

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): November 2012
	DATE: December 13, 2012
	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).	



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

November Flooding

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

November Precipitation

November precipitation was below normal, except in locations typically favored by west to northwest wind lake effect snows (northwestern and northeastern Upper Michigan) where precipitation and snowfall was near or above 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	2.05	-1.03		14.8	-8.8	
Marquette City	1.63	-0.91		7.2	-2.9	
Houghton Airport	2.50	0.26		M	M	M
Ironwood	2.41	-0.18		21.4	-2.7	
Iron Mountain	1.36	-0.49		2.2	-3.3	
Manistique	0.71	-1.59	4 th	4.0	-0.3	
Munising	3.55	0.41		21.4	8.6	
Newberry	1.75	-0.37		10.7	1.0	
Ontonagon 6SE	2.57	-0.07		21.0	-1.0	

Other monthly precipitation totals from coop observers:

Location	Precipitation (inches)	Snowfall (inches)
Amasa (Iron County)	1.45	7.5
Atlantic Mine (Houghton County)	3.46	27.0
Baraga 7NW (Baraga County)	2.83	20.2
Bergland Dam (Ontonagon County)	3.56	24.5
Big Bay (Marquette County)	2.11	17.0
Big Bay 9SW (Marquette County)	1.88	11.9
Chatham (Alger County)	1.33	8.5
Clarksburg (Marquette County)	1.68	12.8
Cooks (Schoolcraft County)	1.96	8.8
Copper Harbor (Keweenaw County)	2.66	12.1
Garden Corners (Delta County)	1.92	7.2
Gladstone (Delta County)	1.28	1.7
Greenland 6N (Ontonagon County)	2.98	19.2
Gwinn (Marquette County)	1.36	3.8
Harvey (Marquette County)	1.66	4.4
Herman (Baraga County)	2.78	23.0
Ishpeming 7NNE (Marquette County)	M	M
Jacobsville (Houghton County)	2.50	14.0
Mohawk (Keweenaw County)	1.96	14.0
Menominee (Menominee County)	0.88	2.5
Norway (Dickinson County)	1.09	2.5
Stambaugh (Iron County)	1.33	7.0
Twin Lakes (Houghton County)	4.34	35.2
Watersmeet (Gogebic County)	1.51	10.6
Watton (Baraga County)	1.72	15.0

Drought Discussion

According to the December 11th, 2012 release of the U.S. Drought Monitor, most areas along the Wisconsin Border were classified under Abnormally Dry (D0) drought, with areas of Iron and Dickinson Counties under Moderate (D1) drought. Elsewhere, no drought was indicated. For the latest drought status, please go to <http://www.crh.noaa.gov/mqt/?n=drought>.

November 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	32.6	1.8	
Marquette City	36.5	1.2	
Houghton Airport	32.5	0.5	
Ironwood	31.0	1.0	
Iron Mountain	33.0	0.7	
Manistique	35.0	0.4	
Munising	34.3	-0.2	
Ontonagon	34.5	0.6	
Newberry	34.0	0.8	

November River Levels

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

November 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:
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