

## CTBS Research Response to Hurricane Harvey

*Since August 28 to today, TAMUG has been mentioned in 404 news stories in 349 media outlets all across the nation. Of those, 289 were from CTBS Director Dr. Sam Brody.*



**As Houston Looks to Recover, Small Towns Now Bear the Brunt**  
Houston has begun assessing the damage of Harvey, but the storm marched on to conquer a new swath speckled with small towns and home to millions.  
NYTIMES.COM



**What makes Houston so vulnerable to serious floods?**  
The size of storm Harvey is unusual – but rapid expansion, poor infrastructure and a distinctive topography have played a role in the devastating impact  
THEGUARDIAN.COM



**Nation's fourth-largest city struggles to get moving again after Harvey**  
It will be a long time before Houston's transportation network is back to normal.  
WASHINGTONPOST.COM | BY LUZ LAZO

## New Projects

*Understanding the differences in evacuation orders to natural hazard events.*

Ashley Ross

*Land Use Change and Economic Impacts of Flooding in the Houston Region, GLO.*

Wesley Highfield, Sam Brody, Meri Dalvasheridze

*Diagnosing the Timing and drivers of northeastern Caribbean Holocene droughts with sinkhole lake records, NSF.*

Peter van Hengstum

*Floodplain Management Regulations Compliance, DHS.*

Phil Berke, Sam Brody

## Proposals Submitted

*Infrastructure interdependencies during Hurricane Harvey.*

Ashley Ross, Nasir Gharaibeh (Civil Engineering)

*Identifying Rural Disaster Resilience in the aftermath of Hurricane Harvey.*

Ashley Ross, David Retchless, Stuart Carlton

*Extreme Storm Rapid Response: In-Situ Barrier Island Storm Impact and Recovery Measurements of Hydrodynamics, Morphodynamics, and Sedimentation Across Texas Barrier Islands.*

Jens Figlus, Katherine Anarde (Rice University), and Timothy Dellapenna

*Evaluating surface water pollutants following a natural-technological hazard event in coastal Texas.*

Wesley Highfield, Karl Kaiser, David Hala, Kristina Mena (UTSPH)

*Assessing the Economic Effectiveness of Flood Mitigation Activities for Investment.*

Wesley Highfield, Sam Brody, Jeffrey Jeffrey Czajkowski (University of Pennsylvania, Wharton School).

## Ongoing Work

*Urban Flooding in the U.S.: Causes, Consequences, and Mitigation, Hagler Institute for Advanced Study, TX A&M Galveston Campus.*

Sam Brody, Wesley Highfield, Josh Gunn, Gerry Galloway (University of Maryland)

*Coastal Flood Risk Reduction Program: Integrated, multi-scale approaches for understanding how to reduce vulnerability to damaging events, NSF.*

Sam Brody, Wesley Highfield, Meri Dalvasheridze, Jens Figlus, Yoonjeong Lee, Galen Newman, Phil Berke, Eric Bardenhagen

*Coastal Bay Web Atlas: A tool for communicating flood risk along Galveston Bay, NSF, GLO, Bay Area Coastal Protection Alliance, TCEQ.*

Sam Brody, Wesley Highfield, Himanshu Grover (U. of Washington)

*Combining Environmental Protection and Flood Mitigation on the Texas Coast: A Proactive Land Acquisition Framework, Harris and Eliza Kempner Fund.*

Wesley Highfield, Sam Brody, Yoonjeong Lee

*Land Use Change and Economic Impacts of Flooding in the Houston Region, GLO, NSF.*

Wesley Highfield, Sam Brody, Meri Dalvasheridze

*Optimizing Flood Risk Reduction Strategies in the Houston-Galveston Region, GLO, Wortham Foundation.*

William Merrell, Sam Brody, Erik van Berchum (Delft University)

*Modeling the Interaction Between Land Use Change and Floodplain Boundaries in Harris County, TX, NSF, Rice University.*

Sam Brody, Antonia Sebastian (Rice University), Wesley Highfield.

*Avoiding Flood Losses in the Houston-Galveston Area with a Coastal Spine Protection System, NSF, GLO, BACPA.*

Sam Brody, Wesley Highfield, Bill Merrell, Meri Dalvasheridze