**NWS FORM E-5** 

U.S. DEPARTMENT OF COMMERCE

NOAA, NATIONAL WEATHER SERVICE

HSA OFFICE: Grand Rapids, MI

REPORT FOR (MONTH &YEAR):

June 2012

DATE: July 22, 2012

SIGNATURE:

Daniel K. Cobb, MIC

Mark L. Walton, Service Hydrologist

. TO: NATIONAL WEATHER SERVICE (W/OS31)

HYDROMETEOROLOGICAL INFO CENTER 1325 EAST-WEST HIGHWAY, RM 13468

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

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**

No significant flooding occurred in our Hydrologic Service Area (HSA) during the month of June. An areal flood advisory was issued for several counties in our HSA for minor street flooding.

### **Flood Conditions**

Monday, June 18<sup>th</sup>

At 8:23 AM EDT an areal flood advisory was issued for Muskegon and Oceana Counties until 4:30 PM EDT Monday. Thunderstorms with very heavy rain were moving into the advisory area.

At 10:54 AM EDT the areal flood advisory remained in effect for Muskegon and Oceana Counties until 4:30 PM EDT. Local law enforcement reported minor street flooding in Muskegon County near Sherman Boulevard. Radar estimated rainfall amounts of one to two inches over the past two hours, most of which fell within a 30 minute time span. At 12:41 PM EDT, the areal flood advisory that was in effect for Muskegon and Oceana Counties was cancelled.

No rivers exceeded their banks during the month of June.

#### **Flood Stage Report**

No rivers exceeded flood stage during the month of June.

#### **River Conditions**

River levels across the HSA were below normal at the end of the month. The end of the month percentage of normal flow for selected rivers is listed below:

Location	<u>River</u>	% of Normal
Scottville	Pere Marquette	78
Whitehall	White	70
Evart	Muskegon	82
Mt. Pleasant	Chippewa	80
Lansing	Grand	54
Grand Rapids	Grand	54
East Lansing	Red Cedar	44
Hastings	Thornapple	63
Battle Creek	Battle Creek	42
Battle Creek	Kalamazoo	56

## **General Hydrologic Information**

For our HSA, June 2012 was a warm and dry month.

June precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan, were 2.17, 1.89, and 2.92 inches, respectively (Figure 1). Precipitation totals for the month at these three sites were 1.60 inches below normal at Grand Rapids, 1.56 inches below normal at Lansing, and 0.37 of an inch above normal at Muskegon, Michigan (Figure 2). Yearly precipitation totals were 1.03 inches below normal for Grand Rapids, 1.91 inches below normal for Lansing, and 0.98 of an inch above normal for Muskegon, Michigan.

Temperatures for the month of June were above normal at Grand Rapids, Lansing, and Muskegon, Michigan, with average monthly departures of +2.4, +2.2 and +3.1 degrees Fahrenheit, respectively.

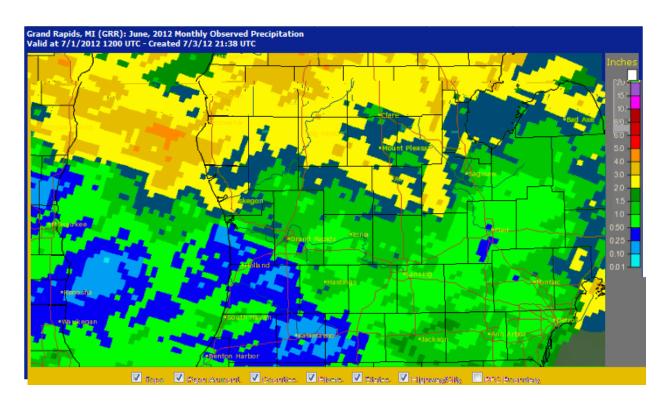


Figure 1. June 2012 Monthly Precipitation Totals

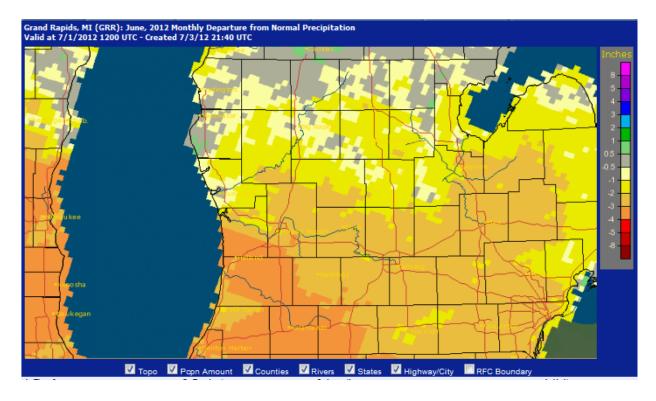


Figure 2. June 2012 Monthly Departure from Normal Precipitation Totals

# **Hydrologic Products issued this month:**

- 3 Areal Flood Advisories (ARBFLSGRR)
- 1 Probabilistic Hydrologic Outlook (ARBESFGRR)
- 30 Daily River and Lake Summaries (ARBRVDGRR)
- 30 Hydrologic Summaries (ARBRVAGRR)

## **News Articles and Related Documentation**

None