

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

DATE:

March 9th, 2017

SIGNATURE:

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Mark Sekelsky, Lead Forecaster

TO: NATIONAL WEATHER SERVICE (W/OS31)
HYDROMETEOROLOGICAL INFO CENTER
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SILVER SPRING, MD 20910

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

The warmer than normal weather combined with generally above normal precipitation supported high flows for the rivers in Southwest Lower Michigan. The warmer temperatures caused the snowpack to melt sooner than usual, which added to the flow. Still, no forecast point reached flood stage and the impacts from the high water levels was minimal.

Flood Conditions

Flows were high for much of the month, but no sites reached flood stage.

The following rivers exceeded bankfull during the month of February 2017:

- Muskegon River at Croton, Michigan (2 days above bankfull)
- Chippewa River near Mount Pleasant, Michigan (1 day above bankfull)
- Maple River at Maple Rapids, Michigan (8 days above bankfull)
- Grand River at Ionia, Michigan (10 days above bankfull)
- Looking Glass River near Eagle, Michigan (9 day above bankfull)
- Red Cedar River near Williamston, Michigan (1 day above bankfull)
- Grand River at Jackson, Michigan (1 day above bankfull)

Flood Stage Report

No forecast points exceeded flood stage in our HSA during the month of February 2017.

River Conditions

The end of the February percentage of normal flow for selected rivers is listed below:

<u>Location</u>	<u>River</u>	<u>% of Normal</u>
Scottville	Pere Marquette	204
Whitehall	White	172
Ewart	Muskegon	333
Mt. Pleasant	Chippewa	270
Lansing	Grand	209
Grand Rapids	Grand	195
East Lansing	Red Cedar	220
Hastings	Thornapple	162
Battle Creek	Battle Creek	200
Battle Creek	Kalamazoo	169

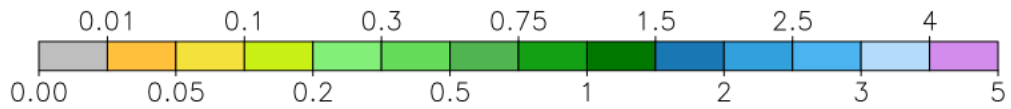
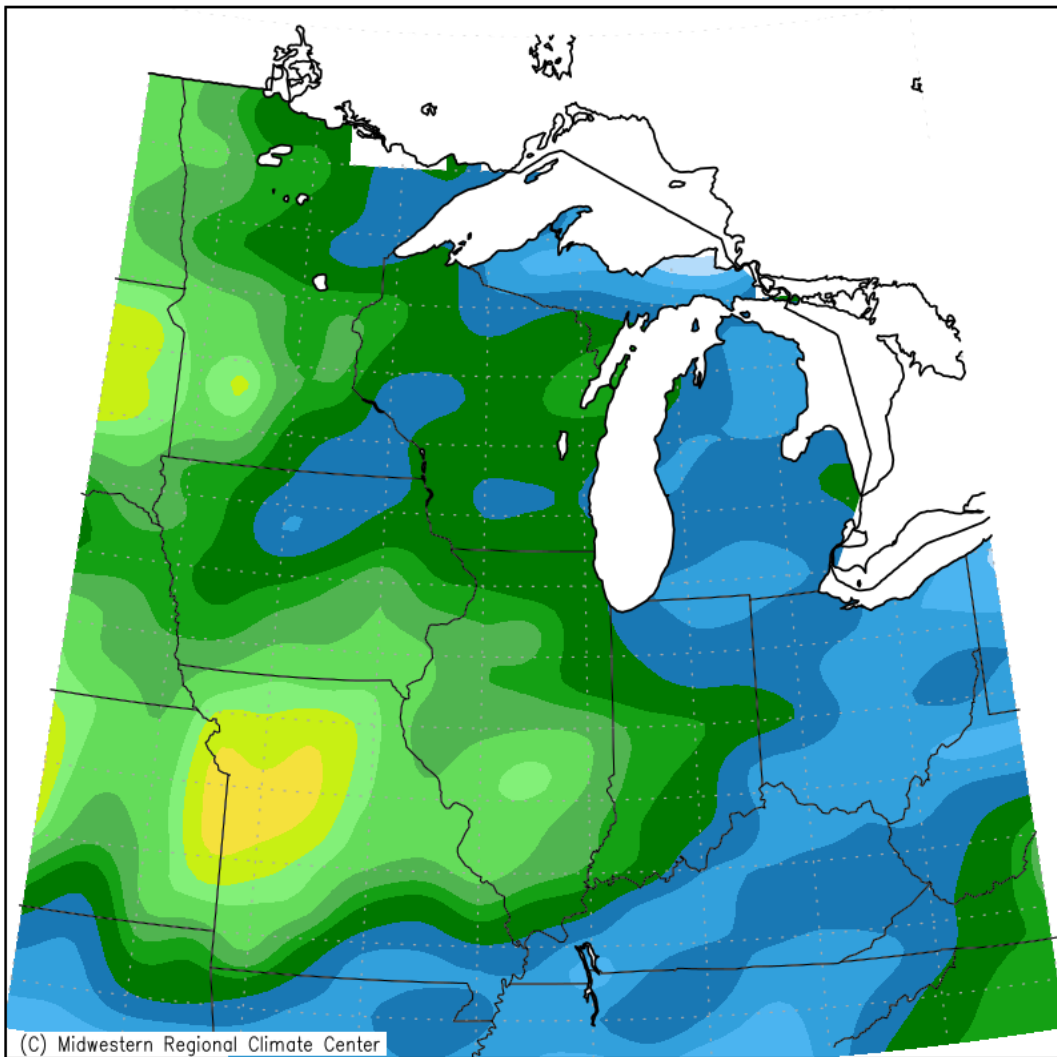
General Hydrologic Information

Generally, above normal precipitation fell during the month of February. Much of it was in the form of rain with temperatures ending up above normal as well. The heaviest precipitation fell toward the end of the month.

February precipitation totals at Grand Rapids, Lansing, and Muskegon, Michigan, were 2.05, 2.63, and 2.67 inches, respectively (Figure 1). Monthly departures were 0.26 inches, 1.16 inches, and 0.84 inches respectively. Yearly departures were 1.68, 3.16, and 1.84 inches for Grand Rapids, Lansing and Muskegon respectively. Percent of mean precipitation for February 2017 is shown in Figure 2.

Temperatures for the month of February were warmer than normal at Grand Rapids, Lansing, and Muskegon. The average monthly temperature departures were, 7.9, 9.6, and 8.2 degrees Fahrenheit respectively.

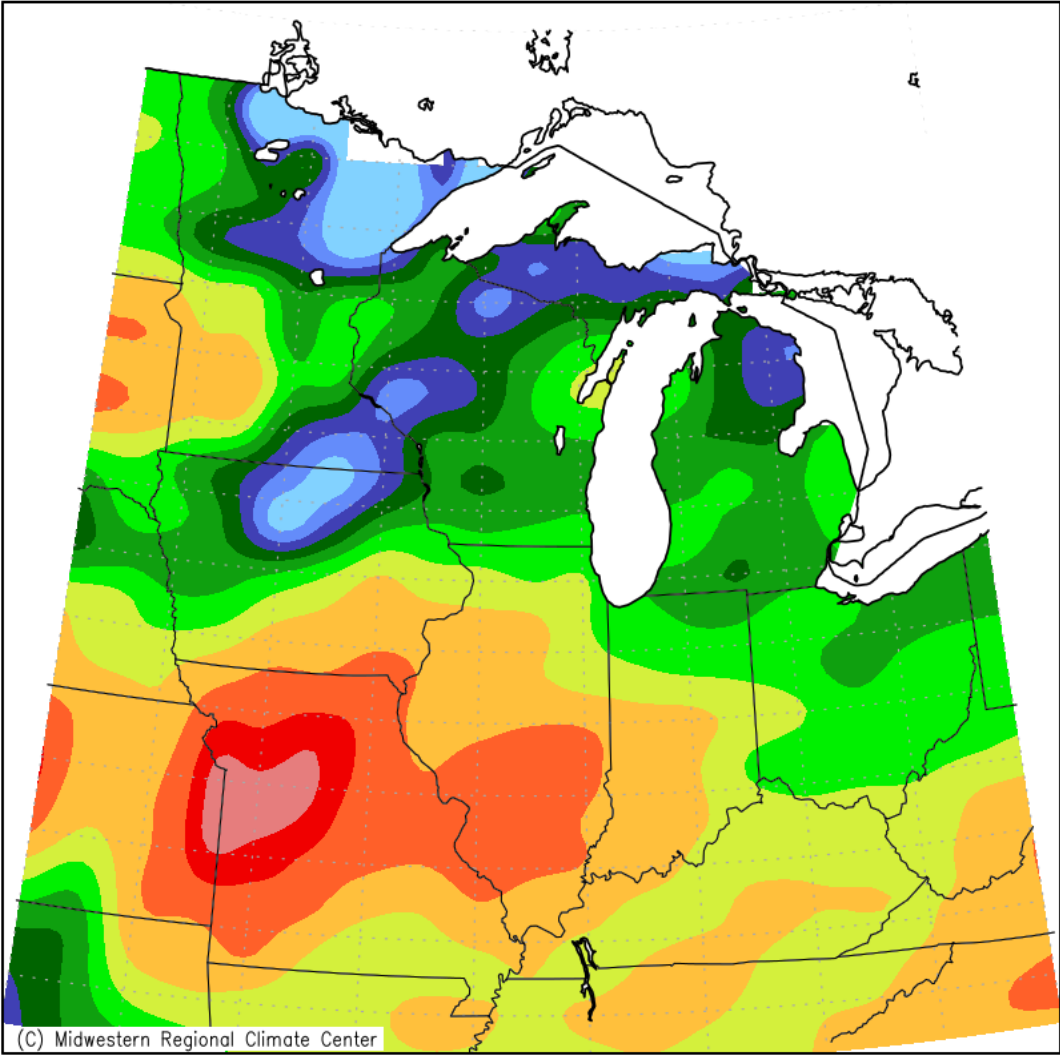
Accumulated Precipitation (in)
February 1, 2017 to February 28, 2017



Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana-Champaign

Figure 1. February Monthly Precipitation Totals

Accumulated Precipitation: Percent of Mean
February 1, 2017 to February 28, 2017



Mean period is 1981–2010.



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University of Illinois at Urbana–Champaign

Figure 2. February Percent of Mean of Accumulated Precipitation

Hydrologic Products issued this month:

28 Hydrologic Summaries (ARBRVAGRR)

1 Probabilistic Hydrologic Outlook (ARBESFGRR)

36 River Flood Advisory Statements (ARBFLSGRR)

21 Hydrologic Statements (ARBRVSGRR)