



FEMA



US Army Corps
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Joint Flood Risk Key Messages

About Flood Risk

- Floods are the #1 most common natural disaster in the United States.
- Every community in the United States is vulnerable to flooding.
- Many individuals and communities are not aware of their flood risk.
- Local officials should inform their communities of their flood risk, so that they can make informed decisions about their safety. State and Federal agencies need to reinforce that message.
- Even if your community has never experienced a flood, your risk of flooding can change over time due to changes in climate, population, development in and around your community, and other factors.
- The 100-year flood (the flood that has a 1 percent-annual-chance of occurring) mapped on the Federal Emergency Management Agency's (FEMA's) Flood Insurance Rate Maps is intended for insurance, floodplain management, and planning efforts and is not intended to be a safety standard.

Flood Risk by the Numbers

- FEMA estimates that 10 million households are located in flood-prone areas. To learn more about the flood risk in specific communities, visit www.floodsmart.gov or www.csc.noaa.gov/snapshots/.
- The U.S. Army Corps of Engineers (USACE) estimates that 94 million acres of land in the United States are at risk for flooding.
- Most buildings have a 26 percent chance of flooding during the life of a 30-year mortgage. Most buildings have a 4 percent chance of experiencing a fire during the same time period. To learn more about a home or building's flood risk, visit www.floodsmart.gov.
- Floods greater than a 100-year flood can and do happen as seen in the Midwest, which received two 500-year floods in a 15-year period (1993 and 2008).
- Between 20-25 percent of all flood insurance claims are paid to people living outside flood-prone areas (e.g., outside of Special Flood Hazard Areas).
- Over the past 10 years (2001-2010) the average flood insurance claim paid in the United States was nearly \$48,000 per year.
- Over the past 10 years (2001-2010), flood insurance claims averaged just over \$2.6 billion.
- The average flood insurance policy costs about \$600 per year.
- People outside of high-risk areas file over 20% of National Flood Insurance Program (NFIP) claims and receive one-third of disaster assistance for flooding.
- The NFIP paid \$709 million in flood insurance claims to homeowners, business owners, and renters in 2010.



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2010 Flood Insurance Claim Report for Top 10 States as of 3/2/11:

State	Total Number of 2010 Claims
New Jersey	4,690
Tennessee	4,209
New York	2,210
Massachusetts	1,936
Texas	1,894
Illinois	1,747
Rhode Island	1,445
Kentucky	1,120
North Carolina	1,104
Pennsylvania	1,094

State	Total 2010 Claims Payments
Tennessee	\$226,308,829
New Jersey	\$99,581,949
Texas	\$66,446,294
Rhode Island	\$40,695,502
Kentucky	\$38,083,762
Illinois	\$26,795,484
Massachusetts	\$25,599,747
New York	\$21,149,496
Iowa	\$17,900,000
North Carolina	\$16,224,553

Flood Risk Behind Levees

- Levees are not fail-proof, and they do not eliminate risk. Floods can and do happen behind levees. Levees are built to hold back a certain amount of water (not all floods).
- Levees often protect other critical infrastructure such as roads, hospitals, drinking and wastewater facilities, and power generating facilities.
- If levees are built on the bank of the river or coast there may be significant adverse impacts on the natural resources and functions of the river or coastal floodplains.

Status of the U.S. Levee System

- The average age of levees within Federal levee safety programs is approximately 50 years, and the age of many nonfederal levees can be much older—100 years or more.
- Although constructed to reduce damages, some levees have increased flood risk by attracting development to the floodplain. Many levees originally constructed to protect agricultural fields are now being used to protect large urban communities.
- Risks are growing as population and economic investment behind levees increase, the infrastructure ages, and storm severity increases due to climate change and increased development.
- Although the number, location, and condition of all the Nation’s levees are unknown, estimates indicate that there may be more than 100,000 miles of levees, with tens of millions of people living and working behind them.
- States and communities are advised to adopt standards to manage flood risk behind levees.

Flood Risk Roles and Responsibilities

- Flood risk management, public safety, and flood risk communication are shared responsibilities among Federal, State, local, and private partners.
- Floodplain management decisions made by State and local officials impact the effectiveness of Federal programs to mitigate flood risk.
- Communities and individuals that rely solely on Federal disaster assistance to cover their flood damages are often unaware that:
 - Federal programs do not fully cover the costs of recovery in the event of flooding.
 - Federal disaster assistance is only available if the President declares a disaster, and that assistance is usually in the form of loans that have to be repaid.
 - The average Federal Individuals and Households Program award is around \$4,000.
- Building safely has long-term payoffs for communities, particularly related to economic resiliency. A 2005 independent study showed that for every dollar spent by FEMA in mitigation activities during the period from 1993 to 2003, society saved \$4 on average (Natural Hazards Mitigation Saves: An Independent Study to Assess the Future Savings from Mitigation Activities, Multihazard Mitigation Council/National Institute of Building Sciences, 2005).

Flood Risk Management Responsibilities

Citizens are responsible for:

- Understanding that they are at risk, and that there are steps they can take to protect themselves from floods, including the following:
 - Visit www.floodsmart.gov to learn about their home's flood risk and purchasing flood insurance.
 - Create a personal flood file containing information about their possessions and keep it in a secure place.
 - Raise electrical components and appliances at least 12 inches above the home's projected flood elevation.
 - Move furniture and valuables to a safe place.
 - Create a safety kit with drinking water, canned food, first aid, blankets, a radio, and a flashlight.
 - Plan and practice a flood evacuation route. Know safe routes from home, work, and school that are on higher ground.
 - Ask an out-of-state relative or friend to be the emergency family contact.
 - Have a plan to protect pets.
 - Visit Ready.gov for more information on emergency preparation.

Levee owners and operators are responsible for:

- Maintaining and operating the levee to reduce the risk to life and property in areas behind levees.
- Long-term financing of levees and the cost of managing risks associated with aging levees.
- Collaborating with community planners to reduce consequences of levee overtopping and failure, ensuring that critical facilities in areas behind levees are fully operational in flood events.
- Certifying levee data to meet levee accreditation requirements for the NFIP.
- Informing community and citizens of risks associated with levees.

State and local officials are responsible for:

- Determining how land is used in floodplains and for enforcing requirements that reduce flood risk.
- Communicating flood risk to the public along with the steps they can take to reduce that risk.
- Considering the adoption of more robust development standards for areas behind levees and other areas at risk to protect new development and reduce community liability.
- Developing their own modeling to supplement FEMA maps to address special hazards, such as erosion hazards, sea level rise, and waterway setbacks, among many other options.

Key FEMA Program Messages

- FEMA identifies and analyzes flood hazards and related risks.
- FEMA provides Federal, State and local governments with valuable data for assessing and reducing the risk of flood to people and their homes and businesses.
- FEMA is responsible for analyzing and identifying the flood hazards in leveed areas and for helping communities identify the risks associated with levees.
- FEMA does not own, operate, maintain, or certify levees for safety.

Key USACE Program Messages

- Public safety is the primary focus of the USACE Levee Safety Program.
- USACE has specific authority for approximately 2,000 levees, spanning 14,000 miles nationwide. There are many other private and other non-USACE levees that have not been inventoried or inspected.
- The USACE Levee Safety Program is an integral component of a broad, national flood risk management effort that employs a systemwide approach to flood risk management and embraces shared responsibility.
- While information from USACE inspections may be used for NFIP purposes, USACE does not perform levee system evaluations to meet NFIP accreditation criteria. USACE is responsible for providing certification information for those levees it owns and operates.
- Levee safety must be improved across the Nation.