

NWS FORM E-5

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

HSA OFFICE:
Grand Rapids, MI

REPORT FOR (MONTH & YEAR):
June 2005

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:
July 28, 2005

SIGNATURE:
MIC
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 flooding occurred within this Hydrologic Service Area.

No significant river flooding occurred in the Grand Rapids Hydrologic Service Area (HSA) during the month of June. However, one Flash Flood Warning and numerous Urban and Small Stream Flood Advisories were issued in our HSA during the month of June. The Flash Flood Warning was issued for Mecosta County, and Urban and Small Stream Flood Advisories were issued for Mecosta, Isabella, Montcalm, Gratiot, Kent, Ionia, Clinton, Allegan, Barry, Eaton, Van Buren, and Kalamazoo counties. No significant property damage was reported and no lives were lost during the flooding events that occurred in June.

June Flooding

Heavy rain from thunderstorms during the month of June resulted in numerous Urban and Small Stream Flood Advisories being issued across our HSA. For the month of June, 25 Flood Statements for Urban and Small Stream Flood Advisories were issued for 12 counties in our HSA. Only minor street flooding and no significant property damage occurred with these events.

On Tuesday, June 28th, at 5:09 PM EDT an Urban and Small Stream Flood Advisory was issued for Mecosta County. The radar was indicating very intense precipitation over the advisory area, with radar estimated rainfall amounts of over two inches over the past hour. The thunderstorm intensified and began to back build over Mecosta County and the Urban and Small Stream Flood Advisory was upgraded to a Flash Flood Warning at 5:45 PM EDT. For this event the radar estimated a maximum storm total precipitation of 7.3 inches, of which, approximately 6.5 inches of the storm total fell over a two hour period. We also received the next day a "ground truth" report, of 5.25 inches of rain in approximately 2 hours, from an individual who lives on the North side of Chippewa Lake near the core of the heavy rain cell in the warned area. Significant flooding occurred in Mecosta County with several roads underwater and the shoulders of many roads in the area washed out.

June Precipitation

June precipitation totals were above normal at Grand Rapids and Lansing, and below

normal at Muskegon, Michigan. Monthly precipitation totals at Grand Rapids, Lansing, and Muskegon, were 7.35, 5.49, and 0.90 inches, respectively. Precipitation for the month at these three sites were 3.68 inches above normal at Grand Rapids, 1.89 inches above normal at Lansing, and 1.68 inches below normal at Muskegon, Michigan. For the year, precipitation totals at Grand Rapids were 2.12 inches above normal, 1.23 inches above normal at Lansing, and 3.07 inches below normal at Muskegon, Michigan. For Grand Rapids this was the 4th wettest June on record. In contrast, it was the 9th driest June on record for Muskegon.

June Temperatures

Temperatures for the month of June were much above normal at Grand Rapids, Lansing, and Muskegon, averaging 5.8, 6.5, and 7.2 degrees above normal, respectively. For Grand Rapids this was the 5th warmest June on record. For Lansing and Muskegon this was the warmest June on record.

June River Levels

During June, river levels did not exceed flood stage and were near normal by the end of the month across Grand Rapids HSA.

Hydrologic Products issued this month:

- 1 Hydrologic Outlook (ARBESFGRR) was issued
- 1 Flash Flood Warning (ARBFFWGRR) was issued
- 2 Flash Flood Statements (ARBFFSGRR) were issued
- 25 Urban and Small Stream Flooding Advisories (ARBFLSGRR) were issued
- 3 Hydrologic Statements (ARBRVSGRR) were issued
- 30 Hydrologic Summary's (ARBRVAGRR) were issued
- 30 Daily River and Lake Summary's (ARBRVDGRR) were issued