NWS FORM E-5	U.S. DEPARTMENT OF COMMERCE NOAA, NATIONAL WEATHER SERVICE	HSA OFFICE: Grand Rapids, MI		
		REPORT FOR (MONTH &YEAR): November 2008		
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS				
-		DATE:		
		December 5, 2008		
	L WEATHER SERVICE (W/OS31)			
HYDROMETEOROLOGICAL INFO CENTER		SIGNATURE:		
1325 EAST	-WEST HIGHWAY, RM 13468	Daniel K. Cobb, MIC		
SILVER SF	RING, MD 20910	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).				

X 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 November.

Flood Conditions

None

Flood Stage Report

No rivers exceeded flood stage this month.

<u>River Conditions</u>

River levels by the end of November were near normal for our HSA. The end of the month percentage of normal flow for selected rivers is listed below:

Location	River	% of Normal
Scottville	Pere Marquette	94
Whitehall	White	79
Evart	Muskegon	78
Mt. Pleasant	Chippewa	82
Lansing	Grand	127
Grand Rapids	Grand	115
East Lansing	Red Cedar	138
Hastings	Thornapple	99
Battle Creek	Battle Creek	118
Comstoc	Kalamazoo	120

General Hydrologic Information

November 2008 had below normal precipitation and near normal temperatures. November precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan were 2.07, 1.69, and 2.94 inches, respectively. Precipitation totals for the month at these three sites were 1.28 inches below normal at Grand Rapids, 0.97 of an inch below normal at Lansing, and 0.29 of an inch below normal at Muskegon, Michigan. Yearly precipitation totals were 8.10 inches above normal for Grand Rapids, 2.77 inches above normal for Lansing, and 8.75 inches above normal for Muskegon, Michigan. Snowfall totals for the month at Grand Rapids, Lansing, and Muskegon were above normal with readings of 10.0 (+2.3), 7.5 (+2.4), and 14.8 (+6.1) inches, respectively. At the end of the month the snow depth was 0 inches at Grand Rapids, Lansing, and Muskegon, Michigan.

Temperatures for the month of November were near normal at Grand Rapids, Lansing, and Muskegon, with average monthly departures of +0.5, -0.4 and +0.7 degrees Fahrenheit, respectively.

Hydrologic Products issued this month:

- 3 Hydrologic Statements (ARBRVSGRR)
- 30 Hydrologic Summaries (ARBRVAGRR)
- 30 Daily River and Lake Summaries (ABRRVDGRR)
- 1 Hydrologic Outlook (ARBESFGRR)