



## **Climate Change vs. Global Warming**

While climate change and global warming are separate issues, their causes and effects are linked. Here's what you need to know:

#### **CLIMATE CHANGE**

Climate change is the gradual **shift of global weather conditions** over time. The effects of climate change are seen in changing weather patterns, such as ecosystems gradually becoming hotter, drier or wetter. Climate change increases the frequency, duration and severity of extreme weather and climate-related disasters—the rate of which is accelerated by human activity.

#### **GLOBAL WARMING**

Global warming describes an **increase in the average temperature of the Earth**. This is a side effect of climate change, due in part to human actions pushing greenhouse gases into the atmosphere. Rising global temperatures are associated with increases in extreme weather events, such as heat waves or large storms.



### **Knowledge Check**

On average, global temperatures have increased by 0.14 degrees Fahrenheit each decade since 1880—and in the last 50 years, that pace has more than doubled.



### **Billion-Dollar Disasters**

Climate change is increasing the frequency and severity of storms, causing greater damage to the communities in their path. The following are examples of billion-dollar disasters in the U.S. over the last decade.



#### **HURRICANE HARVEY**

Texas, September 2017

- The costliest flood event in Texas history. As of July 2021, \$9 billion in claims were paid by the NFIP.
- Houston received the most rainfall recorded in the continental United States from a single storm (51.88 inches).
- Nearly 80,000 homes had 18 or more inches of floodwater, and 23,000 of those homes accumulated over 5 feet.

#### **HURRICANE IDA**

Louisiana, August 2021

- Floodwaters due to storm surge reached up to 14 feet above ground level near the Mississippi River.
- The U.S. Small Business Administration (SBA) approved over 26,000 low-interest disaster loan applications totaling over \$1.3 billion.
- The NFIP paid 14,540 flood claims totaling over \$655 million.







#### **MULTI-STATE FLASH FLOODING**

Kentucky & Missouri, July 2022

- Both disasters were brought on by once-in-a-millennium storms causing \$1.3 billion in damage.
- Affected areas saw up to nearly 11 inches of rain within 3 days.
- The NFIP paid over \$13.1 million in claims to Kentucky residents and over \$34.7 million in claims to Missouri residents.



#### **HURRICANE IAN**

Florida, September 2022

- Ian hit Florida as a Category 4 hurricane and crossed into South Carolina as a Category 1 hurricane.
- The storm generated historic levels of rainfall in Florida, reaching 17 inches of rain within a single day.
- The NFIP paid over **\$2.3 billion** to policyholders.

#### **BILLION-DOLLAR DISASTER COUNT & FINANCIAL IMPACT**



# **Climate Change & Flooding**

While all weather patterns are affected by the transforming global climate, flooding disasters are becoming more common and severe.



#### **Did You Know?**

Floods are the most frequently occurring natural disaster in the United States, and they are projected to become even more frequent and intense as a result of changing climate conditions. In fact, **2020** was the most active tropical storm season in U.S. history.

Rising sea levels, changing precipitation patterns and wildfires that lead to increased flooding are becoming more common as the global climate changes. Just 1 inch of floodwater can cause roughly \$25,000 of damage to your home—and flood damage is often not covered by homeowners or renters insurance. Flood insurance is the best way to protect the life you've built if disaster strikes; be sure to cover your home, building or condominium association and the contents inside of it with an NFIP policy.

The NFIP is prepared to assist you and your community before, during and after a flooding disaster. Take the necessary steps now to prepare yourself for flooding by visiting floodsmart.gov/find to locate a flood insurance provider near you.





#### ADDITIONAL RESOURCES & CONTACT INFORMATION

Learn more about how flood insurance can protect your investments with the NFIP Protect the Life You've Built Brochure, available online at <a href="mailto:agents.floodsmart.gov/protect-the-life-youve-built">agents.floodsmart.gov/protect-the-life-youve-built</a>. For more information on cleanup, renovation and mitigation after a flood disaster, review the NFIP Rebuilding Safer & Stronger After a Flood Guide at <a href="mailto:agents.floodsmart.gov/rebuilding-after-flood">agents.floodsmart.gov/rebuilding-after-flood</a>.

Contact FEMA Mapping and Insurance eXchange (FMIX) Customer Care Center for questions about flood mapping and insurance. Go to <u>floodmaps.fema.gov/fhm/fmx\_main.html</u> to chat live with a specialist from 9 a.m. to 5 p.m. ET Monday-Friday, email <u>FEMA-FMIX@fema.dhs.gov</u> or call **877-336-2627**.

This publication was created with information from the White House, National Oceanic and Atmospheric Association, National Weather Service and National Environmental Satellite Data and Information Service.





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), captioned telephone service or others, give FEMA the number for that service.

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