

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

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).

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 August in our Hydrologic Service Area (HSA). Flood advisories were issued for 12 of our 23 Counties in our HSA. No significant property damages were reported and no lives were lost during the minor nuisance flooding events that occurred in August.

Flood Conditions

Only minor nuisance flooding occurred during the month of August. On August 7th flood advisories were issued for Kalamazoo and Van Buren Counties when heavy rainfall associated with a line of thunderstorms moved through the area, no flooding was reported during this event. On August 19th flood advisories were issued once again for Kalamazoo and Van Buren Counties when heavy rain associated with a line of thunderstorms moved through the area and resulted in ponding of water on local area roads. On August 22nd, flood advisories were issued for Oceana, Newaygo, Muskegon, Ottawa, Kent, Montcalm, Gratiot, Ionia, and Clinton, Counties when thunderstorms producing heavy rain moved through the area and resulted in ponding of water on local area roads. On August 24th, flood advisories were issued for Clinton and Ingham Counties when a line of thunderstorms with heavy rain moved through the area and resulted in ponding of water on local area roads and the Michigan State University Campus. Finally, on August 29th, a flood advisory was issued for Ingham County when radar estimated rainfall in excess of two inches an hour occurred near the city of Holt, which resulted in 8 inches of water covering the intersection of Holt and Aurelius Road for a brief period. For the month of August, no significant property damage was reported and no lives were lost during the minor nuisance flooding events that occurred during the month.

Flood Stage Report

No rivers exceeded flood stage during the month of August.

River Conditions

River levels by the end of August were near to above normal for the majority of the rivers

in our HSA. Heavy rainfall toward the end of the month resulted in several rivers being significantly above normal levels, but still within bank.

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	117
Whitehall	White	96
Evert	Muskegon	97
Mt. Pleasant	Chippewa	124
Lansing	Grand	460
Grand Rapids	Grand	142
East Lansing	Red Cedar	512
Hastings	Thornapple	160
Battle Creek	Battle Creek	134
Comstock	Kalamazoo	124

General Hydrologic Information

For the month of August, precipitation and temperature were above normal for Grand Rapids, Lansing and Muskegon, Michigan.

August precipitation totals at Grand Rapids, Lansing, and Muskegon, were 6.10, 6.42, and 4.94 inches, respectively. Precipitation for the month at these three sites was 2.32 inches above normal at Grand Rapids, 2.96 inches above normal at Lansing, and 1.17 inches above normal at Muskegon, Michigan. For the year, precipitation totals were above normal at Grand Rapids, Lansing, and Muskegon, Michigan. Yearly precipitation totals were 0.35 of an inch above normal for Grand Rapids, 1.41 inches above normal for Lansing, and 0.02 of an inch above normal for Muskegon, Michigan.

The majority of the precipitation in August came during the latter part of the month with the first part of the month being very dry. As a result, portions of our HSA were categorized to be in a severe drought in early August and multiple drought statements were issued by our office to cover the impacts. The significant rainfall near the end of August mitigated the drought in our HSA and the last drought statement was issued August 31st.

Temperatures for the month of August were above normal at Grand Rapids, Lansing, and Muskegon, with average monthly departures of +3.9, +3.0 and +1.9 degrees Fahrenheit, respectively.

Hydrologic Products issued this month:

- 13 Flood Statements (ARBFLSGRR) were issued
- 7 Hydrologic Outlooks (ARBESFGRR) were issued (6 were drought statements)
- 18 Hydrologic Statements (ARBRVSGRR) were issued
- 31 Hydrologic Summary's (ARBRVAGRR) were issued
- 31 Daily River and Lake Summary's (ABRRVDGRR) were issued