

# Block Island and University of Rhode Island partner to strengthen coastal resilience

By Amber Neville,  
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The University of Rhode Island Coastal Institute has officially designated Block Island as its newest Climate Response Demonstration Site, formalizing a partnership to protect the island's natural systems, infrastructure, and freshwater resources. The New Shoreham Town Council voted unanimously in support of the designation on July 7, following a recommendation from the town's Coastal Resilience Committee.

Block Island joins a growing network of CRDS sites across Rhode Island—places where science, policy, and community priorities come together. Each site serves as a model for resilience, showcasing place-based strategies tailored to the distinct challenges and strengths of its location.

"We have a community that really cares about the island's future and a history of coastal monitoring and research here," said Judy Gray, chair of the New Shoreham Coastal Resilience Committee. "The CRDS designation helps us coordinate and strengthen those efforts, bringing in science that supports informed local decisions."

## Why Block Island matters

Just 13 miles off the Rhode Island mainland, Block Island is both accessible and exceptional. Known for its dramatic bluffs, freshwater ponds, and wild beaches, the island offers a rare blend of natural beauty and timeless charm. Nearly 40 percent of its land is permanently protected, including landmarks like Mohegan Bluffs and Southeast Lighthouse. Trails wind through meadows and coastal edges, offering views that have remained largely unchanged for decades.

But the island also faces growing challenges. Its community largely depends on the Port of Galilee on the mainland for essential supplies, fresh water is limited, and coastal erosion is accelerating—threatening roads, infrastructure, and habitat. The same landscapes that draw 15,000 to 20,000 visitors per day in summer are increasingly under strain.

Tourism remains the island's economic engine. A 1999 study estimated more than \$59 million in direct annual visitor spending. Statewide, tourism generated \$5.6 billion in 2023. Preserving Block Island's natural and historic character is essential to sustaining both local livelihoods and seasonal businesses.



Protective fencing on Block Island safeguards dune vegetation, a natural barrier against coastal erosion. (URI Photos/Coastal Institute)

## What the climate site designation means

The Climate Response Demonstration Site designation formalizes an ongoing partnership between Block Island and the University. Through these sites, the Coastal Institute provides targeted support for research and monitoring, connects URI faculty and students with community-based projects, and helps develop strategies tailored to local needs that also inform broader resilience planning. Each CRDS represents a long-term commitment to collaborative, applied science.

Block Island joins three other Climate Response Demonstration Sites supported by the Coastal Institute:

- *Napatree Point, Westerly* – A natural area site monitoring ecological transitions within a barrier beach system
- *Bristol County* – A mixed-use site addressing municipal infrastructure, land-use planning, and ecosystem resilience
- *Roger Williams Park, Providence* – An urban watershed site focused on storm-water management, water quality monitoring, and equitable access to green space

Each site serves as a model for how science, policy, and local knowledge can come together to build coastal resilience.

"Block Island presents a rare opportunity to study climate resilience in an island setting—with real constraints on natural resources, supply chain vulnerabilities,

and seasonal infrastructure demands," said Nathan Vinhateiro, the Coastal Institute's science director and lead for the Block Island CRDS. "It's a manageable scale for research, with insights that are transferable well beyond the island."

## Next steps for research and collaboration

The Coastal Institute will consolidate and build upon Block Island research efforts already underway by URI faculty and students. Ongoing efforts related to coastal processes, freshwater resources, ecological monitoring, and infrastructure planning will be further integrated to support informed, community-driven decisions.

"I've been studying bluff erosion and shoreline change on Block Island for more than a decade," said Bryan Oakley, coastal geologist and collaborator from Eastern Connecticut State University. "This designation helps bring that work into alignment with community priorities—providing a framework to apply the science more directly to local decision-making and future resilience planning."

The Coastal Institute is also working to strengthen partnerships with local organizations. In addition to the Town of New Shoreham and its Coastal Resilience Committee, the Coastal Institute is expanding engagement with groups such as the Block Island Conservancy, Block Island Land Trust, The Nature Conservancy, and the Block Island Maritime Institute. These groups bring essential expertise in conser-

vation, land stewardship, and public education.

To support new and ongoing efforts, the Coastal Institute will launch a CRDS seed grant program in fall 2025. This program will provide flexible funding to URI faculty and students for early-stage projects, including baseline data collection, field monitoring, and the development of tools that inform resilience and land-use planning.

## Get involved

The CRDS initiative welcomes collaboration with researchers and local partners and values input from island stakeholders.

To learn more, explore the CRDS StoryMap series or support the initiative by making a gift to the URI Coastal Institute to fund student-led research on Block Island.

For questions or collaboration inquiries, contact Vinhateiro at [nvinhateiro@uri.edu](mailto:nvinhateiro@uri.edu).

## About the URI Coastal Institute

The University of Rhode Island Coastal Institute catalyzes research, fosters partnerships, and stimulates dialogue to support resilient and diverse coastal communities and ecosystems. It connects researchers, decision-makers, and communities to develop solutions to coastal challenges across Rhode Island and beyond.



Coastal Institute staff and local partners, including Nigel Grindley and Judy Gray of the Block Island Coastal Resilience Committee, survey shoreline erosion on Block Island during a site visit.