

NWS FORM E-5

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

HSA OFFICE:
Grand Rapids, MI

REPORT FOR (MONTH & YEAR):
April 2008

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

DATE:
May 13, 2008

TO: NATIONAL WEATHER SERVICE (W/OS31)
HYDROMETEOROLOGICAL INFO CENTER
1325 EAST-WEST HIGHWAY, RM 13468
SILVER SPRING, MD 20910

SIGNATURE:
Daniel K. Cobb, MIC
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

Minor River flooding occurred during the month of April on the Grand River at Comstock Park, Michigan. A flood advisory for small streams was issued for 3 counties.

Flood Conditions

A flood watch was issued April 10th for the southern half of our Hydrologic Service Area (HSA). The flood watch preceded a strong spring storm system forecast to move into the area that night. The forecast called for widespread rain of several inches from thunderstorms over the southern portion of our HSA. Flood advisories for small streams were issued early in the morning on April 11th, for Barry, Kent and Gratiot counties. The storm that moved into the area produced one to two inches of rain over a six hour time period and resulted in high stream levels, with minor ponding of water on streets in the counties under the advisory. The runoff from this event eventually worked its way into the major river systems and resulted in a river flood warning being issued for the Grand River at Comstock Park, Michigan, on the morning of April 14th. The Grand River at Comstock Park, Michigan, crested just above flood stage later that afternoon. No significant property damage was reported with this flood event.

Flood Stage Report

The Grand River in Comstock Park, Michigan, with a flood stage of 12 feet, went above flood stage at 10:00 AM on April 14th, crested at 12.10 feet at 5:35 PM on April 14th, and fell back below flood stage on April 16th, at 7:00 PM.

River Conditions

River levels by the end of April were above normal for our more Northerly streams and near to below normal for the rest in 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	140
Whitehall	White	128
Ewart	Muskegon	92
Mt. Pleasant	Chippewa	110
Lansing	Grand	94
Grand Rapids	Grand	92
East Lansing	Red Cedar	75
Hastings	Thornapple	73
Battle Creek	Battle Creek	79
Comstock	Kalamazoo	94

General Hydrologic Information

For the month of April, temperatures were above normal and precipitation ranged from near normal to slightly below normal.

April precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan, were 3.56, 2.16, and 2.62 inches, respectively. Precipitation totals for the month at these three sites were 0.08 of an inch above normal at Grand Rapids, 0.93 of an inch below normal at Lansing, and 0.29 of an inch below normal at Muskegon, Michigan. For the year, precipitation totals were above normal at Grand Rapids, Lansing, and Muskegon, Michigan. Yearly precipitation totals were 4.31 inches above normal for Grand Rapids, 1.54 inches above normal for Lansing, and 5.91 inches above normal for Muskegon, Michigan. Only a trace of snowfall for the month was reported at Grand Rapids, Lansing, and Muskegon.

Temperatures for the month of April were above normal at Grand Rapids, Lansing, and Muskegon, with average monthly departures of +4.2, +4.7 and +3.1 degrees Fahrenheit, respectively.

Hydrologic Products issued this month:

- 1 Hydrologic Outlook (ARBESFGRR) was issued
- 4 Flood Watches (ARBFFAGRR) were issued
- 1 Flood Warning (ARBFLWGRR) was issued
- 16 Flood Statements (ARBFLSGRR) were issued
- 16 Hydrologic Statements (ARBRVSGRR) were issued
- 30 Hydrologic Summary's (ARBRVAGRR) were issued
- 30 Daily River and Lake Summary's (ABRRVDGRR) were issued