



Florida

Flood risk and mitigation

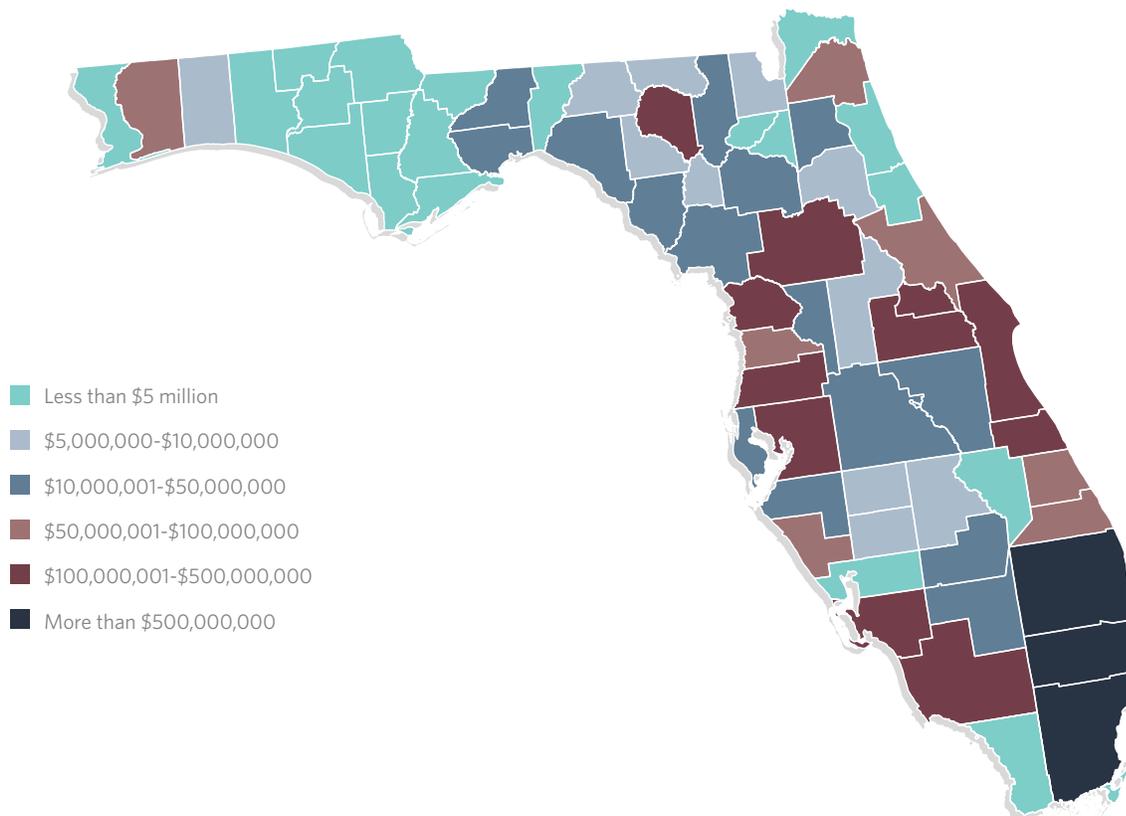
Overview

Floods and hurricanes are a serious threat to Florida, causing loss of life and considerable physical and economic damage to communities. Between 2000 and 2017, 25 federal disasters were declared for floods, hurricanes, and severe storms in the state. To counter the impact of severe weather, Florida is investing in measures such as elevating buildings and converting flood-prone areas into green spaces to better protect homes and businesses—and it's realizing a large return on investment.¹

Figure 1

Florida Floods Projected to Cost Millions in Damage

Total economic loss estimates in 1% annual chance flood hazard areas



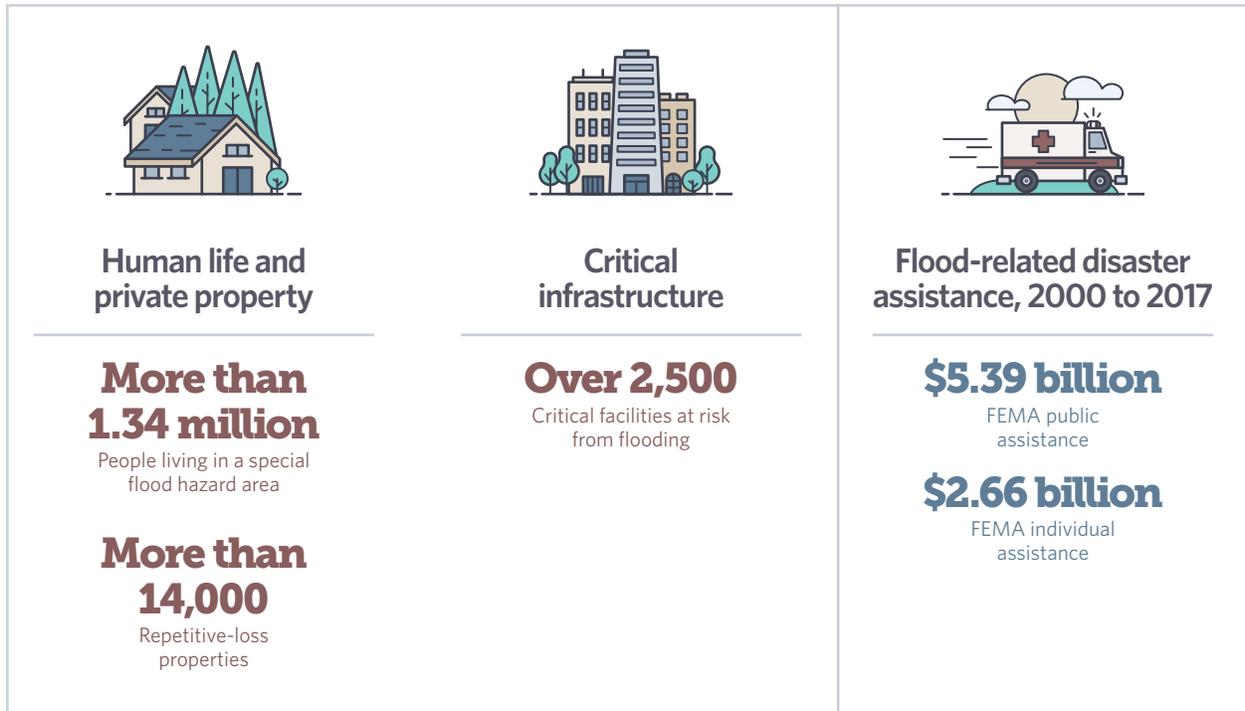
Source: Florida Division of Emergency Management, "State Hazard Mitigation Plan—2018 Update—DRAFT" (2018)

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Figure 2

Over 1.3 Million Floridians Live in Flood-Risk Areas

Lives, property, public infrastructure vulnerable to flooding, and government aid



Sources: Florida Division of Emergency Management, "State Hazard Mitigation Plan—2018 Update—DRAFT" (2018); Federal Emergency Management Agency, "Disasters: Total Number of Declared Disasters by State/Tribal Government and by Year"

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Federal flood insurance helps communities prepare

In Florida, 238 localities participate in the National Flood Insurance Program's Community Rating System.² This voluntary program offers communities lower insurance premiums if they have flood plain management practices that exceed the program's minimum requirements. These practices include buying out flood-prone homes, improving storm drainage, elevating buildings, and flood proofing structures. The city of Ocala has taken advantage of this program and earned a Community Rating System Class 3 designation, which has garnered Ocala policyholders living in a designated flood zone a 35 percent discount on flood insurance premiums.³

Figure 3

State and Federal Investment in Florida’s Flood Mitigation Efforts

Risk-reduction spending by program and level of government, 2000-17

Program	Federal share	State share
Pre-disaster mitigation and other mitigation grants	\$177.1 million	\$54 million
Hazard mitigation grants made after flood-related disasters	\$752.2 million	\$301.5 million

Note: Sum of hazard mitigation grants made following flood-related major disasters in Florida does not include a full account of grants made after the 2017 hurricane season.

Sources: Federal Emergency Management Agency, “Hazard Mitigation Assistance Pre-Disaster Mitigation Data,” last modified Oct. 13, 2017; Federal Emergency Management Agency, “Open FEMA Dataset: Hazard Mitigation Grants—V1,” last modified April 23, 2015

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Figure 4

Mitigation Pays in Florida

Study shows loss avoidance after Hurricane Matthew

Mitigation projects before Hurricane Matthew	
Investment	\$19.2 million
Losses avoided	\$81.1 million
Return on investment	422%

Source: Florida Division of Emergency Management, “State Hazard Mitigation Plan” (2017)

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Flood resilience for buildings saves money

In the most flood-prone parts of Florida, building two feet above the code requirement returns \$21.10 for every dollar invested.⁴

Importance of policy

Communities must take actions to better prepare for weather-related catastrophes such as floods. And federal officials should consider policy reforms that would improve flood protection and preparation, minimize disruptions to the economy, and reduce costs to the federal government and taxpayers. These actions include:

- Increasing federal investment in flood mitigation programs that help communities prepare for and reduce the damage from floods.
- Improving resiliency requirements for infrastructure built and rebuilt in flood-prone areas.
- Protecting ecosystems, such as wetlands, salt marshes, and dunes, that can act as barriers to storms and help shield property.
- Reforming the National Flood Insurance Program to better communicate actual risk, break the cycle of repeated loss and rebuilding in the most flood-prone areas, and provide incentives for communities and homeowners to better prepare for floods.

Endnotes

- 1 Florida Division of Emergency Management, “Loss Avoidance Assessment” (2017), https://www.floridadisaster.org/globalassets/importedpdfs/01_dr-4283-loss-avoidance-report.pdf.
- 2 Federal Emergency Management Agency, “Community Rating System” (2017), https://www.fema.gov/media-library-data/1503240360683-30b35cc754f462fe2c15d857519a71ec/20_crs_508_oct2017.pdf.
- 3 Federal Emergency Management Agency, “Community Rating System” (2017), https://www.fema.gov/media-library-data/1507029324530-082938e6607d4d9eba4004890dbad39c/NFIP_CRS_Fact_Sheet_2017_508OK.pdf.
- 4 National Institute of Building Sciences, “Natural Hazard Mitigation Saves: 2017 Interim Report” (2017), <https://www.nibs.org/page/mitigationsaves>. This finding refers to new buildings in coastal velocity zones, the most hazardous of the special flood hazard areas.

For further information, please visit:

pewtrusts.org/flood-prepared-communities

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