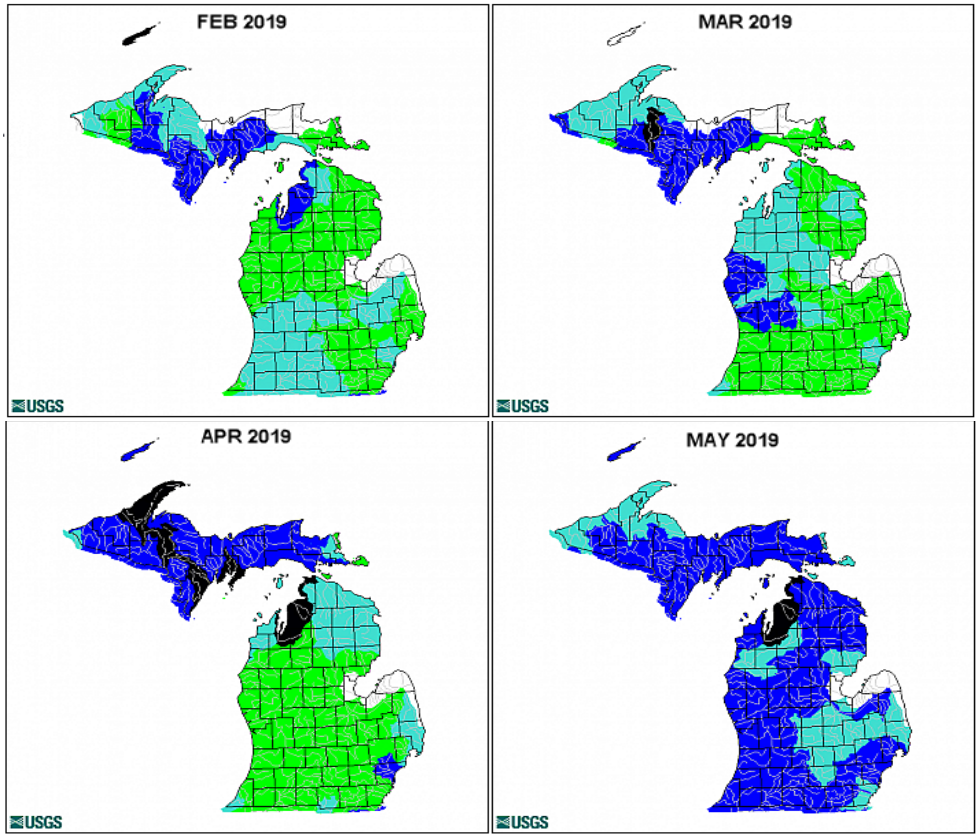
2019 HIGH WATER LEVELS INFORMATION

FOR FLOOD MANAGEMENT



Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

High water levels and flooding have been a common experience across Michigan in 2019. As a result, flooding impacts to homes and businesses have occurred in all areas of the state. The above US Geological Survey waterwatch maps give a comparison of Michigan stream flows by month for the spring of 2019 and illustrate that by May the entire state experienced above normal or even high record flows. Due to the widespread and prolonged nature of the flooding, citizens are requesting information on why this is happening and resources that are available from the Department of Environment, Great Lakes, and Energy (EGLE). This fact sheet provides general information on high water levels and flood management. Other fact sheets are available on floodplains, permitting, and high water level issues on the Great Lakes and wetlands, inland lakes, and streams.

This Fact Sheet answers the following questions:

Why is such widespread flooding occurring?

What can I do to prepare for or respond to a flood at my home or business?

What resources are available to gather more information about obtaining flood insurance?

Michigan Department of Environment, Great Lakes, and Energy

Water Resources Division

www.Michigan.gov/WRD

EGLE – Floodplain Management Program web site: *Michigan.gov/FloodplainManagement*
Federal Emergency Management Agency web site: *https://www.fema.gov/flood-insurance*
Water Resources Division web site: *Michigan.gov/WRD*

Why is such widespread flooding occurring?

Several factors contribute to high inland water levels:

- A wetter than usual summer and fall in 2018 caused higher than normal soil moisture content which limited the infiltration of rain events in the spring of 2019 (i.e., rain could not soak into the ground).
- Larger volume of snow meltwaters because of above-average winter snowpack depths and higher than normal water content within the snow.
- Above-average spring rainfall totals, including larger total volume of rainfall, prolonged rainfall events, and very intense individual rainfall events. These occurrences can cause flooding even when pre-existing water levels are normal.
- Record-high water levels on the Great Lakes cause a backwater effect on the rivers that flow into them which in turn back up into the streams, lakes, and wetlands that lie upstream of them. The U.S. Army Corps of Engineers in Detroit monitors water levels on the Great Lakes. Weekly updates and water level forecasts can be seen at www.lrd.usace.army.mil.

What can I do to prepare for or respond to a flood at my home or business?

The Federal Emergency Management Agency (FEMA) as well as the National Weather Service (NWS) provide a variety of resources on how to prepare for a flood, and deal with flood impacts after they occur:

- How to Prepare for a Flood (FEMA)
- Flood Safety (NWS)
- Flood Information Map (NWS)
- After the Flood Clean Up (FEMA)
- Salvaging Water-Damaged Family Valuables and Heirlooms (FEMA)
- The NFIP Flood Claims Process (FEMA)
- Reducing Future Flood Damage (FEMA)

What resources are available to gather more information on obtaining flood insurance?

Homeowner's and renter's insurance do not typically cover flood damage. Almost all flood insurance policies in Michigan are obtained through FEMA's National Flood Insurance Program (NFIP):

- https://www.floodsmart.gov/
- EGLE Floodplain Management & NFIP
- EGLE Quick Guide to Floodplains & NFIP

Communities (cities, townships) who would like to inquire about joining the NFIP can contact EGLE staff for National Flood Insurance information.