

<b>NWS FORM E-5</b>  U.S. DEPARTMENT OF COMMERCE NOAA, NATIONAL WEATHER SERVICE  <b>MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS</b>  TO: NATIONAL WEATHER SERVICE (W/OH12x1) HYDROMETEOROLOGICAL INFO CENTER 1325 EAST-WEST HIGHWAY, RM 7116 SILVER SPRING, MD 20910	HSA OFFICE: <b>Marquette, MI</b>
	REPORT FOR (MONTH / YEAR): <b>April 2011</b>
	DATE: <b>May 14, 2011</b>
	SIGNATURE: <b>Robin J. Turner, MIC</b> <b>Justin Titus, Meteorologist</b>
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.

**April Flooding**

Minor flooding was observed on the Chocolay River near Harvey and the Trap Rock River near Lake Linden when both rivers exceeded bankfull (action) stage, but remained below flood stage. Elevated river levels resulted from a combination of snowmelt and rainfall, with no known significant impacts from the flooding.

**April Precipitation**

April precipitation was normal to well above normal over Upper Michigan. The most precipitation fell over the east, where amounts were 200 to 300 percent of normal. Snowfall was well above normal over western Upper Michigan, and near normal elsewhere.

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	4.35	1.56	9 <sup>th</sup>	15.2	2.6	
Marquette City	4.06	1.61	6 <sup>th</sup>	7.3	-0.5	
Houghton Airport	2.98	1.00		25.2	18.1	3 <sup>rd</sup>
Ironwood	4.15	1.70		20.0	9.6	
Iron Mountain	3.15	0.80		3.6	-0.8	
Manistique	5.84	3.56	2 <sup>nd</sup>	1.0	-1.5	
Munising	4.89	2.57	2 <sup>nd</sup>	7.5	0.5	
Newberry	5.16	3.34	2 <sup>nd</sup>	6.0	1.2	
Ontonagon	3.11	0.84	8 <sup>th</sup>	17.0	9.8	4 <sup>th</sup>

Other monthly precipitation totals from coop observers:

Location	Precipitation (inches)	Snowfall (inches)
Ahmeek (Keweenaw County)	3.15	12.7
Amasa (Iron County)	2.66	2.3
Atlantic Mine (Houghton County)	3.89	27.0
Baraga (Baraga County)	3.86	12.8
Bergland Dam (Ontonagon County)	5.46	21.1
Big Bay (Marquette County)	4.15	14.1
Chatham (Alger County)	3.35	6.1
Clarksburg (Marquette County)	2.85	13.0
Cooks (Schoolcraft County)	5.85	4.8
Copper Harbor (Keweenaw County)	M	M
Garden Corners (Delta County)	5.87	2.4
Gladstone (Delta County)	4.17	0.7
Greenland (Ontonagon County)	4.05	11.0
Gwinn (Marquette County)	3.01	7.6
Harvey (Marquette County)	3.57	0.4
Herman (Baraga County)	3.55	22.7
Ishpeming (Marquette County)	3.45	M
Jacobsville (Houghton County)	4.18	15.2
Laurium (Houghton County)	2.98	25.2
Marquette West (Marquette County)	4.25	5.5
Mohawk (Keweenaw County)	3.78	17.7
Menominee (Menominee County)	4.30	1.1
Norway (Dickinson County)	3.32	4.5
Painesdale (Houghton County)	1.86	23.0
Rapid River (Delta County)	3.66	0.2
Stambaugh (Iron County)	2.75	6.1
Twin Lakes (Houghton County)	4.58	14.0
Two Heart (Luce County)	4.56	9.0
Watersmeet (Gogebic County)	3.27	5.0
Watton (Baraga County)	2.67	14.5

**Drought Discussion**

Due to above normal precipitation in April, some improvement was noted in the latest drought outlook. All but far western Upper Michigan is classified as Abnormally Dry, an improvement from much of the area being classified in a Moderate Drought in early April. The existing drought is due to long term precipitation deficits.

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

## **April 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	36.7	-0.8	
Marquette City	36.9	-1.8	
Houghton Airport	37.3	-0.2	
Ironwood	38.4	-1.5	
Iron Mountain	38.4	-2.9	
Manistique	36.9	-1.8	
Munising	37.2	-1.0	
Newberry	36.6	-2.2	
Ontonagon	41.8	0.0	

## **April River Levels**

April average streamflow was near normal over Upper Michigan.

## **April Products Issued**

Flood Warnings (FLW): 0  
Flood Advisories (FLS): 3  
River Statements (RVS): 2  
Flash Flood Watches (FFA): 0  
Flash Flood Warnings (FFW): 0  
Flash Flood Statements (FFS): 0

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