



U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY

Opening Statement

Chair Lizzie Fletcher (D-TX)
of the Subcommittee on Environment

Environment Subcommittee Field Hearing:
Weathering the Storm: Improving Hurricane Resiliency through Research
Monday, July 22, 2019

Good afternoon, and welcome to the Subcommittee on Environment's field hearing on hurricane and coastal resilience research.

I am glad we are able to hold this hearing in Houston today, and I am pleased to welcome our witnesses, including two Houstonians, Dr. Rifai and Mr. Blackburn, and my colleagues. I thank Chairwoman Johnson for making this field hearing possible.

Here in Houston, we know the devastation hurricanes can bring—and we know the importance of preparing. As a young girl, I was just a few blocks from where we sit today, in the house I grew up in, when Hurricane Alicia came through Houston—the eye of the storm passing right overhead. And in the years since, we have seen many storms, here and across the Gulf Coast. We know them by them by name: Rita. Ike. Harvey.

In fact, Texas is particularly vulnerable. The Texas General Land Office has found that in the last fourteen years, every coastal county in Texas received at least one hurricane disaster declaration. In 2017, Hurricane Harvey rewrote the continental U.S. record for total rainfall from a tropical cyclone. It was the second-costliest hurricane in U.S. history, behind only Hurricane Katrina. At least 68 people died from the direct effects of the storm, and it left an estimated \$125 billion of damage in its wake. We are still recovering.

We have watched in recent days as Hurricane Barry made its way to the coast, predicted to dump one to two feet of rainwater across Louisiana, with storm surges along the Mississippi River. Fortunately, the effects were not as severe as expected. But we know that will not always will be the case.

The science is clear: hurricanes are becoming more frequent and more intense. That means more storms like Harvey. And with that knowledge, it is time to expand the conversation beyond just improving weather forecasts, so that communities can prepare for and recover from severe storms.

The National Oceanic and Atmospheric Administration, or NOAA, defines coastal resilience as “building the ability of a community to ‘bounce back’ after hazardous events such as hurricanes, coastal storms, and flooding – rather than simply reacting to impacts.” I know that my constituents, and Americans across the country, want the federal government to do more than simply react to hurricane impacts.

Investing in research can facilitate the development of evidence-based policies that address how our environment is changing and how this change will affect society. We need not only a better understanding of the conditions that generate hurricanes, but also an understanding of how to adapt our natural and man-made structures to better withstand more frequent and intense tropical storms.

Today’s advancements in hurricane forecasting would not be possible without federal investments at agencies like NOAA. The National Hurricane Center, part of NOAA’s National Weather Service, works closely with research partners within the Agency, such as the Office of Oceanic and Atmospheric Research, and with the broader research community, to develop products and services that ultimately lead to more accurate forecasts. Given the success of these federal investments in improving hurricane research and forecasting, it is now time we expand our focus to building coastal resilience to the hurricanes we have gotten much better at predicting.

While hurricane forecasts have improved tremendously, we still need to continue to improve our hurricane forecasts, and to better understand what to expect during hurricane season in both the short- and long-term. Hurricane forecasts help us understand the new normal we are facing, informing research needed to develop resilience to increasingly extreme hurricanes. This means broad investments into interdisciplinary research that can address tough problems. That is why we are here today.

I look forward to hearing from our expert panel how the Science, Space, and Technology Committee can best support interdisciplinary research needed to help coastal communities like Houston build resilience to hurricanes.