



New York Sea Grant (NYSG) is a collaborative program of the State University of New York, Cornell University, and NOAA (National Oceanic and Atmospheric Administration).

With 3,400 miles of coastlines, New York is the only U.S. state bordering both the Great Lakes and the Atlantic Ocean. More than 85% of NY's population lives in a coastal region.



NYSG provides research, education, and extension services enhancing coastal community economic vitality, environmental sustainability, and citizen awareness of NY's marine and Great Lakes resources.

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NYSG Focus Area for this project:
Healthy New York Coastal Ecosystems
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Sharing Knowledge About Natural and Nature-Based Features in New York

New York Sea Grant proposes ways to advance the use of natural and nature-based features to build resilient shoreline practices across New York State.

Shorelines around New York State are experiencing flooding and erosion. While hardened structures are traditionally used to address risk, there is an interest in integrating natural and nature-based features to improve resilience. However, several hurdles exist to the widespread implementation of these techniques, including differences in natural and nature-based features project typology, difficulty in comparing performance and streamlining permitting, a lack of data and standards that facilitate project monitoring and analysis, and limitations to data accessibility.

Over three years, New York Sea Grant workshops and virtual forums provided information to fill identified knowledge gaps about natural and nature-based features, including baseline conditions, success rates, and socio-cultural benefits of sites. Experts were recruited to provide case studies, tools, and resources to targeted end-users. Two statewide symposiums connected local participants to peers through virtual technology, allowing for learning across New York State while supporting regionally-specific discussions.

In total, more than 450 participants attended the virtual forums, workshops, and symposiums to learn about relevant research projects, with more than ninety percent stating they would use the knowledge gained.

New York Sea Grant proposes the following solutions to further advance knowledge sharing and implementation of natural and nature-based features in New York State:

- developing a natural and nature based features community of practice,
- encouraging regular data collection and monitoring of natural and nature-based features sites,
- utilizing tools for visualizing change over time, and
- developing an accessible and comprehensive list of projects.

Project Partner:

- Science and Resilience Institute at Jamaica Bay



Shorefront Park living shoreline, Patchogue, New York.

Photo: Kathleen M. Fallon/
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