

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

REPORT FOR (MONTH & YEAR):
April 2010

DATE:
June 1, 2010

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).

X

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

Summary

River flood advisories were issued for 14 river forecast points. Of the 14 river forecast points, 6 exceeded bankfull stage. All rivers remained below flood stage.

Flood Conditions

Sunday, April 4th

At 4:25 PM EDT, the hydrology section of the area forecast discussion mentioned the possibility of urban and small stream flooding in the coming week.

Monday, April 5th

At 6:10 AM EDT, the hazardous weather outlook mentioned the possibility of rises on area rivers due to locally heavy rain over the next several days.

Tuesday, April 6th

At 10:23 AM EDT, a river flood advisory was issued for the following rivers:

- Grand River at Ionia
- Sycamore Creek near Holt
- Looking Glass River near Eagle
- Maple River at Maple Rapids
- Flat River near Smyrna

At 1:59 PM EDT, a river flood advisory was issued for the Grand River at Lowell and continued for the following rivers:

- Grand River at Ionia
- Sycamore Creek near Holt
- Looking Glass River near Eagle
- Maple River at Maple Rapids
- Flat River near Smyrna

At 6:17 PM EDT, the river flood advisory continued for the Looking Glass River near Eagle.

At 10:50 PM EDT, a river flood advisory was issued for the Grand River at Eaton Rapids, the Grand River at Ada, the Grand River near Comstock Park, the Grand River at Grand Rapids, the Red Cedar River near Williamston, the Red Cedar River at East Lansing, and the Thornapple River near Hastings, and continued for the following rivers:

- Grand River at Ionia
- Grand River at Lowell
- Sycamore Creek near Holt
- Looking Glass River near Eagle
- Maple River at Maple Rapids
- Flat River near Smyrna

Wednesday, April 7th

At 10:21 AM EDT, the river flood advisory continued for the following rivers:

- Grand River at Eaton Rapids
- Grand River at Ionia
- Grand River at Lowell
- Grand River at Ada
- Grand River near Comstock Park
- Grand River at Grand Rapids
- Sycamore Creek near Holt
- Red Cedar River near Williamston
- Red Cedar River at East Lansing
- Looking Glass River near Eagle
- Maple River at Maple Rapids
- Flat River near Smyrna
- Thornapple River near Hastings

At 10:19 PM EDT, the river flood advisory was canceled for the Grand River at Ada and the Red Cedar River near Williamston, and continued for the following rivers:

- Grand River at Eaton Rapids
- Grand River at Ionia
- Grand River at Lowell
- Grand River near Comstock Park
- Grand River at Grand Rapids
- Sycamore Creek near Holt
- Red Cedar River at East Lansing
- Looking Glass River near Eagle
- Maple River at Maple Rapids
- Flat River near Smyrna
- Thornapple River near Hastings

Thursday, April 8th

At 11:03 AM EDT, the river flood advisory was canceled for the Grand River at Eaton Rapids, the Grand River at Grand Rapids, the Red Cedar River at East Lansing, the Flat River near Smyrna, and the Thornapple River near Hastings, and continued for the following rivers:

- Grand River at Ionia
- Grand River at Lowell
- Grand River near Comstock Park
- Sycamore Creek near Holt
- Looking Glass River near Eagle
- Maple River at Maple Rapids

At 10:17 PM EDT, the river flood advisory was canceled for the Looking Glass River near Eagle and continued for the following rivers:

- Grand River at Ionia
- Grand River at Lowell
- Grand River near Comstock Park
- Sycamore Creek near Holt
- Maple River at Maple Rapids

Friday, April 9th

At 11:21 AM EDT the river flood advisory continued for the following rivers:

- Grand River at Ionia
- Grand River at Lowell
- Grand River near Comstock Park
- Sycamore Creek near Holt
- Maple River at Maple Rapids

At 10:47 PM EDT, the river flood advisory was canceled for the Grand River near Comstock Park and continued for the following rivers:

- Grand River at Ionia
- Grand River at Lowell
- Sycamore Creek near Holt
- Maple River at Maple Rapids

Saturday, April 10th

At 9:13 AM EDT, the river flood advisory continued for the following rivers:

- Grand River at Ionia
- Grand River at Lowell
- Sycamore Creek near Holt
- Maple River at Maple Rapids

At 9:30 PM EDT, the river flood advisory continued for the following rivers:

- Grand River at Ionia
- Grand River at Lowell
- Sycamore Creek near Holt
- Maple River at Maple Rapids

Sunday, April 11th

At 11:08 AM EDT, the river flood advisory continued for the following rivers:

- Grand River at Ionia
- Grand River at Lowell
- Sycamore Creek near Holt
- Maple River at Maple Rapids

At 9:30 PM EDT, the river flood advisory continued for the following rivers:

- Grand River at Ionia
- Grand River at Lowell
- Sycamore Creek near Holt
- Maple River at Maple Rapids

Monday, April 12th

At 10:31 AM EDT, the river flood advisory continued for the following rivers:

- Grand River at Ionia
- Sycamore Creek near Holt
- Maple River at Maple Rapids

At 10:13 PM EDT, the river flood advisory continued for the following rivers:

- Grand River at Ionia
- Sycamore Creek near Holt
- Maple River at Maple Rapids

Tuesday, April 13th

At 10:40 AM EDT, the river flood advisory was canceled for the Sycamore Creek near Holt and continued for the following rivers:

- Grand River at Ionia
- Maple River at Maple Rapids

At 9:28 PM EDT, the river flood advisory continued for the following rivers:

- Grand River at Ionia
- Maple River at Maple Rapids

Wednesday, April 14th

At 10:21 AM EDT, the river flood advisory continued for the following rivers:

- Grand River at Ionia
- Maple River at Maple Rapids

At 9:03 PM EDT, the river flood advisory was canceled for the Grand River at Ionia and continued for the Maple River at Maple Rapids.

Thursday, April 15th

At 9:57 AM EDT, the river flood advisory continued for the Maple River at Maple Rapids.

At 9:11 PM EDT, the river flood advisory continued for the Maple River at Maple Rapids.

Friday, April 16th

At 10:00 AM EDT, the river flood advisory was canceled for the Maple River at Maple Rapids.

Monday, April 26th

At 10:10 AM EDT, a river flood advisory was issued for the St. Joseph River at Burlington.

At 9:27 PM EDT, the river flood advisory was canceled for the St. Joseph River at Burlington.

Flood Stage Report

No rivers exceeded flood stage during the month of April.

River Conditions

River levels by the end of April were near to below normal for 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	80
Whitehall	White	79
Ewart	Muskegon	42
Mt. Pleasant	Chippewa	98
Lansing	Grand	59
Grand Rapids	Grand	75
East Lansing	Red Cedar	67
Hastings	Thornapple	66
Battle Creek	Battle Creek	71
Comstock	Kalamazoo	86

General Hydrologic Information

April 2010 had near to slightly below normal precipitation and significantly above normal temperatures.

April precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan were 3.81, 2.49, and 2.15 inches, respectively. Precipitation totals for the month at these three sites were 0.33 of an inch above normal at Grand Rapids, 0.60 of an inch below normal at Lansing, and 0.76 of an inch below normal at Muskegon, Michigan. Yearly precipitation totals were 2.01 inches below normal for Grand Rapids, 3.33 inches below normal for Lansing, and 2.95 inches below normal for Muskegon, Michigan. Snowfall totals for the month were below normal with Grand Rapids, Lansing, and Muskegon, only reporting a Trace. Snowfall totals for the year at Grand Rapids, Lansing, and Muskegon were 72.2 inches (-0.0), 42.6 inches (-11.9), and 73.6 inches (-31.9) respectively.

Temperatures for the month of April were significantly above normal at Grand Rapids, Lansing, and Muskegon, Michigan, with average monthly departures of +7.3, +6.9 and +6.6 degrees Fahrenheit, respectively.

Snow depths and frost depths across the HSA were zero at the end of the month.

Hydrologic Products issued this month:

- 25 River Flood Advisories (ARBFLSGRR)
- 18 Hydrologic Statements (ARBRVSGRR)
- 1 Probabilistic Hydrologic Outlook (ARBESFGRR)
- 30 Hydrologic Summaries (ARBRVAGRR)
- 30 Daily River and Lake Summaries (ARBRVDGRR)