

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

DATE:

August 13, 2013

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

SIGNATURE:

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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

No significant flooding occurred during the month of July 2013. Areal flood advisories were issued for Ingham, Calhoun, Jackson, and Kalamazoo Counties. Only minor temporary flooding of roadways occurred in the advisory area.

Flood Conditions

No rivers exceeded bankfull during the month of July.

Flood Stage Report

No rivers exceeded flood stage during the month of July.

River Conditions

River levels across the HSA were near normal at the end of the month. 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	103
Whitehall	White	120
Evert	Muskegon	100
Mt. Pleasant	Chippewa	122
Lansing	Grand	100
Grand Rapids	Grand	105
East Lansing	Red Cedar	116
Hastings	Thornapple	106
Battle Creek	Battle Creek	99
Battle Creek	Kalamazoo	95

General Hydrologic Information

July 2013 had temperatures near normal and precipitation near to below normal across Southwest Lower Michigan. July precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan, were 3.21, 1.75, and 2.29 inches, respectively (Figure 1). Precipitation totals for the month at these three sites were 0.57 of an inch below normal at Grand Rapids, 1.09 inches below normal at Lansing, and 0.08 of an inch below normal at Muskegon, Michigan (Figure 2). Yearly precipitation totals were 9.29 inches above normal for Grand Rapids, 10.29 inches above normal for Lansing, and 12.12 inches above normal for Muskegon, Michigan.

Temperatures for the month of July were near normal at Grand Rapids, Lansing, and Muskegon, Michigan, with average monthly departures of +0.2, +0.1 and +0.2 degrees Fahrenheit, respectively.

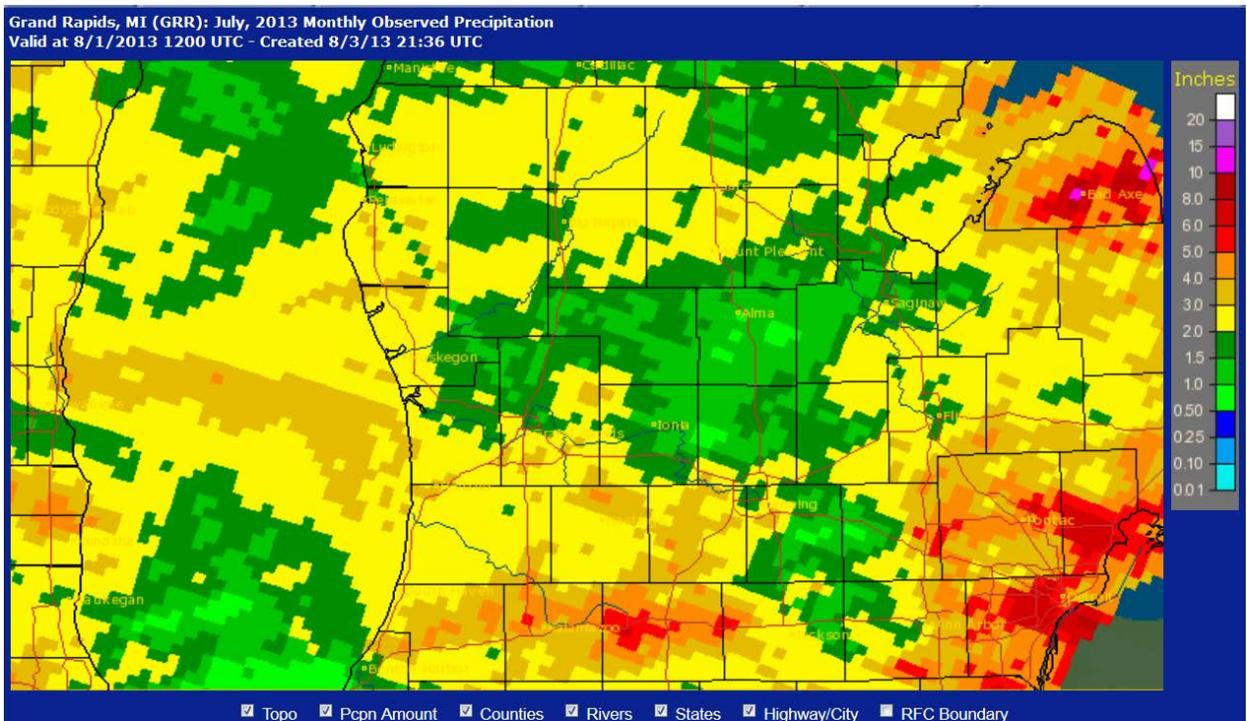


Figure 1. July Monthly Precipitation Totals

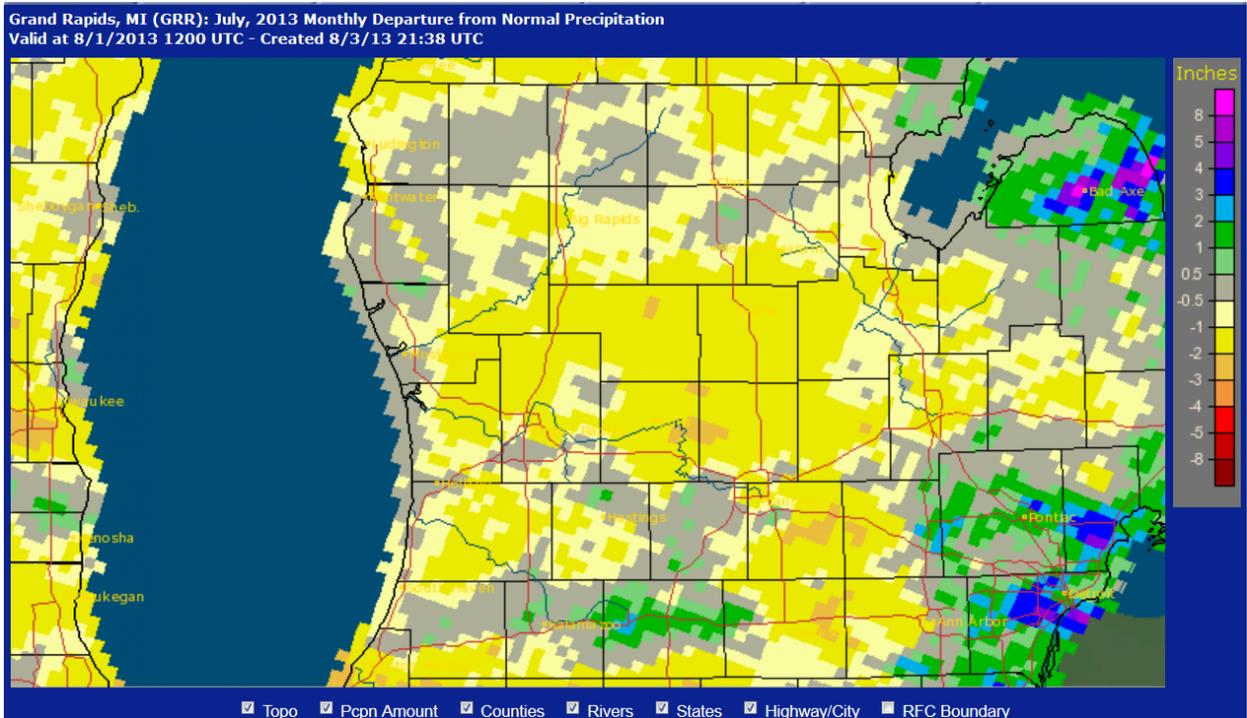


Figure 2. July Monthly Departure from Normal Precipitation Totals

Hydrologic Products issued this month:

- 5 Areal Flood Advisories (ABRFLSGRR)
- 1 Hydrologic Outlook (ARBESFGRR)
- 31 Hydrologic Summaries (ARBRVAGRR)
- 31 Daily River and Lake Summaries (ARBRVDGRR)