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

HISTORY AND CAUSES

FLOOD SAFETY AWARENESS WEEK
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 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: about 25% of flood insurance claims come from low-to-moderate risk areas.

CAUSES OF FLOODING

HURRICANES
Hurricanes bring strong winds, heavy rains and flying debris. Major hurricanes can create storm surge in coastal areas and heavy rain and flooding hundreds of miles inland. Both coastal and inland areas are vulnerable. 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.

TROPICAL STORMS
Wind speeds don’t tell the entire story when it comes to tropical storms. Intense rainfall, not related directly to the wind speed of a tropical storm, often causes the most damage. In 2001, Tropical Storm Allison produced more than 30 inches of rainfall in Houston in just a few days, flooding over 70,000 houses and destroying 2,744 homes.

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 April 1997, spring thaw caused the Red River in North Dakota to overflow, causing $4 billion in damages.

HEAVY RAINS
All areas of the country are at heightened risk for flooding due to heavy rains. The Northeast is at especially high risk due to heavy rains produced by Nor’easters. This excessive rainfall can happen in any season, putting property at risk year round. In April 2007, a powerful Nor’easter dropped up to 9 inches of rain in parts of New Jersey, and more than 8 inches in New York City’s Central Park – quadrupling a 101-year-old record.

WEST COAST THREATS
The West Coast rainy season usually lasts from November to April, bringing heavy flooding and increased flood risks with it; however, flooding can happen at anytime. Wildfire-scorched land brings the potential for mudflows and heavy floods. In July 2008, heavy rain over wildfire-stricken land resulted in mudflows and flooding that affected more than 50 homes in Independence, California.

LEVEES & DAMS
The US 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. They can also be overtopped, or even fail during large floods, creating even more damage. The record-breaking Midwest floods of 2008 left homes in Lawrenceville, IL submerged after a levee breached on the Embarras River.

FLASH FLOODS
Flash flooding is the #1 weather-related killer in the U.S. A flash flood is a phenomenon that occurs within 6 hours of an event that generates significant flood waters, such as a thunderstorm, the collapse of a man made structure or an ice break. In July 2008, 9 inches of rain in New Mexico caused flash floods that damaged nearly 500 houses, campers, mobile homes and other structures.

Visit www.floodsmart.gov/noaafloodweek to learn more about flooding and preparedness.