

NWS FORM E-5

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

HSA OFFICE:

Grand Rapids, MI

REPORT FOR (MONTH & YEAR):

October 2006

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

DATE:

November 16, 2006

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

X

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 October in our Hydrologic Service Area (HSA). During the month of October, urban and small stream flood advisories were issued for Newaygo, Lake, Oceana, Osceola, Mason, Muskegon, Allegan, Van Buren, Ottawa, Isabella, Mecosta, Montcalm, and Gratiot counties in Southwest Lower Michigan. During the advisories a few urban and secondary roads flooded for a short period, and small creeks and streams had significant rises, but no significant property damage was reported.

Flood Conditions

On October 2nd, urban and small stream flood advisories were issued late in the morning for Muskegon, Allegan, Van Buren, and Ottawa Counties. Later that evening urban and small stream flood advisories were issued for Mason, Oceana, and Newaygo Counties. Radar estimated rainfall rates in excess of one to two inches per hour over the advisory area, but no significant flooding was reported. On October 4th, urban and small stream flood advisories were issued early in the morning for Mason, Lake, Osceola, Oceana, Newaygo, Isabella, Mecosta, Montcalm, and Gratiot Counties when a line of thunderstorms over the advisory area produced two inches of rain over a two hour period. This heavy rain event resulted in a minor flooding of secondary roads, and significant rises in small creeks and streams. The advisories were cancelled or allowed to expire after the minor nuisance flooding subsided. No significant property damage was reported for these events.

Flood Stage Report

No rivers exceeded flood stage during the month of October.

River Conditions

River levels across the Grand Rapids HSA by the end of October were significantly above normal in Southwest Lower Michigan. Above normal rainfall for the month resulted in higher than normal flows at the end of the month for most of the rivers located in Southwest Lower Michigan.

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	160
Ewart	Muskegon	174
Mt. Pleasant	Chippewa	140
Lansing	Grand	243
Grand Rapids	Grand	184
East Lansing	Red Cedar	289
Hastings	Thornapple	120
Battle Creek	Battle Creek	171
New Richmond	Kalamazoo	132

General Hydrologic Information

Temperatures were below normal and precipitation above normal for October across Southwest Lower Michigan.

October precipitation totals at first order stations across our HSA were above normal for Grand Rapids, Lansing, and Muskegon, Michigan. October precipitation totals at Grand Rapids, Lansing, and Muskegon, were 5.02, 2.95, and 5.05 inches, respectively. Precipitation for the month at these three sites were 2.22 inches above normal at Grand Rapids, 0.66 of an inch above normal at Lansing, and 2.25 inches above normal at Muskegon, Michigan. For the year, precipitation totals were still above normal at Grand Rapids, Lansing, and Muskegon, Michigan. Yearly precipitation totals were 6.75 inches above normal for Grand Rapids, 3.44 inches above normal for Lansing, and 7.48 inches above normal for Muskegon, Michigan.

October snowfall totals at first order stations across our HSA were above normal for Grand Rapids (+1.5”) and Lansing (+1.1”), and below normal for Muskegon (-0.4”), Michigan. October snowfall totals at Grand Rapids, Lansing, and Muskegon, were 2.1, 1.5, and 0.2 inches, respectively.

Soil Temperatures across the HSA were still above freezing, and at 2 inches ranged from 44 degrees Fahrenheit at Baldwin, Michigan to 45 degrees Fahrenheit at Grand Rapids, Michigan.

Temperatures for the month of October were below normal at Grand Rapids, Lansing, and Muskegon, with average monthly departures of -2.7, -2.8 and -2.4 degrees Fahrenheit, respectively.

Hydrologic Products issued this month:

- 1 Hydrologic Outlook (ARBESFGRR) was issued
- 6 Hydrologic Statements (ARBRVSGRR) were issued
- 13 Flood Statements (ARBFLSGRR) were issued
- 31 Daily River and Lake Summary's (ABRRVDGRR) were issued
- 31 Hydrologic Summary's were issued (RVA)