

*NYSG and partners piloted a statewide framework for monitoring the effectiveness of a variety of shoreline management features, including natural and nature-based features*

## Piloting a Statewide Framework for Monitoring NY's Shoreline Features

Interest has grown throughout New York State in options for innovative shoreline management as an alternative to traditional structural features. Using innovative features has the potential to limit negative impacts such as shoreline erosion, and may increase or sustain natural shoreline processes, providing ecological, mitigation, and socio-economic benefits. However, monitoring data are needed to determine the effectiveness of utilizing natural and nature-based features over traditional structures.

New York Sea Grant (NYSG) partnered with organizations to develop a framework to monitor the performance of shoreline types including hardened structures, nature-based structures, and natural features. NYSG Coastal Processes and Resiliency Extension Specialists served as leads for the state's New York City, Long Island, and Great Lakes areas. The draft framework was piloted at multiple sites in each region, including New York City's Randall Island, Long Island's Widow's Hole; Sodus Point Beach park on Lake Ontario; and the Hudson River Estuary's Coxsackie Boat Launch.

The feedback from participants of the regional workshops; local, state, and federal permit reviewers; the project advisory committee; and piloting in the respective regions allowed for the protocols to be refined by the project's technical working groups and for the finalization of the monitoring framework for shoreline features in NYS. The ecological function, hazard mitigation, structural integrity, and socio-economic indicators in the framework are designed to be applicable across a full spectrum of features from hardened infrastructure to natural features.

The results were presented at the 2019 NY-NJ Harbor and Estuary Program's annual conference. Sharing lessons learned and building a network of regional stakeholders,



*Pilot-monitoring of shoreline features at a site in the Great Lakes region.  
Photo: Katie Graziano, Science & Resilience Institute at Jamaica Bay*

technical experts, and regulators have been integral to the development of a statewide monitoring framework for various shoreline features. [Learn more at www.nyseagrant.org/nyshorelines](http://www.nyseagrant.org/nyshorelines).

### Project Partners:

Science and Resilience Institute at Jamaica Bay  
SCAPE Landscape Architecture  
Arcadis  
City University of New York  
NY-NJ Harbor and Estuary Program  
New York City Department of Parks and Recreations  
New York State Department of Environmental Conservation  
New York State Department of State (co-funder)  
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**The Sea Grant Focus Area for this project is Resilient New York 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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