

Flooding in non-coastal areas is increasing in frequency and intensity. Even if you're inland, severe flooding can reach your community and threaten the life you've built. Learn more about your increasing flood risk and flood insurance from National Flood Insurance Program (NFIP).





Myth Versus Fact

According to the National Oceanic and Atmospheric Association (NOAA), from 1900 to 2010, precipitation totals increased by as much as 20% across the Midwest. These heavier precipitation patterns have caused unprecedented extreme flash flooding and flood damage.

Review the following myths and facts about flood insurance to further understand your potential flood risk.



MYTH

FACT



"Severe flooding only happens in coastal regions." With storm intensity and frequency increasing, coastal storms now maintain their strength as they travel inland and cause severe flooding. Additionally, flooding can occur in inland communities due to different weather events—like heavy downpours, severe rain or snowmelt after an eventful winter.

"Only property owners in high-risk flood zones need to insure their properties with flood insurance."

Properties in low-risk flood zones are still at risk of flooding. In fact, more than 40% of NFIP flood insurance claims come from outside high-risk flood areas. Recent construction, wildfires, impervious surfaces (e.g., cement), a breached dam, poor stormwater infrastructure and oversaturated land can worsen flooding in any area.

"If my property suffers flood damage, I can apply for and receive federal disaster assistance."

Federal disaster assistance is only made available following a presidentially declared disaster and is not a substitute for flood insurance. It is only intended to meet a survivor's basic needs and often comes in the form of a loan from the U.S. Small Business Administration (SBA) that must be repaid with interest.

In comparison, flood insurance claims may be filed regardless of a presidential disaster declaration and provide the means to repair and restore your property after a flood.

Common Inland Flooding Risks

Flash Flooding



Prolonged rainfall or heavy, excessive rain in a short period can cause flash flooding in any region. Flash flooding can last minutes or hours and may occur with little to no warning. Urban areas are more prone to flash flooding than rural areas due to a higher volume of impermeable surfaces (such as cement or blacktop) that increase runoff.



Riverine Flooding

Riverine flooding occurs when streams and rivers exceed their capacity to accommodate water flow, causing the water to overflow the riverbanks and spill into adjacent land. This type of flooding can happen quickly and last for days, weeks or longer depending on the severity and elevation of surrounding floodplains.

Spring Flooding and Snowmelt



Communities in the northern half of the United States may experience spring flooding, brought on by snowmelt and rain-on-snow events. When snow melts, the water soaks into the ground or runs off due to frozen ground or overly saturated land. Runoff can also occur when rain falls on non-absorbent soil. Spring flooding is expected to become a more frequent flood event with temperatures expected to rise throughout the 21st century.



Dam or Levee Failure

Dam or levee failure can occur with little to no warning, potentially causing major flooding in the surrounding areas. Failure of a dam or levee can be brought on by severe storms, like heavy rain and wind events. Flooding caused by dam or levee failure can range from minor to extensive and last for days to weeks.

Learn more about the National Dam Safety Program managed by FEMA at fema.gov/dam-safety and review FEMA's tips on living with levees at fema.gov/flood-maps/living-levees.

Historical Inland Flooding Events

According to NOAA's National Centers for Environmental Information (NCEI), the U.S. has experienced an increase in billion-dollar inland flood events in recent years. In 2019 alone, the Midwest and Southern U.S. were impacted by flood events that left damage totaling at least \$20 billion.

Refer to the following map to review historical flood events that have affected even the most inland communities.

SNOWMELT/SPRING FLOODING

- Record snowfall, snowmelt from rain storms and already saturated soil led to rising river levels.
- 200+ NFIP claims were filed from January to June, with an average payment of \$19,353.

ATMOSPHERIC RIVER

- WY, 2022
- In four days, Yellowstone National Park received between 0.8 and 5 inches of rain and 2 to nearly 5 inches of snowmelt, which is equivalent to 4 to 9 inches of rain.
- Floodwaters washed out roads and bridges, swept away multiple houses and flooded hundreds more.

ATMOSPHERIC RIVERS

- CA, 2022-2023
- Rainfall triggered 700+ landslides.
- 1,947 NFIP claims were filed with an average payment of \$52,422.

TROPICAL STORM OCTAVE

- AZ, 1983
- Intense rainfall inundated southeastern Arizona filling a freeway underpass with 9 feet of water and causing \$370 million in damage.
- 221 NFIP claims were filed with an average payment of \$17,952.

RIVERINE FLOODING

higher than normal.

payment of \$19,972.

The Des Moines River rose 7 feet above flood

• 1,393 NFIP claims were filed with an average

SNOWMELT/SPRING FLOODING MO, 2011

Severe weather resulted in record-setting rainfall,

· Approximately 985 NFIP claims were filed with

an average payment of \$42,031.

spanning three weeks and causing \$2 billion in damage.

stage and Coralville Reservoir measured 38 feet

IA, 1993



HURRICANE IDA

flood damage.

payment of \$54,418.

Northeast, 2021



HURRICANE IRENE

- More than 500 miles of roadway, 200 bridges and 1,000 homes were damaged or destroyed.
- Over 5,000 NFIP claims were filed with an average payment of \$34,518.

FLOODING

KY, 2022

• Flooding caused by 14–16 inches of rain over five days prompted more than 600 helicopter rescues.

New York City recorded its wettest hour on record

• 10,388 NFIP claims were filed with an average

resulting in hundreds of millions of dollars in

• 457 NFIP claims were filed with an average payment of \$59,930.

FLOODING

WV, 2016

VT. 2011

- Approximately 8–10 inches of rain in less than 12 hours damaged or destroyed thousands of homes, businesses and roads.
- Nearly 1,000 NFIP claims were filed with an average payment of \$53,473.



FLOODING

MD. 2016 & 2018

- In both severe rainfall events, nearly 7 inches of rain fell over 3 hours.
- In 2016, the Patapsco River rose over 2 feet in 5 minutes.

RIVERINE FLOODING

Ohio River, 2018

- Between 8 and 9 inches of rainfall raised the Ohio River in Louisville to its highest level since 1997.
- Flooding and landslides were reported as a result of the severe storms.

• In West Texas, 1–3 inches of rain fell per hour.

• 168 NFIP claims were filed with an average payment of \$66,733.

- Orlando endured its wettest September on record with a total accumulation of 22.42 inches of rain.
- 5,470 NFIP claims were filed with an average payment of \$78,666.

FLOODING

TN, 2021

- NFIP claims totaled \$16.4 million
- FEMA and the U.S. SBA provided \$9.3 million in disaster assistance.





ADDITIONAL RESOURCES & CONTACT INFORMATION

The NFIP offers flood insurance policies to property owners, condo associations and renters. For more information on what flood insurance covers, visit floodsmart.gov/whats-covered. To purchase a flood insurance policy, contact your insurance agent or visit floodsmart.gov/find to find a flood insurance provider.

To learn more about other flooding types and how they could affect your area, download the NFIP Flooding & Related Weather Events brochure at agents.floodsmart.gov/nfip-flooding-weather-events.

For more information on the NFIP, visit <u>floodsmart.gov</u> or contact the NFIP at **877-336-2627**.

This publication was created with information from state and federal sources.





Congress created the National Flood Insurance Program (NFIP) in 1968 to reduce future flood damage through floodplain management, and to provide people with flood insurance through individual agents and insurance companies. FEMA manages the NFIP.

If you use a relay service, such as video relay service (VRS), casptioned telephone service or others, give FEMA the number for that service.

For the most up-to-date version of this resource, please visit <u>agents.</u> <u>floodsmart.gov/inland-flood-risk</u>.

December 2023 | P-2334