

<b>NWS FORM E-5</b> U.S. DEPARTMENT OF COMMERCE NOAA, NATIONAL WEATHER SERVICE  <b>MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS</b>  TO: NATIONAL WEATHER SERVICE (W/OH12x1) HYDROMETEOROLOGICAL INFO CENTER 1325 EAST-WEST HIGHWAY, RM 7116 SILVER SPRING, MD 20910	HSA OFFICE: <b>Marquette, MI</b>
	REPORT FOR (MONTH / YEAR): <b>December 2016</b>
	DATE: <b>January 15, 2017</b>
	SIGNATURE: <b>Robin J. Turner, MIC</b> <b>Justin Titus, Meteorologist</b>
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.

**December Flooding**

No flooding was reported to the National Weather Service.

**December Precipitation**

December precipitation was much above normal over the Keweenaw Peninsula and eastern Upper Michigan due to nearly continuous lake effect snow. Elsewhere, precipitation was near normal.

Below is a chart of some of the larger cities in the Upper Peninsula, with monthly precipitation in inches, the amount of inches above or below normal for the month and any applicable record high or low rank.

Location	Precipitation	Above/Below	Rank	Snowfall	Above/Below	Rank
WFO Marquette	2.19	-0.38		42.0	-0.8	
Marquette City	2.01	0.04		22.4	-2.9	
Houghton Airport	5.29	3.40	8 <sup>th</sup>	74.8	21.9	
Ironwood	2.56	0.45		44.6	-1.7	
Iron Mountain	1.91	0.36		18.2	4.3	
Manistique	3.23	1.63		17.8	No Data	
Munising	5.15	1.40		53.1	11.9	
Newberry	2.47	No Data		28.9	No Data	

**Drought Discussion**

The January 3, 2017 release of the U.S. Drought Monitor did not indicate drought conditions across Upper Michigan. For the latest drought status, please go to <http://www.drought.gov>.

**December River Levels**

According to the United States Geological Survey, Upper Michigan December average streamflow generally was normal (25-75 percentile) in most drainage basins. The Paint River and Menominee River Basins levels were much above normal (>90 percentile) to near record high. The Sturgeon River Basin (in Delta County) was listed as above normal (76-90 percentile).

**December Products Issued**

- 31 – Hydrologic Summary
- 1 – Hydrologic Outlook