

<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>May 2011</b>
	DATE: <b>June 12, 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.

### May Flooding

On May 10<sup>th</sup>, training thunderstorms moved over northern Houghton County, dropping 2-3 inches of water in a short period of time. Runoff from the heavy rain resulted in street flooding mainly in and around the city of Chassell, MI. The greatest extent of the flooding reported to the National Weather Service was water over roads, including 4 to 6 inches of water over U.S. Highway 41 in Chassell.

On May 30<sup>th</sup>, thunderstorms moving over western Upper Michigan quickly dropped 1-2 inches of rain. The resulting runoff from the heavy rainfall caused a road to be washed out just west of Little Girls Point. The road was closed between little girls point and west to the Wisconsin state line. Other reports of flooding from this event were limited to ponding of water on roads.

### May Precipitation

Precipitation amounts in May were near or above normal over Upper Michigan. The most precipitation fell over western portions of the area, where amounts were 100 to 200 percent of normal. Most of the precipitation fell in the form of rain, with only a couple tenths of an inch of snowfall reported at most.

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	3.19	3.10	0.09	
Marquette City	3.77	2.79	0.98	10 <sup>th</sup>
Houghton Airport	2.34	1.83	0.51	
Ironwood	4.35	3.28	1.07	
Iron Mountain	4.62	3.05	1.57	
Manistique	3.09	2.94	0.15	
Munising	3.68	2.95	0.73	
Newberry	2.76	2.60	0.16	
Ontonagon	3.65	3.00	0.65	

Other monthly precipitation totals from coop observers:

Location	Precipitation (inches)
Ahmeek (Keweenaw County)	M
Amasa (Iron County)	3.58
Atlantic Mine (Houghton County)	4.75
Baraga (Baraga County)	1.99
Bergland Dam (Ontonagon County)	3.82
Big Bay (Marquette County)	3.74
Chatham (Alger County)	3.10
Clarksburg (Marquette County)	3.48
Cooks (Schoolcraft County)	3.26
Copper Harbor (Keweenaw County)	M
Garden Corners (Delta County)	3.09
Gladstone (Delta County)	3.59
Greenland (Ontonagon County)	3.62
Gwinn (Marquette County)	3.40
Harvey (Marquette County)	3.63
Herman (Baraga County)	3.91
Ishpeming (Marquette County)	2.85
Jacobsville (Houghton County)	5.58
Laurium (Houghton County)	1.83
Marquette West (Marquette County)	M
Mohawk (Keweenaw County)	3.25
Menominee (Menominee County)	2.14
Norway (Dickinson County)	1.52
Painesdale (Houghton County)	5.42
Rapid River (Delta County)	3.88
Stambaugh (Iron County)	3.25
Twin Lakes (Houghton County)	3.16
Two Heart (Luce County)	3.48
Watersmeet (Gogebic County)	3.18
Watton (Baraga County)	2.86

We Energies Rain Gauges (inches)\*

Crystal Falls (Iron County)	3.77
Witch Lake (Marquette County)	2.70
Iron River (Iron County)	3.91
Covington (Baraga County)	2.91

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

### **Drought Discussion**

Due to above normal precipitation in May, some improvement was noted in the latest drought outlook. The northern Huron Mountain Range and Keweenaw Peninsula are classified as Abnormally Dry. Elsewhere, no drought was noted in the latest release of the drought monitor.

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

### **May 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	50.3	-0.2	
Marquette City	50.1	-0.4	
Houghton Airport	49.5	-0.1	
Ironwood	50.4	-2.0	
Iron Mountain	52.7	-0.8	
Manistique	48.1	-1.5	
Munising	47.9	-1.4	
Newberry	49.9	-0.6	
Ontonagon	53.3	-0.2	

### **May River Levels**

May average streamflow was near normal over Upper Michigan.

### **May Products Issued**

Flood Warnings (FLW): 0  
Flood Advisories (FLS): 1  
River Statements (RVS): 0  
Flash Flood Watches (FFA): 0  
Flash Flood Warnings (FFW): 1  
Flash Flood Statements (FFS): 0

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