

NWS FORM E-5

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

HSA OFFICE:

Grand Rapids, MI

REPORT FOR (MONTH & YEAR):

July 2015

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

DATE:

August 14, 2015

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).

X

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

Summary

Overall only minimal hydrologic impacts occurred during the month of July for the NWS Grand Rapids HSA. The main reason for this is because less than normal rainfall fell across most of the HSA. No forecast points exceeded flood stage.

Flood Conditions

Wednesday, July 1st

At 10:41 AM EDT, the flood advisories remained in effect for Holt on Sycamore Creek, Ionia on the Grand River, along with New Richmond and Comstock which are located on the Kalamazoo River.

Wednesday, July 1st

At 11:34 PM, the flood advisories remained in effect for Holt on Sycamore Creek, Ionia on the Grand River, along with New Richmond and Comstock which are located on the Kalamazoo River.

Thursday, July 2nd

At 10:34 AM EDT, the flood advisories remained in effect for Holt on Sycamore Creek, Ionia on the Grand River, along with New Richmond and Comstock which are located on the Kalamazoo River.

Thursday, July 2nd

At 11:43PM EDT, the flood advisories were dropped for Ionia, New Richmond and Comstock, but continued for Holt.

Friday, July 3rd

At 11:01 AM EDT, the flood advisory was continued for Holt.

Friday, July 3rd

At 8:46 PM EDT, the flood advisory for Holt was cancelled as the river fell below action stage.

Monday, July 6th

At 11:53 PM EDT a flood advisory was issued for Muskegon County. Thunderstorms crossing the region were expected to produce over 2 inches of rain that could lead to some flooding. The advisory was in effect until 5:45 AM Tuesday.

Tuesday, July 7th

At 1:58 AM EDT the flood advisory for Muskegon County was updated. It was estimated that 2 to 3 inches of rain fell from the thunderstorms. A report of several vehicles stuck in standing water was received.

Tuesday, July 7th

At 5:18 AM EDT, the flood advisory for Muskegon County was cancelled as the water levels had receded.

Tuesday, July 7th

At 11:54 PM EDT, a flood advisory was issued for Holt on Sycamore Creek. Runoff from the recent rain is expected to cause the river to rise above action stage.

Wednesday, July 8th

At 7:50 AM the flood advisory for Holt was continued.

Wednesday, July 8th

At 11:45 AM EDT the flood advisory for Holt was continued.

Wednesday, July 8th

At 9:48AM EDT, the flood advisory for Holt was continued.

Thursday, July 9th

At 9:42 AM EDT, the flood advisory for Holt was cancelled.

Tuesday, July 14th

At 1:55 AM EDT, an areal flood advisory was issued for much of the central and southern parts of the HSA. Thunderstorms that tracked through the region produced 1 to 3 inches of rain, which had caused minor flooding. The advisory was in effect until 2 pm Tuesday.

Tuesday, July 14th

At 7:51 AM EDT, the flood advisory was continued for much of central and southern locations parts of the HSA.

Tuesday, July 14th

At 12:14 PM EDT, the flood advisory was cancelled.

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

- Sycamore Creed near Holt, Michigan (5 days above bankfull)
- Grand River at Ionia, Michigan (2 days above bankfull)
- Kalamazoo River near New Richmond, Michigan (1 days above bankfull)
- Kalamazoo River at Comstock, Michigan (5 days above bankfull)

Flood Stage Report

No gage exceeded flood stage in July thys no NWS Form E-3 “Flood Stage Report” was.

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	96
Whitehall	White	104
Evert	Muskegon	95
Mt. Pleasant	Chippewa	121
Lansing	Grand	222
Grand Rapids	Grand	146
East Lansing	Red Cedar	131
Hastings	Thornapple	136
Battle Creek	Battle Creek	200
Battle Creek	Kalamazoo	119

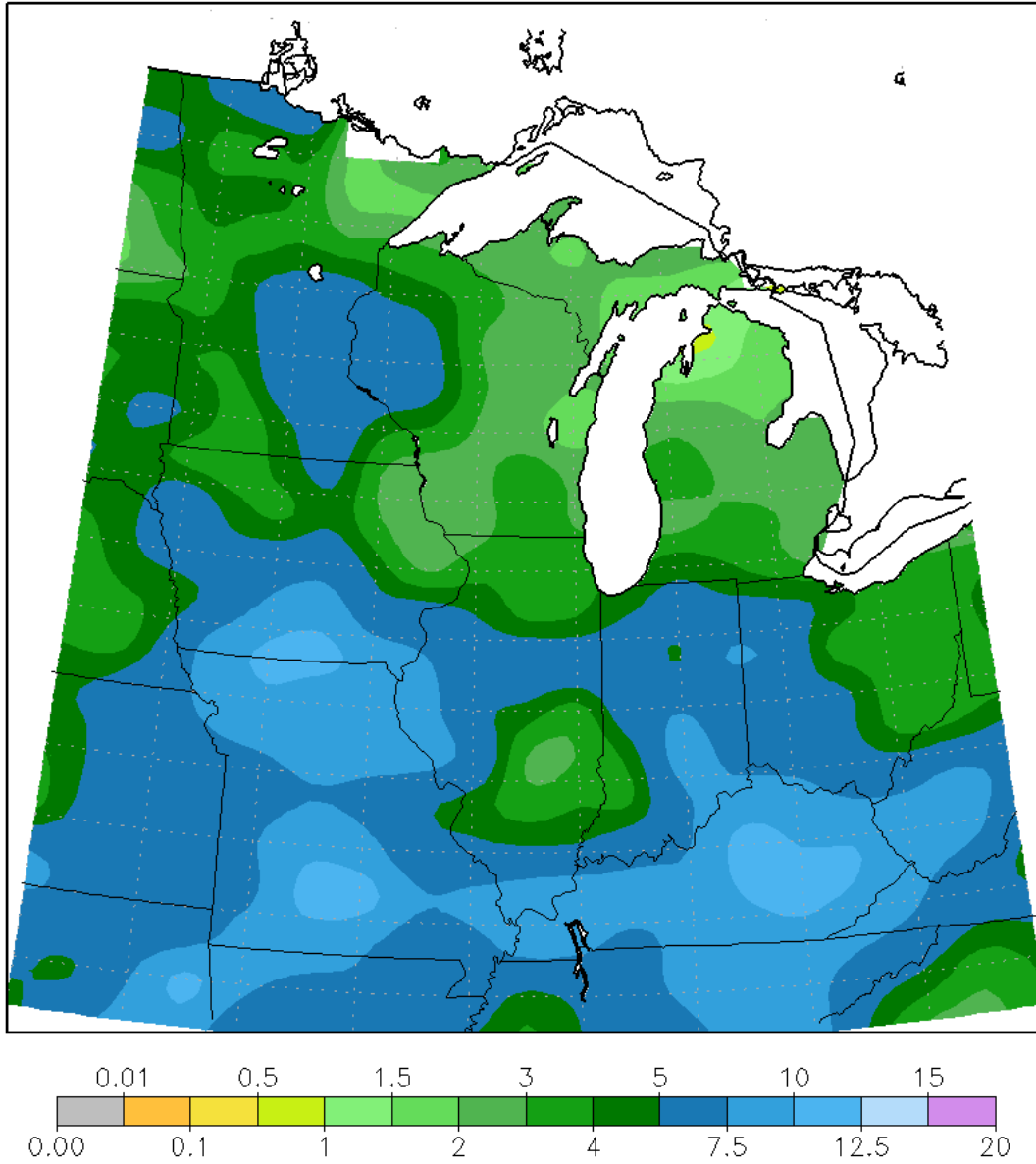
General Hydrologic Information

July 2015 featured below normal temperatures and generally below normal precipitation. The region that saw above normal precipitation was mostly in the lower White and Muskegon basins.

July precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan, were 2.23, 2.39, and 5.05 inches, respectively (Figure 1). Precipitation departures for the month at these three sites were 1.55 of an inch below normal at Grand Rapids, 0.45 inches below normal at Lansing, and 2.68 inches above normal at Muskegon. Percent of mean precipitation for July 2015 is shown in Figure 2. Yearly precipitation departures were 3.24 inches below normal for Grand Rapids, 1.65 inches above normal for Lansing, and 3.59 inches above normal for Muskegon.

Temperatures for the month of July were below normal at Grand Rapids, Lansing, and Muskegon. The average monthly temperature departures were, 1.7, 1.3, and 1.1 degrees Fahrenheit respectively.

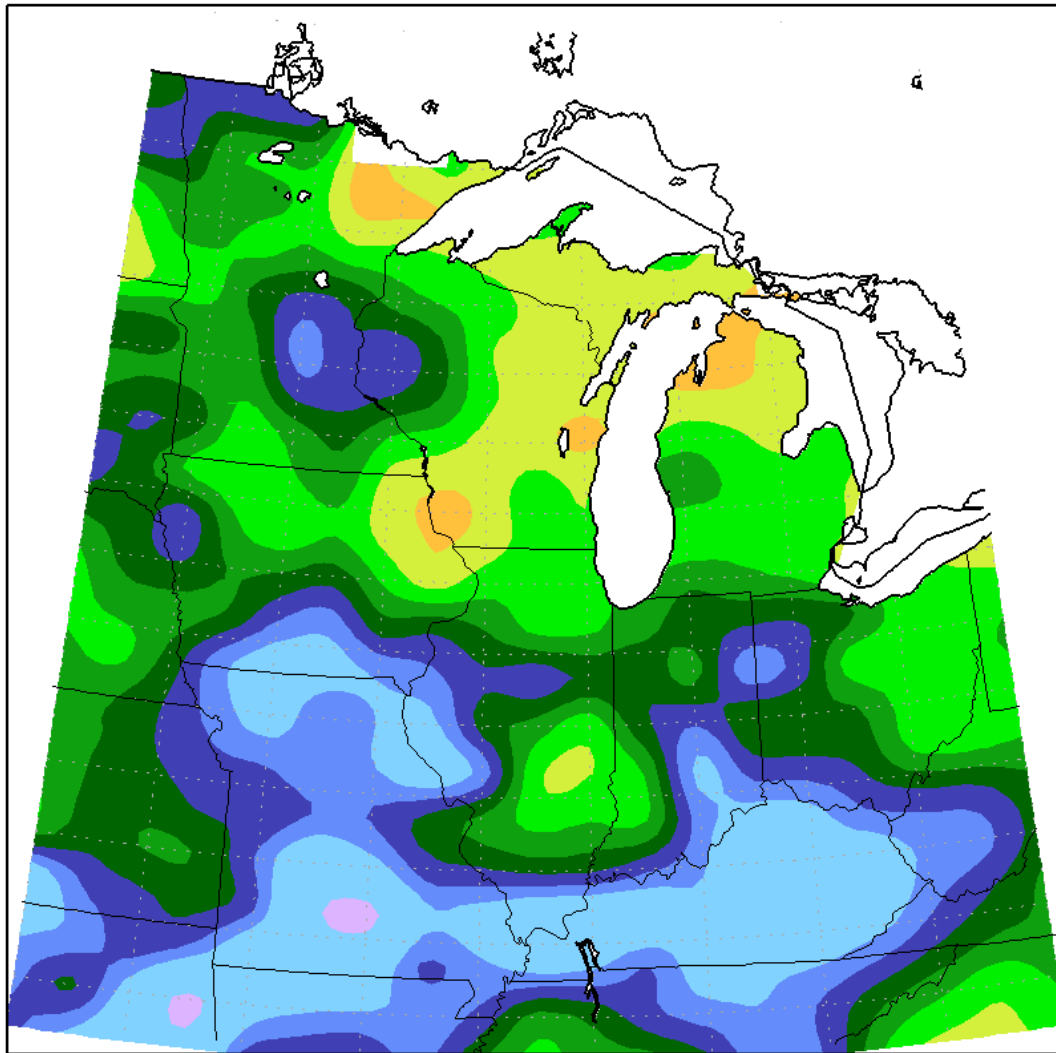
Accumulated Precipitation (in)
July 1, 2015 to July 31, 2015



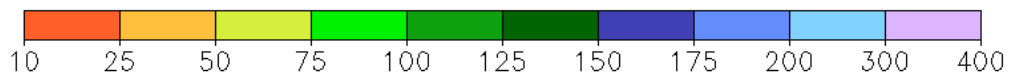
Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana-Champaign

Figure 1. July Monthly Precipitation Totals

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



Mean period is 1981–2010.



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Figure 2. July Percent of Mean of Accumulated Precipitation

Hydrologic Products issued this month:

- 1 Hydrologic Outlook (ARBESFGRR)
- 31 Hydrologic Summaries (ARBRVAGRR)
- 31 Daily River and Lake Summaries (ARBRVDGRR)
- 6 Areal Flood Advisory Statements (ARBFLSGRR)
- 19 River Flood Advisory Statements (ARBFLSGRR)
- 3 Hydrologic Statements (ARBRVSGRR)

News Articles and Related Documentation

None