

## Informing Stakeholders about Erosion and Recession of New York's Coastal Bluffs

**B**luffs are steep cliffs or banks that can range in height from 10 feet to upwards of 50 feet. They are composed of loosely compacted sediments ranging in size from clays, silts, sand, and gravel to large boulders and bedrock. A significant population of New York's residents live atop coastal bluffs along the shorelines of the Great Lakes and Long Island. Due to their steep nature, and the influence of waves, water level, seepage, and runoff, bluffs are susceptible to erosion and episodic failure that may result in large quantities of sudden movement of bluff material. This erosion is resulting in a nearly permanent recession of the shoreline in impacted locations.



*Bluff erosion along New York's Great Lakes shoreline.  
Photo: Roy Widrig/NYSG*

New York Sea Grant (NYSG) collaborates with academic institutions, state and federal agencies, and local community groups to inform stakeholders about the current state of the science of coastal bluff erosion and recession.

In November 2022, NYSG invited stakeholders to participate in a two-hour, statewide Coastal Bluff Symposium to discuss the status of recent coastal bluff research. Stony Brook University, The Nature Conservancy, New York State Department of Environmental Conservation, and U.S. Army Corps of Engineers provided attendees with updates on research projects currently underway along both the Long Island and Great Lakes bluff shorelines. Sixty-one participants included representatives of state and federal agencies, academic institutions, non-governmental organizations, municipalities, environmental consultants, and shoreline residents. This educational opportunity was built on a NYSG-sponsored coastal erosion workshop held in 2020.

Additionally in 2022, NYSG completed an "Erosion and Recession of New York's Coastal Bluffs" outreach document that discusses bluff formation, erosion processes acting on coastal bluffs, mass movements of bluffs, how to protect bluffs, and how to monitor and report bluff erosion. An insert is included to help shoreline homeowners keep records to assess their properties to avoid potential bluff erosion-related issues. This educational resource has been distributed to stakeholders along the Great Lakes and Long Island shorelines and is available online.

### **P**artners:

- Stony Brook University
- The Nature Conservancy
- New York State Department of Environmental Conservation
- U.S. Army Corps of Engineers

*Nature-Based Shoreline Management resources:  
<https://www.nyseagrant.org/glcoastal>*

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**The Sea Grant Focus Area for this project is New York Resilient Communities and Economies.**

New York Sea Grant is a joint program of Cornell University, the State University of New York, and NOAA.  
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