

NWS FORM E-5

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

HSA OFFICE:

Grand Rapids, MI

REPORT FOR (MONTH & YEAR):

May 2013

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

DATE:

July 1, 2013

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 L. Walton, Service Hydrologist

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

No significant flooding occurred in the Grand Rapids Hydrologic Service Area (HSA) during the month of May 2013.

Flood Conditions

Wednesday, May 22nd

At 4:53 PM EDT a river flood warning was issued for the Muskegon River near Croton, Michigan. One to two inches of rain had fallen across the basin and the Muskegon River was forecast to rise just above flood stage Thursday evening.

At 9:56 PM EDT the river flood warning for the Muskegon River near Croton, Michigan, was cancelled. The river forecast was updated to crest below flood stage.

The following rivers exceeded bankfull, but remained below flood stage, during the month of May 2013:

- Pere Marquette River near Scottville, Michigan (2 days above bankfull)
- Muskegon River near Croton, Michigan (3 days above bankfull)
- Maple River at Maple Rapids, Michigan (7 days above bankfull)
- Chippewa River below Mt. Pleasant, Michigan (4 days above bankfull)
- Looking Glass River near Eagle, Michigan (6 days above bankfull)
- Grand River at Ionia, Michigan (10 days above bankfull)
- Flat River near Smyrna, Michigan (2 days above bankfull)
- Grand River at Comstock Park, Michigan (3 days above bankfull)
- Grand River at Grand Rapids, Michigan (2 days above bankfull)

Flood Stage Report

No rivers exceeded flood stage during the month of May.

River Conditions

River levels across the HSA were significantly above 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	176
Whitehall	White	210
Ewart	Muskegon	228
Mt. Pleasant	Chippewa	465
Lansing	Grand	193
Grand Rapids	Grand	285
East Lansing	Red Cedar	206
Hastings	Thornapple	413
Battle Creek	Battle Creek	151
Battle Creek	Kalamazoo	104

General Hydrologic Information

May 2013 had temperatures above normal, and near to slightly above normal precipitation, for Southwest Lower Michigan.

May precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan, were 3.59, 3.95, and 4.57 inches, respectively (Figure 1). Precipitation totals for the month at these three sites were 0.39 of an inch below normal at Grand Rapids, 0.59 of an inch above normal at Lansing, and 1.32 inches above normal at Muskegon, Michigan (Figure 2). Yearly precipitation totals were 9.11 inches above normal for Grand Rapids, 6.43 inches above normal for Lansing, and 10.42 inches above normal for Muskegon, Michigan.

Only a Trace of snowfall was reported across portions of Southwest Lower Michigan during the month of May.

Temperatures for the month of May were above normal at Grand Rapids, Lansing, and Muskegon, Michigan, with average monthly departures of +3.8, +3.8 and +3.7 degrees Fahrenheit, respectively.

Figure 1. May Monthly Precipitation Totals

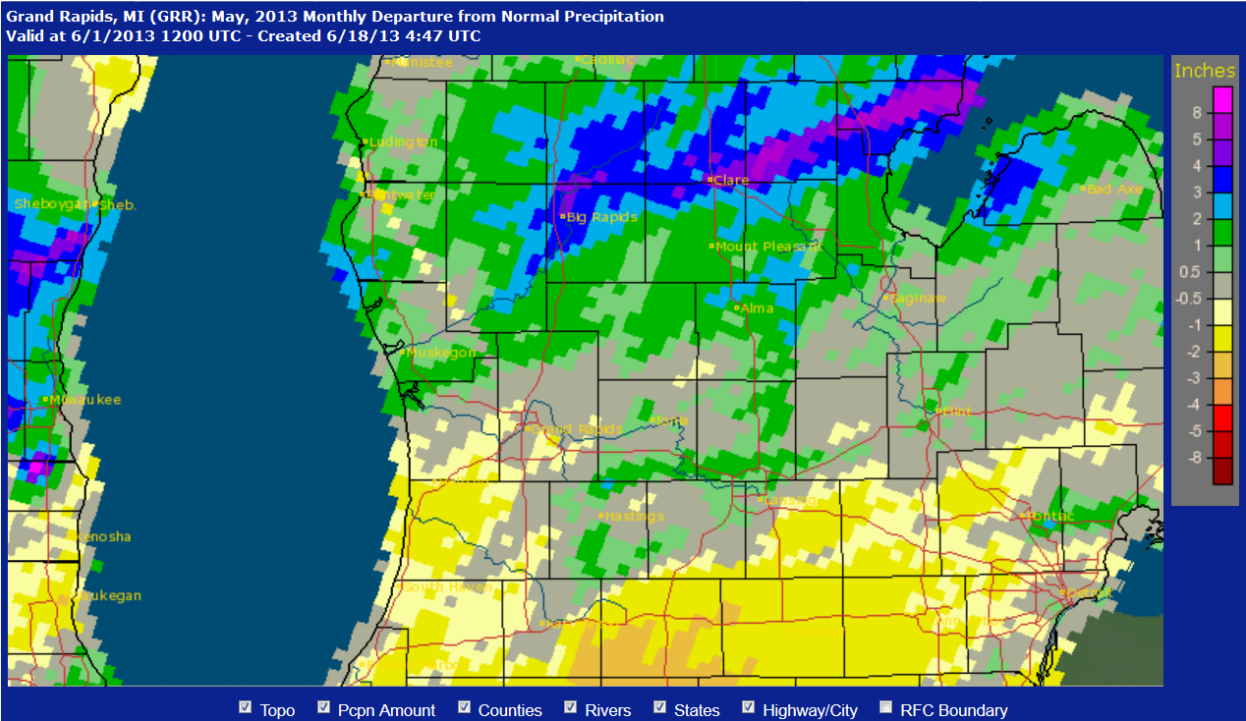


Figure 2. May Monthly Departure from Normal Precipitation Totals

Hydrologic Products issued this month:

- 1 River Flood Warning (ARBFLWGRR)
- 1 River Flood Statement (ARBFLSGRR)

7 Areal Flood Advisories (ABRFLSGRR)
39 River Flood Advisories (ARBFLSGRR)
28 Hydrologic Statements (ARBRVSGRR)
3 Hydrologic Outlooks (ARBESFGRR)
31 Hydrologic Summaries (ARBRVAGRR)
31 Daily River and Lake Summaries (ARBRVDGRR)