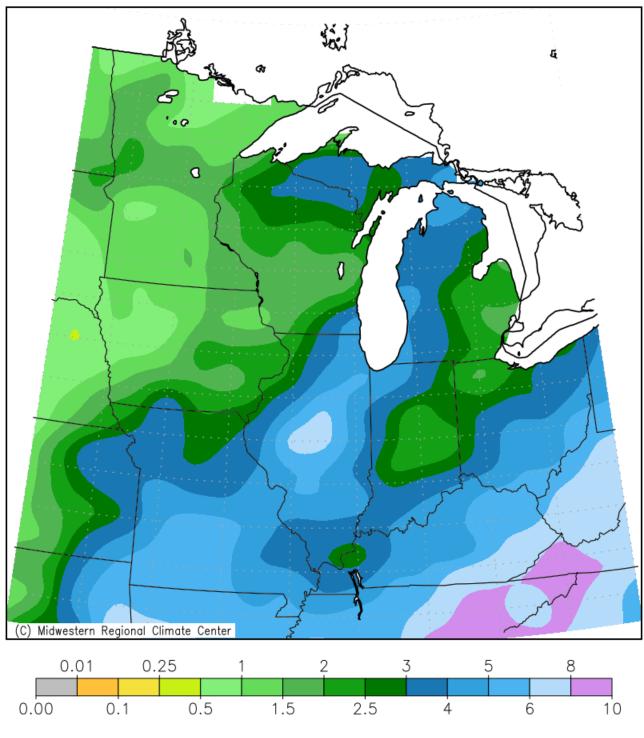
### **Media Links**

None.

### **April Products Issued**

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

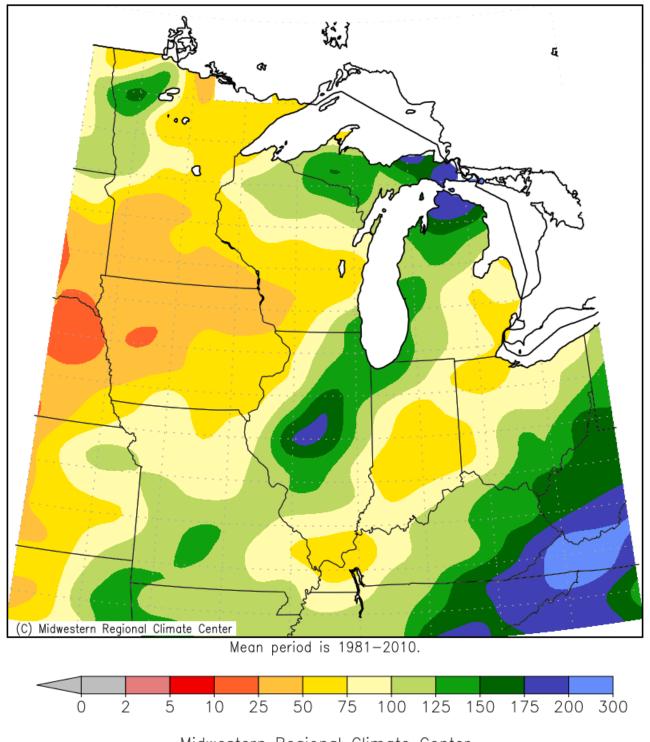
# Accumulated Precipitation (in) April 1, 2020 to April 30, 2020



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

Figure 2. April 2020 Monthly Precipitation Totals.

# Accumulated Precipitation: Percent of Mean April 1, 2020 to April 30, 2020



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

Figure 3. April 2020 Percent of Normal of Accumulated Precipitation

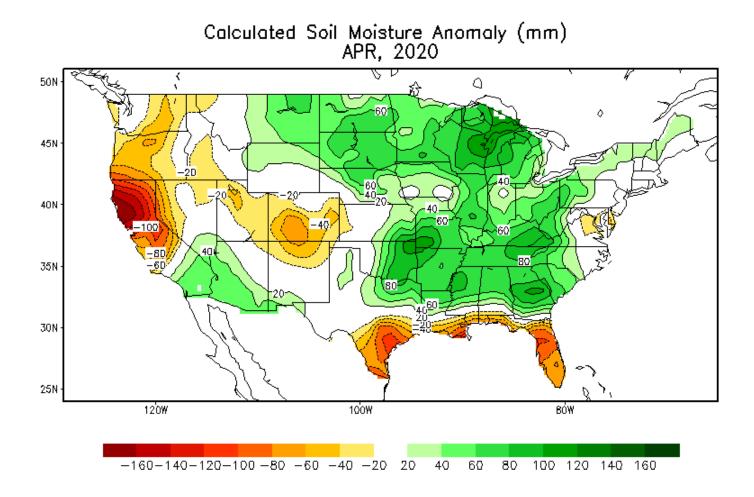


Figure 4: Climate Prediction Center monthly soil moisture anomaly for April 2020

# Calculated Soil Moisture Ranking Percentile APR, 2020 50N 45N 40N 35N 30N 120W 100W 80W

Figure 5: Climate Prediction Center monthly average soil moisture percentile for April 2020