Wisconsin

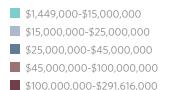
Flood risk and mitigation

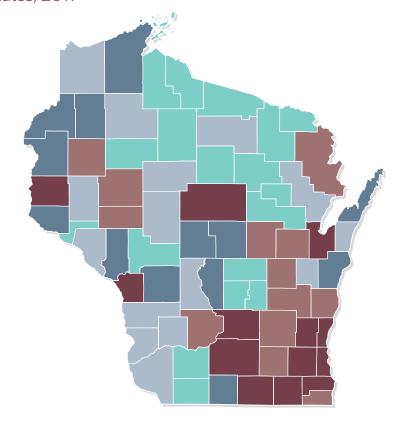
Figure 1 in this fact sheet has been updated to show that the flood damage amounts are in millions of dollars. In Figure 2, the notes have been updated to clarify how "potential losses" are calculated.

Overview

Floods and storms are becoming more intense in Wisconsin, with floods occurring every two weeks, on average, and causing over \$72 million in property loss annually.¹ According to the Wisconsin Emergency Management Division, flood damage tends to be the most widespread disaster in the state.² As these events become more serious, the physical and economic damage to communities and the threats to human lives and ecosystems also increase. Between 2000 and 2015, 12 federal disasters and emergencies were declared for floods and severe storms in Wisconsin, which exceeded \$274 million in total assistance from the U.S. government.³

Figure 1 In 13 Counties, Flood Damage Could Exceed \$100 Million Annually Potential building loss estimates, 2011





Source: Wisconsin Emergency Management Division

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Figure 2

149,000 Wisconsinites Live in Flood-Risk Areas

Life, property, and public infrastructure at risk from flooding, and past federal government aid



Human life and private property

149,000

Estimated population living in 1% annual chance flood-hazard areas, 2010

544

Number of repetitive-loss properties, 2016

3

Number of severe repetitive-loss residential properties, 2016



State-owned infrastructure, 2013

6,733

Number of essential facilities at risk from flooding

\$9.78 million

Estimated potential losses from at-risk essential facilities



Flood-related disaster assistance, 2000-15

\$133 million

FEMA individual assistance

\$141 million

FEMA public assistance

Notes: One percent annual-chance flood-hazard areas are locations subject to flooding that has a 1 percent chance of being equaled or exceeded in any year. Repetitive-loss properties are National Flood Insurance Program-insured buildings and/or contents for which the program paid at least two claims of more than \$1,000 in any 10-year period since 1978. Severe repetitive-loss properties are those for which the program has either made at least four claim payments for buildings and/or contents of more than \$5,000 or at least two building-only claim payments for which the total amount exceeds the current value of the property. Essential facilities include schools, care facilities, police and fire stations, and communications facilities, as well as emergency operations centers. Potential losses include buildings and contents, restoration time to 100% functionality, lifeline losses (for selected components) and losses to structures and equipment. Disaster assistance figures are as of May 26, 2016.

Sources: Mark English, "Special Flood Hazard Area Exposure Resource Map v2.0," accessed May 9, 2016, http://www.arcgis.com/home/webmap/viewer.html?webmap=5767b4c3ac164e54916bc7ebc20d25d6; Wisconsin Emergency Management Division, State of Wisconsin Hazard Mitigation Plan (October 2011), http://emergencymanagement.wi.gov/mitigation/state_plan.asp; Federal Emergency Management Agency, "Repetitive Loss State/Community Drilldown Non-mitigated Records Only," Jan. 31, 2016; Federal Emergency Management Agency, "Severe Repetitive Loss State Summary/Residential (Validated) Properties Only," Jan. 31, 2016 and Federal Emergency Management Agency, "Disaster Declarations," accessed May 2, 2016, https://www.fema.gov/disasters

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Federal flood insurance helps communities prepare

Seventeen communities in Wisconsin participate in the National Flood Insurance Program's Community Rating System. The voluntary program provides reduced insurance premiums in communities that proactively implement flood plain management practices—such as acquisition and relocation of flood-prone structures, elevation of structures, and flood proofing—that exceed the program's minimum requirements.⁴ The highest-rated communities in the state are Elm Grove and Kenosha County, which each earned 25 percent discounts for eligible properties.⁵

Figure 3

State and Federal Investment Supports Wisconsin's Mitigation Efforts

Risk-reduction expenditures by program and level of government

Program	Federal	State
Pre-disaster and other mitigation grants	\$9.5 million	\$3.0 million
Hazard Mitigation Grants made after flood-related disasters	\$47.2 million	\$15.1 million

Sources: Federal Emergency Management Agency, "OpenFEMA Dataset: Hazard Mitigation Grants-V1," March 9, 2016, http://www.fema.gov/openfema-dataset-hazard-mitigation-grants-v1; Federal Emergency Management Agency, "Hazard Mitigation Assistance Pre-Disaster Mitigation Data," March 9, 2016, https://www.fema.gov/media-library/assets/documents/103341; Federal Emergency Management Agency, "Hazard Mitigation Assistance Repetitive Flood Claims (RFC) Data," March 9, 2016, https://www.fema.gov/media-library/assets/documents/103321; Federal Emergency Management Agency, "Hazard Mitigation Assistance Severe Repetitive Loss (SRL) Data," March 9, 2016, https://www.fema.gov/media-library/assets/documents/103337; and Federal Emergency Management Agency, "Hazard Mitigation Assistance Flood Mitigation Assistance (FMA) Data," March 9, 2016, https://www.fema.gov/media-library/assets/documents/103339

Importance of policy

Communities must prepare for weather-related catastrophes such as floods and hurricanes, and U.S. policymakers should consider reforms that improve protection and preparation; minimize disruptions to the economy; and reduce costs to the federal government and taxpayers by:

- Increasing federal investment in proactive mitigation programs that help communities prepare for and reduce risk of floods.
- Improving resilience and durability requirements for infrastructure that is rebuilt after disasters.
- Protecting ecosystems, such as wetlands, salt marshes, and dunes, which can absorb storm impacts 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 prepare in advance of floods.

Endnotes

- U.S. Department of Energy, "State of Wisconsin Energy Sector Risk Profile," accessed Aug. 4, 2016, http://www.energy.gov/sites/prod/files/2015/05/f22/WI-Energy%20Sector%20Risk%20Profile.pdf.
- 2 Wisconsin Emergency Management Division, State of Wisconsin Hazard Mitigation Plan (October 2011), http://emergencymanagement.wi.gov/mitigation/state_plan.asp.
- 3 Sum of individual assistance and public assistance for Wisconsin flood-related major disaster and emergency declarations from 2000 to 2015. Federal Emergency Management Agency, "Disaster Declarations," accessed May 26, 2016, https://www.fema.gov/disasters.
- 4 National Flood Insurance Program, "Community Rating System (CRS)," https://www.floodsmart.gov/floodsmart/pages/crs/community_rating_system.jsp.
- 5 Federal Emergency Management Agency, Community Rating System (2014), http://www.fema.gov/media-library-data/1398878892102-5cbcaa727a635327277d834491210fec/CRS_Communites_May_1_2014.pdf.

For further information, please visit:

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