

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 2011
	DATE: November 29, 2011
	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

Most locations across Upper Michigan saw near or below normal precipitation in October. Generally, north-northwest wind lake effect belts got the most precipitation. Specifically, areas east of Munising, over the northern Huron Mountains and near Ironwood were near normal for precipitation.

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

Location	Precipitation	Above/Below	Rank	Snowfall	Above/Below	Rank
WFO Marquette	1.88	-1.32		T	-5.2	
Marquette City	1.64	-1.25		0.0	-2.3	
Houghton Airport	2.25	-0.55		0.0	-2.9	
Ironwood	3.33	0.31		0.0	-4.7	
Iron Mountain	1.47	-0.97		0.0	-0.6	
Manistique	3.13	0.27		0.0	-0.7	
Munising	3.71	0.08		0.0	-2.7	
Ontonagon	3.05	-0.36		0.0	-2.3	

Other monthly precipitation totals from coop observers:

Location	Precipitation (inches)	Snowfall (inches)
Amasa (Iron County)	M	M
Atlantic Mine (Houghton County)	3.08	0.0
Baraga (Baraga County)	2.11	0.0
Bergland Dam (Ontonagon County)	4.04	0.0
Big Bay (Marquette County)	M	M
Chatham (Alger County)	2.75	0.0
Clarksburg (Marquette County)	2.18	T
Cooks (Schoolcraft County)	2.84	T
Copper Harbor (Keweenaw County)	2.29	0.0
Garden Corners (Delta County)	2.67	0.0
Gladstone (Delta County)	2.41	0.0
Greenland (Ontonagon County)	2.75	0.0
Gwinn (Marquette County)	1.87	0.0
Harvey (Marquette County)	1.72	0.0
Herman (Baraga County)	3.82	0.2
Ishpeming (Marquette County)	2.97	M
Jacobsville (Houghton County)	2.26	T
Mohawk (Keweenaw County)	3.32	0.0
Menominee (Menominee County)	1.87	0.0
Norway (Dickinson County)	1.39	T
Painesdale (Houghton County)	3.97	0.0
Rapid River (Delta County)	2.28	T
Stambaugh (Iron County)	2.27	0.0
Twin Lakes (Houghton County)	3.66	0.0
Two Heart (Luce County)	4.25	T
Watersmeet (Gogebic County)	2.33	0.0
Watton (Baraga County)	2.51	0.0

Drought Discussion

According to the November 1st, 2011 release of the U.S. Drought Monitor, the Keweenaw Peninsula and northern Huron Mountains saw some drought improvement, and was classified under Moderate (D1) Drought. Otherwise, areas roughly west of a line from Munising to Iron Mountain, were classified as Abnormally Dry (D0). East of this line, no drought was indicated by the Drought Monitor.

For the latest drought status, please go to <http://www.drought.unl.edu/dm/monitor.html>.

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 coldest month, where applicable.

Location	Temperature (degrees)	Above/Below	Rank
WFO Marquette	47.3	3.7	7 th
Marquette City	51.5	4.2	8 th
Houghton Airport	48.5	3.9	
Ironwood	48.3	3.0	
Iron Mountain	48.3	2.0	
Manistique	46.8	0.2	
Munising	48.5	2.2	
Ontonagon	51.2	4.5	2 nd

October River Levels

According to the United States Geological Survey, October streamflow was below to much below normal over roughly central and western Upper Michigan, and near normal over eastern Upper Michigan.

October Products Issued

Flood Warnings (FLW): 0
Flood Advisories (FLS): 0
River Statements (RVS): 0
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