

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): March 2011
	DATE: April 13, 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.

March Flooding

No reports of flooding were received by the National Weather Service (NWS).

March Precipitation

March precipitation was below to well below normal in most locations. The lowest precipitation deficits existed near the Wisconsin border where a couple of storm systems dropped higher precipitation amounts.

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	1.33	-1.45		17.4	-11.5	
Marquette City	0.92	-0.75		10.5	-0.2	
Houghton Airport	0.63	-1.20		8.5	-10.2	
Ironwood	1.17	-0.90		8.5	-11.7	
Iron Mountain	1.36	-0.25		11.5	1.4	
Manistique	0.92	-0.75		10.5	-0.2	
Munising	1.43	-0.58		11.9	-5.2	
Newberry	1.57	-0.41		9.9	-3.5	
Ontonagon	1.37	-0.33		13.0	-5.8	

Other monthly precipitation totals from coop observers:

Location	Precipitation	Snowfall
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	(inches)	(inches)
Ahmeek (Keweenaw County)	0.65	6.2
Amasa (Iron County)	1.22	8.5
Atlantic Mine (Houghton County)	1.08	13.0
Baraga (Baraga County)	0.67	4.4
Bark River (Delta County)	M	M
Bergland Dam (Ontonagon County)	0.96	7.5
Big Bay (Marquette County)	1.33	11.6
Chatham (Alger County)	1.06	10.2
Clarksburg (Marquette County)	0.94	11.1
Cooks (Schoolcraft County)	1.33	12.9
Copper Harbor (Keweenaw County)	0.58	5.7
Cornell (Delta County)	M	M
Daggett (Menominee County)	M	M
Garden Corners (Delta County)	0.91	6.9
Gladstone (Delta County)	1.37	9.3
Greenland (Ontonagon County)	0.75	4.7
Gwinn (Marquette County)	1.55	12.9
Harvey (Marquette County)	0.60	6.2
Herman (Baraga County)	1.70	19.2
Ishpeming (Marquette County)	1.12	M
Jacobsville (Houghton County)	0.87	5.3
Laurium (Houghton County)	0.59	6.5
Marquette West (Marquette County)	1.14	10.1
Mohawk (Keweenaw County)	0.78	8.5
Menominee (Menominee County)	2.31	22.1
Norway (Dickinson County)	1.34	12.9
Painesdale (Houghton County)	0.57	9.0
Rapid River (Delta County)	M	M
Stambaugh (Iron County)	1.37	14.0
Twin Lakes (Houghton County)	0.99	10.8
Two Heart (Luce County)	M	M
Watersmeet (Gogebic County)	1.26	6.0
Watton (Baraga County)	1.17	8.8
Wetmore (Alger County)	M	M

Drought Discussion

Continuing precipitation deficits in March lead to a moderate drought over central and eastern Upper Michigan, while extreme western Upper Michigan remains drought free.

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

March 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	24.5	0.4	
Marquette City	25.9	-0.6	
Houghton Airport	24.0	0.1	
Ironwood	23.4	-1.8	
Iron Mountain	27.6	0.5	
Manistique	25.9	-0.6	
Munising	25.7	-0.2	
Newberry	22.3	-2.9	
Ontonagon	27.5	-1.1	

March River Levels

March average streamflow was below normal over south central Upper Michigan, and near normal over the rest of Upper Michigan.

March 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

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