

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

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

No significant flooding occurred during the month of June in our Hydrologic Service Area (HSA). During the month of June, urban and small stream flood advisories were issued for Newaygo, Kent, Allegan, Jackson, Lake, Oceana, Muskegon, and Mason Counties in Southwest Lower Michigan. During the advisories a few secondary roads flooded for a short period and small creeks and streams had significant rises, but no significant property damage was reported.

Flood Conditions

On June 2nd, urban and small stream flood advisories were issued for Newaygo, Kent and Allegan Counties. Two inches of rain fell during a two hour period over the advisory area and resulted in a few secondary roads flooded for a short period, and significant rises in small creeks and streams. On June 18th, urban and small stream flood advisories were issued for Mason, Lake, Oceana, Newaygo, and Muskegon Counties when a line of thunderstorms over the advisory area produced two to four inches of rain over a six hour period. On June 21st, an urban and small stream flood advisory was issued for Jackson County when thunderstorms over the advisory area produced three to six inches of rain over an eight hour period. The rain events on the 18th and 21st resulted in a few secondary roads flooded in low lying areas for a short period, and significant rises in small creeks and streams. On June 26th, an urban and small stream flood advisory was issued for Jackson County when thunderstorms dumped three to four inches of rain over the advisory area over a four hour period. Streets flooded due to a clogged drain in the city of Jackson and stranded several vehicles. The advisories were allowed to expire after the minor nuisance flooding subsided. No significant property damage was reported for these events.

A river flood warning was issued for the Grand River at Jackson on June 26th, but was cancelled the next day when the river crested below the flood stage of 14 feet, at 13.8 feet.

Flood Stage Report

No rivers exceeded flood stage during the month of June.

River Conditions

River levels across the Grand Rapids HSA by the end of June were above normal in our more Northern streams and below normal in our Southern streams.

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	125
Whitehall	White	106
Evart	Muskegon	157
Mt. Pleasant	Chippewa	181
Lansing	Grand	138
Grand Rapids	Grand	103
East Lansing	Red Cedar	93
Hastings	Thornapple	65
Battle Creek	Battle Creek	83
New Richmond	Kalamazoo	84

General Hydrologic Information

June precipitation was below normal, and temperatures were above normal across Southwest Lower Michigan.

June precipitation totals at first order stations across our HSA were below normal for Grand Rapids, Lansing, and Muskegon, Michigan. June precipitation totals at Grand Rapids, Lansing, and Muskegon, were 1.77, 1.60, and 1.61 inches, respectively. Precipitation for the month at these three sites were 1.90 inches below normal at Grand Rapids, 2.00 inches below normal at Lansing, and 0.97 of an inch below normal at Muskegon, Michigan. For the year, precipitation totals were still above normal at Grand Rapids, Lansing, and Muskegon, Michigan. Yearly precipitation totals were 2.25 inches above normal for Grand Rapids, 1.87 inches above normal for Lansing, and 5.82 inches above normal for Muskegon, Michigan.

Temperatures for the month of June were slightly above normal at Grand Rapids, Lansing, and Muskegon, with average monthly departures of +0.5, +0.3 and +1.0 degrees Fahrenheit, respectively.

Hydrologic Products issued this month:

- 1 Flood Warning (ARBFLWGRR) was issued
- 1 Hydrologic Outlook (ARBESFGRR) was issued
- 15 Flood Statements (ARBFLSGRR) were issued
- 2 Hydrologic Statements (ARBRVSGRR) were issued
- 30 Daily River and Lake Summary's (ABRRVDGRR) were issued
- 30 Hydrologic Summary's were issued (RVA)