NWSE	ORM E-5	U.S. DEPARTMENT OF COMMERCE	HSA OFFICE:
		NOAA, NATIONAL WEATHER SERVICE	Grand Rapids, MI
•			REPORT FOR (MONTH &YEAR):
			June 2018
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS			
			DATE:
			July 8th, 2018
TO:	NATIONAL W	VEATHER SERVICE (W/OS31)	-
	HYDROMETI	EOROLOGICAL INFO CENTER	SIGNATURE:
	1325 EAST-W	EST HIGHWAY, RM 13468	Daniel K. Cobb, MIC
	SILVER SPRI	NG, MD 20910	Mark Sekelsky, Lead Forecaster
		•	•

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

Any hydrologic impacts were local and minimal for the month of June. This is because the rainfall was largely below normal. There were a couple of rounds of thunderstorms with each resulting in minor urban and poor drainage flooding. The first was around the 10th impacting mainly southwest parts of the HSA. The second was the 27th with the main area of storms tracking through portions of the Lower Grand, White, Pere Marquette and Muskegon basins.

Flood Conditions

No significant hydrologic events occurred during the Month of June.

No rivers exceeded bankfull during the month of June 2018:

Flood Stage Report

No forecast points exceeded flood stage in our HSA during the month of June 2018. Thus, the NWS Form E-3 "Flood Stage Report" was not issued.

River Conditions

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

Location	River	% of Normal
Scottville	Pere Marquette	95
Whitehall	White	85
Evart	Muskegon	86
Mt. Pleasant	Chippewa	116
Lansing	Grand	105
Grand Rapids	Grand	147
East Lansing	Red Cedar	100
Hastings	Thornapple	130
Battle Creek	Battle Creek	132
Battle Creek	Kalamazoo	115

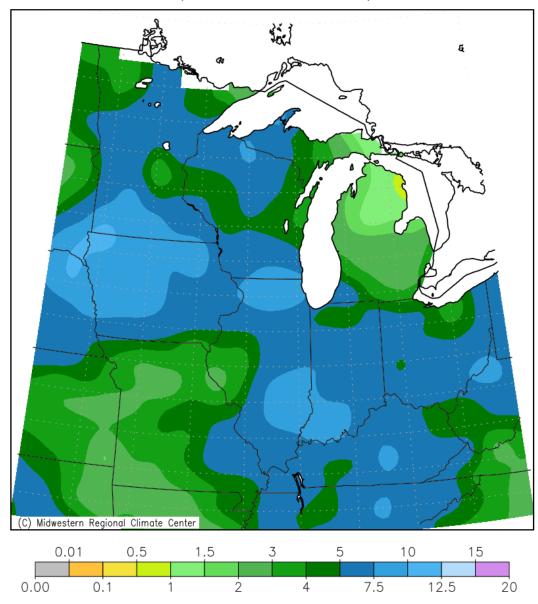
General Hydrologic Information

The month of June featured mostly below normal precipitation. The greatest departures were along the Muskegon River. A small area of the Lower Kalamazoo basin saw above normal precipitation.

June precipitation amounts for Grand Rapids, Lansing, and Muskegon, Michigan, were 2.50, 1.86, and 2.21 inches, respectively (Figure 1). Monthly departures were -1.27, -1.59 and -0.34 inches respectively. Yearly departures were 1.86, 2.78, and 3.36 inches for Grand Rapids, Lansing and Muskegon respectively. Percent of mean precipitation for June 2018 is shown in Figure 2.

Temperatures for the month of June were above normal at Grand Rapids, Lansing and Muskegon. The average monthly temperature departures for these sites were 1.5, 1.1 and 3.4 degrees Fahrenheit respectively.

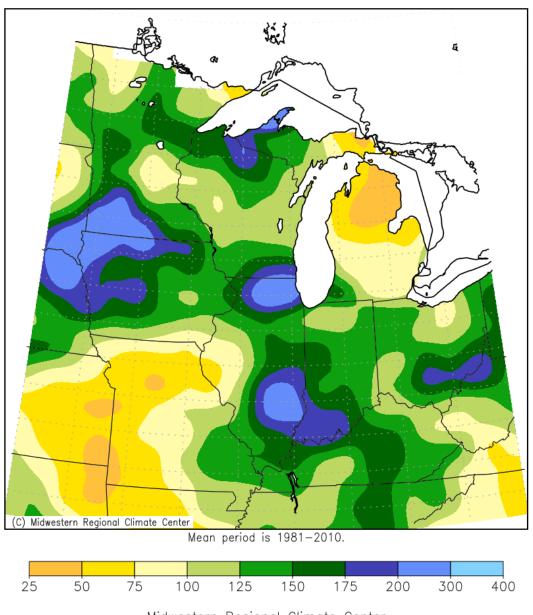
Accumulated Precipitation (in) June 1, 2018 to June 30, 2018



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

Figure 1. June 2018 Monthly Precipitation Totals

Accumulated Precipitation: Percent of Mean June 1, 2018 to June 30, 2018



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

Figure 2. June 2018 Percent of Mean of Accumulated Precipitation

Hydrologic Products issued this month:

- 30 Hydrologic Summaries (ARBRVAGRR)
 - 1 Probabilistic Hydrologic Outlook (ARBESFGRR)
- 30 Daily River Forecasts (ARBRVDGRR)
 7 Areal Flood Advisory Statements (ARBFLSGRR)

News Articles and Related Documentation

None