NWS FORM E-5 U.S. DEPARTMENT OF COMMERCE NOAA, NATIONAL WEATHER SERVICE

HSA OFFICE: Grand Rapids, MI
REPORT FOR (MONTH &YEAR): September 2012
DATE:

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 October 11, 2012

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).

 \mathbf{X} An \mathbf{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 September. At the end of September the U.S. Drought Monitor had our HSA in an Abnormally Dry (D0) Category.

Flood Conditions

No rivers exceeded their banks during the month of September.

Flood Stage Report

No rivers exceeded flood stage during the month of September.

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	River	<u>% of Normal</u>
Scottville	Pere Marquette	76
Whitehall	White	66
Evart	Muskegon	66
Mt. Pleasant	Chippewa	65
Lansing	Grand	67
Grand Rapids	Grand	55
East Lansing	Red Cedar	60
Hastings	Thornapple	70
Battle Creek	Battle Creek	50
Battle Creek	Kalamazoo	72

General Hydrologic Information

For our HSA, precipitation was below normal and temperatures were near normal for September 2012.

September precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan, were 1.97, 2.88, and 1.03 inches, respectively (Figure 1). Precipitation totals for the month at these three sites were 2.31 inches below normal at Grand Rapids, 0.62 of an inch below normal at Lansing, and 2.86 inches below normal at Muskegon, Michigan (Figure 2). Yearly precipitation totals were 4.81 inches below normal for Grand Rapids, 3.00 inches below normal for Lansing, and 3.20 of an inch below normal for Muskegon, Michigan.

Temperatures for the month of September were near normal at Grand Rapids, Lansing, and Muskegon, Michigan, with average monthly departures of +0.2, -0.1 and +0.7 degrees Fahrenheit, respectively.

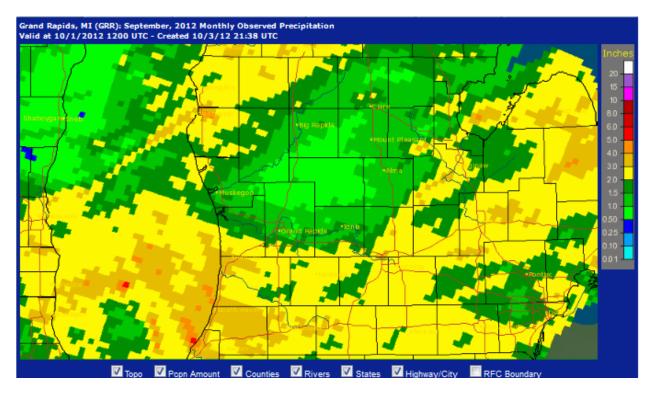


Figure 1. September 2012 Monthly Precipitation Totals

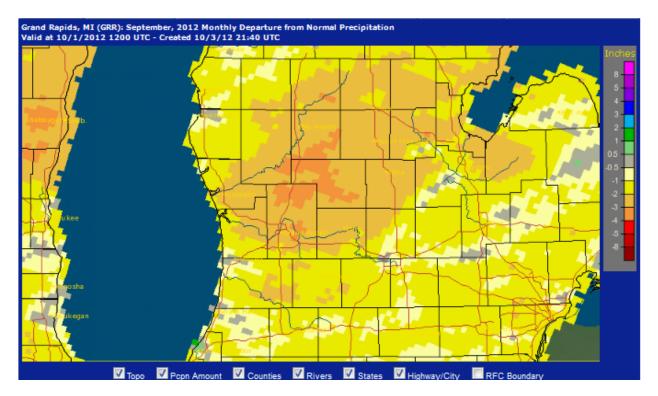


Figure 2. September 2012 Monthly Departure from Normal Precipitation Totals

Hydrologic Products issued this month:

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

News Articles and Related Documentation

None