

NWS FORM E-5

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

HSA OFFICE:

Grand Rapids, MI

REPORT FOR (MONTH & YEAR):

October 2016

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

DATE:

November 9th, 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

Minimal hydrologic impacts occurred during the month of October despite the above normal rainfall for parts of the region. The heaviest rain fell over the lower reaches of the Grand and Muskegon basins. The rain was spread out over several events. Local downpours created some minor urban and poor drainage flooding around Grand Rapids and Muskegon during the middle part of the month.

Flood Conditions

No significant flooding occurred in the month of October.

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

- Sycamore Creek Holt, Michigan (7 days above bankfull)

Flood Stage Report

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

River Conditions

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

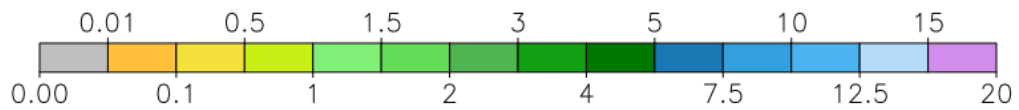
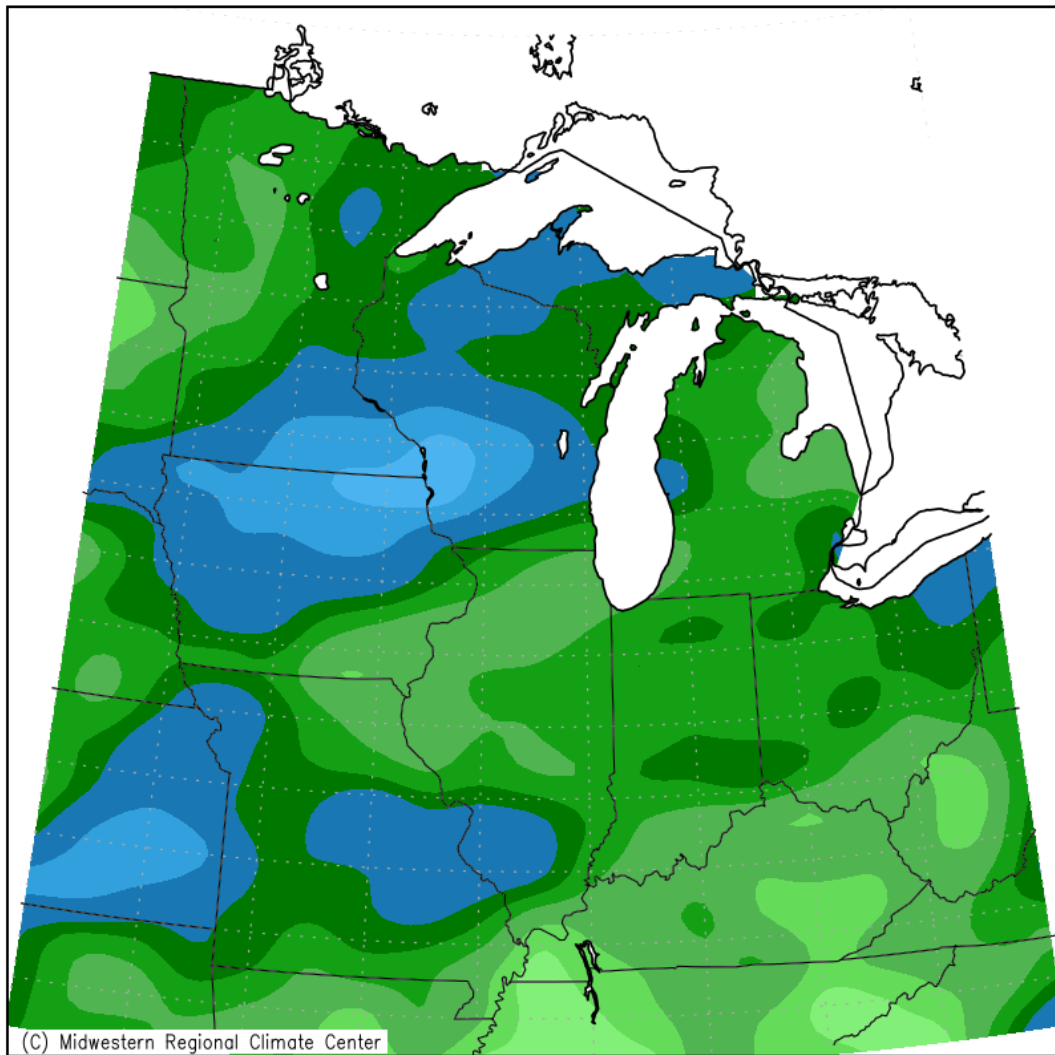
<u>Location</u>	<u>River</u>	<u>% of Normal</u>
Scottville	Pere Marquette	114
Whitehall	White	105
Ewart	Muskegon	102
Mt. Pleasant	Chippewa	143
Lansing	Grand	273
Grand Rapids	Grand	232
East Lansing	Red Cedar	299
Hastings	Thornapple	223
Battle Creek	Battle Creek	218
Battle Creek	Kalamazoo	153

General Hydrologic Information

October precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan, were 6.15, 3.20, and 3.78 inches, respectively (Figure 1). All three sites featured above normal precipitation for the October. Monthly departures were 2.89 inches, 0.67 inches, and 0.67 inches respectively. Percent of mean precipitation for October 2016 is shown in Figure 2. All three sites also feature yearly precipitation departures through the end of October that were above normal. Those departures were 7.83 inches, 2.91 inches, and 7.27 inches respectively.

Temperatures for the month of October were above normal at Grand Rapids, Lansing, and Muskegon. The average monthly temperature departures were, 3.7, 4.0, and 4.1 degrees Fahrenheit respectively.

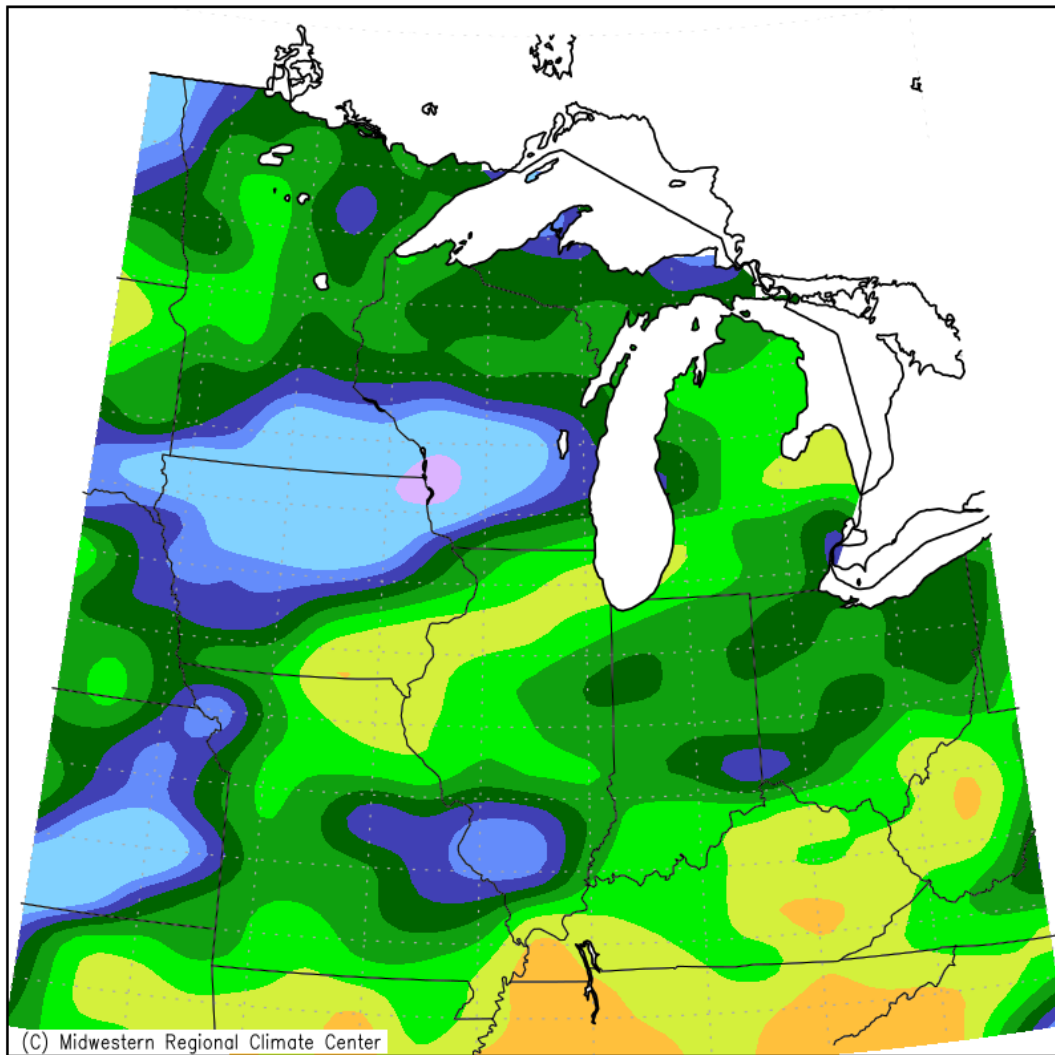
Accumulated Precipitation (in)
September 1, 2016 to September 30, 2016



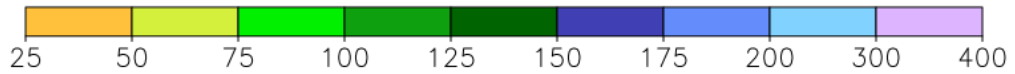
Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana-Champaign

Figure 1. October Monthly Precipitation Totals

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



Mean period is 1981–2010.



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Figure 2. October Percent of Mean of Accumulated Precipitation

Hydrologic Products issued this month:

- 31 Hydrologic Summaries (ARBRVAGRR)
- 31 Daily River Forecasts (ARBRVDGRR)
 - 1 Probabilistic Hydrologic Outlook (ARBESFGRR)
- 17 River Flood Statements (ARBFLSGRR)
 - 5 Areal Flood Statements (ARBFLSGRR)
 - 4 Hydrologic Statements (ARBRVSGRR)

News Articles and Related Documentation

None