

<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>October 2012</b>
	DATE: <b>November 5, 2012</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).	



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

**October Flooding**

No flooding was reported to the National Weather Service (NWS).

**October Precipitation**

October precipitation was generally above normal across much of Upper Michigan, with the exception of far western Upper Michigan which was near or slightly below normal. The extra precipitation was due partially to a slow moving cold front late in the month that dropped 2-3 inches of precipitation over a 2 day period. The highest precipitation amounts were observed near Lake Superior east of the Keweenaw Peninsula where northwest winds brought additional lake effect/enhanced precipitation. Snowfall was generally below normal, except over the higher terrain of Baraga and Marquette Counties where snow was near normal for October.

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	5.20	1.41	9 <sup>th</sup>	6.1	0.1	
Marquette City	4.54	1.42		0.0	-0.9	
Houghton Airport	4.03	1.00		0.8	-3.8	
Ironwood	3.73	-0.20		1.8	-4.3	
Iron Mountain	M	M		M	M	
Manistique	4.41	1.11		0.0	-0.2	
Munising	6.06	1.85		0.0	-1.6	
Newberry	5.40	2.17	7 <sup>th</sup>	0.0	-0.5	
Ontonagon 6SE	4.97	1.47	9 <sup>th</sup>	0.0	-2.3	

Other monthly precipitation totals from coop observers:

Location	Precipitation (inches)	Snowfall (inches)
Amasa (Iron County)	2.37	0.2
Atlantic Mine (Houghton County)	4.48	3.0
Baraga 7NW (Baraga County)	3.91	T
Bergland Dam (Ontonagon County)	4.63	2.5
Big Bay (Marquette County)	3.43	0.4
Big Bay 9SW (Marquette County)	3.14	6.8
Chatham (Alger County)	5.55	1.0
Clarksburg (Marquette County)	4.24	5.5
Cooks (Schoolcraft County)	M	M
Copper Harbor (Keweenaw County)	4.40	T
Garden Corners (Delta County)	4.30	T
Gladstone (Delta County)	4.67	M
Greenland 6N (Ontonagon County)	4.51	T
Gwinn (Marquette County)	4.61	4.4
Harvey (Marquette County)	3.78	0.0
Herman (Baraga County)	5.40	13.8
Ishpeming 7NNE (Marquette County)	4.73	8.5
Jacobsville (Houghton County)	4.55	0.1
Mohawk (Keweenaw County)	4.46	0.8
Menominee (Menominee County)	3.58	M
Norway (Dickinson County)	3.63	0.1
Stambaugh (Iron County)	2.99	0.8
Twin Lakes (Houghton County)	4.66	0.8
Watersmeet (Gogebic County)	4.93	0.2
Watton (Baraga County)	3.93	3.1

**Drought Discussion**

According to the October 30th, 2012 release of the U.S. Drought Monitor, most areas along the Wisconsin Border were classified under Abnormally Dry (D0) drought. Elsewhere, no drought was indicated. For the latest drought status, please go to <http://www.crh.noaa.gov/mqt/?n=drought>.

## **October 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	42.6	-0.7	
Marquette City	47.4	0.2	
Houghton Airport	42.7	-1.3	
Ironwood	41.8	-1.6	
Iron Mountain	M	M	
Manistique	44.9	-0.6	
Munising	45.0	-0.8	
Ontonagon	44.9	-1.8	
Newberry	44.6	-0.2	

## **October River Levels**

According to the United States Geological Survey, October streamflow was below normal (10-24 percentile) to much below normal (<10 percentile) in most Lake Michigan drainage basins across Upper Michigan. Streamflow was listed as normal (25-75 percentile) in most Lake Superior drainage basins.

## **October Products Issued**

Flood Warnings (FLW): 0  
Flood Advisories (FLS): 0  
River Statements (RVS): 1  
Flash Flood Watches (FFA): 0  
Flash Flood Warnings (FFW): 0  
Flash Flood Statements (FFS): 0

CC:  
Robin J. Turner - WFO MQT MIC  
Justin Titus – WFO MQT HPM  
Mark Walton - WFO GRR SH