

Household Flooding in Michigan

Highlights from a report by Healthy Urban Waters & their partners*

How flooding happens

Flooding can be caused by excess rain, overflowing rivers, and shortcomings of wastewater infrastructure. Older Michigan cities like Detroit often have combined sewer systems, which means that overflows and flooding caused by excessive rain can contain untreated sewage.

The impacts of flooding

- Missed school & work
- Having to leave ones home
- Recovery costs (e.g., health care, home repair, trash removal, or mold removal)
- Injuries or death (e.g., from electrocution or drowning)
- Respiratory issues due to mold or other microbes
- Stomach or intestinal issues
- Skin rashes
- Eye irritation
- Psychological distress

43% of 4,667 Detroit households surveyed between 2012-2020 reported household flooding.

Renters are 1.7x more likely to report household flooding

...I got this feeling of 'Okay, it happened. We're sorry. This is why it happened. Okay, fill out this paperwork and go about your day.' Until a person lives there and knows what it is like to smell raw sewage or knows what it's like to slip and fall and break a bone and be lying in raw sewage, you can kind of disconnect from those stories and be like okay, just do this and get your money back. But it's much more than just money that's needed to mitigate the situation. It's just, what are you doing to prevent it? Because you can't pay me for the stress I feel every time I see a heavy rain happen. There's no paying for that.

- Detroit Resident

A family piles soaked, ruined belongings pulled from their flooded basement at the end of their driveway.

(CBS News; Marlene Beck Mohan)

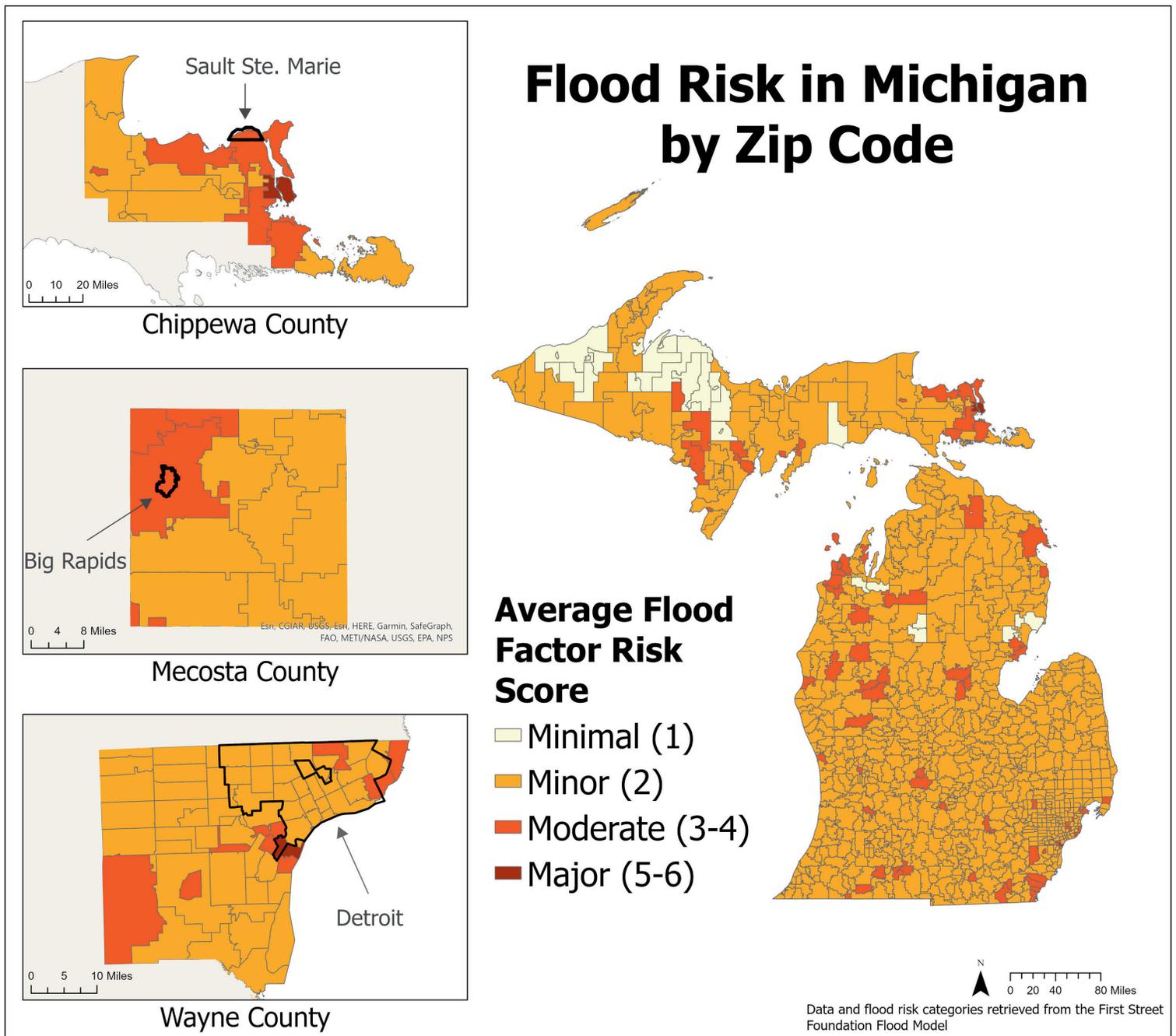




Preparing for future flooding

Over the next 25 years, rain events in the Midwest are expected to become more frequent, more severe, and last longer than in previous years. As weather events make existing health inequities worse, we can expect increasing challenges to health equity as our climate changes. Our most vulnerable neighbors are likely to be impacted the most by flooding. See the next page for recommendations to prevent flooding and protect communities.

This map shows the average Flood Factor Risk score in zip codes across Michigan. The Flood Factor Risk score is the risk of a property flooding at least once over the course of a 30-year mortgage.



How Can Decision Makers Improve Preparation and Response to Flooding?

1. Fund major infrastructure updates

Government agencies and regional authorities should prioritize funding for new infrastructure to control rainwater and flooding.

2. Maintain vacant lots & flood-prone areas

Unmaintained lots can contribute to flooding if not properly cared for. The city should be responsible for taking care of vacant lots, especially lots which may be making flooding worse.

3. Streamline the process for flood related claims & ensure equity in settlements

Submitting a claim to Detroit Water and Sewerage Department for flood damage can be difficult to navigate. The process should be easier and compensation should be distributed quickly and equitably.

4. Address remaining research & policy questions

In order to put solutions in place which are good for the community, long lasting, and equitable, the city needs to invest in research to find the specific causes and effects of flooding in different neighborhoods.

5. Hold landlords accountable for flood prevention & response

Landlords need to be responsible for basic household maintenance and flooding prevention on their properties.

6. Develop grants and technical assistance programs to support household flood related maintenance

Flood related maintenance can be costly and unaffordable for many people. Grants and assistance programs would make it easier to put these protections in place.

***Read the full report at https://huw.wayne.edu/learning-center/detroit_flood_report_2021.pdf**

