

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

TO: NATIONAL WEATHER SERVICE (W/OS31)
HYDROMETEOROLOGICAL INFO CENTER
1325 EAST-WEST HIGHWAY, RM 13468
SILVER SPRING, MD 20910

DATE:

June 11th, 2017

SIGNATURE:

Daniel K. Cobb, MIC

Mark Sekelsky, Lead Forecaster

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).

X

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

Summary

Minimal hydrologic impacts occurred in the Hydrologic Service Area during the month of May. The month started off with very high flows, but as the month ended up drier than normal, conditions returned back closer to normal by the end of the month.

Flood Conditions**Monday, May 1st**

At 7:09 AM EDT, the areal flood watch was cancelled for Southwest Lower Michigan.

Less rain fell than predicted.

At 10:20 AM EDT, the flood warning for Vicksburg on the Portage River was continued.

At 9:22 PM EDT, the flood warning for Vicksburg on the Portage River was continued.

Tuesday, May 2nd

At 10:37 AM EDT, the flood warning for Vicksburg on the Portage River was continued.

At 9:51 PM EDT, the flood warning for Vicksburg on the Portage River was continued.

Wednesday, May 3rd

At 10:43 AM EDT, the flood warning for Vicksburg on the Portage River was continued.

At 9:56 PM EDT, the flood warning for Vicksburg on the Portage River was continued.

Thursday, May 4th

At 5:05 PM EDT, the flood warning for Vicksburg on the Portage River was continued.

At 9:27 PM EDT, the flood warning for Vicksburg on the Portage River was continued.

Friday, May 5th

At 10:46 AM EDT, the flood warning for Vicksburg on the Portage River was continued.

At 8:37 PM EDT, the flood warning for Vicksburg on the Portage River was continued.

Saturday, May 6th

At 9:39 AM EDT, the flood warning for Vicksburg on the Portage River was continued.

At 9:42 PM EDT, the flood warning for Vicksburg on the Portage River was continued.

Sunday, May 7th

At 9:12 AM EDT, the flood warning for Vicksburg on the Portage River was continued.
At 12:39 PM EDT, the flood warning for Vicksburg on the Portage River was cancelled.

Sunday, May 21st

At 9:15 AM EDT a flood warning was issued for the following river:

- Portage River Near Vicksburg, Michigan

At 10:50 AM EDT the flood warning for Vicksburg on the Portage River was continued.

At 9:27 PM EDT the flood warning for Vicksburg on the Portage River was continued.

Monday, May 22nd

At 11:09 AM EDT the flood warning for Vicksburg on the Portage River was continued.

At 9:06 PM EDT the flood warning for Vicksburg on the Portage River was cancelled.

The following rivers exceeded bankfull during the month of May 2017:

- Looking Glass River near Eagle, Michigan (4 days above bankfull)
- Muskegon River at Croton, Michigan (2 days above bankfull)
- Chippewa River near Mount Pleasant, Michigan (2 days above bankfull)
- Maple River at Maple Rapids, Michigan (11 days above bankfull)
- Sycamore Creek at Holt, Michigan (8 days above bankfull)
- Grand River at Ionia, Michigan (9 days above bankfull)
- Flat River at Smyrna, Michigan (5 days above bankfull)
- Roque River at Rockford, Michigan (1 day above bankfull)

Flood Stage Report

No forecast points exceeded flood stage in our HSA during the month of May 2017. As a result no NWS Form E-3 “Flood Stage Report” was issued.

River Conditions

The end of the May percentage of normal flow for selected rivers is listed below:

<u>Location</u>	<u>River</u>	<u>% of Normal</u>
Scottville	Pere Marquette	101
Whitehall	White	108
Evert	Muskegon	124
Mt. Pleasant	Chippewa	128
Lansing	Grand	173
Grand Rapids	Grand	126
East Lansing	Red Cedar	156
Hastings	Thornapple	114
Battle Creek	Battle Creek	141
Battle Creek	Kalamazoo	151

General Hydrologic Information

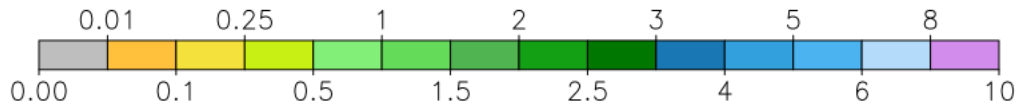
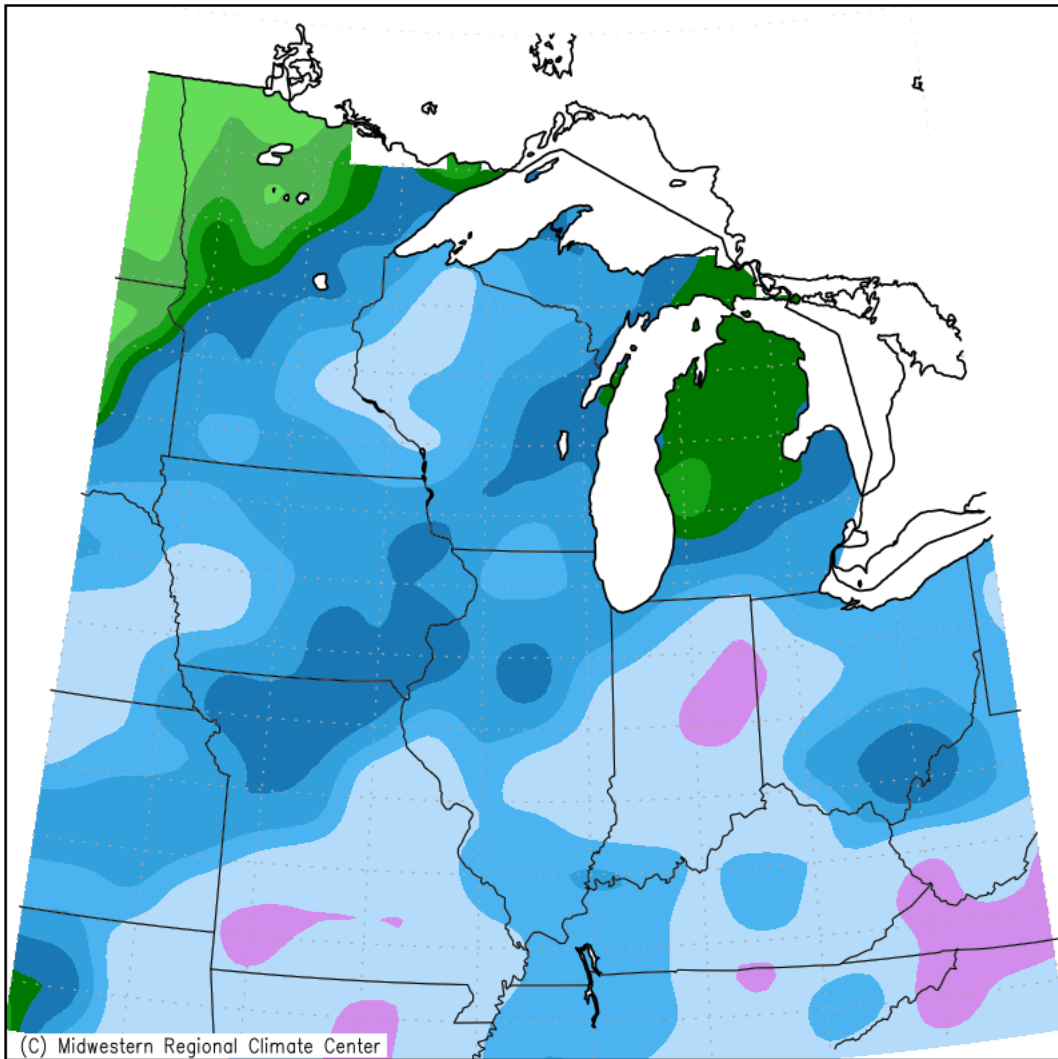
Near normal rainfall fell in the Kalamazoo River Basin with below normal values further north. The month started off with very high water levels. Despite below normal rainfall for most of the HSA, the water levels remained above normal for the month. A heavier rain event around May 20th resulted in rises on the Kalamazoo and Portage basin, but no flooding was observed.

May precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan, were 1.50, 2.49, and 1.50 inches, respectively (Figure 1). Monthly departures were -2.48 inches, -0.87 inches, and -1.75 inches respectively. Yearly departures were 3.02, 5.49*, and 2.21 inches for Grand Rapids, Lansing and Muskegon respectively. Percent of mean precipitation for May 2017 is shown in Figure 2.

Temperatures for the month of May were below normal at Grand Rapids and Muskegon. The monthly average temperature was normal at Lansing. The average monthly temperature departures for Grand Rapids, Lansing and Muskegon were, -1.1, 0.0 and -0.6 degrees Fahrenheit respectively.

* Please note that there was an error on the April report for yearly departure rainfall for Lansing

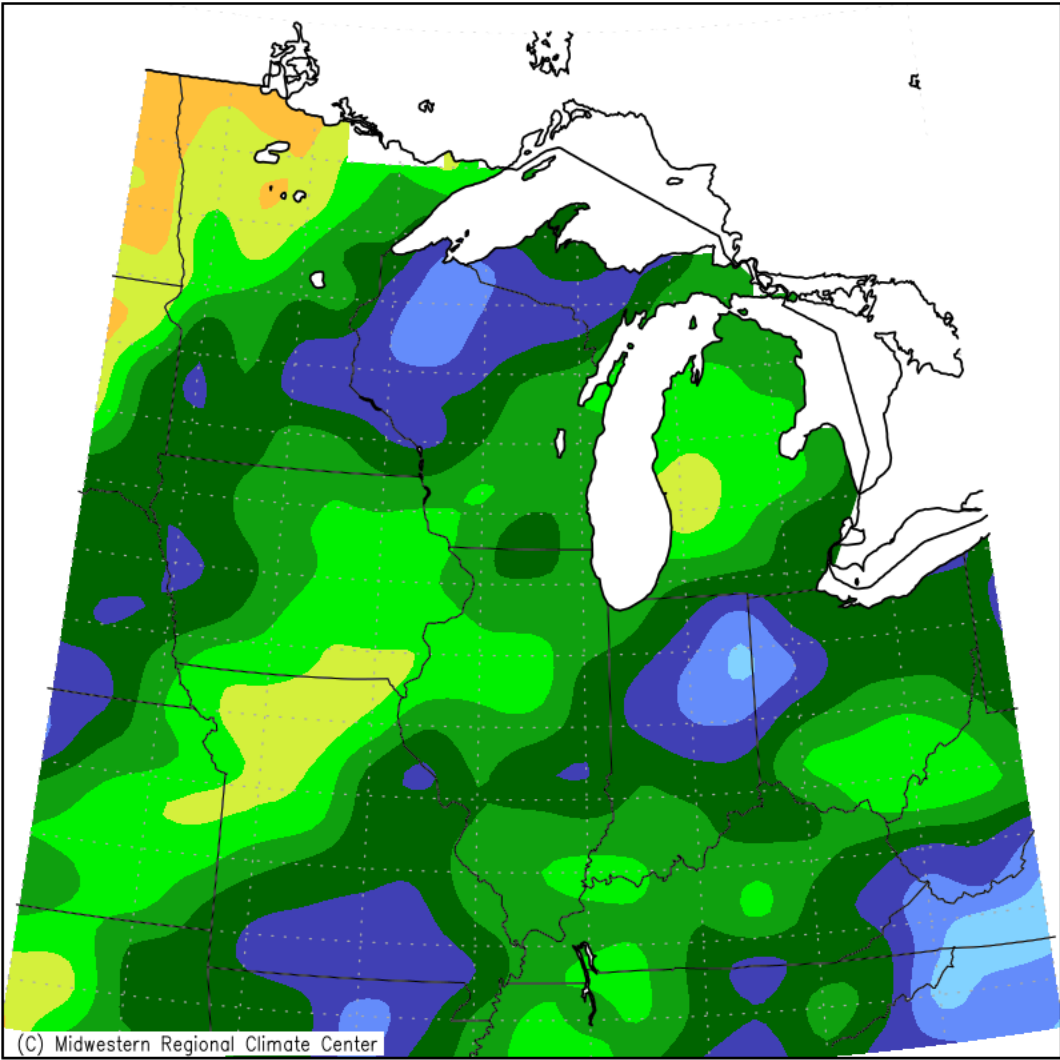
Accumulated Precipitation (in)
May 1, 2017 to May 31, 2017



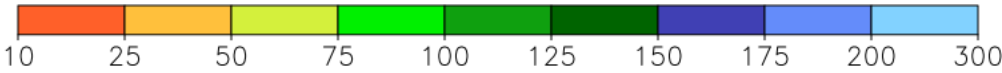
Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana-Champaign

Figure 1. May Monthly Precipitation Totals

Accumulated Precipitation: Percent of Mean
May 1, 2017 to May 31, 2017



Mean period is 1981–2010.



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Figure 2. May Percent of Mean of Accumulated Precipitation

Hydrologic Products issued this month:

- 31 Hydrologic Summaries (ARBRVAGRR)
- 1 Probabilistic Hydrologic Outlook (ARBESFGRR)
- 1 Flood Warnings (ARBFLWGRR)
- 18 River Flood Warning Statements (ARBFLSGRR)
- 32 River Flood Advisory Statements (ARBFLSGRR)
- 2 Areal Flood Advisory Statements (ARBFLSGRR)
- 12 Hydrologic Statements (ARBRVSGRR)
- 31 Daily River and Lake Summary (ARBRVDGRR)
- 2 Areal Flood Watch (ARBFFAGRR)