

TEXAS

Flood-related disasters are the costliest and most frequent type of disaster facing the United States. From 2000 to 2018, flood-related events cost more than **\$830 billion in economic losses**,¹ accounted for **73% of presidential disaster declarations**,² and caused more than **6,200 deaths**.¹ Floods are an **immediate threat to 53 military installations** across the nation.³

These numbers reflect what Americans and people across the globe already know: **floods are affecting our way of life**. Addressing the challenges posed by flooding and other extreme weather impacts will require individuals, communities, and state and federal governments to work collaboratively to build a more sustainable future for us all.

Surging Waters: Science Empowering Communities in the Face of Flooding is a report produced by AGU that shows how science is essential to finding solutions to mitigate flooding now and in the future. For more information, visit www.scienceisessential.org.

TO EMPOWER COMMUNITIES TO UNDERSTAND AND ADDRESS THEIR FLOOD RISK, POLICY MAKERS CAN:

- 1 Support robust and steadily increasing funding** to science-based federal agencies.
- 2 Support science centers and programs** that research region-specific flooding concerns and incentivize scientists working within their communities.
- 3 Support legislation** that ensures science can be conducted and inform policy freely and openly.
- 4 Support policies** to manage flooding and its impacts that account for a changing world.



Between 2000 and 2018, floods caused **\$93 billion** and hurricanes caused **\$34 billion** in **property damages**.⁴



Between 2000 and 2018, **634 people** died from floods and flash floods and **58 people** died from hurricanes in Texas.⁴



Flooding is an **immediate threat** to the **US Army's Fort Hood** in Killeen, TX and the **US Air Force's Joint Base San Antonio** in San Antonio, TX.³

The **U.S. Geological Service Water Science Centers** fund and conduct water research and monitoring **driven by state priorities**

CONTACT THE TEXAS OFFICES:

Austin, TX: 512-927-3500

Conroe, TX: 936-271-5300

Fort Worth, TX: 817-263-9545

San Antonio, TX: 210-691-9200

The **NOAA National Sea Grant College Program** supports coastal communities through research and extension programs **shaped by local needs**.

CONTACT THE MAIN OFFICE:

Texas A&M, College Station, TX: 979-845-3854

BETWEEN 2010 AND 2019...

The **Texas Water Science Center** spent **\$106 MILLION** between 2010 and 2019 on Texas's flood research and education priorities.⁵

In 2017, Texas Sea Grant reached **31,000 K-12 STUDENTS** and supported **75 UNDERGRADUATE and GRADUATE STUDENTS**.⁶

PREPARE YOUR DISTRICT FOR FLOODS: ready.gov/floods. Assess your home or office's flood risk: msc.fema.gov.
NEED HELP NOW? Contact the Texas Division of Emergency Management: **512-424-2208**

1. NOAA. U.S. Billion-Dollar Weather and Climate Disasters. National Centers for Environmental Information (NCEI) (2019). Available at: <https://www.ncdc.noaa.gov/billions/>. (Accessed: 23rd July 2019) 2. The Pew Charitable Trusts. *Infrastructure Upgrades Can Help U.S. Businesses Better Withstand Disasters* (2019). Available at: <https://www.pewtrusts.org/en/research-and-analysis/articles/2019/05/15/infrastructure-upgrades-can-help-us-businesses-better-withstand-disasters>. (Accessed: 5th July 2019) 3. US Department of Defense. Report on effects of a changing climate. (2019). 4. NOAA National Centers for Environmental Information. Storm Events Database. Available at: <https://www.ncdc.noaa.gov/stormevents/>. (Accessed: 14th August 2019) 5. Raines, T; Texas Water Science Center. Personal communication. (2019). 6. NOAA. Texas Sea Grant. Sea Grant (2018). Available at: <https://seagrant.noaa.gov/Program-Locations/TX>. (Accessed: 20th August 2019)