

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): December 2011
	DATE: January 8, 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.

December Flooding

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

December Precipitation

Generally, precipitation was below normal across Upper Michigan for December. Areas that received the most precipitation were locations favored by northwest winds off Lake Superior, where some locations even saw above normal precipitation. The lack of snow, and generally below normal precipitation, was due to few storm systems moving past the area as a result of large scale flow patterns. Well above normal temperatures in December worked to diminish or eliminate any existing snowpack, which when combined with below normal snowfall made for well below normal snow depths across much of Upper Michigan.

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	1.89	-0.64		24.7	-11.9	
Marquette City	1.58	-0.40		5.6	-18.6	1 st
Houghton Airport	1.52	-1.42		9.1	-34.3	4 th
Ironwood	1.68	-0.48		22.4	-10.1	
Iron Mountain	1.46	0.06		7.2	-5.3	
Manistique	1.80	0.21		5.0	-11.2	
Munising	2.59	-0.34		10.4	-22.1	3 rd
Ontonagon	2.10	-0.88	8 th	35.0	-18.2	8 th

Other monthly precipitation totals from coop observers:

Location	Precipitation (inches)	Snowfall (inches)
Amasa (Iron County)	1.79	8.0
Atlantic Mine (Houghton County)	1.26	35.0
Baraga (Baraga County)	1.26	13.7
Bergland Dam (Ontonagon County)	3.57	34.7
Big Bay (Marquette County)	1.68	9.1
Big Bay 9SW (Marquette County)	1.52	12.8
Chatham (Alger County)	1.51	11.9
Clarksburg (Marquette County)	1.44	15.2
Cooks (Schoolcraft County)	2.43	7.3
Copper Harbor (Keweenaw County)	1.54	8.4
Garden Corners (Delta County)	2.23	7.1
Gladstone (Delta County)	2.04	5.4
Greenland (Ontonagon County)	2.05	26.2
Gwinn (Marquette County)	1.44	9.5
Harvey (Marquette County)	1.53	2.2
Herman (Baraga County)	2.12	34.6
Ishpeming 7NNE (Marquette County)	1.75	23.7
Jacobsville (Houghton County)	1.66	20.3
Mohawk (Keweenaw County)	2.49	27.4
Menominee (Menominee County)	0.85	1.3
Norway (Dickinson County)	1.44	10.5
Painesdale (Houghton County)	2.28	39.0
Rapid River (Delta County)	M	M
Stambaugh (Iron County)	1.23	9.0
Twin Lakes (Houghton County)	2.60	41.9
Two Heart (Luce County)	M	M
Watersmeet (Gogebic County)	1.43	5.7
Watton (Baraga County)	1.46	16.6

Drought Discussion

According to the January 3rd, 2012 release of the U.S. Drought Monitor, the Keweenaw Peninsula and northern Huron Mountains were 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.

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

December 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	22.4	3.9	
Marquette City	27.3	3.6	
Houghton Airport	24.4	4.1	
Ironwood	22.3	5.2	
Iron Mountain	23.7	3.9	
Manistique	27.1	4.0	
Munising	25.9	3.1	
Ontonagon	26.9	5.2	6 th

December River Levels

According to the United States Geological Survey, December streamflow was below normal in Lake Superior drainage basins, and near normal in Lake Michigan drainage basins.

December 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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