

NWS FORM E-5

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

HSA OFFICE:
Grand Rapids, MI

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

REPORT FOR (MONTH & YEAR):
January 2004

DATE:
February 6, 2004

TO: NATIONAL WEATHER SERVICE (W/OH12X1)
HYDROMETEOROLOGICAL INFO CENTER
1325 EAST-WEST HIGHWAY, RM 7116
SILVER SPRING, MD 20910

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).

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

No significant flooding occurred in the Grand Rapids Hydrologic Service Area (HSA) during the month of January. Ice jams caused rapid rises on the Pere Marquette River near Scottville and Flat River near Smyrna during the month of January. No significant flooding or flood damages occurred with these ice jam events.

January Precipitation

January precipitation totals at first order and contract stations across our HSA were all near to below normal. Monthly precipitation totals at Grand Rapids, Lansing, and Muskegon, were 2.01, 0.91, and 1.35 inches, respectively. Precipitation for the month at these three sites varied from 0.02 of an inch below normal at Grand Rapids, 0.70 of an inch below normal at Lansing, to 0.87 of an inch below normal at Muskegon, Michigan.

Snowfall for the month was well above normal for all first order and contract stations across our HSA. The snowfall for the month was 44.2 inches at Grand Rapids, 28.3 inches at Lansing, and 47.0 inches at Muskegon. Snowfall for the month of January was 23.1 inches above normal at Grand Rapids, 14.3 inches above normal at Lansing, and 12.6 inches above normal at Muskegon. Grand Rapids had it's 5th snowiest January on record (snowfall records go back to 1905), and Lansing had it's 6th snowiest winter on record. Snow depths at the end of the month varied from around 6 to 24 inches in our HSA with the highest amounts near the lake. Snow water equivalents ranged from about a half an inch to just over three inches. Frost depths across the HSA were from 4 to 6 inches.

January Temperatures

The monthly mean temperature in January ran as much as 5F below normal in Lansing to around 3F below normal in Grand Rapids and Muskegon.

January River Levels

River levels were near to above normal across the HSA. Due to the below normal temperatures in January, river ice was substantial and completely covered many rivers.

An ice jam occurred on the Pere Marquette River near Scottville on January 9th and on the Flat River near Smyrna on January 16th. The ice jam on the Pere Marquette River near Scottville caused river levels to rapidly rise to near bankfull on January 9th and fluctuate near bankfull for several days before falling back down to more normal levels by the end of the month. The ice jam on the Flat River near Smyrna caused river levels to rapidly rise to near flood stage January 23rd and fluctuate near flood stage for several days before falling back down to more normal levels by the end of the month. Hydrologic statements were issued by our office to cover both of these ice jam events.

Hydrologic Products issued this month:

13 Hydrologic Statements (ARBRVSGRR) were issued.

1 Hydrologic Outlook (ARBESFGRR) was issued.

31 Hydrologic Summarys (ARBRVAGRR) were issued.