

NWS FORM E-5

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

HSA OFFICE:

Grand Rapids, MI

REPORT FOR (MONTH & YEAR):

May 2015

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

DATE:

June 25, 2015

SIGNATURE:

Daniel K. Cobb, MIC

Mark Sekelsky, Lead Forecaster

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

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

While wet conditions prevailed for much of the HSA for the month of May, little if any impacts occurred. The high flows seen at the end of the month reveal the overall wet conditions that occurred.

Flood Conditions

Tuesday, May 12th

At 9:55 PM EDT, a flood warning was issued for the Rogue River below Rockford. Flood stage is 8.0 ft. The level at issuance was 7.7 feet and rising rapidly. The river was forecast to crest the following day during the afternoon.

Tuesday, May 12th

At 10:03 PM EDT the flood advisory for the Rogue River below Rockford was cancelled as it was upgraded to a warning.

Wednesday, May 13th

At 10:33 AM EDT the flood warning for the Rogue River below Rockford was cancelled as the river crested below flood stage overnight. The crest was 7.8 feet.

The following rivers exceeded bankfull during the month of May 2015:

- Sycamore Creed near Holt, Michigan (2 days above bankfull)
- Chippewa River below Mount Pleasant, Michigan (3 days above bankfull)
- Rogue River in Rockford, Michigan (2 days above bankfull)

Flood Stage Report

No rivers exceeded flood stage in our HSA during the month of May 2015. 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	146
Whitehall	White	165
Evert	Muskegon	150
Mt. Pleasant	Chippewa	215
Lansing	Grand	100
Grand Rapids	Grand	111
East Lansing	Red Cedar	106
Hastings	Thornapple	213
Battle Creek	Battle Creek	134
Battle Creek	Kalamazoo	157

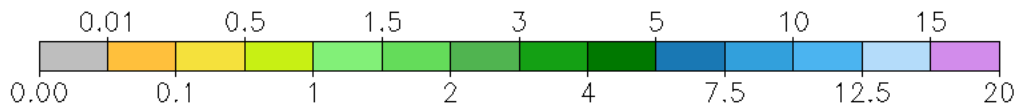
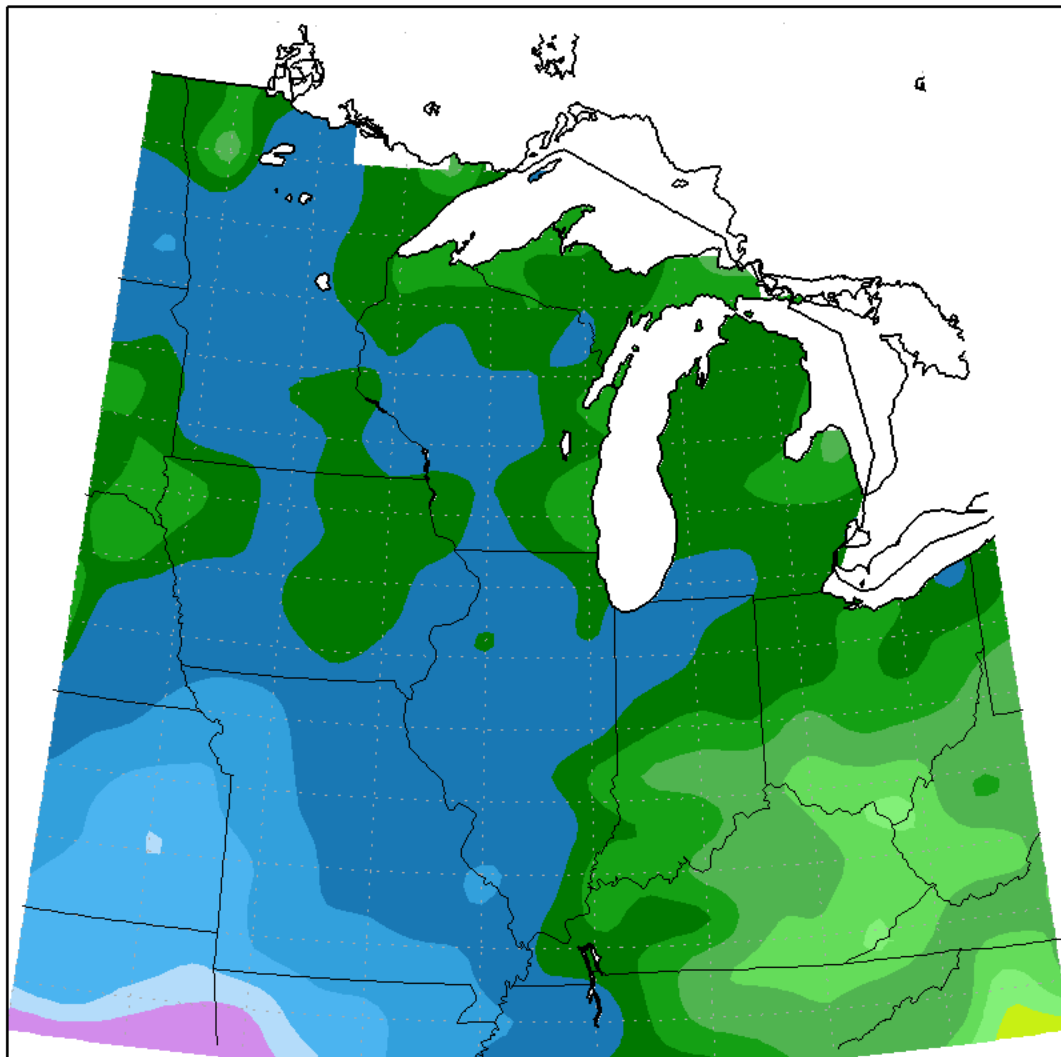
General Hydrologic Information

May 2015 featured above normal temperatures. Heavier than normal rainfall fell across northern and southern parts of the hydrologic service area. This includes the Muskegon and White river basins, along the Kalamazoo basin. The main storm of the month occurred on the 9th through the 12th resulting in some basins seeing over an inch of rain with a second storm occurring from the 30th to 31st, producing over 2 inches of rain.

May precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan, were 3.47, 3.77, and 3.29 inches, respectively (Figure 1). Precipitation departures for the month at these three sites were 0.51 of an inch below normal at Grand Rapids, 0.41 inches above normal at Lansing, and 0.04 inches above normal at Muskegon. Percent of mean precipitation for May 2015 is shown in Figure 2. Yearly precipitation departures were 1.95 inches below normal for Grand Rapids, 3.93 inches below normal for Lansing, and 0.16 inches above normal for Muskegon.

Temperatures for the month of May were above normal at Grand Rapids, Lansing, and Muskegon. The average monthly temperature departures were, 2.2, 3.5, and 2.1 degrees Fahrenheit respectively.

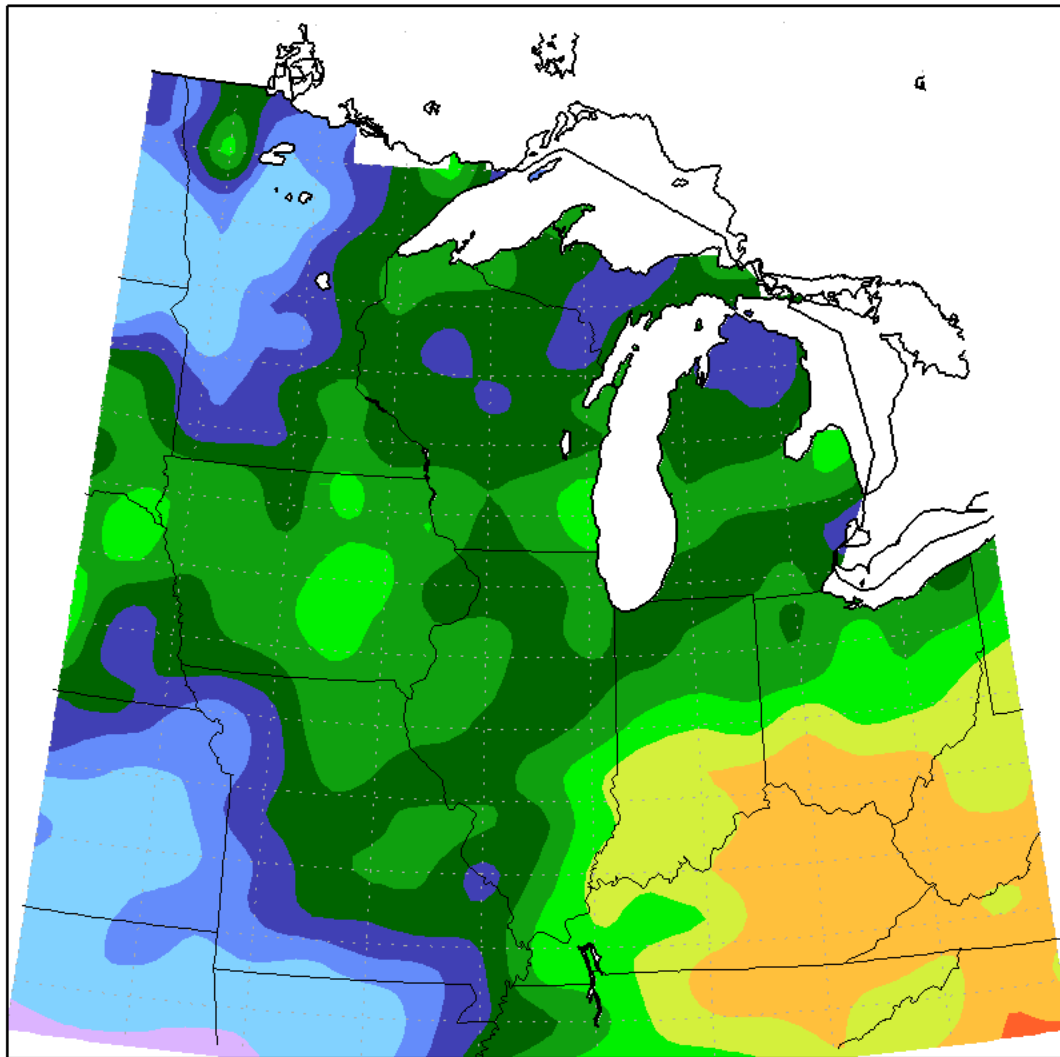
Accumulated Precipitation (in)
May 1, 2015 to May 31, 2015



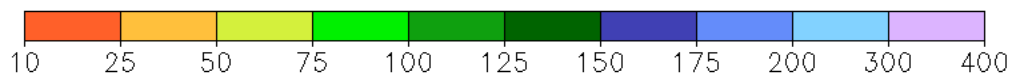
Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana-Champaign

Figure 1. May Monthly Precipitation Totals

Accumulated Precipitation: Percent of Mean
May 1, 2015 to May 31, 2015



Mean period is 1981–2010.



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Figure 2. May Percent of Mean of Accumulated Precipitation

Hydrologic Products issued this month:

- 1 Hydrologic Outlook (ARBESFGRR)
- 31 Hydrologic Summaries (ARBRVAGRR)
- 10 River Flood Advisories(ARBFLSGRR)
- 1 County Areal Flood Advisories(ARBFLSGRR)
- 1 River Flood Warning(ARBFLWGRR)

News Articles and Related Documentation

None