America's Growing Flood Risk Massachusetts



CONSIDERABLE GAPS IN FLOOD RISK REVEALED

- · New research shows 76,200 additional Massachusetts homes are at substantial risk of flooding
- Coastal properties are vulnerable to flood damage from nor'easters, high tide, storm surges, and tropical storms or hurricanes.
- Inland flooding threatens Massachusetts 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 11.4% growth in the number of Massachusetts properties at substantial risk of flood

Current Properties at Risk

Difference in number of properties currently at substantial risk1

+ 76,200 1

117,100 FEMA

193,300 First Street Foundation

Properties at Risk by 2050

Total number of properties at substantial risk²

+ 22,100 (+11.4%)

193,300 215,400 in 2020 in 2050

Massachusetts 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	
Boston	19,177	19%	27,819	28%	+8,642	+45.1%
Worcester	5,424	13%	5,670	14%	+246	+4.5%
Springfield	4,766	11%	4,989	12%	+223	+4.7%
Lawrence	4,685	38%	4,963	41%	+278	+5.9%
Quincy	4,618	22%	6,574	31%	+1,956	+42.4%
Newton	4,417	18%	4,620	19%	+203	+4.6%
Lowell	4,291	20%	4,648	21%	+357	+8.3%
Revere	4,027	32%	5,034	39%	+1,007	+25.0%
Lynn	4,026	21%	4,681	24%	+655	+16.3%
Hull	3,056	65%	3,236	68%	+180	+5.9%

 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



215,000

Massachusetts properties at risk

47,000

being impacted by a flood

of all Massachusetts



low- to moderate-risk flood zones

Floods are the #1

\$69,000

2005-2020

Nearly **88,000**

Massachusetts property owners have made flood insurance claims **Assistance Program**

MASSACHUSETTS STORM SIMULATION

Using its proprietary risk model, First Street Foundation recreated 6 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, 88,000 Massachusetts property owners have made flood insurance claims through the National Flood Insurance Program or the Individual Assistance Program.

Flood Event	Date	# Properties affected
Nor'easter	2003 Feb	2,616
Nor'easter	2009 Nov	3,565
Nor'easter ⁴	2010 Mar	2,938
River flood near Springfield, MA	2011 Aug	658
Hurricane Irene	2011 Aug	103
Hurricane Sandy	2012 Oct	7.910

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 — Our resources include: — Raise awareness of community risk of flood with free social media tools Email/Letter Check your clients flood risk at floodfactor.com Social Media Tools **Templates** Mailer Templates Create a custom quote for your client at https://nationalfloodservices.com/agents-portal/agents/ Inform your clients of their personal flood risk using our customizable email/letter and postcard templates.

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