

<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>March 2014</b>
	DATE: <b>May 27, 2014</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.

**March Flooding**

No flooding was reported to the National Weather Service.

**March Precipitation**

Generally, March precipitation was near or above normal in west to northwest snowbelts. Other areas were generally near or below 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	1.96	-1.07		30.0	-4.9	
Marquette City	1.67	-0.33		18.2	-3.5	
Houghton Airport	No Data			No Data		
Ironwood	1.94	-0.04		26.4	1.5	
Iron Mountain	0.93	-0.72		9.0	-1.6	
Manistique	1.29	-0.50		11.0	No Data	
Munising	2.33	0.24		25.5	6.7	
Newberry	1.25	No Data		11.9	No Data	
Ontonagon 6SE	1.86	0.13		13.5	-5.4	

Other monthly precipitation totals from coop observers:

Location	Precipitation (inches)	Snowfall (inches)
Alberta (Baraga County)	1.11	M
Amasa (Iron County)	1.29	14.6
Atlantic Mine (Houghton County)	1.55	23.5
Baraga 7NW (Baraga County)	1.69	22.5
Big Bay (Marquette County)	1.93	22.2
Chatham (Alger County)	1.76	20.7
Clarksburg (Marquette County)	1.66	21.2
Cooks (Schoolcraft County)	1.72	23.8
Copper Harbor (Keweenaw County)	1.23	19.0
Garden Corners (Delta County)	1.56	16.9
Gladstone (Delta County)	2.52	23.6
Greenland 6N (Ontonagon County)	1.68	18.5
Gwinn (Marquette County)	1.35	15.4
Harvey (Marquette County)	2.11	17.9
Herman (Baraga County)	1.79	35.4
Jacobsville (Houghton County)	1.46	16.1
Mohawk (Keweenaw County)	1.31	M
Menominee (Menominee County)	1.08	11.4
Norway (Dickinson County)	1.27	12.3
Paulding (Ontonagon County)	1.16	20.6
Stambaugh (Iron County)	1.17	11.9
Watton (Baraga County)	1.82	17.1

**Drought Discussion**

The March 25, 2014 release of the U.S. Drought Monitor continued to indicate no drought conditions across Upper Michigan. For the latest drought status, please go to <http://www.crh.noaa.gov/mqt/?n=drought>.

**March Temperatures**

Below is a table of some of the larger cities in the Upper Peninsula, with average monthly temperature and number of degrees above or below normal for the month, and the rank of an all-time warmest or coldest month, where applicable.

Location	Temperature (degrees)	Above/Below	Rank
WFO Marquette	15.6	-8.6	1 <sup>st</sup>
Marquette City	17.5	-11.5	4 <sup>th</sup>
Houghton Airport	15.8	-9.4	4 <sup>th</sup>
Ironwood	14.3	-10.8	1 <sup>st</sup>
Iron Mountain	17.4	-10.5	2 <sup>nd</sup>
Manistique	15.4	-11.7	1 <sup>st</sup>
Munising	14.6	-13.1	1 <sup>st</sup>
Newberry	16.2	-8.7	3 <sup>rd</sup>
Ontonagon 6SE	19.9	-9.0	1 <sup>st</sup>

## **March River Levels**

According to the United States Geological Survey, March average streamflow across Upper Michigan was below normal (10-24 percentile) to well below normal (<10 percentile) in Lake Superior drainage basins. Lake Michigan drainage basin streamflow was normal (25-75 percentile) across much of Upper Michigan.

## **March Products Issued**

31 Hydrologic Summary (ARBRVAMQT)

1 Hydrologic Outlook (ARBESFMQT)

CC:

Robin J. Turner - WFO MQT MIC

Justin Titus – WFO MQT HPM

Mark Walton - WFO GRR SH