

NWS FORM E-5

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

HSA OFFICE:  
**Grand Rapids, MI**

REPORT FOR (MONTH & YEAR):  
**February 2010**

**MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS**

DATE:  
March 25, 2010

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 February.

**Flood Conditions**

None to report.

**Flood Stage Report**

No rivers exceeded flood stage this month.

**River Conditions**

River levels by the end of February were below normal for our HSA.  
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	96
Whitehall	White	86
Ewart	Muskegon	91
Mt. Pleasant	Chippewa	84
Lansing	Grand	60
Grand Rapids	Grand	68
East Lansing	Red Cedar	56
Hastings	Thornapple	55
Battle Creek	Battle Creek	81
Comstock	Kalamazoo	95

## **General Hydrologic Information**

February 2010 had above normal snowfall and slightly above normal temperatures. February precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan were 1.80, 1.35, and 2.02 inches, respectively. Precipitation totals for the month at these three sites were 0.26 of an inch above normal at Grand Rapids, 0.10 of an inch below normal at Lansing, and 0.44 of an inch above normal at Muskegon, Michigan. Snowfall totals for the month were above normal at Grand Rapids, Lansing, and Muskegon with 24.8 (+12.6), 20.6 (+10.0), and 28.1 (+9.8) inches, respectively. At the end of the month, the snow depth was 8 inches at Grand Rapids and Lansing, and 7 inches at Muskegon, Michigan.

Temperatures for the month of February were slightly above normal at Grand Rapids, Lansing, and Muskegon, Michigan, with average monthly departures of +2.2, +1.4 and +1.2 degrees Fahrenheit, respectively.

Frost Depths across the HSA varied from one to four inches at the end of the month.

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

- 2 Hydrologic Statements (ARBRVSGRR)
- 1 Probabilistic Hydrologic Outlook (ARBESFGRR)
- 28 Hydrologic Summaries (ARBRVAGRR)