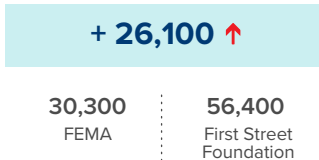




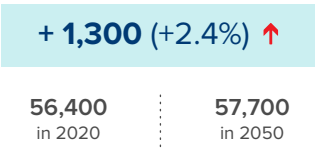
CONSIDERABLE GAPS IN FLOOD RISK REVEALED

- New research shows 26,100 additional North Dakota homes are at substantial risk of flooding
- Flooding threatens North Dakota homeowners with heavy rains associated with winter snowmelt and spring storms
- Poor drainage due to urbanization leaves many areas of the state susceptible to flooding from heavy rainfall
- Over the next 30 years there will be a 2.4% growth in the number of North Dakota properties at substantial risk of flood

Current Properties at Risk
Difference in number of properties currently at substantial risk¹



Properties at Risk by 2050
Total number of properties at substantial risk²

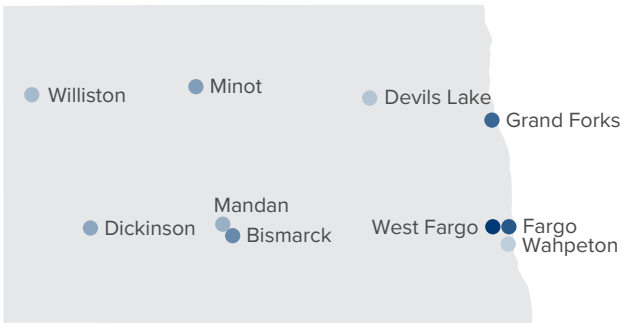


¹ Comparison of count of properties within a Special Flood Hazard Area (1 in 100 layer) versus those with 1% risk from the First Street Foundation Flood Model. Some counties may show higher FEMA counts due to a variety of factors, including the generalization of SFHAs, assumptions around flood protection measures, and local context. FEMA zones are estimated by MassiveCert, Inc. ² Substantial 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.

North Dakota 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	
West Fargo	5,248	41%	5,256	41%	+8	+0.2%
Fargo	3,891	12%	3,959	12%	+68	+1.7%
Grand Forks	2,567	17%	2,598	17%	+31	+1.2%
Bismarck	2,297	9%	2,384	10%	+87	+3.8%
Minot	1,252	6%	1,292	6%	+40	+3.2%
Dickinson	1,154	11%	1,187	11%	+33	+2.9%
Mandan	1,146	14%	1,253	15%	+107	+9.3%
Williston	778	8%	806	8%	+28	+3.6%
Devils Lake	227	7%	234	8%	+7	+3.1%
Wahpeton	219	8%	230	8%	+11	+5.0%



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.

58,000

North Dakota properties at risk over the next 30 years

12,000

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

9.1%

of all North Dakota 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)

Floods are regular occurrence along the rivers of North Dakota. The Red River, in fact, floods once every 3 years

<https://www.ndstudies.gov/gr8/content/unit-iii-waves-development-1861-1920/lesson-1-changing-landscapes/topic-5-blizzards-floods-and-drought/section-3-floods>

NORTH DAKOTA STORM SIMULATION

Using its proprietary risk model, First Street Foundation recreated 2 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.

Flood Event	Date	# Properties affected
River flood near Bismark, ND ⁴	2011 Jun	809
River flood nearTowner, ND	2011 Jun	356

⁴Source: Fema.gov

Based on model simulation of historic events. Historic recreations do not include precipitation. See methodology for full model details.

Since 2000, nearly 30,400 North Dakota property owners have made flood insurance claims through the National Flood Insurance Program or the Individual Assistance Program.

[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 North Dakota Flood Toolkit here

