

## Coastal Flood Resilience News April 29, 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 <u>Coastal Flood Resilience Project</u>, a coalition of nonprofit organizations working for stronger programs to prepare for coastal storm flooding and rising sea levels along the coast of the United States.

## Science

1. NSF Retreat from Antarctica: This <u>article</u> describes how Trump administration budget cuts are forcing the National Science Foundation to rollback support for vessels and facilities in Antarctica and eliminating new projects for the 2025/2026 field season.

The article notes that "Global temperature change and sea level rise are urgent problems, and Antarctica is central to stopping this..." and quotes Gary Wilson, president of the Scientific Committee on Antarctic Research:

"Antarctica can't wait. Time is just not on our side."

2. Antarctic Subglacial Water Speeds Ice Loss and Sea Level Rise: New <u>research</u> reported in *Nature Communications* suggests that ice melting below glaciers on Antarctica could accelerate tipping points and increase sea level rise above current projections.

> "We demonstrate that water at the base of ice sheets influences sliding behaviour and that its exclusion from models can underestimate sea-level rise projections and delay the predicted onset of tipping points...Our results indicate that incorporating subglacial water can amplify ice discharge across the Antarctic Ice Sheet by up to threefold above the standard approach, potentially contributing an additional 2.2 metres [7 feet] to sea-level rise by 2300."

This article in Phys.org provides more information.

3. NOAA Cuts Degrade Weather Forecasts: This New York Times <u>article</u> describes how current and projected cuts to NOAA will degrade the accuracy of weather forecasting.

"The cuts would significantly scale back the work of the 122 weather offices nationwide, which collect weather observations and issue warnings during severe weather events."

- 4. NOAA Budget Cuts Put Hurricane Forecasting at Risk: This *Grist* <u>article</u> describes how cuts to NOAA staff and research funding pose a threat to NOAA's ability to predict hurricanes on a seasonal basis, putting lives and property at risk.
- 5. Hurricane Landfall Hole in Mid-Atlantic Coast: This <u>story</u> in USA Today describes how hurricanes along the east coast commonly skip over the coast between southern Virginia and Delaware. The low landfalls are thought to be related to the angle of the coastline and the prevailing upper winds in that region.
- **6. Sea Level Rise Science Training Module:** The Environmental Law Institute has developed a <u>training module</u> on sea level rise and related issues for use in its Climate Judiciary Project (CJP). The CJP offers education and training on climate change matters for the judicial community.

## **National Policy**

- 7. ASFPM Announces Legislative and Policy Agenda: The Association of State Floodplain Managers (ASFPM) has released a new <u>Legislative and Policy Plan</u> for 2025. Some key priorities are:
  - Reauthorize the National Flood Insurance Program;
  - Modernize FEMA's disaster assistance programs;
  - Reauthorize the Digital Coast Act; and
  - Promote flood disclosure law.
- 8. Flood Risk Disclosure Issues and Impacts: This interesting <u>article</u> in the *Miami Herald* looks at flood risk disclosure issues in Florida and other states and reviews FEMA policy against disclosing past flood impacts to properties prior to the sale of a property. Florida recently passed <u>new requirements</u> for disclosure of past flood impacts as part of real estate transactions and the article describes efforts to expand that narrow bill.
- 9. EDF Links Sea Level Rise Impacts to EPA Climate Change Actions: This <u>article</u> in the newsletter of the Environmental Defense Fund describes the impacts of storms and rising seas in the Congressional district on Long Island previously held by EPA Administrator Lee Zeldin and calls for EPA to expand efforts to reduce greenhouse gas releases and thus mitigate coastal flood impacts.
- **10. Coastal Demographics and Economics Report:** The Center for the Blue Economy at the Middlebury Institute for International Studies has published a <u>report</u> on the critical role that coastal areas play in the U.S. economy and society. Key findings include:

- In 2022 over 131 million people live on the coast, 31% of the total U.S. population
- In 2022 there were 53 million jobs in coastal counties, 37% of total U.S. employment
- Coastal counties accounted for \$7.01 trillion, or 34% of total U.S. GDP.
- **11. Senate Bill Proposes Tax Incentives for Disaster Resilience:** A <u>bipartisan bill</u> introduced in the Senate would provide tax incentives for homeowner investments to improve resilience to risks including coastal flooding. The tax credit would cover 50% of the eligible upgrades up to \$25,000 for families who make less than \$200,000 a year, with the credit phasing out for families making below \$300,000.

Here is a press releases from <u>Senator Schiff</u>.

12. Coastal Land Conservation Legislation: A bill introduced in the U.S. House, titled the Resilient Coasts and Estuaries Act (<u>HR 2786</u>), would reauthorize and enhance the Coastal and Estuarine Land Conservation Program (CELCP) and require the National Oceanic and Atmospheric Administration to work toward designating five new National Estuarine Research Reserves and to enhance the Reserve System. Rep. Levin's press release notes:

"CELCP's authorization expired in fiscal year 2013 and other federal funding mechanisms ran out in 2017. The *Resilient Coasts and Estuaries Act* would revive funding for CELCP at \$60 million per year and expand the eligibility for program to include nongovernmental organizations. The bill would prioritize funding for projects in communities that lack resources for coastal hazards...".

**13. U.S. Government Failing to Support Financial Infrastructure Needed for Climate Adaptation**: In this <u>podcast</u> from Climate Proofers, Susan Crawford reviews the failures of the U.S. government to manage the complex financial system supporting climate adaptation:

> "Susan talks about the financial architecture that underpins US climate resilience: municipal bonds and insurance markets. She warns of mounting risks in the muni bond market because of the current tariff chaos, potential tax policy changes, and investors' failure to figure climate hazards into their pricing. She also flags the slow-motion collapse of affordable insurance in high climate risk areas...".

## State and Local

- **14. Puerto Rico Sea Level Rise Video:** This well done <u>video</u>, developed by the Caribbean Center for Rising Seas, provides an overview of the challenges that Puerto Rico faces in responding to rising sea levels and actions that are needed to reduce risk.
- **15. Maine \$75 Million Bond Proposed for Coastal Resilience Projects:** The Maine legislature is considering legislation to send to statewide referendum a general fund <u>bond</u> for:

"grants for county, municipal and tribal governments, as well as regional councils, to improve their coastal climate resiliency and upgrade their engineered beaches?"

- **16. Maine Impacts of BRIC Program Cuts:** This <u>article</u> in the Maine Monitor describes how cuts to FEMA's Building Resilience Infrastructure and Communities (BRIC) program are a setback to projects in Maine, including coastal projects.
- **17. New Orleans Green Infrastructure:** This<u>article</u> in the *New York Times* describes how New Orleans is using rain gardens, bioswales, and related green infrastructure to manage stormwater and reduce flooding.

"Every drop of water that is stored somewhere that is not in our drainage system counts toward a benefit," said Meagan Williams, the urban water program manager for the city of New Orleans. "If we can't take away all the flooding, but we can reduce how much it's flooding, then we're moving the needle in the right direction."

**18. South Carolina Oyster Infrastructure:** This <u>article</u> in the *Charleston Post and Courier* describes how communities and businesses are using oyster shells to help establish new oyster beds that help reduce coastal erosion, noting:

"Oysters are the foundation of South Carolina's estuarine ecosystem. Their reefs help <u>trap sediment and prevent the gradual erosion</u> of the marsh mud that many critters rely on, according to the Coastal Conservation League."

- **19. South Carolina Impacts of NOAA Funding Cuts:** This<u>article</u> in the Charleston *Post and Courier* describes in some detail the range of impacts that proposed cuts to NOAA funding would have for the State of South Carolina.
- **20. Inventory of Climate Resilience Networks:** This <u>Inventory of Resilience Networks</u> provides a handy resource for identifying regional and national collaborations among

governments and organizations working to build climate resilience. It is the product of a joint effort by the American Society of Adaptation Professionals and NOAA Sea Grant.