

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

TO: NATIONAL WEATHER SERVICE (W/OS31)
HYDROMETEOROLOGICAL INFO CENTER
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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).

An X inside this box indicates that no significant flooding occurred within this Hydrologic Service Area.

Summary

A rare thunderstorm event in early January resulted in a Flood Watch being issued for our entire Hydrologic Service Area (HSA). The Flood Watch was followed by Flood Advisories for 14 counties and significant rises in all river systems within our HSA. Only minor flooding occurred on the Red Cedar River in East Lansing, Michigan.

Flood Conditions

The forecast for a rare January thunderstorm triggered a Flood Watch being issued on January 7th 2008, for our entire HSA. This thunderstorm resulted in significant rainfall over the area and the issuance of Flood Advisories on January 7th and 8th, for Mecosta, Montcalm, Kent, Ottawa, Muskegon, Newaygo, Oceana, Calhoun, Eaton, Ingham, Jackson, Kalamazoo, and Van Buren Counties. Only minor ponding of water on roads and low lying areas occurred in these counties during this event. On January 8th a river flood warning was issued for the Red Cedar River in East Lansing, Michigan. Minor flooding occurred from January 9th through January 11th on the Red Cedar River in East Lansing, Michigan. All other area rivers showed significant rises for this event, but remained below flood stage. No deaths or significant damages were reported for this flood event. Significant ice began to develop on area rivers near the end of the month and a Flood Advisory was issued for minor backwater flooding from an ice jam on the Grand River below the city of Portland, Michigan. The ice jam resulted in significant river rises, and flooding of undeveloped low lying areas along the river, just upstream from the ice jam.

Flood Stage Report

The Red Cedar River in East Lansing, Michigan, with a flood stage of 7 feet, went above flood stage at 11:00 AM on January 9th, crested at 7.51 feet at 10:00 AM on January 10th, and fell back below flood stage on January 11th at 4:45 PM.

River Conditions

River levels by the end of January were significantly above normal for our HSA. Significant ice began to develop on area rivers by the end of the month.

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	195
Whitehall	White	154
Evart	Muskegon	151
Mt. Pleasant	Chippewa	339
Lansing	Grand	348
Grand Rapids	Grand	426
East Lansing	Red Cedar	479
Hastings	Thornapple	258
Battle Creek	Battle Creek	185
Comstock	Kalamazoo	196

General Hydrologic Information

For the month of January, precipitation totals and average temperatures were significantly above normal for Grand Rapids, Lansing, and Muskegon, Michigan.

January precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan, were 3.76, 2.81, and 4.56 inches, respectively. Precipitation totals for the month at these three sites were 1.73 inches above normal at Grand Rapids, 1.20 inches above normal at Lansing, and 2.34 inches above normal at Muskegon, Michigan. Snowfall totals for the month at Grand Rapids, Lansing, and Muskegon were 28.3 (+7.2), 15.2 (+1.2), and 38.3 (+3.9) inches, respectively. At the end of the month the snow depth was 2 inches at Grand Rapids, and 1 inch at Lansing and 4 inches at Muskegon, Michigan.

Temperatures for the month of January were significantly above normal at Grand Rapids, Lansing, and Muskegon, with average monthly departures of +4.2, +4.7 and +3.7 degrees Fahrenheit, respectively.

Frost depths ranged from 2 to 4 inches, and river ice was increasing across the Hydrologic Service Area.

Hydrologic Products issued this month:

- 3 Hydrologic Outlooks (ARBESFGRR) were issued
- 7 Flood Watches (ARBFFAGRR) were issued
- 8 Flood Warnings (ARBFLWGRR) were issued
- 40 Flood Statements (ARBFLSGRR) were issued
- 72 Hydrologic Statements (ARBRVSGRR) were issued
- 31 Hydrologic Summary's (ARBRVAGRR) were issued