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

HSA OFFICE:
Grand Rapids, MI
REPORT FOR (MONTH &YEAR):
April 2007

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

DATE: May 29, 2007

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 April in our Hydrologic Service Area (HSA).

# **Flood Conditions**

None occurred during the month of April. A flood watch was issued on April 2, 2007, for our entire HSA in advance of widespread showers and thunderstorms, but flooding did not materialize. A flood warning was issued for the flat river near Smyrna, but the river crested below flood stage.

### **Flood Stage Report**

No rivers exceeded flood stage during the month of April.

#### **River Conditions**

River levels across the Grand Rapids HSA by the end of April were significantly above normal at the end of the month.

The end of the month percentage of normal flow for selected rivers is listed below:

Location	<u>River</u>	% of Normal
Scottville	Pere Marquette	173
Whitehall	White	168
Evart	Muskegon	144
Mt. Pleasant	Chippewa	200
Lansing	Grand	211
Grand Rapids	Grand	159
East Lansing	Red Cedar	186
Hastings	Thornapple	242
Battle Creek	Battle Creek	199
Comstock	Kalamazoo	140

# **General Hydrologic Information**

For the month of April, precipitation totals were above normal and temperatures were below normal for Grand Rapids, Lansing and Muskegon, Michigan.

April precipitation totals at Grand Rapids, Lansing, and Muskegon, were 4.27, 3.37, and 4.22 inches, respectively. Precipitation for the month at these three sites were 0.79 of an inch above normal at Grand Rapids, 0.28 of an inch above normal at Lansing, and 1.31 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 2.30 inches above normal for Grand Rapids, 0.15 of an inch above normal for Lansing, and 2.04 inches above normal for Muskegon, Michigan.

April snowfall totals at first order stations across our HSA were above normal for Grand Rapids (+3.9"), Lansing (+3.5), and Muskegon (+10.6"), Michigan. April snowfall totals at Grand Rapids, Lansing, and Muskegon, were 6.7", 6.0", and 13.7", respectively. All the snow was gone by the end of the month.

Temperatures for the month of April were below normal at Grand Rapids, Lansing, and Muskegon, with average monthly departures of -1.2, -0.9 and -1.2 degrees Fahrenheit, respectively.

By the end of the month soil temperatures were 52 degrees Fahrenheit at 2 inches at Baldwin and Grand Rapids, Michigan.

### **Hydrologic Products issued this month:**

- 1 Flood Warning (ARBFLWGRR) was issued
- 3 Flood Statements (ARBFLSGRR) were issued
- 5 Flood Watches (ARBFFAGRR) were issued
- 1 Hydrologic Outlook (ARBESFGRR) was issued
- 40 Hydrologic Statements (ARBRVSGRR) were issued
- 30 Hydrologic Summary's (ARBRVAGRR) were issued
- 30 Daily River and Lake Summary's (ABRRVDGRR) were issued