

FACT SHEET

Flooding – Our Nation’s Most Frequent and Costly Natural Disaster

HISTORY AND CAUSES

FLOOD SAFETY AWARENESS

FEMA and the National Flood Insurance Program (NFIP) are proud to partner with the National Oceanic and Atmospheric Administration (NOAA) and National Weather Service (NWS) to demonstrate flood risks across the country and provide important information about steps you can take to protect yourself and your family.

HISTORY OF FLOODING

FLOODING is the most frequent severe weather threat and the costliest natural disaster facing the nation. Ninety percent of all natural disasters in the U.S. involve flooding. And high-risk flood areas are not the only ones at risk: more than 20% of all flood insurance claims come from policies in moderate- to low-risk areas.

CAUSES OF FLOODING

SPRING THAW

During the spring, frozen land prevents melting snow or rainfall from seeping into the ground. When the snow does melt, it can overflow streams, rivers and lakes. Add spring storms, and the result is often severe spring flooding. In spring 2009, Alaska experienced record-breaking flooding after warmer-than-normal temperatures caused snowmelt and ice jams along Alaskan rivers. The resulting damage to homes, roads and airports was estimated at more than \$7.2 million.

TROPICAL STORMS

Wind speeds don’t tell the entire story when it comes to tropical storms. Intense rainfall, not directly related to the wind speed of a tropical storm, often causes the most damage. In November 2009, remnants of Tropical Storm Ida redeveloped into a strong coastal storm (nor’easter) that generated up to 18 inches of rain in many areas and caused major flooding along the Atlantic Coast. The storm caused an estimated \$70 million in damage in Virginia alone.

HURRICANES

Hurricanes can bring strong winds, heavy rains and storm surge in coastal areas. As hurricanes and tropical storms move inland, torrential rains and high winds can cause damage hundreds of miles from the coast. Hurricane Ike in 2008 was the third most destructive hurricane ever to hit the United States. In Texas, Ike’s 100 mph winds, 13-foot high storm surge and 16 inches of rain destroyed thousands of homes and properties. Figures from NOAA’s National Climatic Data Center reports puts losses from the storm at \$27 billion.

HEAVY RAINS

All areas of the country are at heightened risk for flooding due to heavy rains. This excessive rainfall can happen during any season, putting property at risk year round. In April and May 2010, heavy rain and severe storms battered many Southern states, including Tennessee, Arkansas, Alabama, Kentucky, Mississippi, and Georgia. Western and mid-Tennessee were hardest hit with local rainfall amounts of 18-20 inches to the south and west of



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the Nashville metropolitan area. Flooding in the Nashville, Tennessee area alone caused more than \$1 billion in damages.

WEST COAST THREATS

The West Coast rainy season usually lasts from November to April, bringing the majority of yearly precipitation to states in the Pacific Northwest. In January 2009, Washington experienced some of the worst flooding on record. A combination of heavy rains and snowmelt caused extensive flooding and mudslides, with an estimated \$125 million in flood damage to roads, buildings and other government structures.

LEVEES & DAMS

The U.S. has thousands of miles of levees and dams that are designed to protect against a certain level of flooding. These structures can erode and weaken over time, and they can also be overtopped—or even fail—during large flood events. Heavy rains in July caused the Lake Delhi dam in Iowa to burst, emptying a nine mile lake and leading to catastrophic flooding.

FLASH FLOODS

Flash flooding is the #1 weather-related killer in the U.S. A flash flood is a phenomenon such as a thunderstorm, collapse of a man-made structure or an ice break that occurs within six hours of an event and generates significant flood waters. In March 2010, flash floods occurred throughout Virginia and West Virginia as a result of snowmelt compiled with moderate to heavy rain. This event was categorized as the most high-impact flash flood to affect the Blacksburg area in the past five years with preliminary damages estimated at least \$6 million.

To learn what you can do to prepare for floods, visit www.ready.gov.

Visit www.floodsmart.gov to learn more about flood causes, safety precautions, flood risks, and flood insurance policy options.



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