The New York Sea Grant Law and Policy Summer Fellowship provides students from partner institutions in New York State with an opportunity to collaborate with local communities on extension programs.

The following is the end product of 2025 Fellow, Mia Fraser - a first year law student at Pace University. Her research project assessed current town codes and their compatibility with nature-based features. Information presented here is for educational purposes only and can be used as a starting point for for communities interested in assessing and/or their shoreline codes.

Please note, the following content has not been technically reviewed and should be considered as draft information.

For more information, contact:

Kathleen Fallon, Sr. Coastal Processes and Hazards Specialist, kmf228@cornell.edu.

New York Sea Grant

Peconic Watershed Town Code Compatibility with Nature Based Feature Projects

Mia Fraser, 2025 Legal Fellow



Definitions Used

Nature-based features

Nature-Based Features (NBF), such as living shorelines, can offer both protective and ecological benefits by working with natural systems to enhance resilience.

Although not suitable in every location, these strategies should be prioritized and implemented where feasible to ensure a balanced and adaptive approach to shoreline management and community resilience.

Use of "Living Shorelines"

A type of NBF; use of NBF more encompassing and will be used in this presentation going forward.

Examples of NBF Types

Shoreline Adaptation Methods val of hardened structures

- Marsh and dune grass plantings
- ❖ Dune restoration
- ❖ Tidal marsh restoration
- Oyster reef or shellfish bed restoration

Erosion Control Methods and Structures materials (wood, coir logs, matting)

- Sand placement (in conjunction with control structures)
- Shell bags
- Breakwaters
- ❖ Rock or rip rap revetments
- Bulkhead construction

Examples of NBF Types, continued

HOW GREEN OR GRAY SHOULD YOUR SHORELINE SOLUTION BE?

GREEN - SOFTER TECHNIQUES

GRAY - HARDER TECHNIQUES

Living Shorelines



VEGETATION

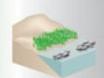
ONLY -Provides a buffer to upland areas and breaks small waves. Suitable only for low wave environments.



EDGING -Added structure holds the toe of existing or vegetated slope in place.



SILLS -Parallel to existing or vegetated shoreline, reduces wave energy, and prevents erosion. Suitable for most areas except high wave energy environments.



BREAKWATER -(vegetation optional) - Offshore structures intended to break waves. reducing the force of wave action, and encourage sediment pre-existing accretion. Suitable for most areas.



Coastal Structures

REVETMENT -Lays over the slope of the shoreline and protects it from erosion and waves. Suitable for sites with hardened shoreline storm surge and structures.



BULKHEAD -Vertical wall parallel to the shoreline intended to hold soil in place. Suitable for areas highly vulnerable to wave forces.

The Town of Southold, NY is gearing up to update its Wetlands and Shoreline Code. This is a great opportunity to update this section of the Town's Code to better accommodate NBF projects.

Chapter 275's Compatibility with NBF Projects

Section 275-2: Definitions; word usage

COASTAL CONSTRUCTION: The repair, modification, reconstruction or new construction of structures, including but not limited to bulkheads, docks, floats, jetties, groins, catwalks, stairways, decks, revetments, any erosion or water control device...work in and around wetland areas which requires a permit pursuant to this chapter entitled "Wetlands and Shoreline" or Chapter 111, Coastal Erosion Hazard Areas, of the Town Code.

- This definition could include NBF construction due to the phrase, "...any erosion or water control device."
- NBF projects would likely be construed in the same way as coastal-hardening devices listed within this definition for permitting purposes.

Chapter 275's Compatibility with NBF Projects

Section 275 - 2: Definitions; word usage

EROSION CONTROLActions taken or structures installed to prevent the wearing away of the land or loss of soil by the action of water, ice or wind. Erosion control typically relates to stabilization of unvegetated soils resulting from excavation, grading, stockpiling, construction or other activities.

Impact on NBF Projects

This definition would likely include NBF projects under its umbrella.

Chapter 275's Compatibility with NBF Projects

Section 275 - 3: Findings; purpose; jurisdiction; setbacks

C. Jurisdiction. The following areas are subject to protection under Chapter 275 of the Code of Southold. (1) Any freshwater wetland, tidal wetland, beach, bank, bluff, dune, flat, marsh, swamp, wet meadow, bog, or vernal pool; (2) Any creek, estuary, strem, pond, canal, or lake; (3) Land under water; (4) Land subject to tidal action; (5) Land within 100 feet of the areas listed above; (6) All Town waters.

Impact on NBF Projects

NBF projects are likely to occur within or around the areas under Chapter 275's jurisdiction.

Chapter 275's Compatibility with NBF Projects

Section 275 - 3.1: Licensing of coastal contractors

A. ...it shall be unlawful for any person to engage in coastal construction in the Town of Southold without first obtaining a license ...

B. Exceptions. No license shall be required for the following: (1) An individual who engages in coastal construction on his or her own residential property... (4) Any municipality or government agency...

- Those seeking to construct NBF projects would likely need a license to do so.
- However, it is important to note that residents or municipality agencies could potentially construct NBFs without a license.

Chapter 275's Compatibility with NBF Projects

Section 275-4: Exceptions

A. Permit exceptions; nondisturbance buffers. (1) The provisions of this chapter shall not require a permit for the following... (e) The ordinary and usual maintenance or repair on a wetlands-permitted structure (of the same dimensions) of a functional... jetty, groin, dike, dam or other watercontrol device or structure... (h) Proactive restoration or enhancement projects...

- There is language indicating that water-control device maintenance is exempted.
- NBF maintenance would likely be exempted from needing additional permits.
- NBF projects could potentially be approved without a permit as "proactive restoration or enhancement projects."

Chapter 275's Compatibility with NBF Projects

Section 275 - 5: Permit procedures

B. Administrative permit. (1) The administrative permit review process is intended to provide for expedited review of projects that are deemed consistent with the Board's policy regarding protection of wetland resources... (i) The construction of a permitted bulkhead as per § 275-11, which is toreplace an existing functional bulkhead, subject to the following: [1] That the new bulkhead is constructed substantially similar to the design and measurement of the existing bulkhead; and [2] The new bulkhead is in the same location as the existing bulkhead...

- This section allows for expedited permitting for only the replacement/repair of existing bulkheads
- With a slight change to the language, NBF projects could also request administrative permits under this provision.

Chapter 275's Compatibility with NBF Projects

Section 275 - 11: Construction and operation standards

B. Shoreline structures. The following standards are required for all operations relating to shoreline structures on residential properties... (1) Bulkheads, retaining walls, revetments and gabions.

(a) Only in-place replacement of existing functional bulkheads (as defined in § 275-2) is permitted. In-kind replacement relates to the position and dimensions and does not necessarily require or allow for the use of the same materials.

- Only restoration of existing bulkheads to their original form is expressly allowed on residential properties.
- * "In-kind" replacement, which could be in the form of replacing a bulkhead with a NBF, is neither expressly permitted nor prohibited so long as the original dimensions remain consistent.

Chapter 275's Compatibility with NBF Projects

Section 275 - 12: Standards for issuance of a permit

The Trustees may adopt a resolution directing the issuance of a permit to perform operations applied for only if it determines that such operations will not substantially... B. Cause damage from erosion, turbidity or siltation... E. Increase the danger of flood and storm - tide damage...I. Otherwise adversely affect the health, safety and general welfare of the people of the Town.

- ❖ It is likely NBF projects will meet these standards
- These standards are a reflection of the local government's recognition of issues associated with erosion

SOUTHOLD V. EAST HAMPTON V. NYSDOS MODEL CODE: Definitions

Southold could take inspiration from East Hampton's code or from the NYSDOS Model Code with regard to living shoreline code accommodation when updating Chapter 275. An example:

Southold's
Language, Section
275-2,
Definitions; word
usage
COASTAL
CONSTRUCTION

EROSION CONTROL

East Hampton's
Language, Section
255-1-20:
Definitions

EROSION CONTROL
STRUCTURE

COASTAL EROSION
CONTROL STRUCTURE

NYDOS Model
Code on Coastal
Shoreline
Protection
Measures
Definition
SOLUTION

Conclusion: integrating language that is more specific to living shorelines could help Southold entities prevent permitting confusion and delay for living shoreline projects.

Draft findings - out for review

Current Peconic Town Code Compatibility with NBF Projects

EXAMPLE: EAST HAMPTON, Chapter 255: Zoning

Section 255 - 1 20: Definitions

EROSION CONTROL STRUCTURE: Every structure sited in or under any body of water, or on or near any shoreline, wetland, beach, or bluff adjacent thereto, which is designed to reduce, retard or prevent erosion of the shoreline or the silting or filling in of a natural or dredged harbor or channel. This definition shall be deemed to include all groins, jetties, seawalls, revetments, bulkheads, breakwaters, gabions, and riprap, as well as any other man - made fabrication or device, including one made of geotextile tubes or sandbags, which is designed to reduce, retard, or prevent erosion...

COASTAL EROSION CONTROL STRUCTURE: See "erosion control structure."

Section 255 - 1-20: Strengths & Opportunities

Strengths: NBF would likely fall under this definition, as the code proclaims that every structure designed to prevent erosion is an erosion control structure.

Opportunities: Adding NBF types to the current list of what the definition includes or adding, "Including but not limited to..." prior to the listed types of structures.

Example of edited definition: NYS Department of State Model Code on Coastal Shoreline Protection Measures

NATURE-BASED STRUCTURES: Nature-based measures, or nature-based features (NBF), are shoreline management techniques that integrate structural components with living material and natural substrate designed to emulate natural features and processes. NBF provide services/benefits such as erosion and stormwater management, flood risk reduction and water quality improvement, as well as secondary benefits such as habitat, improved aesthetics and carbon sequestration. Nature-based approaches may not be appropriate in areas with high wave energies.

Thank you!

For more information on Southold Town Code Review and code comparisons with East Hampton, let me know and I can provide more resources!