

NWS FORM E-5

U.S. DEPARTMENT OF COMMERCE
NOAA, NATIONAL WEATHER SERVICE

HSA OFFICE:

Grand Rapids, MI

REPORT FOR (MONTH & YEAR):

September 2016

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

DATE:

October 14th, 2016

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

September was a drier than normal month for much of the region. Lower parts of the Grand, Pere Marquette and White rivers did see above normal rainfall. Overall little or no impacts occurred. A late in the month rain event resulted in the month closing out with above normal flows.

Flood Conditions

No significant flooding occurred in the month of September.

The following rivers exceeded bankfull during the month of September 2016:

- Sycamore Creek Holt, Michigan (3 days above bankfull)

Flood Stage Report

No forecast points exceeded flood stage in our HSA during the month of September 2016. As a result no Flood Stage Report(E3) was issued.

River Conditions

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

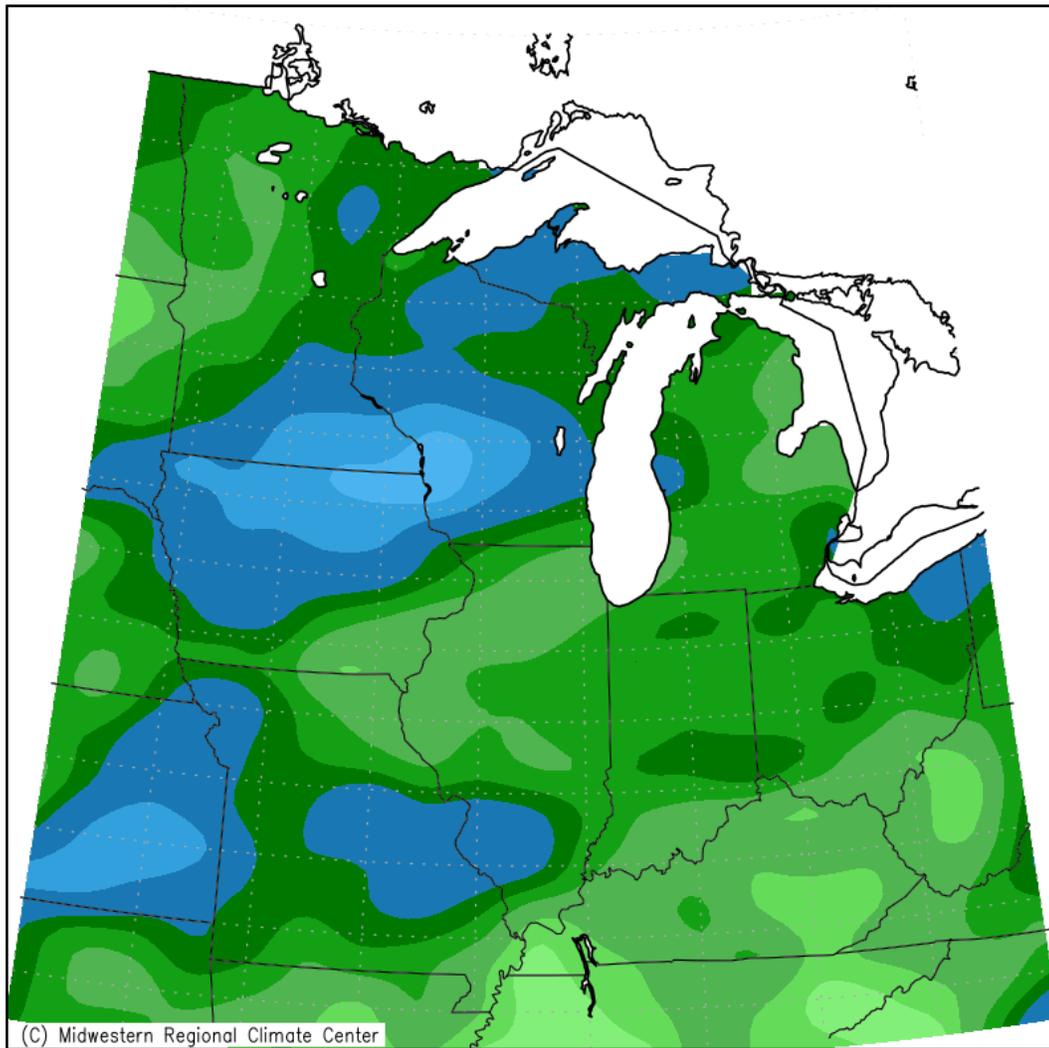
<u>Location</u>	<u>River</u>	<u>% of Normal</u>
Scottville	Pere Marquette	119
Whitehall	White	119
Ewart	Muskegon	120
Mt. Pleasant	Chippewa	132
Lansing	Grand	678
Grand Rapids	Grand	144
East Lansing	Red Cedar	1267
Hastings	Thornapple	181
Battle Creek	Battle Creek	214
Battle Creek	Kalamazoo	171

General Hydrologic Information

September precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan, were 2.40, 3.35, and 5.92 inches, respectively (Figure 1). The Grand Rapids and Lansing featured below normal precipitation for the September, while Muskegon was above normal. Monthly departures for Grand Rapids, Lansing and Muskegon were -1.88 inches, -0.15 inches, and 2.03 inches. Percent of mean precipitation for September 2016 is shown in Figure 2. Yearly precipitation departures through the end of September were 4.94 inches above normal for Grand Rapids, 2.24 inches above normal for Lansing, and 6.60 inches above normal for Muskegon.

Temperatures for the month of September were above normal at Grand Rapids, Lansing, and Muskegon. The average monthly temperature departures were, 3.6, 4.1, and 5.2 degrees Fahrenheit respectively.

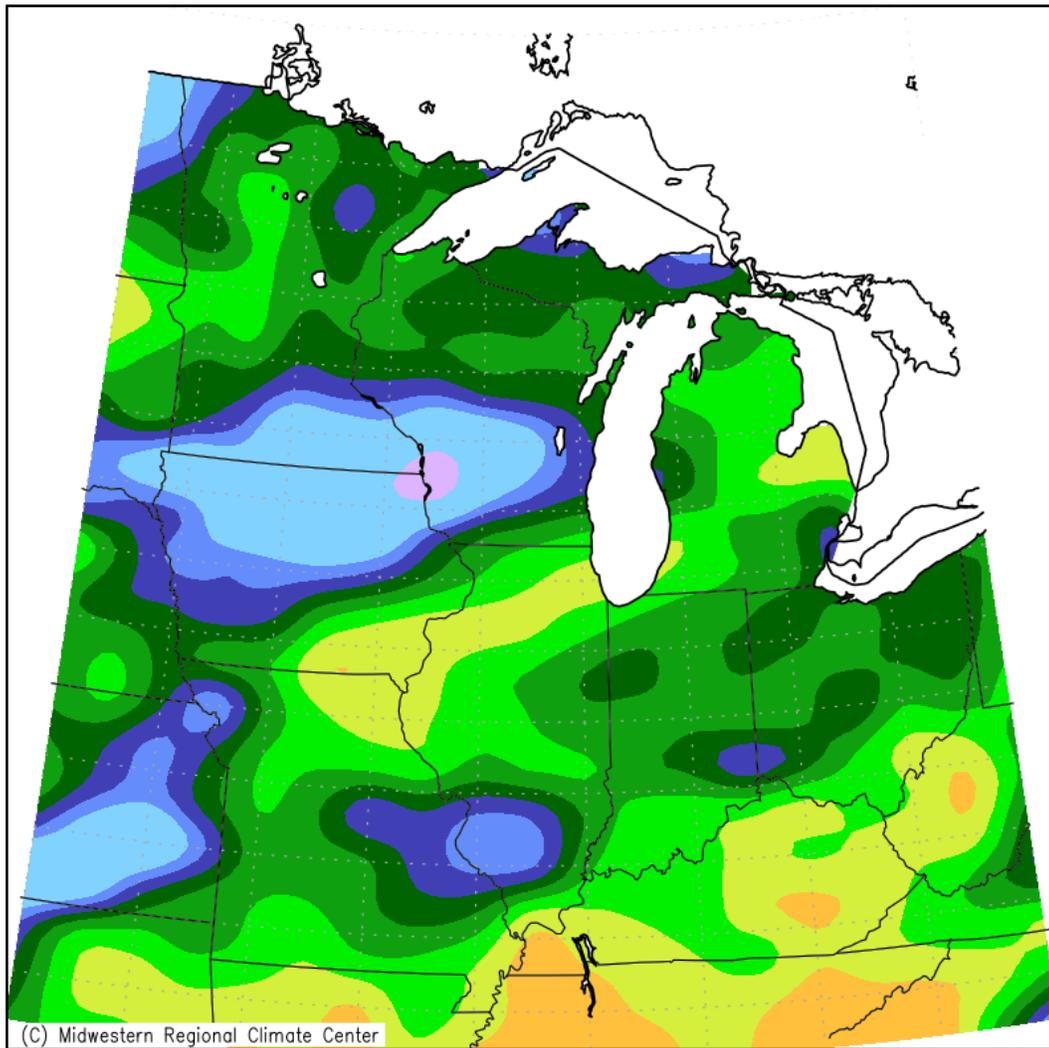
Accumulated Precipitation (in)
September 1, 2016 to September 30, 2016



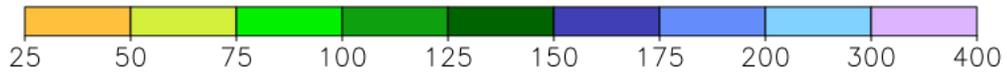
Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana-Champaign

Figure 1. September Monthly Precipitation Totals

Accumulated Precipitation: Percent of Mean
September 1, 2016 to September 30, 2016



Mean period is 1981–2010.



Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
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Figure 2. September Percent of Mean of Accumulated Precipitation

Hydrologic Products issued this month:

- 30 Hydrologic Summaries (ARBRVAGRR)
- 30 Daily River Forecasts (ARBRVDGRR)
 - 1 Probabilistic Hydrologic Outlook (ARBESFGRR)
 - 4 River Flood Statements (ARBFLSGRR)
 - 1 Hydrologic Statements(ARBRVSGRR)

News Articles and Related Documentation

None