

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

DATE:

September 1st, 2017

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

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).



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

**Summary**

With well below normal precipitation during the month of August, hydrologic impacts were minimal

**Flood Conditions**

Wednesday, July 12th

At 2:17 PM EDT, an areal flood advisory was issued for thunderstorms that dumped heavy rain over southeast Ottawa County. Minor flooding was expected.

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The no rivers exceeded bankfull during the month of August 2017:

**Flood Stage Report**

No forecast points exceeded flood stage in our HSA during the month of August 2017. Thus, the NWS Form E-3 "Flood Stage Report" was not issued.

**River Conditions**

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

<u>Location</u>	<u>River</u>	<u>% of Normal</u>
Scottville	Pere Marquette	109
Whitehall	White	91
Evert	Muskegon	120
Mt. Pleasant	Chippewa	137
Lansing	Grand	87
Grand Rapids	Grand	88
East Lansing	Red Cedar	109
Hastings	Thornapple	114
Battle Creek	Battle Creek	89
Battle Creek	Kalamazoo	87

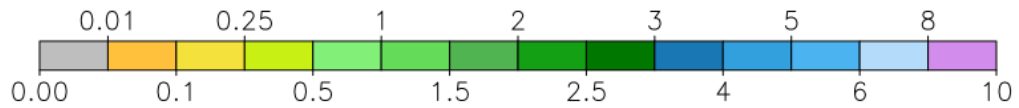
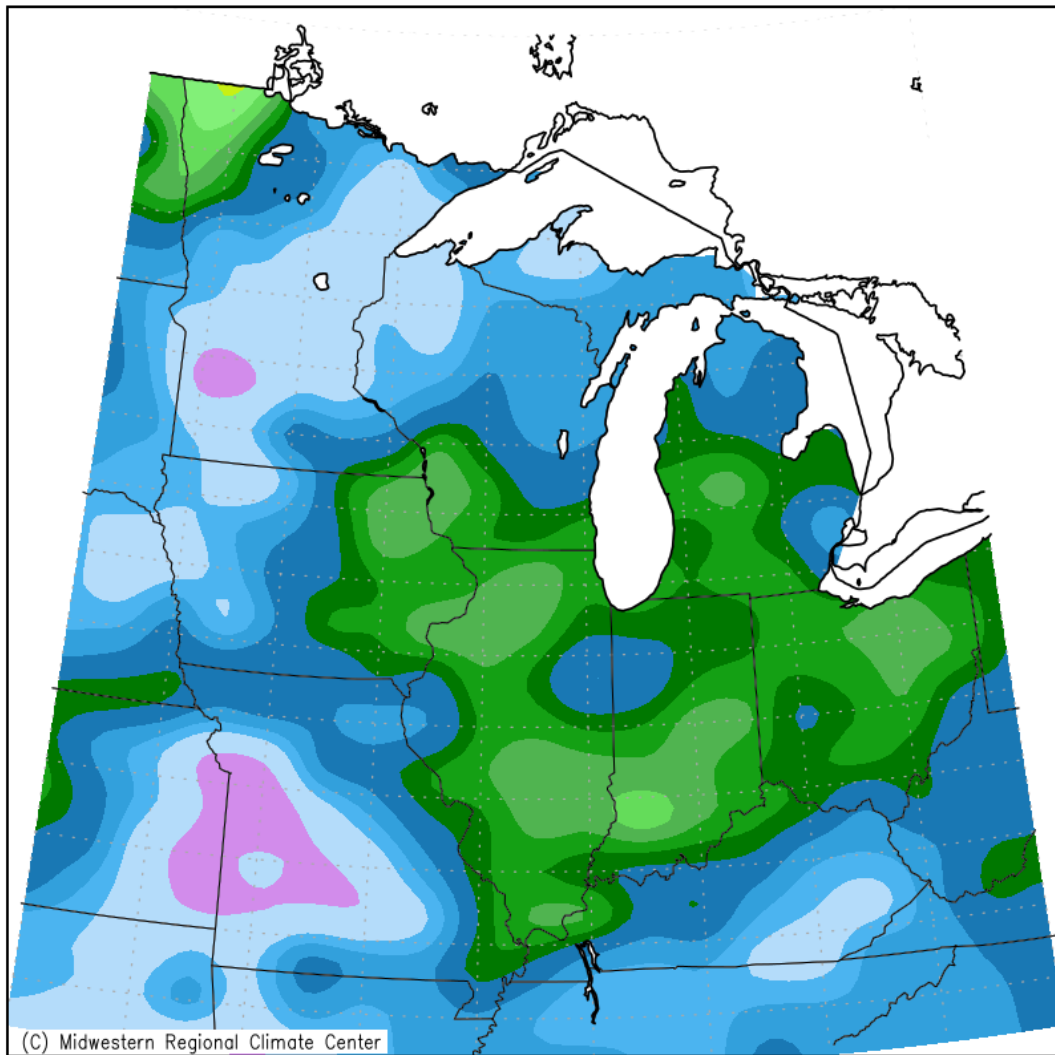
## **General Hydrologic Information**

The month of August featured well below normal precipitation. The greatest departures were in the Grand and Kalamazoo basins where roughly half the normal precipitation fell. As a result, many of the river levels fell through the month.

August precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan, were 1.72, 1.79, and 1.41 inches, respectively (Figure 1). Monthly departures were -1.86, -1.44 and -1.98 inches respectively. Yearly departures were -0.53, 4.10, and 0.46 inches for Grand Rapids, Lansing and Muskegon respectively. Percent of mean precipitation for August 2017 is shown in Figure 2.

Temperatures for the month of August were below normal at Grand Rapids, Lansing and Muskegon. The average monthly temperature departures for Grand Rapids, Lansing and Muskegon were, -2.1, -1.8 and -1.3 degrees Fahrenheit respectively.

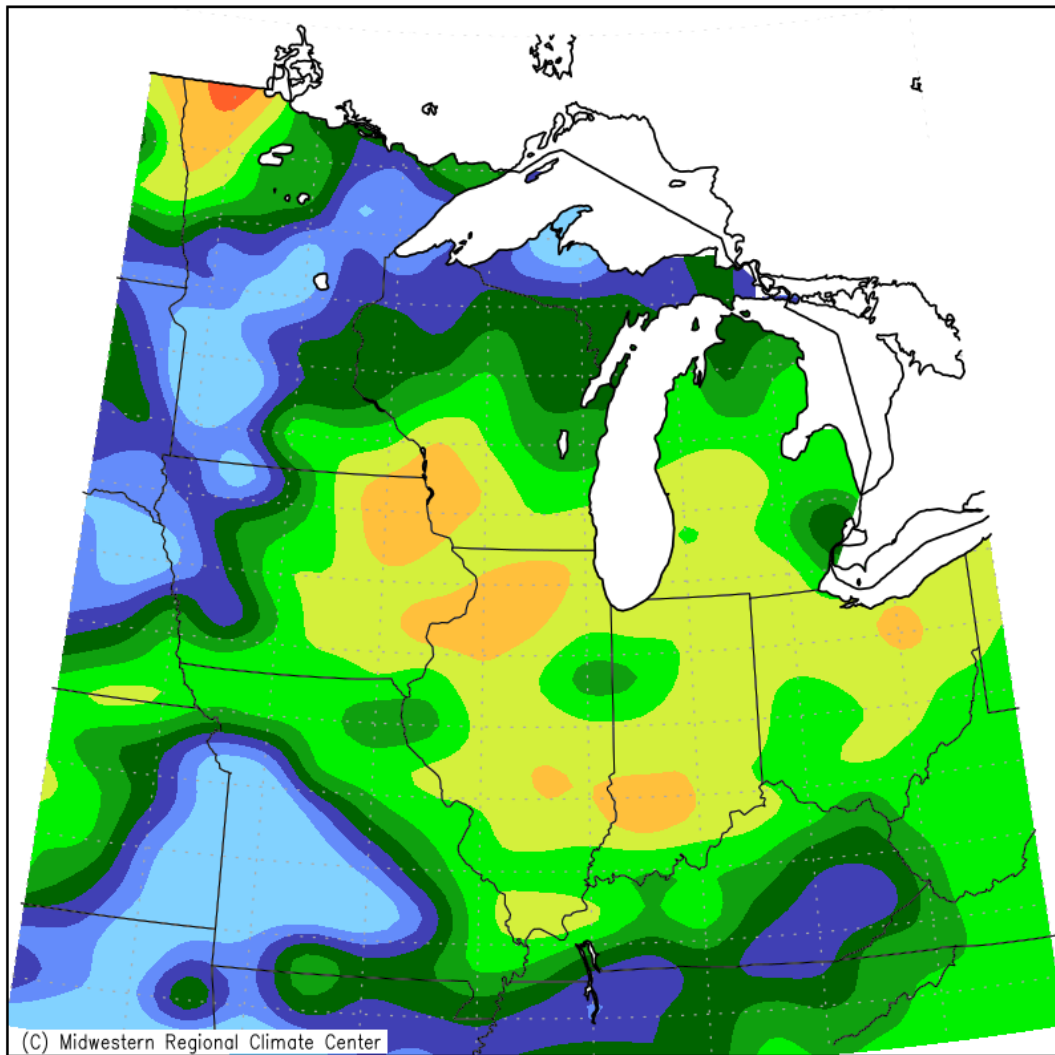
Accumulated Precipitation (in)  
August 1, 2017 to August 31, 2017



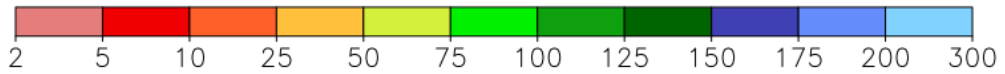
Midwestern Regional Climate Center  
Illinois State Water Survey, Prairie Research Institute  
University of Illinois at Urbana–Champaign

Figure 1. August Monthly Precipitation Totals

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



Mean period is 1981–2010.



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Figure 2. August Percent of Mean of Accumulated Precipitation

**Hydrologic Products issued this month:**

- 31 Hydrologic Summaries (ARBRVAGRR)
- 1 Probabilistic Hydrologic Outlook (ARBESFGRR)
- 31 Daily River and Lake Summary (ARBRVDGRR)
- 1 Areal Flood Advisory Statements (ARBFLSGRR)