

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): September 2011
	DATE: October 15, 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).	



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

September Flooding

The only flooding reported to the National Weather Service in September was minor street flooding (of unknown extent) in the city of Houghton related to heavy rainfall from thunderstorms.

September Precipitation

A strong low pressure system that brought high winds to the area in late September also produced a period of moderate to heavy lake enhanced rainfall over north central and eastern Upper Michigan. Another lake effect rain event occurred toward the end of September and produced lesser amounts of 0.5 to 1.5 inches of rain. North winds from this event focused rain over most areas of Upper Michigan near Lake Superior. North central and eastern Upper Michigan generally saw 100 to near 300 percent of normal precipitation. Inland areas closer to the Wisconsin border and over the Keweenaw Peninsula were generally near or below normal at 50 to 100 percent of normal 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	Normal	Above/Below	Rank
WFO Marquette	6.75	3.96	2.79	5 th
Marquette City	4.80	3.63	1.17	
Houghton Airport	2.27	3.55	-1.28	
Ironwood	3.68	3.63	0.05	
Iron Mountain	3.25	3.35	-0.10	
Manistique	4.16	3.45	0.71	
Munising	5.22	3.79	1.43	
Newberry	4.57	3.41	1.16	
Ontonagon	3.97	3.26	0.71	

Other monthly precipitation totals from coop observers:

Location	Precipitation (inches)
Amasa (Iron County)	2.25
Atlantic Mine (Houghton County)	3.10
Baraga (Baraga County)	2.62
Bergland Dam (Ontonagon County)	3.57
Big Bay (Marquette County)	5.73
Chatham (Alger County)	5.26
Clarksburg (Marquette County)	5.10
Cooks (Schoolcraft County)	3.53
Copper Harbor (Keweenaw County)	4.91
Garden Corners (Delta County)	3.59
Gladstone (Delta County)	3.41
Greenland (Ontonagon County)	4.75
Gwinn (Marquette County)	4.40
Harvey (Marquette County)	4.41
Herman (Baraga County)	5.55
Ishpeming (Marquette County)	5.68
Jacobsville (Houghton County)	2.92
Marquette West (Marquette County)	M
Mohawk (Keweenaw County)	3.31
Menominee (Menominee County)	3.07
Norway (Dickinson County)	3.23
Painesdale (Houghton County)	3.04
Rapid River (Delta County)	2.92
Stambaugh (Iron County)	2.51
Twin Lakes (Houghton County)	5.25
Two Heart (Luce County)	3.98
Watersmeet (Gogebic County)	2.95
Watton (Baraga County)	3.52

We Energies Rain Gauges (inches)*

Crystal Falls (Iron County)	3.60
Witch Lake (Marquette County)	3.10
Iron River (Iron County)	2.39
Covington (Baraga County)	3.95

* This data has not been quality controlled by the National Weather Service.

Drought Discussion

According to the latest release of the U.S. Drought Monitor, Keweenaw County saw increased drought, and was classified under Severe (D2) Drought. Northern Baraga County, northern Houghton County and northern Marquette County were classified in Moderate (D1) Drought. Areas roughly west of a line from Munising to Norway, and west of Wakefield, were classified as Abnormally Dry (D0).

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

September 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	55.2	-0.3	
Marquette City	59.0	0.2	
Houghton Airport	56.3	0.4	
Ironwood	55.1	-0.5	
Iron Mountain	56.9	-0.7	
Manistique	55.7	-1.4	
Munising	56.3	-1.1	
Newberry	55.1	-1.4	
Ontonagon	58.0	-0.2	

September River Levels

According to the USGS, September streamflow was below to much below normal in the Lake Superior and Menominee drainage basins, and near normal in Lake Michigan drainage basins.

September Products Issued

Flood Warnings (FLW): 0
Flood Advisories (FLS): 2
River Statements (RVS): 0
Flash Flood Watches (FFA): 0
Flash Flood Warnings (FFW): 0
Flash Flood Statements (FFS): 0

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