

Exploring Nature-Based Shorelines Erosion Management Practices Along NY's Great Lakes

The term nature-based shorelines (NBS) refers to shoreline management measures that incorporate natural or nature-based features alone or in combination with structural components. While traditional 'hard' structures, such as seawalls, are often used to manage erosion along New York's Great Lakes shorelines, alternative management options, such as NBS, may be just as effective under the right conditions and may provide additional ecological benefits.

Although various individual efforts are advancing NBS in New York State, there is currently a lack of regional dialogue and an established coordinated strategy to support and guide multi-stakeholder efforts throughout NY's Great Lakes basin. This gap creates a significant opportunity to scale-up regional efforts through collaboration and coordinated research, planning, design, outreach, and implementation activities.

NYSG Facilitates Collaborative NBS Learning

New York Sea Grant (NYSG), with several partners, took the initial steps to coordinate regional discussions regarding the potential use of NBS protection techniques along NY's Great Lakes shorelines and connecting channels.

NYSG and its partners held a workshop for nearly 70 experts and practitioners, including engineers, planners, coastal scientists, and agency representatives. Speakers, breakout groups, and a panel discussion targeted the following objectives:

- Learn how NBS methods are being used and how they may apply to NY's Great Lakes shorelines
- Assess opportunities and constraints for implementing NBS projects: identifying data, research, outreach, and resource needs
- Identify demonstration project opportunities
- Identify next steps toward a coordinated management approach.

One hundred percent of those responding to a post-workshop survey indicated the workshop experience will influence their future decisions/actions, such as, recommending NBS to property owners and



Nature-based shoreline practices can add ecological benefits to shoreline management efforts. Photo: NYSDEC

contractors and considering site conditions (e.g., sediment transport) before implementing a project. Future actions participants feel are needed include:

- Training and education for shoreline property owners, contractors, and permitting staff
- Disclosure of existing data
- Creation of a collaborative, idea-sharing forum
- Demonstration project assessment/monitoring.

Partners:

- New York State Department of Environmental Conservation
- NOAA Coastal Storms Program
- Wisconsin Sea Grant
- Finger Lakes – Lake Ontario Watershed Protection Alliance
- New York State Department of State
- United States Army Corps of Engineers

The Sea Grant Focus Area for this project is New York Resilient Communities & Economies

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

New York Sea Grant Extension

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