

## 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

DATE:

March 14, 2012

SIGNATURE:

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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 February in our Hydrologic Service Area (HSA). River flood advisories for high river levels were issued for the Grand River at Ionia, Michigan, Portage River near Vicksburg, Michigan, and the St Joseph River near Burlington, Michigan, but no significant flood damages were reported during these events.

**Flood Conditions**

Several rivers in our HSA exceeded their banks but did not reach flood stage during the month of February.

River flood advisories were issued for the following rivers that exceeded bankfull, but remained below flood stage, during the month of February:

- St. Joseph River near Burlington (5 days above bankfull)
- Portage River near Vicksburg, Michigan (5 days above bankfull)
- Grand River at Ionia, Michigan (3 days above bankfull)

The February Spring Flood and Water Resources Outlook indicated the risk of flooding from late winter into spring was near to below average.

**Flood Stage Report**

No rivers exceeded flood stage during the month of February.

## **River Conditions**

River levels across the HSA were near normal at the end of the month. Very little ice formed on the rivers in our HSA and no ice jams were reported during the month of February. 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	99
Whitehall	White	92
Ewart	Muskegon	94
Mt. Pleasant	Chippewa	100
Lansing	Grand	127
Grand Rapids	Grand	113
East Lansing	Red Cedar	120
Hastings	Thornapple	102
Battle Creek	Battle Creek	134
Battle Creek	Kalamazoo	114

## **General Hydrologic Information**

February 2012 had significantly above normal temperatures and near normal precipitation. Snowfall for the month was near to below normal.

February precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan, were 2.00, 1.59, and 1.84 inches, respectively (Figure 1). Precipitation totals for the month at these three sites were 0.21 of an inch above normal at Grand Rapids, 0.12 of an inch above normal at Lansing, and 0.01 of an inch above normal at Muskegon, Michigan (Figure 2). Yearly precipitation totals were 1.32 inches above normal for Grand Rapids, 0.49 of an inch above normal for Lansing, and 1.11 inches above normal for Muskegon, Michigan.

Snowfall for the month of February at Grand Rapids, Lansing, and Muskegon, Michigan were 16.2 inches (1.4 inches above normal), 12.1 inches (0.5 of an inch above normal), and 10.6 inches (8.7 inches below normal), respectively. Snow depth across the HSA ranged from a Trace to 4 inches at the end of February (Figure 3).

At the end of February frost depth across the HSA were at zero.

Temperatures for the month of February were significantly above normal at Grand Rapids, Lansing, and Muskegon, Michigan, with average monthly departures of +5.1, +4.6 and +5.7 degrees Fahrenheit, respectively.

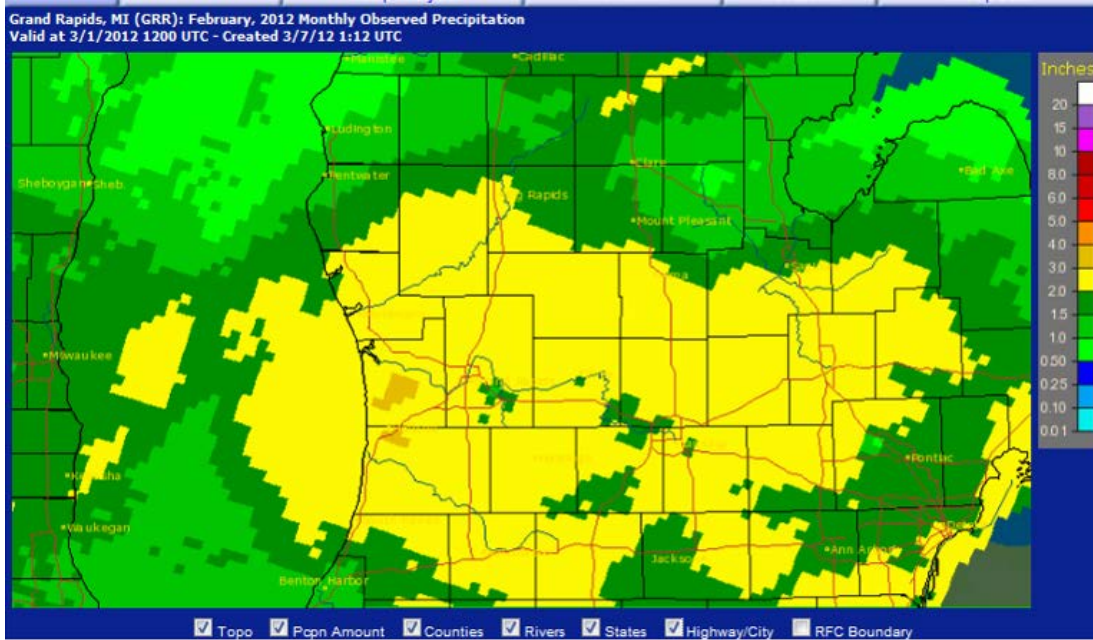


Figure 1. February 2012 Monthly Precipitation Totals

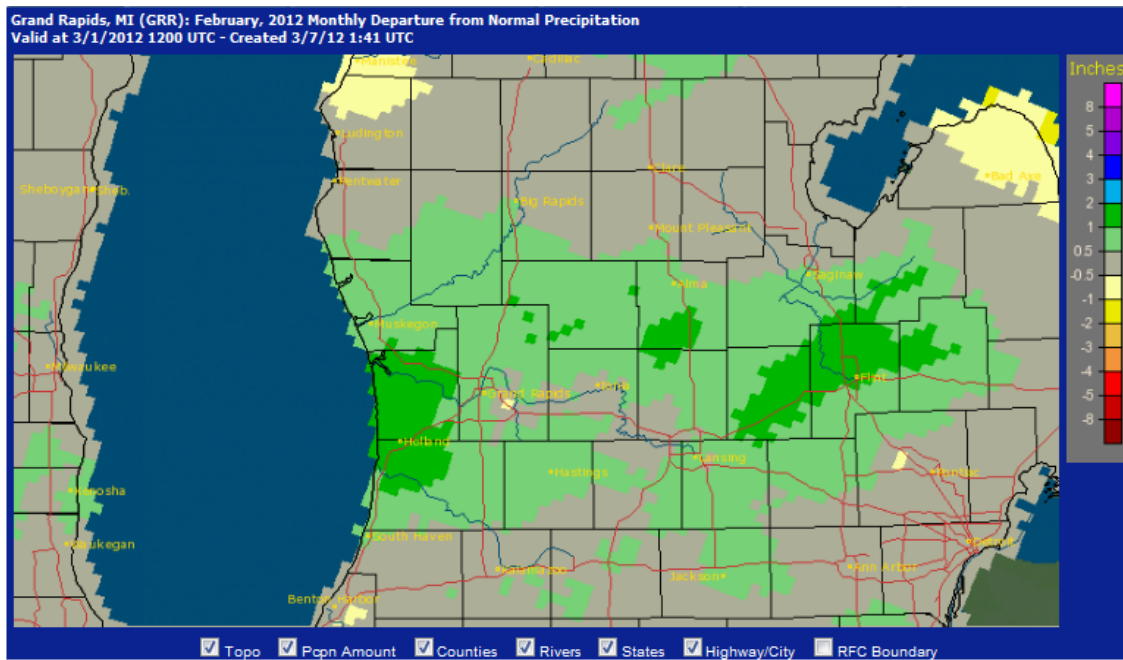


Figure 2. February 2012 Monthly Departure from Normal Precipitation Totals

# Snow Depth

2012-02-29 06

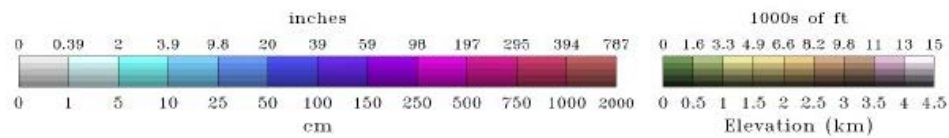
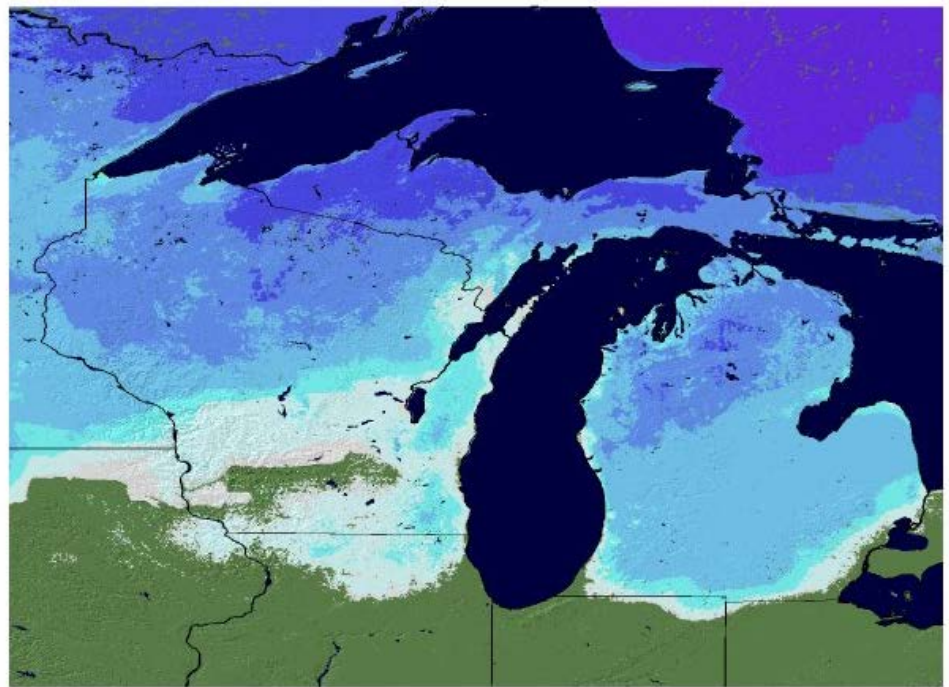


Figure 3. Snow Depth at the end of February.

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

- 17 River Flood Advisories (ARBFLSGRR)
- 4 Hydrologic Statements (ARBRVSGRR)
- 2 Probabilistic Hydrologic Outlooks (ARBESFGRR)
- 29 Hydrologic Summaries (ARBRVAGRR)

## **News Articles and Related Documentation**

None