

NWS FORM E-5

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

HSA OFFICE:  
**Grand Rapids, MI**

**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

REPORT FOR (MONTH & YEAR):  
November 2005

DATE:  
December 13, 2005

SIGNATURE:  
MIC  
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 flooding occurred within this Hydrologic Service Area.

No significant river flooding occurred in the Grand Rapids Hydrologic Service Area (HSA) during the month of November.

November Precipitation

November precipitation totals were above normal at Grand Rapids, Lansing, and Muskegon, Michigan. Monthly precipitation totals at Grand Rapids, Lansing, and Muskegon, were 5.29, 4.53, and 6.77 inches, respectively. Precipitation for the month at these three sites was 1.94 inches above normal at Grand Rapids, 1.87 inches above normal at Lansing, and 3.54 inches above normal at Muskegon, Michigan. Snowfall for the month was above normal and ranged from 17.3 inches (+9.6) at Grand Rapids, to 7.5 inches (+2.4) at Lansing, with 15.6 inches (+6.9) at Muskegon, Michigan. By the end of the month only a trace of snow was reported on the ground for Grand Rapids, Lansing, and Muskegon, Michigan. For the year, precipitation totals at Grand Rapids were 0.33 of an inch below normal (34.10"), 1.04 inches above normal (30.40") at Lansing, and 3.53 inches below normal (26.71") at Muskegon, Michigan.

November Temperatures

Average temperatures for the month of November 2005 were several degrees above normal across southwest Lower Michigan. Temperatures for the month of November were above normal at Grand Rapids, Lansing, and Muskegon, averaging 2.1, 3.8, and 2.7 degrees above normal, respectively.

November River Levels

River levels ranged from above normal for our more Northern rivers, to near/below normal for our more Southern rivers, by the end of November. All rivers stayed below flood stage during the month of November. 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	168
Whitehall	White	169
Ewart	Muskegon	166
Mt. Pleasant	Chippewa	213
Lansing	Grand	106
Grand Rapids	Grand	118
East Lansing	Red Cedar	106
Hastings	Thornapple	48
Battle Creek	Battle Creek	102
Comstock	Kalamazoo	126

Hydrologic Products issued this month:

- 1 Hydrologic Outlook (ARBESFGRR) was issued
- 9 Hydrologic Statement (ARBRVSGRR) were issued
- 30 Hydrologic Summary's (ARBRVAGRR) were issued
- 2 Daily River and Lake Summary's (ARBRVDGRR) were issued