

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

DATE:
October 20, 2014TO: NATIONAL WEATHER SERVICE (W/OS31)
HYDROMETEOROLOGICAL INFO CENTER
1325 EAST-WEST HIGHWAY, RM 13468
SILVER SPRING, MD 20910SIGNATURE:
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Mark Sekelsky

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

Overall September was a quiet month in terms of hydrologic impacts. The main reason for this was the below normal precipitation that occurred throughout the hydrologic forecast area.

Flood Conditions**Thursday, September 4th**

The 3:30 AM EDT Area Forecast Discussion Hydrology section mentions possibility for localized areal flooding with the storms for Thursday night and Friday

The 5:27 AM EDT Hazardous Weather Outlook mentions locally heavy rains are possible with the thunderstorms for Friday.

Friday, September 5th

At 12:10 AM EDT a flood advisory was issued for Muskegon county as heavy rain of up to 2 inches had fallen.

At 1:04 AM EDT a flood warning was issued for Muskegon county as thunderstorms with heavy rain resulted in up to 3 inches of radar estimated rainfall. Localized flooding was reported.

At 6:41 AM EDT the flood warning for Muskegon county was cancelled.

Tuesday, September 9th

The 3:30 AM Area Forecast Discussion Hydrology section mentions the possibility for torrential downpours with the storms for Wednesday Afternoon and Evening. Rainfall amounts of 1.0 to 1.5 inches are expected with locally more than 2 inches. It also mentions rises on small streams are likely to occur. The forecast point on Sycamore Creek responds like a small stream.

Wednesday, September 10th

At 10:48 AM EDT a River Statement was issued for Sycamore Creek at Holt for river rises.

At 9:42 PM EDT the River Statement for Sycamore Creek at Holt was updated

No rivers exceeded bankfull during the month of September 2014:

Flood Stage Report

No forecast points exceeded flood stage in our HSA during the month of September 2014. As a result, no NWS Form E-3 “Flood Stage Report” was sent.

River Conditions

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

<u>Location</u>	<u>River</u>	<u>% of Normal</u>
Scottville	Pere Marquette	100
Whitehall	White	100
Evert	Muskegon	100
Mt. Pleasant	Chippewa	108
Lansing	Grand	85
Grand Rapids	Grand	116
East Lansing	Red Cedar	214
Hastings	Thornapple	115
Battle Creek	Battle Creek	125
Battle Creek	Kalamazoo	96

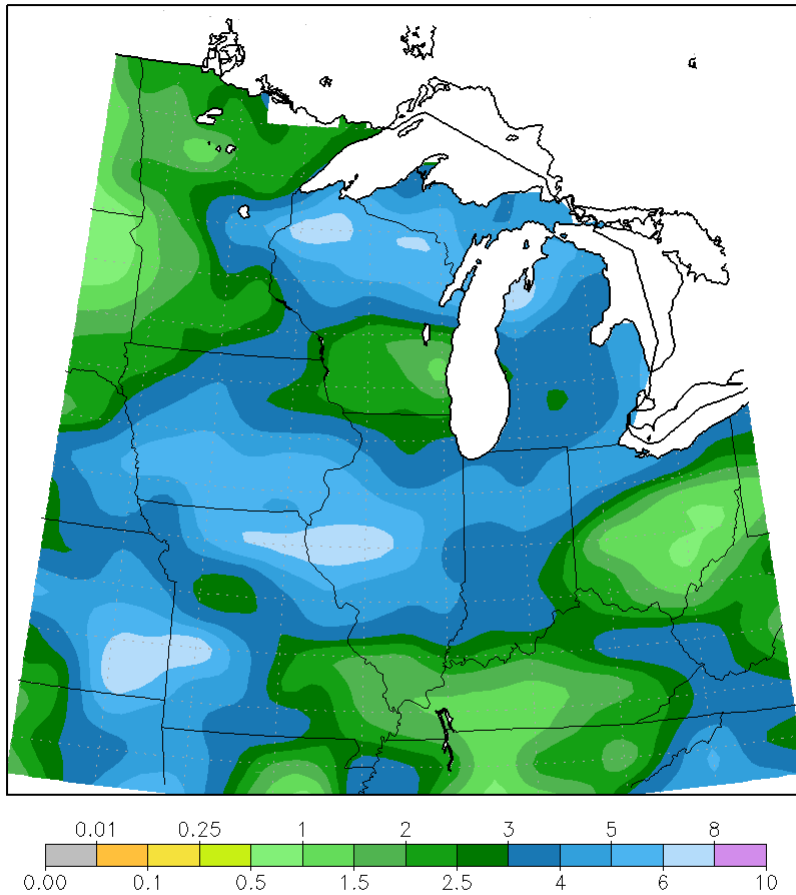
General Hydrologic Information

September 2014 featured below temperatures and precipitation. The lack of precipitation generally supported falling river levels through the month.

September precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan, were 3.10, 2.54, and 3.20 inches, respectively (Figure 1). Precipitation departures for the month at these three sites were 1.18 of an inch below normal at Grand Rapids, 0.96 inches below normal at Lansing, and 0.69 of an inch below normal at Muskegon, Michigan. Percent of mean precipitation for September 2014 is shown in Figure 2. Yearly precipitation departures were 0.62 of an inch above normal for Grand Rapids, 5.17 inches above normal for Lansing, and 5.34 inches above normal for Muskegon, Michigan.

Temperatures for the month of September were below normal at Grand Rapids, Lansing, and Muskegon. The average monthly departures were -0.7, -1.1 and -1.0 degrees Fahrenheit respectively.

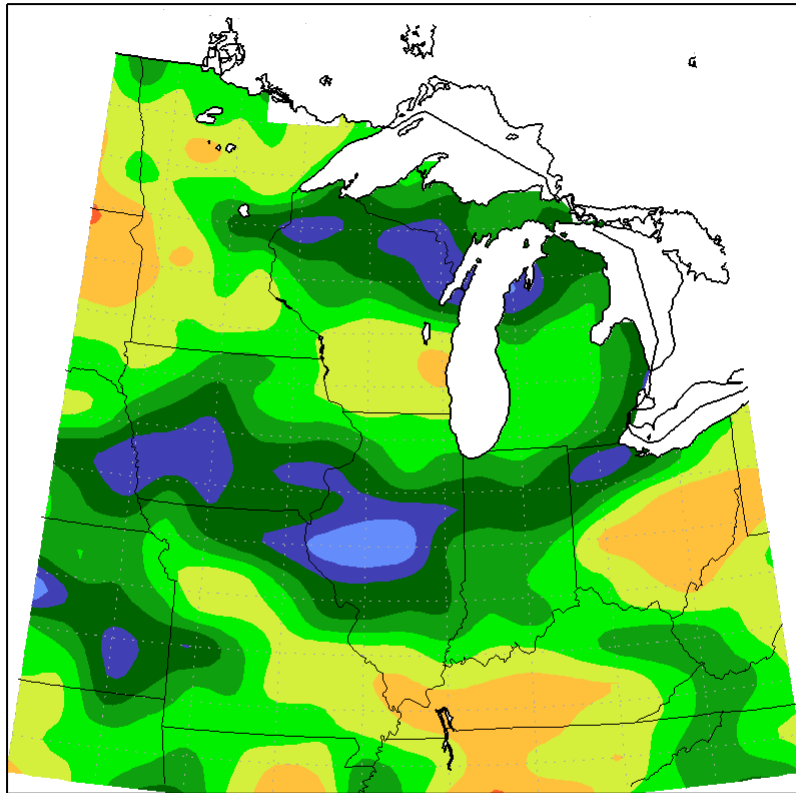
Accumulated Precipitation (in)
September 1, 2014 to September 30, 2014



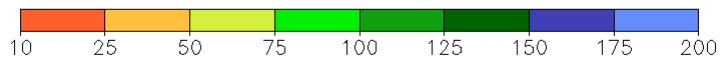
Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana-Champaign

Figure 1. September Monthly Precipitation Totals

Accumulated Precipitation: Percent of Mean
September 1, 2014 to September 30, 2014



Mean period is 1981–2010.



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Figure 2. September Percent of Mean of Accumulated Precipitation

Hydrologic Products issued this month:

- 2 Areal Flood Statements (ARBFLSGRR)
- 1 Areal Flood Warning (ARBFLWGRR)
- 1 Hydrologic Outlook (ARBESFGRR)
- 2 River Statements (ARBRVSGRR)
- 30 Hydrologic Summaries (ARBRVAGRR)
- 30 Daily River and Lake Summary (ARBRVDGRR)

News Articles and Related Documentation

None