

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 2013
	DATE: December 5, 2013
	SIGNATURE: Robin J. Turner, MIC Justin Titus, Meteorologist
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.

October Flooding

No flooding was reported to the National Weather Service.

October Precipitation

October liquid equivalent precipitation was generally near or above normal across Upper Michigan, with the exceptions of Dickinson and southern Marquette Counties as well as areas near Munising. Snowfall was generally below normal as few stronger storm systems moved through the area. One area that stood out for near or greater than normal snowfall was over the higher terrain from near Ontonagon to Atlantic Mine.

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	4.38	0.54		3.5	-2.5	
Marquette City	3.69	0.56		No Data		
Houghton Airport	No Data			No Data		
Ironwood	5.34	1.36		5.0	-1.6	
Iron Mountain	2.64	-0.50		Trace	-0.3	
Manistique	4.01	0.53		T	No Data	
Munising	2.99	-1.24		T	-1.4	
Newberry	3.02	No Data		3.9	No Data	
Ontonagon 6SE	4.40	0.90		5.0	2.5	6 th

Other monthly precipitation totals from coop observers:

Location	Precipitation (inches)	Snowfall (inches)
Alberta (Baraga County)	4.85	3.1
Amasa (Iron County)	3.11	M
Atlantic Mine (Houghton County)	3.87	8.0
Baraga 7NW (Baraga County)	3.36	T
Big Bay (Marquette County)	3.92	4.1
Chatham (Alger County)	3.06	2.9
Clarksburg (Marquette County)	3.22	2.2
Cooks (Schoolcraft County)	3.96	1.5
Copper Harbor (Keweenaw County)	2.31	T
Garden Corners (Delta County)	4.31	T
Gladstone (Delta County)	2.93	M
Greenland 6N (Ontonagon County)	3.97	3.6
Gwinn (Marquette County)	1.95	0.1
Harvey (Marquette County)	3.33	T
Herman (Baraga County)	4.31	7.0
Jacobsville (Houghton County)	3.09	5.2
Mohawk (Keweenaw County)	2.72	2.0
Menominee (Menominee County)	2.95	M
Norway (Dickinson County)	2.44	0.3
Paulding (Ontonagon County)	M	M
Stambaugh (Iron County)	2.98	1.5
Twin Lakes (Houghton County)	M	M
Watton (Baraga County)	3.47	3.4

Drought Discussion

The October 29, 2013 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>.

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	44.2	1.0	
Marquette City	48.6	1.3	
Houghton Airport	44.8	1.4	
Ironwood	44.1	0.7	
Iron Mountain	46.0	1.0	
Manistique	46.4	0.9	
Munising	45.6	0.0	
Newberry	45.9	No Data	
Ontonagon 6SE	46.8	0.0	

October River Levels

According to the United States Geological Survey, October average streamflow was near normal (25-75 percentile).

October Products Issued

0 Areal Flash Flood Watch (ARBFFAMQT)
0 Areal Flood Watches (ARBFFAMQT)
0 Areal Flood Warnings (ARBFLWMQT)
0 Areal Flood Advisories (ARBFLSMQT)
0 Areal Flood Statements (ARBFLSMQT)
0 River Flood Watches (ARBFFAMQT)
0 River Flood Warnings (ARBFLWMQT)
0 River Flood Advisories (ARBFLSMQT)
0 River Flood Statements (ARBFLSMQT)
0 Hydrologic Statements (ARBRVSMQT)
0 Hydrologic Outlook (ARBESFMQT)

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