

NWS FORM E-5

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

HSA OFFICE:
Grand Rapids, MI

REPORT FOR (MONTH & YEAR):
September 2009

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

DATE:
November 5, 2009

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

SIGNATURE:
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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 September.

Flood Conditions

None

Flood Stage Report

No river forecast points exceeded flood stage during the month of September.

River Conditions

River levels were near to above normal across our HSA at the end of September. Even though we had below normal rainfall for September, several rainfall events occurred near the end of the month to push river levels above normal by the end of September. 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>
Whitehall	White	175
Evert	Muskegon	119
Mt. Pleasant	Chippewa	136
Lansing	Grand	146
Grand Rapids	Grand	116
East Lansing	Red Cedar	162
Hastings	Thornapple	106
Battle Creek	Battle Creek	144
Comstock	Kalamazoo	160

General Hydrologic Information

September 2009 will be remembered for above normal temperatures and below normal precipitation over our HSA. September precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan, were 1.56, 0.69, and 2.72 inches, respectively. Precipitation totals for the month at these three sites were 2.72 inches below normal at Grand Rapids, 2.79 inches below normal at Lansing, and 0.80 of an inch below at Muskegon, Michigan. Yearly precipitation totals were 2.46 inches above normal for Grand Rapids, 7.11 inches above normal for Lansing, and 3.17 inches above normal for Muskegon, Michigan.

Temperatures for the month of September were above normal at Grand Rapids, Lansing, and Muskegon, with average monthly departures of +2.3, +1.7 and +2.9 degrees Fahrenheit, respectively.

Hydrologic Products issued this month:

- 1 Hydrologic Outlook (ARBESFGRR)
- 30 Hydrologic Summaries (ARBRVAGRR)
- 30 Daily River and Lake Summaries (ARBRVDGRR)