



CONSIDERABLE GAPS IN FLOOD RISK REVEALED

- New research shows over 191K more homes are at risk of flooding
- Heavy rains often cause flash flooding across the state and the last five years have been the wettest in history for the Great Lakes watershed
- Flooding is made worst in Detroit due to urbanization and an aging storm sewer network

Current Properties at Risk

Difference in number of properties currently at substantial risk¹

+ 191,500 ↑

124,100
FEMA

315,600
First Street Foundation

Properties at Risk by 2050

Total number of properties at substantial risk²

+ 14,100 (+5%) ↑

315,600
in 2020

329,700
in 2050

¹ Comparison of count of properties within a Special Flood Hazard Area (1 in 100 layer) versus those with 1% risk from the First Street Foundation Flood Model. Some counties may show higher FEMA counts due to a variety of factors, including the generalization of SFHAs, assumptions around flood protection measures, and local context. FEMA zones are estimated by MassiveCert, Inc. ²Substantial risk is calculated as inundation 1 cm or more to the building in the 100 return period (1% annual risk) and rounded to the nearest 100 properties. See methodology for full model details.

Michigan cities with the greatest number of properties at risk³

Percentages reflect total number of community properties having some level of flood risk.

Municipality	2020		2050		Change	
Detroit	39,744	10%	41,672	11%	+1,928	+4.9%
Warren	11,916	20%	12,276	22%	+360	+3.0%
Grand Rapids	9,448	15%	9,586	15%	+138	+1.5%
Sterling Heights	5,485	12%	5,753	13%	+268	+4.9%
Lansing	5,164	12%	5,263	12%	+99	+1.9%
Flint	5,161	9%	5,212	9%	+51	+1.0%
Dearborn	5,051	15%	5,266	15%	+215	+4.3%
Dearborn Heights	4,672	19%	4,824	20%	+152	+3.3%
St. Clair Shores	4,115	15%	4,289	16%	+174	+4.2%
Gross Pointe Woods	4,102	60%	4,120	60%	+18	+0.4%

³ Risk is calculated as inundation of 1 cm or more to the building in the 500 return period (0.2% annual risk). See methodology for full model details. Threshold of at least 2,000 properties for municipalities shown.



532,000

Michigan properties at risk over the next 30 years

52,000

properties will face an “almost certain risk” with 99% chance of being impacted by a flood

10%

of Detroit properties are at substantial risk of flooding today

25%

of all flood insurance claims come from low- to moderate-risk flood zones

(source: FEMA)

Floods are the #1 natural disaster in the United States

\$69,000

average flood claim from 2005-2020

(source: FEMA)

239,000

Michigan property owners have made flood insurance claims since 2000 through the National Flood Insurance Program or the Individual Assistance Program

(source: FEMA)

MICHIGAN STORM SIMULATION

Using its proprietary risk model, First Street Foundation recreated 3 major storm/flooding events that occurred since the year 2000 and calculated the number of properties that would be affected had the same storm/even struck today. Its findings are shocking.

Since 2000, nearly 239,000 Michigan property owners have made flood insurance claims through the National Flood Insurance Program or the Individual Assistance Program.

Flood Event	Date	# Properties affected
River flood near Lansing, MI	2004 May	1,232
River flood near Grand Rapids, MI ⁴	2013 Apr	1,162
River flood in Southeast MI	2015 Jun	90

⁴Source: Fema.gov
Based on model simulation of historic events. Historic recreations do not include precipitation. See methodology for full model details.

Check your flood risk →

NFS RECOMMENDS

1

Raise awareness of community risk of flood with free social media tools

2

Check your clients flood risk at floodfactor.com

3

Create a custom quote for your client at https://nationalfloodservices.com/agents-portal/agents/

4

Inform your clients of their personal flood risk using our customizable email/letter and postcard templates.

Our resources include:

Social Media Tools

Email/Letter Templates

Mailer Templates

Get your Michigan Flood Toolkit here →