NWS FORM E-5

U.S. DEPARTMENT OF COMMERCE

NOAA, NATIONAL WEATHER SERVICE

HSA OFFICE: Grand Rapids, MI

REPORT FOR (MONTH &YEAR): January 2012

DATE:

February 8, 2012

SIGNATURE:

Daniel K. Cobb, MIC

Mark L. Walton, Service Hydrologist

HYDROMETEOROLOGICAL INFO CENTER 1325 EAST-WEST HIGHWAY, RM 13468

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

NATIONAL WEATHER SERVICE (W/OS31)

SILVER SPRING, MD 20910

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

TO:

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 January in our Hydrologic Service Area (HSA). A river flood advisory for high river levels behind an ice jam was issued for the Grand River near Dimondale, Michigan, but no significant flooding occurred during this event.

Flood Conditions

Saturday, January 21st

At 3:34 PM EST a river flood advisory was issued for minor flooding due to an ice jam on the Grand River just downstream from Dimondale, Michigan near the Grande Pointe Subdivision. A trained river spotter reported river levels rising, and about out of banks, behind the ice jam.

Sunday, January 22nd

At 2:13 PM EST the river flood advisory continued for the Grand River near Dimondale, Michigan. A trained river spotter reported river levels behind the ice jam held steady overnight and were not impacting any homes or property.

At 11:13 PM EST the river flood advisory remained in effect for the Grand River near Dimondale, Michigan. Forecast called for warmer air to move in with rain and mentioned the possibility of the ice jam breaking up and moving.

Monday, January 23rd

At 12:17 PM EST the river flood advisory was cancelled for the Grand River near Dimondale, Michigan, when water levels fell back within banks.

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

- St. Joseph River near Burlington (13 days above bankfull)
- Sycamore Creek near Holt, Michigan (1 day above bankfull)
- Portage River near Vicksburg, Michigan (16 days above bankfull)
- Grand River at Ionia, Michigan (4 days above bankfull)

Flood Stage Report

No rivers exceeded flood stage during the month of January.

River Conditions

River levels across the HSA were near to significantly above normal at the end of the month. Ice formed on area rivers during several cold snaps in January, and an ice jam resulted in above normal river levels for several days on the Grand River between Lansing and Dimondale, Michigan. The end of the month percentage of normal flow for selected rivers is listed below:

<u>Location</u>	River	% of Normal
Scottville	Pere Marquette	110
Whitehall	White	106
Evart	Muskegon	150
Mt. Pleasant	Chippewa	134
Lansing	Grand	311
Grand Rapids	Grand	229
East Lansing	Red Cedar	318
Hastings	Thornapple	283
Battle Creek	Battle Creek	360
Battle Creek	Kalamazoo	213

General Hydrologic Information

January 2012 had significantly above normal temperatures and above normal precipitation. Snowfall for the month was above normal.

January precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan, were 3.20, 2.02, and 3.13 inches, respectively (Figure 1). Precipitation totals for the month at these three sites were 1.11 inches above normal at Grand Rapids, 0.37 of an inch above normal at Lansing, and 1.10 inches above normal at Muskegon, Michigan (Figure 2).

Snowfall for the month of January at Grand Rapids, Lansing, and Muskegon, Michigan were 27.0 inches (6.2 inches above normal), 14.7 inches (0.9 of an inch above normal), and 37.6 inches (9.6 inches above normal), respectively. Snow depth across the HSA ranged from zero to 6 inches at the end of January (Figure 3).

At the end of January frost depth across the HSA ranged from zero to 2 inches.

Temperatures for the month of January were significantly above normal at Grand Rapids, Lansing, and Muskegon, Michigan, with average monthly departures of +5.3, +5.1 and +5.8 degrees Fahrenheit, respectively.

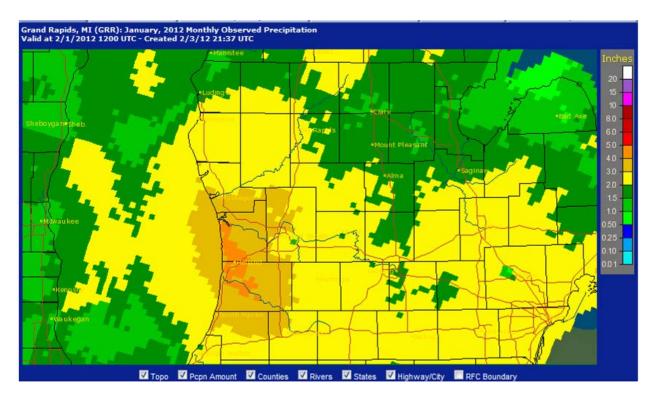


Figure 1. January 2012 Monthly Precipitation Totals

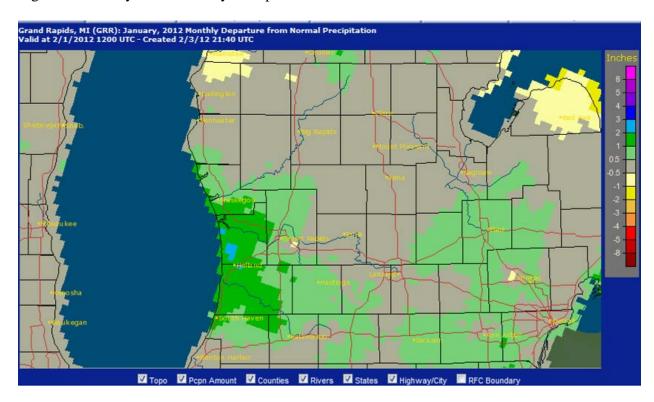


Figure 2. January 2012 Monthly Departure from Normal Precipitation Totals

Snow Depth 2012-01-31 06

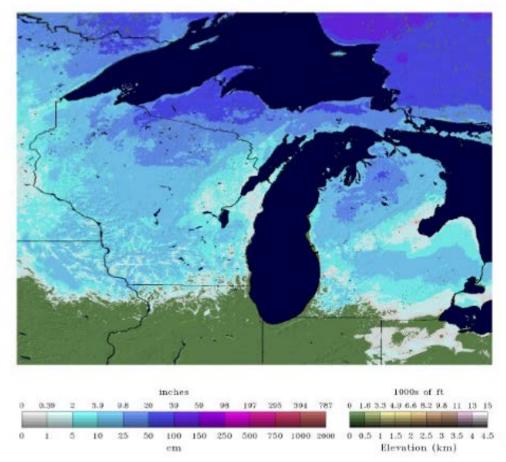


Figure 3. Snow Depth at the end of January.

Hydrologic Products issued this month:

- 36 River Flood Advisories (ARBFLSGRR)
- 13 Hydrologic Statements (ARBRVSGRR)
- 1 Probabilistic Hydrologic Outlook (ARBESFGRR)
- 31 Hydrologic Summaries (ARBRVAGRR)

News Articles and Related Documentation

None