



# Pennsylvania

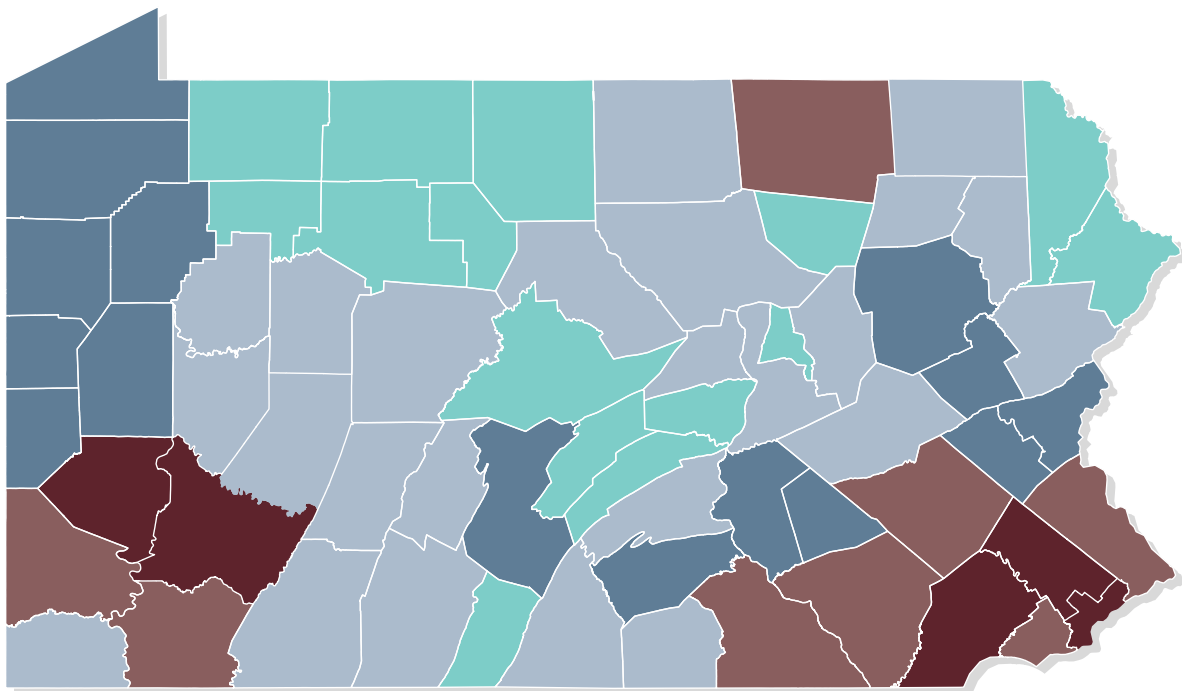
## Flood risk and mitigation

### Overview

Floods and hurricanes are a serious threat to Pennsylvania, causing loss of life and considerable physical and economic damage to communities. From 2003 to 2018, 14 federal disasters were declared for floods, hurricanes, and severe storms in the state, costing taxpayers almost \$1.2 billion in federal assistance.<sup>1</sup>

Figure 1

### Flooding Touches Every County in Pennsylvania



Total events, 1950-2017

■ 15-35   
 ■ 36-58   
 ■ 59-84   
 ■ 85-130   
 ■ 131-213

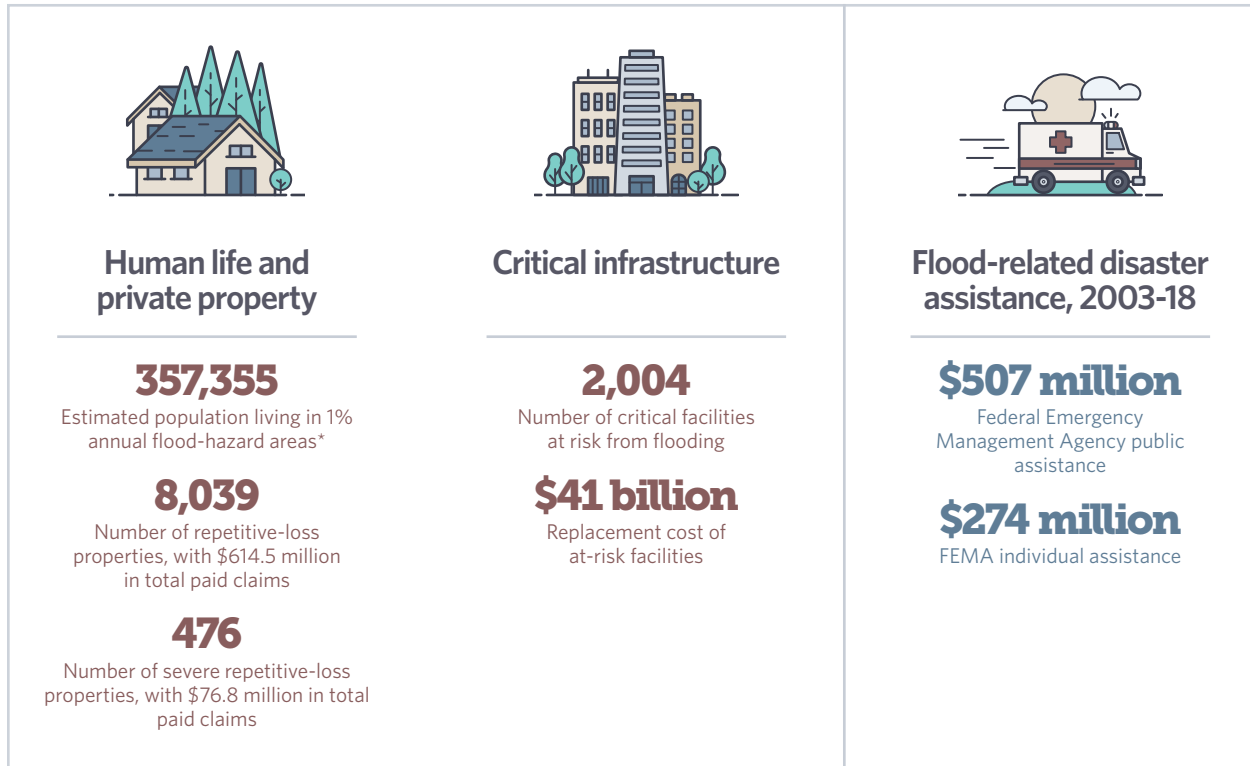
Source: Pennsylvania Emergency Management Agency, "2018 Commonwealth of Pennsylvania State Hazard Mitigation Plan Update" (2018)

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Figure 2

## More than 350,000 Pennsylvanians Live in Flood-Risk Areas

Lives, property, and critical infrastructure at risk from flooding, and past federal aid



Note: One percent annual chance flood-hazard areas are designated locations subject to flooding that has a 1 percent chance of being equaled or exceeded in any year.

Sources: Furman Center, New York University, "FloodzoneData.us" (2017); Pennsylvania Emergency Management Agency, "2018 Commonwealth of Pennsylvania State Hazard Mitigation Plan Update" (2018); Federal Emergency Management Agency, "FEMA Web Disaster Declarations"

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Figure 3

## Schools in Pennsylvania Face Flood Challenges

Pew identifies 10 counties with highest composite scores for school flood risk



Wyoming	Forest
Cameron	Dauphin
Bucks	Wayne
Columbia	Montgomery
Bradford	Monroe

Composite scores are based on three major indicators: a school's location within a flood zone, the percentage of a school's neighborhood (represented by ZIP code) within a flood zone, and the number of historical flood-related federal disaster declarations in that county.

Source: The Pew Charitable Trusts, "Flooding Threatens Public Schools Across the Country: Infrastructure Analysis Evaluates County-Level Flood Risk" (2017)

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## Federal flood insurance helps communities prepare

In Pennsylvania, 23 localities participate in the National Flood Insurance Program's Community Rating System. 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 floodproofing structures. The city of Wilkes-Barre has taken advantage of this program and earned the highest Community Rating System score in the state. This has garnered a 20 percent discount on flood insurance premiums for policyholders living in a designated flood zone.<sup>2</sup>

Figure 4

## State and Federal Investment Supports Pennsylvania's Flood Mitigation Efforts

Risk-reduction expenditures by program and level of government, 2003-17

Program	Federal share	State share
Pre-disaster mitigation and other mitigation grants	\$40.8 million	\$7.9 million
Hazard mitigation grants made after flood-related disasters	\$61.3 million	\$20.4 million

Source: Federal Emergency Management Agency, "OpenFEMA Dataset: Hazard Mitigation Assistance Projects," last modified Nov. 7, 2018

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## Importance of policy

Communities must 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 federal and state taxpayers. These actions include:

- Increasing federal investment in flood mitigation programs that help communities prepare for and reduce the damage from floods.
- Improving resilience 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 to compel communities and homeowners to better prepare for floods.

## Endnotes

- 1 Pennsylvania Emergency Management Agency, "2018 Commonwealth of Pennsylvania State Hazard Mitigation Plan Update," (Oct. 10, 2018), 239, <https://pahmp.com>; Federal Emergency Management Agency, "Disasters: Total Number of Declared Disasters by State/Tribal Government and by Year," accessed Nov. 8, 2018, <https://www.fema.gov/disasters>.
- 2 Federal Emergency Management Agency, "Community Rating System" (2017), [https://www.fema.gov/media-library-data/1523648898907-09056f549d51efc72fe60bf4999e904a/20\\_crs\\_508\\_apr2018.pdf](https://www.fema.gov/media-library-data/1523648898907-09056f549d51efc72fe60bf4999e904a/20_crs_508_apr2018.pdf); Pennsylvania Emergency Management Agency, "2018 Commonwealth of Pennsylvania State Hazard Mitigation Plan Update," 239.

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## For further information, please visit:

[pewtrusts.org/flood-prepared-communities](https://pewtrusts.org/flood-prepared-communities)

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