Coastal Flood Resilience News

August 21, 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. **National Academy to Conduct Climate Assessment to Inform Endangerment Finding Review:** The National Academy of Sciences (NAS) has announced plans to review the latest scientific evidence on whether greenhouse gas emissions are reasonably anticipated to endanger public health and welfare in the U.S. The NAS noted:

   > "The EPA recently announced that it intends to rescind its "endangerment finding," a statement issued by the agency in 2009 that found that greenhouse gas emissions do pose risks to public health and welfare. The National Academies study will be completed and publicly released in September, in time to inform EPA's decision process."

   Here is an article on this topic from *Inside Climate News*. This article in *E&E News* explains how repeal of the Endangerment Finding could open oil companies to damage lawsuits.

2. **DOE Report Misleading on Sea Level Rise:** A major report by the Department of Energy on impacts of climate changes downplays the risks of more severe coastal storms and rising sea levels and denies the fact that the rate of sea level rise is accelerating.

   > "In evaluatingAR6 projections to 2050 (with reference to the baseline period 1995-2014), almost half of the interval has elapsed by 2025, with sea level rising at a lower rate than predicted. U.S. tide gauge measurements reveal no obvious acceleration beyond the historical average rate of sea level rise."

   Susan Crawford offers a critique of the sea level rise elements of the DOE report in this substack post.

> "...the report asserts that "U.S. tide gauge measurements reveal no obvious acceleration beyond the historical average rate of sea level rise." **Denying acceleration is truly troubling for people who live on the East Coast.** Not only are sea levels along our coast rising faster than global sea levels—they are also *accelerating faster* than global levels. Recent acceleration is overwhelmingly statistically significant. But the current DOE authors assume that increases will continue to be linear and minimal."

3. **Declining Water Storage Drives Rising Sea Levels:** This new paper published in *Science Advances* shows unprecedented declines on terrestrial water storage (TWS) since 2002 based on GRACE measurements. This is a result of droughts and groundwater depletion and the authors show that this is recently contributing more fresh water to sea level rise than glaciers and ice sheets.

> "Global ocean mass continues to increase at a rate of 1.99 ± 0.2 mm Sea Level Equivalent (SLE) year-1. Figure 6A shows that, since 2015, it is being driven primarily by decreasing TWS (0.89 ± 0.15 mm SLE year−1), rather than by the melting of the Greenland (0.73 ± 0.07 mm SLEyear−1) and Antarctic (0.37 ± 0.05 mm SLE year−1) ice sheets. In other words, the continents are now the leading contributor (44%) to mass-driven GMSL rise, while Greenland and Antarctica contribute~37 and ~19% respectively."

   This article in *Grist* provides some helpful background information on this complicated topic.

4. **Tide Gauge Data Confirm Sea Level Rise Projections:** This new research published by AGU in *Geophysical Research Letters* assessed sea-level trend and acceleration at 222 tide gauges over 1970–2023, projected them to 2050 and compared those to the AR6 model projections. The observation and model-based projections agree within the likely range at 96% of the tide gauge locations.

5. **Tide Gauge Data Underestimates Flooding:** This new research published in *Nature* argues that tide gauges in coastal waters underestimate actual flooding on land by an order of magnitude:

> "We demonstrate that tide-gauge data are poor indicators of flooding: floods occur 26–128 days annually, an order of magnitude greater than what regional tide gauges suggest in some places. Improving the accuracy of coastal flood measures is critical for identifying the impacts of sea-level rise and developing effective adaptation strategies."

National Policy

6. **Court Upholds BRIC Funding:** This ASFPM article explains that a federal judge issued a preliminary injunction in early August preventing the Trump administration from redirecting funds allocated to the Building Resilient Infrastructure and Communities (BRIC) program. The ruling is a major development in an ongoing lawsuit brought by 20 states seeking to preserve access to more than $4 billion in BRIC funds for critical disaster resilience projects.

7. **New Legislation to Support Resilience of Working Waterfronts:** New bipartisan legislation offers a disaster mitigation tax credit to working waterfronts located on the coasts and on navigable waterways. The *Working Waterfronts Disaster Mitigation Tax Credit Act* would provide working waterfronts with a 30 percent tax credit on up to $1 million when they invest in mitigation expenses, adjusted for inflation annually. Here is a link to the bill text.

8. **Climate Damage Lawsuit Dismissed**: This article in the *Charleston Post and Courier* explains that a judge in Charleston has dismissed the City's lawsuit alleging that 24 named oil companies — including Chevron, BP and Exxon — used deceptive messaging to sell fossil fuel products and failed to warn of the dangers of growing carbon emissions. The City sought financial damages for climate-related injuries related to those emissions. The judge ruled that State law did not apply and that:

   > "the oil companies had no responsibility to warn the public because the correlation between fossil fuels, greenhouse gas emissions and climate change already was "well known."

   The City's case was one of several climate suits filed in state courts across the country — in Maryland, New Jersey, Delaware, New York and Pennsylvania — that have been partially or completely dismissed. The legal challenges in other states remain active. State courts in Minnesota, Vermont, Connecticut and Washington, D.C., have denied similar motions to dismiss, and climate suits have been moved closer to trial in Hawaii, Colorado and Massachusetts.

   Here is an article from the *New York Times* on the Charleston decision. This article in *E&E News* explains how repeal of the Endangerment Finding could open oil companies to damage lawsuits.

9. **Atlas 15 Back on Track:** This article from ASFPM explains that NOAA has confirmed to ASFPM that it has resumed funding contracts for development of both Part I and Part II of the new Atlas 15, including both current and future precipitation estimates with publication expected in 2026.

10. **Flood Risk Reduction Recommendations Based on Texas Flooding:** Law professor Mark Nevitt offers eight recommendations for improving flood management after the Texas flood disaster, including:

    - disclose climate risk information;
    - "climatize" FEMA flood maps;
    - favor managed retreat over unmanaged retreat; and
    - restore the BRIC program.

11. **Letter Supports Digital Coast Act:** This letter from several nonprofits supports a prompt hearing on the Digital Coast Act, citing the value of the several elements of the digital coast program for protecting coastal communities.

12. **New Report from EDF Recommends Nature and Insurance Actions:** A new report from Carolyn Kousky and Talley Burley at the Environmental Defense Fund describes how nature-based solutions can support more sustainable insurance markets and provides recommendations for actions to expand nature-based support of insurance.

13. **Insurance for Insurance Rates:** This substack post from Susan Crawford describes a new business called Eventual that is offering to lock insurance premiums for up to three years based on an additional homeowner payment calculated based on risk.

    > "But Eventual's arrival is another reminder that, as a society, we are really good at smoothing over risk signals—remember Demotech?—and financializing rather than lowering physical risks."

14. **Promoting State and Local Flood Buyout Programs:** This oped in *Next City* by Cornell professor Linda Shi and others describes how state and local buyout programs can play an important role in building flood resilience as federally supported buyout funding is reduced.

15. **New Book Offers Flood Policy Recommendations:** A new book edited by David Alexander, *America's Flooding Problem: Research and Innovation in Risk, Insurance and Resilience*, offers chapters by diverse authors on flood management practices and needed policy solutions including improved data and models, strengthening the National Flood Insurance Program, and addressing social equity.

16. **Urban Ocean Lab Announces New Managing Director:** Urban Ocean Lab has announced that Daphne Lundi will be the organization's Manager Director. She is an urban planner and climate policymaker whose work spans environmental justice, community resilience, and design. Previously, she served as a Deputy Director at the NYC Mayor's

Office of Climate and Environmental Justice, leading initiatives on extreme heat mitigation, social infrastructure, and open space access.

State and Local

17. **Louisiana Retreats from Science Based Coastal Management:** This oped in the *Times Picayune* by journalist Bob Marshall explains how the long bipartisan support in the State of Louisiana for science based coastal management is eroding under the leadership of Governor Jeff Landry.

    > "Why kill a project lauded not only for groundbreaking research and engineering, but for sticking to the essential scientific model of adaptive management — being able to modify as critical influences on the results increased, such as the uncharted changes cascading from climate change? The scientific world already has its answer: The program is now being directed by a politician."

18. **Oped on NOAA Funding Cuts for Coastal Louisiana:** This oped in the *Revelator* by recently fired NOAA employee Sabrina Valenti describes how Trump Administration cuts to coastal programs, including the Coastal Wetland Planning, Protection, and Restoration Act (CWPPRA), are undercutting projects to build coastal resilience in Louisiana.

19. **California Coastal Ecosystem Management:** Rosanna Xia at the *Los Angeles Times* offers an update to the story told in her 2023 book *California Against the Sea* about efforts in a community north of San Francisco to save a beach ecosystem:

    > "Rather than hold the line with increasing futility, here was a humbling example of what can be possible when we transcend the throes of politics — and when we choose to set aside our differences and think beyond just reacting to the same disasters time and time again."

20. **Maine Towns Regulate Development in Floodplains**: This article in the *Maine Monitor* describes how towns across Maine are regulating development in floodplains. Some towns are expanding the criteria that trigger building elevations above one foot above base flood elevation while other communities are requiring elevation of two feet above base flood elevation:

    > "Brian Longstaff, Scarborough's zoning administrator, said that he was a little hesitant about the proposal at first when considering the challenges it could pose to homeowners who were already in compliance with the FEMA minimum. "It was a little bit of a big bite, I thought, but in the end, it makes sense," Longstaff told *The Maine Monitor*, adding that the town is conducting a vulnerability assessment and its projections for future sea level rise show local flood risks growing down the line."

21. **New Jersey Town Fights Sea Level Rise with Oysters: This** article in *Inside Climate News* describes how the town of Long Beach, New Jersey is using oyster shells to protect its bayside marshland from erosion and rising seas.

> "As scientists search for ways to blunt the impact of climate change, they also are seeing that new reefs can be specially designed to protect against coastal erosion by blunting winds and waves and providing a seawall-like buffer for marshes and beaches."