Coastal Flood Resilience News

October 24, 2025

This newsletter provides a summary of news and research journal articles related to coastal storms and rising sea levels. It is a product of the Coastal Flood Resilience Project, a network of nonprofit organizations working for stronger programs to prepare for coastal storm flooding and rising sea levels along the coast of the United States. Prior issues of the CFRP News can be found here.

Science

1. **Changing Conditions in Antarctica Will Raise Sea Levels Faster than Expected:** This new research in the journal *Nature Geoscience* (paywall) points to changing conditions across the Antarctic region that point to faster melt rates and higher sea level rise the previously expected. This article in *Inside Climate News* reports:

   > "Both satellite data and field observations in Antarctica reveal alarming signs of a Greenland-like meltdown, with increased surface melting of the ice fields, faster-moving glaciers and dwindling sea ice. Some scientists are sounding the alarm, warning that the rapid "Greenlandification" of Antarctica will have serious consequences, including an accelerated rise in sea levels and significant shifts in rainfall and drought patterns.

2. **CO2 Hits All Time High:** This new report from the World Meteorological Association explains that:

   > "The levels of the three most abundant long-lived greenhouse gases (LLGHGs), carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O), reached new records in 2024. From 2023 to 2024, CO2 in the global surface atmosphere increased by 3.5 ppm, the largest one-year increase since modern measurements began in 1957. This increase was driven by continued fossil CO2 emissions, enhanced fire emissions and reduced terrestrial/ocean sinks in 2024, which could signal a climate feedback.

This article provides background information and quotes Climate Analytics CEO Bill Hare:

> "Let there be no mistake, this is a very clear warning sign that the world is heading into an extremely dangerous state — and this is driven by the continued expansion of fossil fuel development, globally," Hare said. I'm beginning to feel that this points to a slow-moving climate catastrophe unfolding in front of us."

3. **Artificial Intelligence Can Improve Storm Surge Forecasts**: This article on *The Conservation* website describes how artificial intelligence tools can be used to improve storm surge forecasting to make forecasts that apply to more specific areas of the coast and to generate forecasts faster than current models.

National Policy

4. **Proposal for Privatization of NFIP:** The private insurance company Neptune has posted a paper on its website calling for the privatization of the National Flood Insurance Program (NFIP). The proposal would allow existing NFIP policyholders to maintain the policy as long as they own the property but would stop the selling of new policies:

> **"Stop selling new NFIP policies**. The private market already has the tools, technology, and capacity to manage the risk that the NFIP continues to add. Unlike many legacy renewals, which are still capped on a glide path, new NFIP policies are charged the full Risk Rating 2.0 rate. Private insurers often offer lower premiums than the NFIP full-risk price."

5. **Climate Central Revives NOAA Billion Dollar Disaster Data:** The Trump Administration stopped reporting of information about billion dollar disasters but the nonprofit organization Climate Central has reposted the date at this site. This article in Time magazine provides background information, including improvements made to the NOAA site by Climate Central. This Climate Central press release provides more information, including reporting that:

> "The 14 events recorded just in the first half of this year, between January and June, are well above the inflation-adjusted annual average of 9 events over the past 46 years.
>
> "The first half of 2025 was the most expensive on record, driven by unprecedented damage from the LA wildfires and damaging Spring severe weather."

6. **FEMA Cuts Back Post Disaster Funding:** This article in the *New York Times* describes how FEMA is reducing funding to communities following disasters, noting:

> "FEMA has been delaying disaster declarations and aid payments to communities, adding new hurdles to access some grant funds and cutting off the flow of money intended to boost resilience and prevent future disasters from causing so much damage."
>
> "They're making good on their promise to shift the burden onto states without giving the states any runway to prepare for that," said Sarah Labowitz, a senior fellow at the Carnegie Endowment for International Peace who tracks disaster recovery spending across the country."

7. **Pentagon Retreats from Climate Action:** This article in *floodlight* focuses on heat risks to troops but also explains how the Department of Defense is backtracking on a range of climate related commitments and projects, including protection of bases and other assets from coastal flooding noting:

> "For decades, the Pentagon viewed climate change as a national security threat — not for environmental reasons, but because it undermined operations and readiness. Now the Trump administration is dismantling that approach. Pentagon leaders have cut climate research funding and abandoned adaptation plans. Defense Secretary Pete Hegseth has dismissed global warming concerns as "climate change crap." "

The article cites sea level rise risks, referring to the work of the Union of Concerned Scientists:

> "Rising seas are projected to cause chronic flooding at coastal military bases in the coming decades. By 2050, half of coastal bases could each face 270 or more flood events each year, according to a study by the Union of Concerned Scientists."

8. **Federal Banking Agencies Back Off Climate Risk Assessment:** This article in the *New York Times* describes how federal banking agencies have rescinded 2023 guidance on climate risk assessment for banks with more than $100 billion in assets. At the time, the Fed chair, Jerome H. Powell, said the guidance was "squarely focused on prudent and

appropriate risk management." This action does not directly affect the climate risk regulations adopted by the Securities and Exchange Commission.

9. **Digital Coast Act Advances:** Legislation to extend to 2030 the authorization for the Digital Coast Act (S. 2245) was approved the Commerce Committee in the Senate. Comparable legislation is also moving in the House. Comparable legislation is also moving in the House.

   This Baldwin press release provides background information, including this quote from co-sponsor Senator Lisa Murkowski:

   > "As we confront the escalating impacts of climate change, it is crucial our coastal communities remain equipped with the tools and data they need to adapt and thrive," **said Senator Murkowski.** "The Digital Coast Program has proven to be a vital resource in this effort, providing essential information and support for our local leaders to make informed decisions."

10. **Flood Relocation Mostly Local:** In a new study, faculty at Rice University looked at choices people made to relocate after a flood, including whether they stayed in the area and whether they accepted a FEMA buyout:

    > "Our new national maps of who relocates and where they go after a flood shows that most Americans who move from buyout areas stay local. However, we also found that the majority of them give up their home to someone else, either selling it or leaving a rental home, rather than taking a government buyout offer. That transfers the risk to a new resident, leaving the community still facing future costly risks."

11. **Climate Change "Ghost Cities" Mostly Along Coast**: This article from Weather Fox briefly identifies 20 U.S. cities that face serious climate risks and "are teetering on the edge" of becoming "climate ghost cities".M climate risks are considered, but all the cities named face coastal storm and sea level rise risks with the exception of Boulder and Fresno.

12. **Floating Homes Face FEMA Obstacles:** This article in the *Louisiana Illuminator* describes efforts to develop designs and obtain approval to use floating homes as an alternative to elevating the structure permanently, including the work of The Buoyant Foundation Project.

State and Local

13. **Flood Management Options for New York City:** This article in the *New York Times* uses interesting graphics to offer an in-depth look at flooding challenges in New York City, including storms and rising seas, and reviews the options the city has to manage these challenges, noting on the topic of relocation:

> "But what will convince people to move there, especially longtime residents? For years, the city has discussed a more extensive voluntary buyout program. Homes then could be swapped out for parks, infrastructure or flood-proof developments. A pilot program, started this year, will focus on a low-lying neighborhood in Southern Queens informally known as "the hole."

Here is a link to the city pilot buyout program site, "Resilient Acquisitions Program".

14. **Alaska Native Villages Smashed by Hurricane Halong:** This article in *The Guardian* describes the devastating impacts of Hurricane Halong on two native villages along the coast of Alaska, including the death of one person, two people considered missing, and displacement of 1,500. The article quotes Rick Thoman, an Alaska climate specialist at the University of Alaska Fairbanks:

> "But, you know, when you have an entire community where effectively every house is damaged and many of them will be uninhabitable with winter knocking at the door now, there's only so much that any individual or any small community can do."

15. **Houston Fails to Manage Industrial Site Risks:** This report from Public Health Watch finds that, despite extensive air and water pollution following major storms and flooding, including a lack of industrial disaster mitigation planning, quoting a professor at Texas Southern University:

> "Houston area officials have done little to prepare for a future storm, including failing to develop Instead of waiting for the region to act, she says, it's time for FEMA to change its policy. Under current guidelines, industrial disaster mitigation planning is recommended but not required in order to qualify for

FEMA grant funding. “We should be including those,” she said. “It should be required.””

16. **South Carolina Beaches Erode in Minor Storms:** This article in the *Charleston Post and Courier* describes how even relatively small coastal storms are causing large-scale erosion along South Carolina beaches, despite significant investments in beach nourishment:

> “The state Department of Environmental Services estimates that South Carolina’s coastal communities spent more than **$400 million in federal, state and local funds on beach renourishment from 1979 to 2023**. But as the climate changes and tides rise, beach towns likely will have to pay heftier sums to keep their shores sandy and the multi-million-dollar oceanfront homes protected.”

17. **Outer Banks Homes at Risk of Storms and Rising Seas:** This article in the *Washington Post* provides a helpful overview of the homes on the outer banks at risk of being washed into the sea, noting that some 30 homes are still at risk and describing some of the environmental and economic impacts of lost homes:

> “Each home collapse comes with an environmental toll, creating an eyesore and a safety hazard for miles along public beaches. Septic systems unearthed by erosion present yet another public health threat.
>
> “In addition, each incident triggers economic impacts that ripple through the community and affect other properties and businesses. Woodard, the county commission chairman, said the assessed value of the nine homes that collapsed last week was $5,457,200.”

18. **New Climate Resilience Assessment Map for Maine Coast:** This article in *The Climate Monitor* describes how a NOAA grant has supported development of a coastal ecosystem mapping tool for the Maine coast.

> “The online platform, from New Hampshire-based company Nearview, plots the best opportunities to fortify dunes and beaches along Maine’s 3,500-mile coastline to protect against sea-level rise.”