

## Coastal Flood Resilience News and Updates October 9, 2024

This letter provides an overview of news and journal articles related to coastal flood resilience in the past couple of weeks.

- 1. Hurricane Milton Intensity Linked to Warmer Waters: This major hurricane just made landfall on the west coast of Florida with the potential for significant storm surge, property damage, and loss of life. This *Washington Post* <u>article</u> links the storm intensity to warming waters in the Gulf of Mexico.
- 2. Helene's Record Storm Surges: This Washington Post <u>article</u> offers interesting graphics showing the record-breaking storms surges that Hurricane Helene generated for six Florida communities.
- **3. Tampa Residents Consider Relocating after Helene:** The *New York Times* <u>reports</u> that Even before Hurricane Milton, some Tampa Bay area residents were considering relocating to places with lower flood risk.

"More residents are wrestling lately with how — or whether — to keep living in a beautiful place that has become vulnerable to more frequent and intense storms as well as rising sea levels."

4. Helene Impact on Insurance Cost May Prompt Relocation: This Washington Post <u>article</u> reviews the impacts of Helene and prior storms and suggests that rising cost of insurance may prompt relocation to less risky areas:

"The cost of property insurance in Florida is already among the highest in the country. Three straight <u>years of hurricanes striking Florida's Gulf Coast</u> "reinforces growing concerns," said Adam Kamins, Moody Analytics's senior director of economic research. "Although climate hazards alone tend not to compel residents to move out of an area, further increases in insurance premiums might," he said."

5. Multiple Hurricanes Stress Residents of Florida Big Bend Region: This <u>AP article</u> reports on how residents of the Big Bend region of Florida are coping with damages from three recent hurricanes:

"I've tried to use them all. Catastrophic. Devastating. Heartbreaking ... none of that explains what happened here," Hiers said. The back-to-back hits to Florida's Big

Bend are forcing residents to reckon with the true costs of living in an area under siege by storms that researchers say are becoming stronger because of <u>climate</u> <u>change</u>.

6. North Carolina Development Policies Contribute to Helene Damages: This New York Times <u>article</u> describes how lobbying by real estate developers and others contributed to development is risky places in western North Carolina hard hit by flooding from Hurricane Helene.

> "Over the past 15 years, North Carolina lawmakers have rejected limits on construction on steep slopes, which might have reduced the number of homes lost to landslides; blocked a rule requiring homes to be elevated above the height of an expected flood; weakened protections for wetlands, increasing the risk of dangerous storm water runoff; and slowed the adoption of updated building codes, making it harder for the state to qualify for federal climate-resilience grants."

7. Hurricane Deaths Way Undercounted: This new article in <u>Nature</u> describes the long-term impacts of hurricanes on mortality. The New York Times <u>summarized the findings</u>:

"Looking at 501 events from 1930 to 2015, researchers found that the average tropical storm resulted in an additional 7,000 to 11,000 deaths over the 15 years that followed. Overall during the study period, tropical storms killed more people than automobile crashes, infectious diseases and combat for U.S. soldiers. It's such a big number — especially compared with the 24 direct deaths caused by hurricanes on average, according to federal statistics — that the authors spent years checking the math to make sure they were right."

Here is a <u>comment</u> on the paper by Robinson Meyer.

Note that CFRP released this <u>white paper</u> on July 24 of this year calling for expanded disclosure of long-term hurricane risk.

- 8. Government Accountability Office (GAO) Calls for Climate Resilience Planning and Relocation: Citing a need to limit federal fiscal exposure, the GAO released a <u>report</u> calling for:
  - designating a federal entity to develop a national climate resilience strategic plan;
  - establishing and maintaining a national climate information system; and
  - designating a federal entity to develop and support agency use of information on the potential economic costs of climate change.

Importantly, GAO also repeats its 2020 recommendation that "Congress consider establishing a pilot program to identify and provide assistance to climate migration projects for communities that express interest in relocation as a climate resilience strategy." **9.** NRDC Release Repetitive Flood Loss Tool: NRDC has <u>released</u> a new mapping tool identifying 250,000 properties with multiple claims under the National Flood Insurance Program.

"We are seeing more and more homes damaged by floods because of the climate crisis combined with risky development and out-of-date infrastructure," said <u>Anna</u> <u>Weber</u>, a senior policy analyst at NRDC and co-author of the report. "Stronger hurricanes, more intense rainstorms and rising seas are all enacting a toll on people's lives. We need changes at all levels of government to make communities safer."

In addition to the mapping tool, NDRC offers <u>five policy solutions</u> to reduce flood risk.

- **10.** Union of Concerned Scientists Congressional Briefing on Climate Resilience and Affordable Housing: On September 18, UCS organized a <u>congressional briefing</u> on climate resilience and affordable housing, including changes needed to the National Flood Insurance Program.
- **11. Community Limits on Development in Floodplains:** In this <u>LinkedIn post</u>, A.R. Siders describes recent research into community efforts to limit development in floodplains, finding that most communities have limits in place but that rapid floodplain development is occurring in some communities, commonly the wealthiest and poorest, and this can "mask other success stories when they are averaged."
- **12. California Climate Resilience Bond:** In November, California voters will consider <u>Proposition</u> <u>4</u>, to issue a \$10 billion bond to support climate resilience, including \$1.2 billion for coastal flood resilience. Here is a report from <u>InsideClimateNews</u>.

"Bond funds are an appropriate and very effective way to fund many of the climate change-adaptation actions that many cities and counties are planning right now but don't have local revenue sources to support," said Laura Engeman, an environmental scientist at the University of California, San Diego. "A lot needs to be done around coastal resilience, in terms of environmental restoration as well as the connection between restoration and public infrastructure. These bonds provide a way to plan a lot of that."

**13. Delaware Launches Community Climate Planning:** In this Delaware Public Media <u>interview</u>, Emily Knearl – the Delaware Director of Government Relations and External Affairs for The Nature Conservancy – discusses Senate Bill 237, which mandates that counties and larger municipalities include climate change and community resiliency in their comprehensive planning.

"Delaware is experiencing the highest rate of sea level rise of any state along the Atlantic coast," Knearl said. "Initially, one of our biggest challenges is water, and one

of the things that this bill does, that's so exciting, is for the very first time, it instructs the counties to channel new housing away from rising sea levels and flooding."

**14. Coastal Flooding Poses Risks to Municipal Bonds:** In this <u>substack article</u>, Susan Crawford describes how municipal bond ratings often fail to fully recognize climate risk, including coastal storms and rising seas, focusing instead on short-term ability to repay, leading to municipal defaults and call for federal bailouts:

"There's a larger theme here: the lack of place-based, time-aware credit rating will push risk onto the shoulders of the federal government—all of us. When a city can't cover its debts, it will go into bankruptcy. There will be a frantic call for federal assistance. And then we'll all be in the soup."

This <u>related post</u> describes how the municipal bond structure is baked up by property values that are at risk of significant declines as insurance costs increase in the face of more severe storms.

- **15. Coastal Home Losses Continue**: Several articles describe how coastal homes are collapsing into the sea along the coast of North Carolina and other places.
  - This <u>AP article</u> describes home losses on Rodanthe on the Outer Banks.
  - This WHRO <u>report</u> describes Outer Banks home loses, noting that four homes have been lost this year and many more are at risk.
  - This Washington Post article describes coastal home losses more generally.
- **16.** South Carolina's Hurricane Hugo Retrospective: In this interesting <u>article</u>, Toby Cox and Jonah Chester with the Charleston *Post and Courier* look at the devastating impacts of Hurricane Hugo 35 years ago and asks whether the state is prepared for a comparable storm. They find that, although disaster preparedness has improved, the dramatic population increase along the coast means that property damage and loss of life could still be high.