COASTAL RESILIENCE ADVISORY COMMITTEE

Dear Members of the Selectboard,

The Coastal Resiliency Advisory Committee, after meeting with John Giorgio to review financing strategies and discuss our ideas last December, respectfully requests that you explore the following options to develop dedicated funding mechanisms for the Coastal Resilience Plan (CRP) and determine whether any of these proposals could be included in the Fall 2025 STM Warrant.

The CRP represents a long-term, large-scale investment in the Town's future. With a high-end cost estimate of $930 million (in 2020 dollars) to implement all 40 recommendations, it is clear that a multi-faceted funding strategy will be necessary to bring this plan to fruition. While Article 10 Coastal Resilience Planning funds ($1 million) provide critical support for preliminary work, such as surveys, designs, grant writing, and feasibility studies, these funds are not available for construction, maintenance, or direct project implementation. Furthermore, Article 10 funds require Town Administrator approval and can be accessed by any department for various planning purposes, making it an important but limited resource for moving projects beyond the planning phase.

To ensure that we establish a stable and predictable funding source for actual project implementation, we propose the following financial mechanisms:

1. Establishing a Special Purpose Stabilization Fund

A dedicated Coastal Resiliency Stabilization Fund would ensure that revenue allocated for CRP-related capital projects is preserved for construction, infrastructure investments, and long-term adaptation efforts. Unlike the Article 10 funds, this account would be explicitly dedicated to funding tangible projects rather than planning activities.
Potential funding sources for the stabilization fund could include:

- A small percentage of an existing tax or fee (e.g., 1% of the local hotel tax) to create a sustainable revenue stream.
- A future tax override or debt exclusion to support large-scale, high-priority projects.
- Betterments or special assessments for properties directly benefiting from resilience improvements.

Establishing this fund would also enhance the Town's ability to leverage matching funds from state and federal grants, as many grant programs require local contributions to demonstrate municipal commitment.

2. Creating a Revolving Fund for Coastal Resiliency Activities

A Coastal Resiliency Revolving Fund would provide a mechanism to collect and allocate revenue from specific user-based fees tied to CRP efforts. This account would ensure that revenue from designated sources is directed immediately toward smaller-scale resilience projects, maintenance efforts, and ongoing operational needs. For example, we propose:

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COASTAL RESILIENCE ADVISORY COMMITTEE

- A $50 increase in beach sticker fees, with 50% allocated to the stabilization fund and 50% to the revolving fund.
- Future expansion of dedicated user fees related to access, permitting, or other relevant activities that align with CRP goals.

While initial revenue from these sources may be modest compared to the overall project scope, establishing these mechanisms now will ensure that we have dedicated funding streams in place as we scale up efforts over time.

Why These Funding Mechanisms Are Critical

1. Bridging the Gap Between Planning and Implementation: The Article 10 funds are a necessary but insufficient step toward realizing the CRP. Without dedicated capital funding, projects may be planned but lack the financial backing for execution.
2. Ensuring Financial Stability and Predictability: A proactive funding approach will allow the Town to avoid financial shocks and reliance on emergency funding when resilience projects become urgent.
3. Leveraging State and Federal Grant Opportunities: Dedicated municipal funds will position the Town for competitive grant applications, many of which require matching local contributions.
4. Demonstrating a Community Commitment to Resilience: A clear, sustainable funding strategy will reinforce public confidence in the Town's long-term coastal adaptation efforts.

We recognize that Town Meeting approval is required to create both accounts and that a ballot measure would be necessary for the stabilization fund. However, taking these steps now will prepare the Town for the enormous financial undertaking ahead and allow us to strategically phase in funding over time.

We welcome any ideas, feedback, or refinements and appreciate your consideration of these proposals.

Thank you,

The Coastal Resilience Advisory Committee

Town of Nantucket's Dune Stabilization Pilot Project

Coastal Resilience Advisory Committee

Tuesday, April 8, 2025

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Cliff Stabilizers

COASTAL TECHNOLOGIES

Cliff Stabilizer™

Escarpment Paver/Planter
Specifications & Data Sheet

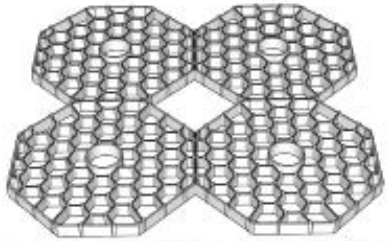
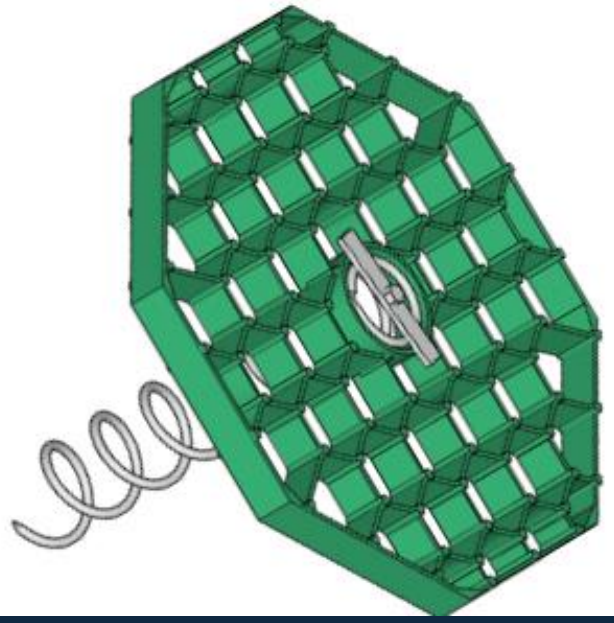


Figure showing square "open space" created for container, root balled or wrapped shrubs or trees



TEMPORARY and RE-USABLE!!!

Specifications:
Frame Materials: Marine Grade HDPE
Frame Dimensions: 22" x 22" (559mm)
Frame Color: Green
Frame Wall Thickness: 5/32" (4mm)
Coil Material: Stainless Steel
Coil Wire Thickness: 5/16" diameter (8mm)
Coil Length: 18.5" (470mm)
Coil Width: 3 3/8" (85mm)

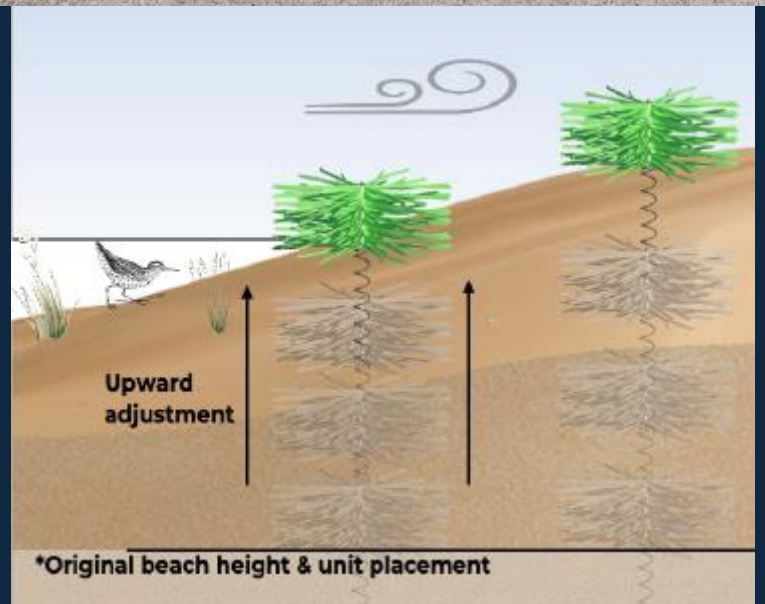
Dune Guards

TEMPORARY and RE-USABLE!!!

Details: DuneGuard products are engineered to passively create and sustain dunes and protective berms

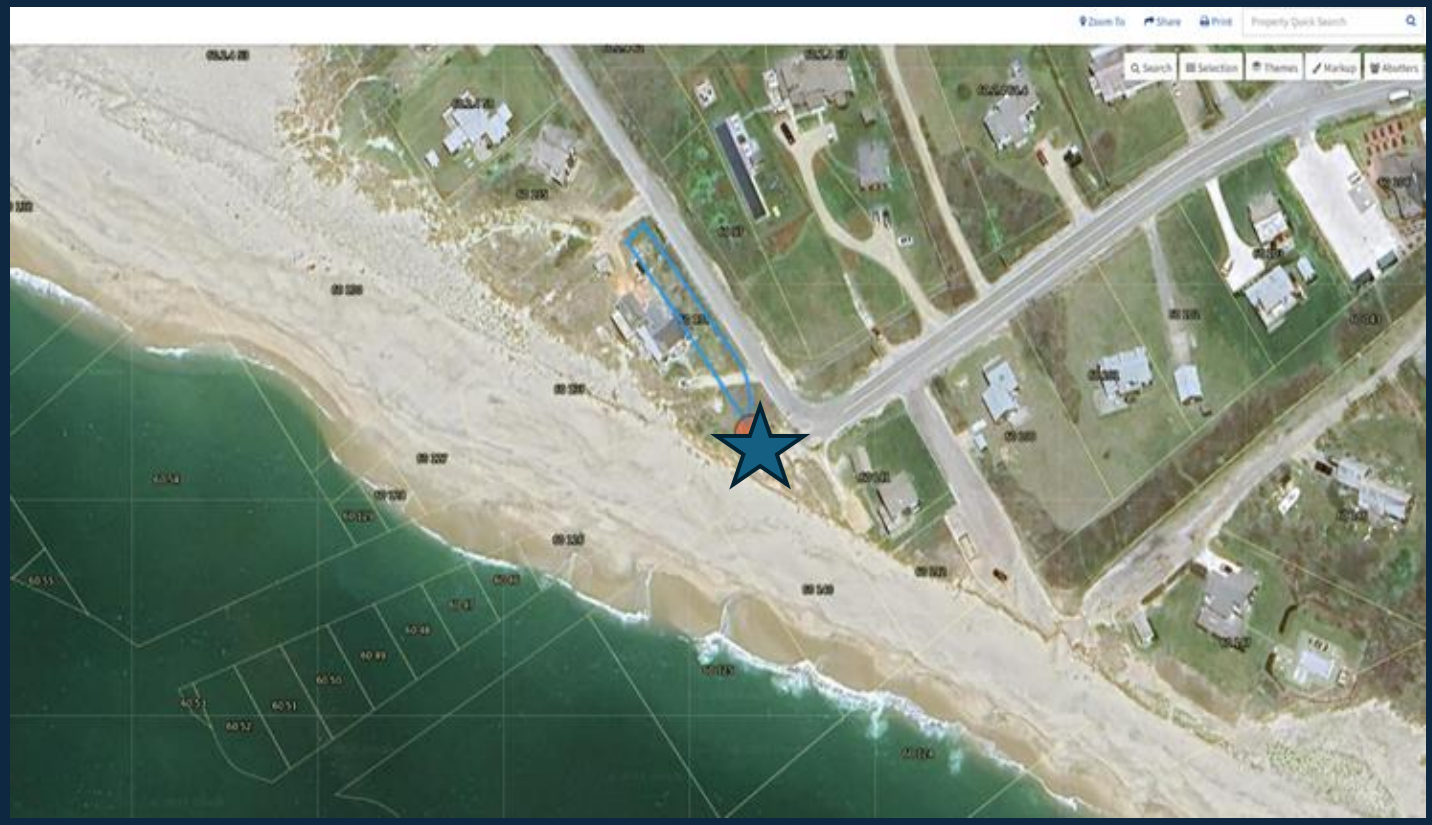
- Flexible protrusions dampen wind currents causing aeolian sediments to fall out of suspension.
- Units can be "unscrewed" vertically to control-build dunes and berms to specific heights and shapes.
- Devices are lightweight and reusable. They are easily removed and repositioned in the field
- Can be utilized to shield built berms from erosion and to protect newly applied beach sand nourishment

Data:
Coil & Armature Material: Stainless Steel
Coil Wire Thickness: 5/16" diameter
Coil Length: 24"
Coil Width: 3 ¾"
Overall Diameter: 25"
Overall Height: 44"
Protrusion Materials: Marine Grade HDPE
Protrusion Thickness: .05"
Protrusion Color: Green



Madaket

- Concerns from Smith's Point residents about Ames Ave/Madaket Rd. intersection preservation
- Town property
- Highly dynamic
- Erosion monitoring station since February 2022
  - -19ft

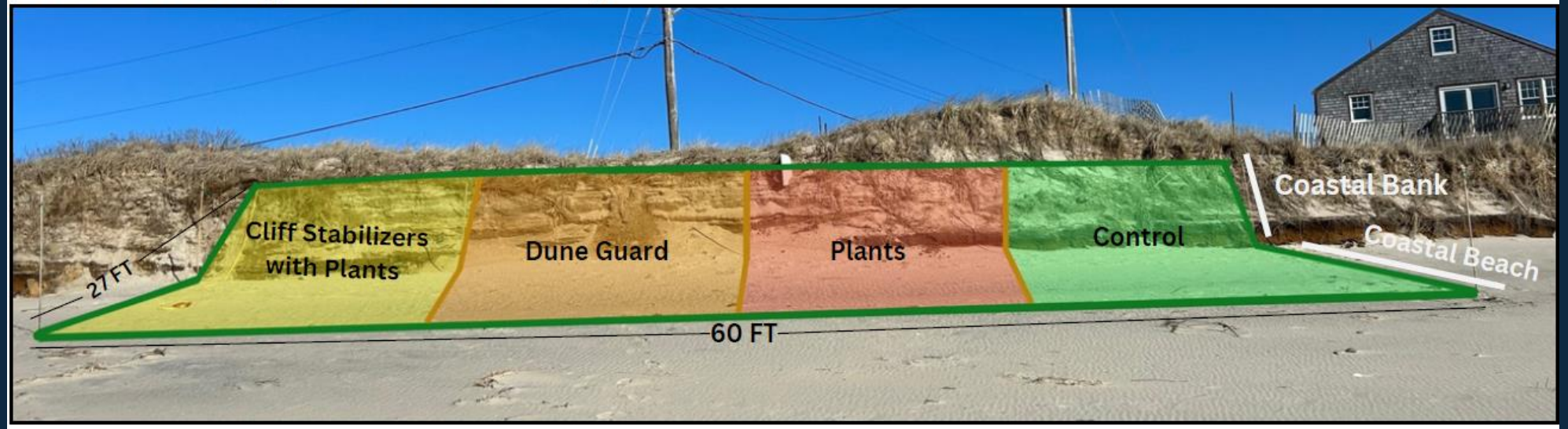


Dionis

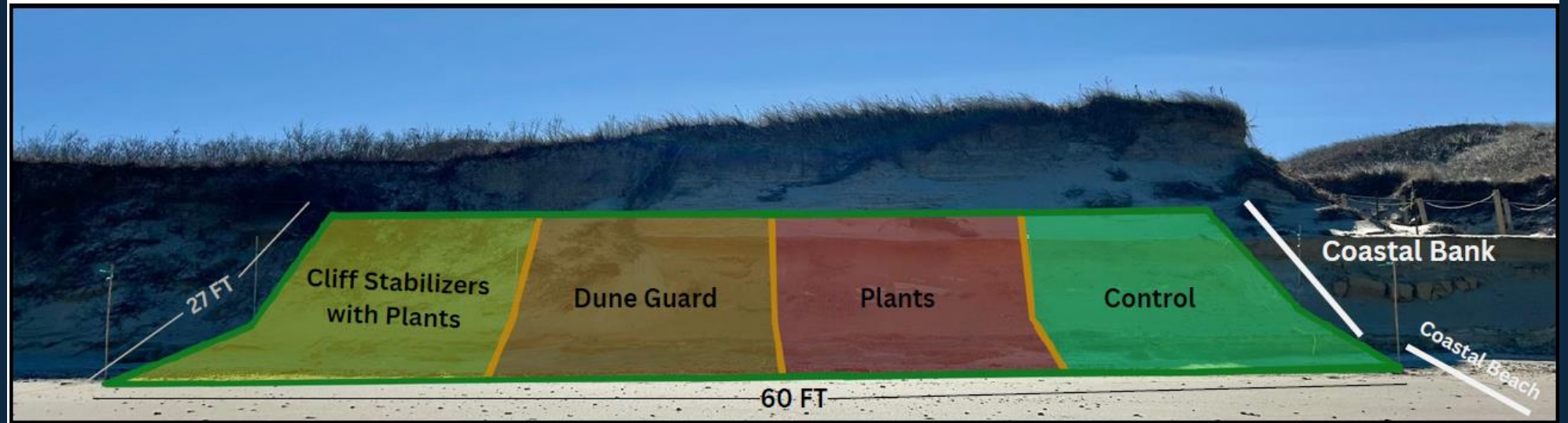
- Town property
- Large coastal bank
- Erosion monitoring station since August 2022
  - -5ft
- Experiencing erosion but at a slower rate than Madaket

4 Project Treatments ~ 400ft^2 each

Madaket (2 Ames Ave)



Dionis Beach

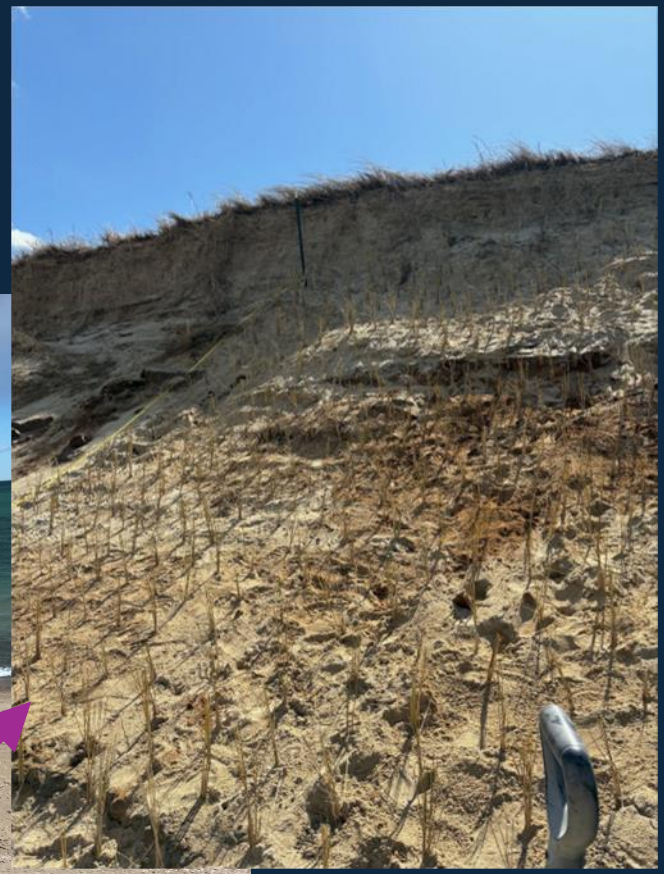


Madaket Installation ~3 hours

Thank you NCF staff!

Dionis Installation ~ 5 hours

Thank you Land Bank staff!



Why Try?

- Temporary devices that help stabilize plants and capture sediment
- Use in Long Island that has similar geology and coastal risks
- Never been used before on Nantucket
- Easy to install- only need impact drill!
- Madaket vs. Dionis
- Data collection: elevations, plant density and mortality
- Easy permitting ~ 1 month (NOI and Natural Heritage)
- Relatively cheap ~$10,000 total (doesn’t include dune guards)
- Doesn’t need significant maintenance
- If works, private property owners can replicate