



NANTUCKET TOWN ASSOCIATION MEETING

October 26, 2021, at 4:00 pm

Meeting held by Zoom conferencing

DRAFT MINUTES FOR REVIEW AND APPROVAL

Attendance (Participants as noted by Zoom): Trish Bridier, Mary Anne Easley, Mary Longacre, Craig Muhlhauser, Gail Norton, Lee Saperstein, Bill Seay, Anne Terry, Henry Terry, Barbara von der Groeben, and Paula Williams.

Thanks to the Atheneum, Amy Jenness, for hosting the meeting. which was recorded and the link (good for 30 days) is included here:

Meeting Recording: https://us02web.zoom.us/rec/share/-o9kzCvOzUwZYIXbXkAfC4_nl5RpP8UvHbgPZHMqkpVyDVX9B1pdXVnqJHdeu10D.UrBdPdqqNN9lahtkx

Access Passcode: 7pj2zs==

Guest: Vince Murphy, Coastal Resilience Coordinator, Department of Natural Resources, vmurphy@nantucket-ma.gov.

I. Call the October 26, 2021, Nantucket Town Association Meeting to Order.

President Henry Terry called the meeting to order at 4:02 pm. He announced that the meeting is being recorded and those who could not attend are welcome to use the above link to watch the recording. He also announced that, to avoid conflicts with the Open Meeting Law, there would be no discussion of the Nantucket Town small area plan because members of that working group are in attendance at today's meeting and no agenda for it has been posted.

II. Approval of minutes of the Meeting of September 28, 2021.

Henry Terry asked for approval of the minutes of the meeting of September 28, 2021. Anne Terry moved approval, Trish Bridier seconded, and the vote to approve was unanimous. Lee Saperstein reminded association members that the minutes were distributed monthly by Mary

Anne Easley and Alexandra LaPaglia, who get little recognition for their work and he wished to thank them publicly.

III. Treasurer's Report.

Anne Terry, Treasurer, gave the Treasurer's report, attached, for which there had been no changes from the month before, leaving an end balance of \$3654.86. A motion to approve was made by Paula Williams, seconded by Trish Bridier, and approved unanimously.

IV. Old Business.

There was no old business.

V. New Business

Responding to a request for new business, Bill Seay reminded the group that The Brotherhood's new owners have put in a Planning Board application for a substantial enlargement of their outdoor serving and entertainment area to accommodate a mini-Cisco Brewery and that there is opposition to this plan from the backyard neighbors on Ash Street and the Nantucket Island Land Bank, whose office is across Broad Street from the restaurant. A public hearing was held by the Planning Board on October 25, 2021, which will be continued to November 15, 2021. Anne Terry, Gay Street, added that she had already submitted written opposition to the plan. Bill Seay then added another concern, namely an application for a substantial expansion of the restaurant at 29 Fair Street (ex-Woodbox), to which there will be local opposition. This planning application is also scheduled for a public hearing at the 4 pm, November 15th, meeting of the Planning Board. The opposing group of neighbors have already met with the Historic District Commission to ask for revisions to the proposed plan.

VI. Guest Presentation: Vince Murphy, Nantucket Coastal Resilience Coordinator, Department of Natural Resources

Henry Terry introduced Vince Murphy, Coastal Resilience Coordinator, for a presentation on the Nantucket Coastal Resilience Plan and its implications for the association's area, namely the downtown and surrounding land. After the presentation there will be time for questions. Vince Murphy said that he will be using a number of PowerPoint slides, which he will go through quickly so that there will be time for the questions. The file for the slides is appended to these minutes; if there is a problem in reading them, go to the report itself. Vince Murphy's address is vmurphy@nantucket-ma.gov and the Coastal Resiliency Plan Report is found on the web site for the Coastal Resiliency Advisory Committee: <https://www.nantucket-ma.gov/DocumentCenter/View/40525/Nantucket-Coastal-Resilience-Plan-PDF>.

Vince Murphy acknowledged that the final version of the plan was due on this day while this talk is based on the publicly released draft plan. He started by reminding the group that water rise is inexorable and inevitable. There are separate planning scenarios that are based on the different projections of water rise. The Nantucket Plan is based on a "High" rise scenario that projects a sea-level rise of 9.25 feet by the year 2100. His slides showed the intermediate points for the

decades between now and 2100. The slides also showed flooding potentials around the Island for each projected amount of sea-level rise. Next, he showed projected land-losses due to erosion for each scenario. The downtown does not have much of an erosion risk, whereas Madaket does. The impact on the built environment of 9.25 feet of sea-level rise is to threaten 2606 structures and 27.9 miles of road that are deemed to be of “extreme, high, or moderate” risk. If the “lower” risk category is examined, the number of structures rises to 10,628 and the miles of road to 87.7.

He then moved on to potential solutions to the problem of sea-level rise; while the plan is Island-wide, his talk concentrated on the downtown and harbor area. In the near term, that is up to 2070, these solutions include using a raised road as a barrier, reinforced dunes, raised bulkheads, berms, and elevated access roads. There is no time to waste and these solutions need to be started in this decade. He then showed a sequence of slides that show in cross-section what each of these elements look like. For the longer term, post 2050, the Town may well need to consider a substantial harbor barrier and gate. While examined in theory, this structure is not part of the current recommendations. In this longer-term period, consideration will need to be given to protection of Coattue by dune nourishment and construction of off-shore breakwaters. He then projected a series of slides that depict solutions for other parts of the Island.

With the risk and the potential solutions shown, he then moved to considerations of actions by individual homeowners, shown in a homeowners’ toolkit; they range in cost from low to high, each with its associated level of protection. He related that all recommendations have been made with historic considerations in mind. In the next several slides, he acknowledged that government will need to be involved heavily in the solutions and that this will take substantial coordination among the Town, the state, and the federal government. The report includes a table of 40 recommendations and he projected a small portion of the recommendations for the Island and, in a separate table, the Downtown. He closed by reminding the group that resilience is a cycle of assessment of risk and vulnerability, planning and priority setting, implementation, recovery actions, and monitor-evaluate-adapt plans, that lead back to an assessment step. This cycle is related to the “plan, do, check, act” cycle of environmental management systems.

Craig Muhlhauser began the questioning by asking about the factors that led to the assignment of potential risks. Vince Murphy replied by saying that the continuing series of UN-sponsored global climate summits have made the predictions of sea-level rise, which in turn depend on the predicted temperature rises expected from the increase of green-house gases in the atmosphere. The latest in this series is COP26 (Conference of the Parties), sponsored by the UK in cooperation with Italy and to be held in Glasgow beginning on 31 October and going for almost two weeks. Mary Longacre noted that it may take legislative action to slow this process.

Lee Saperstein prefaced his question by saying that Nantucket has a long-standing plan to mitigate pollution and the growth of invasive species in the duck pond by Coattue that will involve the installation of larger culverts allowing for tidal flow in and out of the pond. The question is simple, “Is this a good idea?” Vince Murphy answered by saying that the plan should be re-examined in light of the potential of flooding of Orange Street inland from the pond. Mary Longacre noted that potential solutions may be limited by the public’s tolerance of the occasional flood. One hundred percent protection may be much more expensive and even not possible

compared to protection from 90 percent of the storms. Lee Saperstein noted that the Dutch have moved residences and communities, which, to be safe, would need 100 percent protection, from the low-lying tracts of land, known as polders, which are protected by dikes, and established them as farm lands that can tolerate the occasional flood. Craig Muhlhauser noted that he liked the idea of natural barriers. Mary Longacre, chair of the Coastal Resiliency Advisory Committee, said that they have pages in the Town's web site and that they are looking for input from the citizenry. There is a place for public input and, even though the final report has been submitted, they would still appreciate feedback "Your comments on coastal resilience:"

<https://townofnantucket.typeform.com/CoastalResComms?typeform-source=www.nantucket-ma.gov>. Vince Murphy said that he hoped that the Nantucket Town Association would provide feedback. Craig Muhlhauser, seconded by Vince Murphy, said that there will be a substantial cost to protect Nantucket's historic structures.

VI. Adjournment.

Henry Terry thanked Vince Murphy for his presentation and called for a motion to adjourn and Paula Williams so moved and Trish Bridier seconded the unanimously approved motion at 4:52 pm.

***Next meeting is November 16th, one week before the normal time to avoid the Thanksgiving week and will be via Zoom unless a decision to hold an in-person meeting is made; more information will be forthcoming with the next agenda; if one uses Zoom, registration is available at the same address as was used for this meeting.**

*Please remember that we need to end the meeting by 5:00 pm so that the library staff may leave the building.

Lee W. Saperstein, Secretary, saperste@mst.edu.

NANTUCKET TOWN ASSOCIATION

Treasurer's Report Oct 26, 2021

Beginning Balance \$3,654.86

Deposits 0

Expenditures 0

End Balance \$3,654.86



COASTAL RESILIENCE ADVISORY COMMITTEE



What to expect from the Nantucket Coastal Resilience Plan

Risk areas, potential infrastructure, potential policies outcomes.

Water is coming.

Vince Murphy, Coastal Resilience Coordinator, Natural Resources Department, Town of Nantucket.
Presentation on 10/26/21 to Nantucket Town Association

A 20 minute whirlwind

Disclaimer

This presentation was prepared with only information from the Draft CRP that was received on September 24.

The finalized CRP is expected to be received today, October 26, and I did not incorporate any updates.

So, the potentially presenting some outdated information.



COASTAL RESILIENCE ADVISORY COMMITTEE

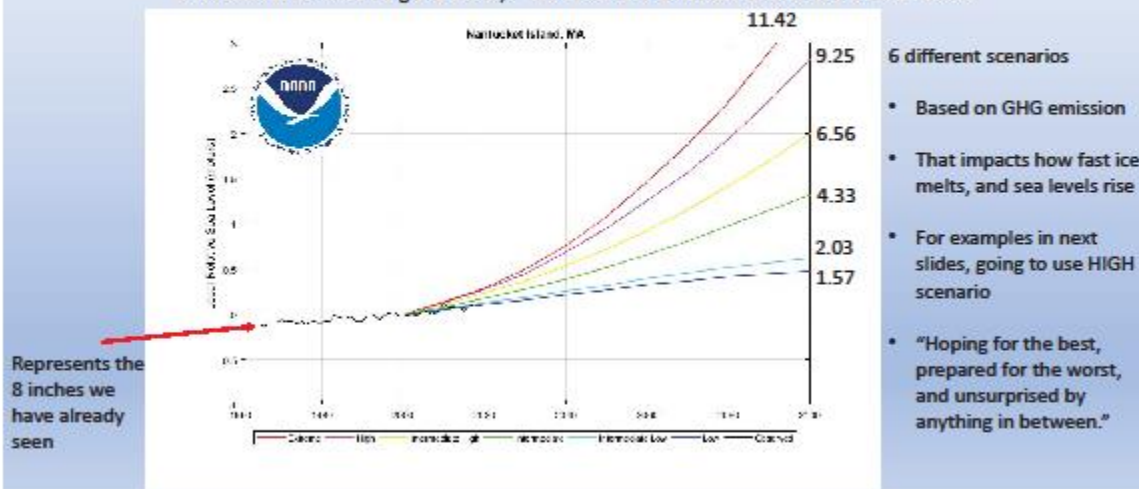


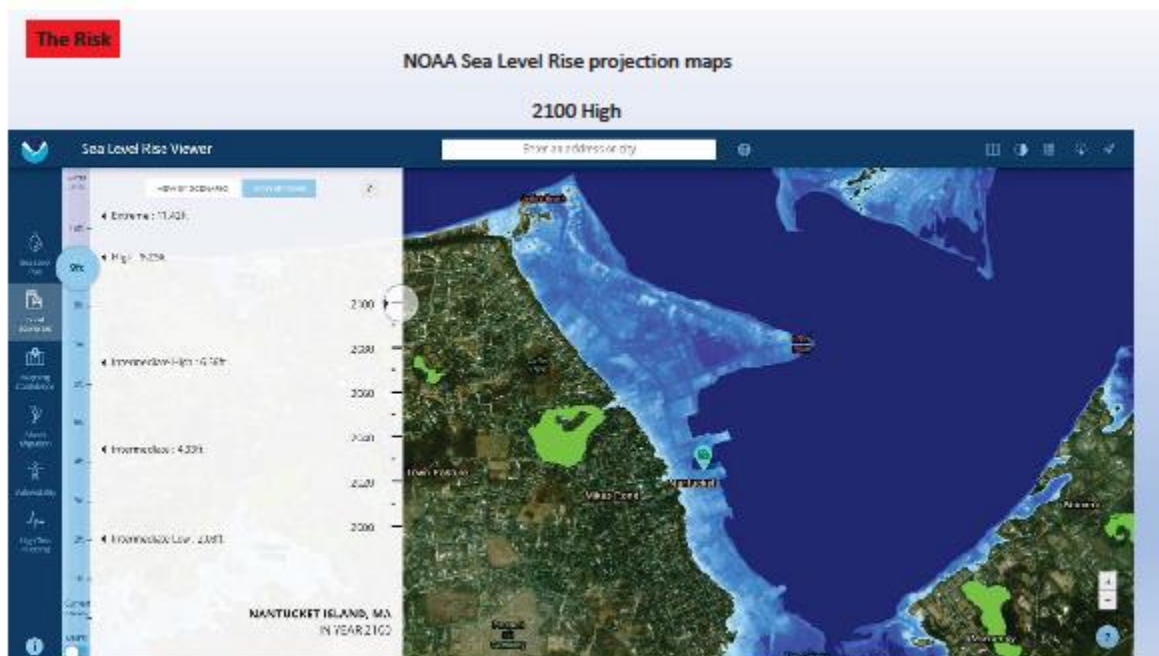
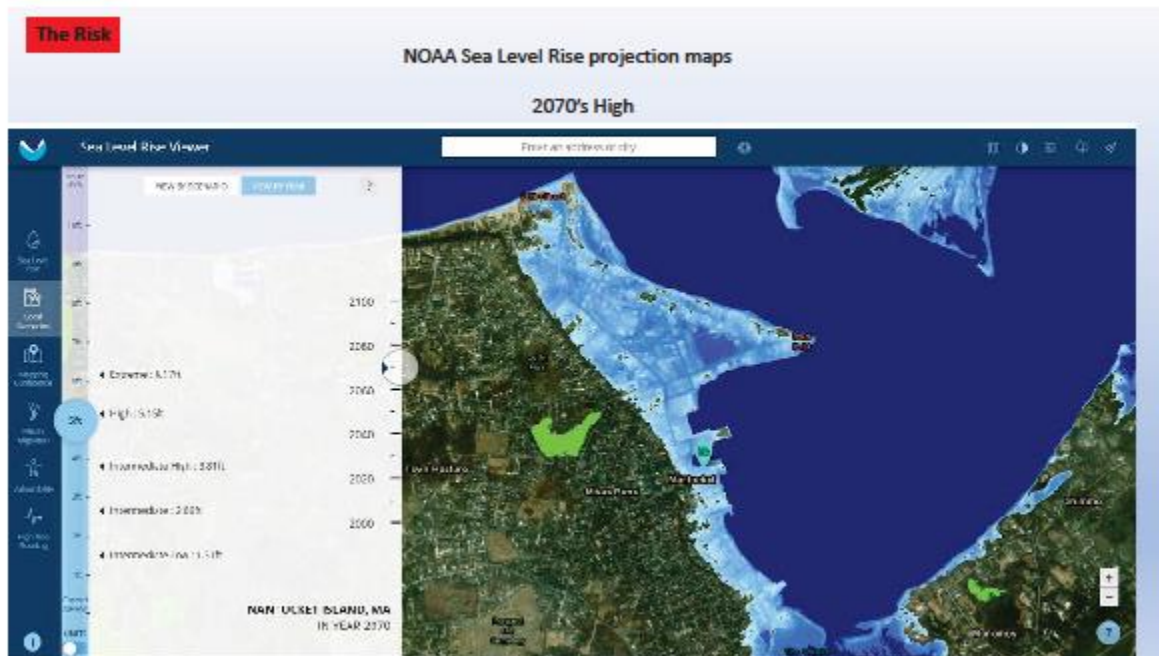
The Risk

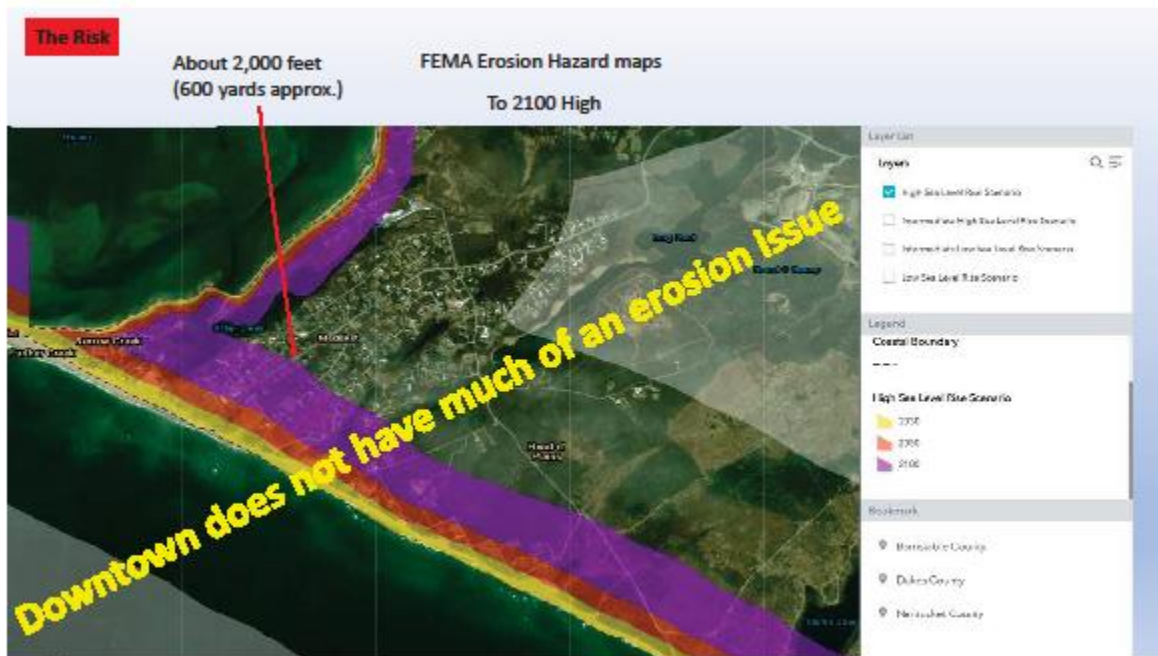
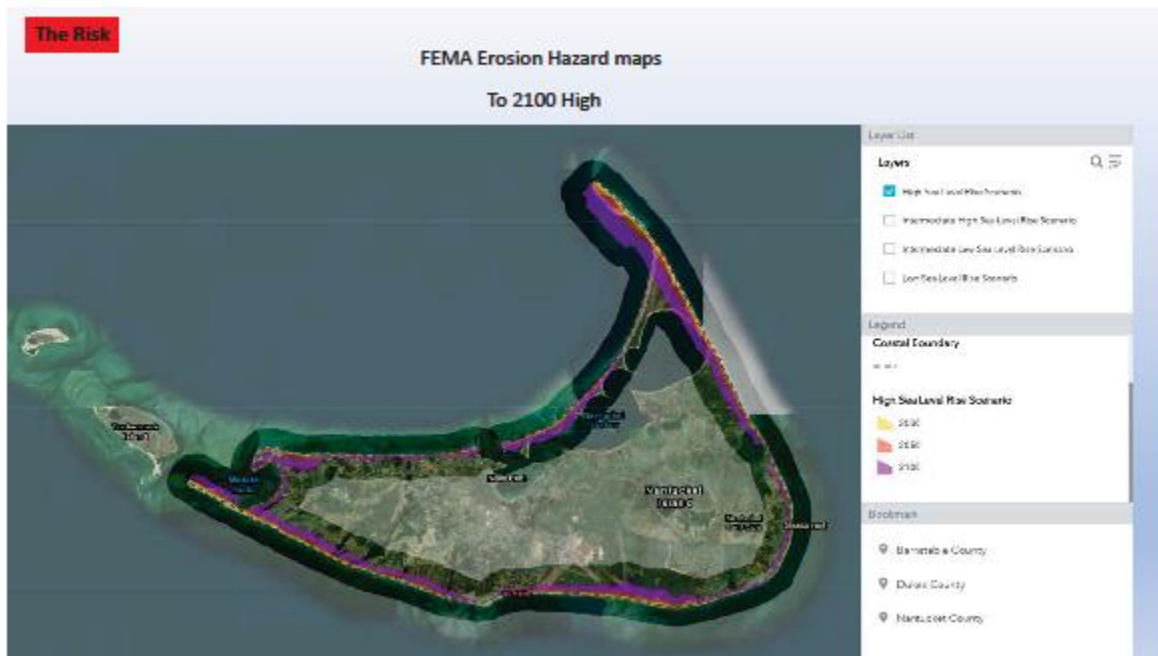
The Risk

The New Nemesis Sea Level Rise

Nantucket knows flooding & erosion; Sea Level Rise will make both of these much worse







The Risk



- 2,606 structures island-wide within extreme + high + moderate risk tiers
- 27.9 miles of public roadways within extreme + high + moderate risk tiers

DRAFT

Source: Nantucket Island Planning and Development Department

The Risk



- 10,828 structures island-wide within lower risk tier
- 87.7 miles of public roadways within lower risk tier

DRAFT

Source: Nantucket Island Planning and Development Department



The Potential Solutions

Near-Term Strategy (2020-2030)

Key near-term step is district scale flood protection to the expected elevation of Mean Monthly High Water in 2070

Combines series of infrastructure investments including elevated roadways, reinforced dunes, raised bulkheads, and berms

This step needs to be started today regardless of what comes next

Through detailed design, a project such as this can be integrated with the Town's existing character

Draft for Discussion Only

- Raised Road or Embankment
- Reinforced Dunes
- Raised Bulkhead
- Berm
- Elevated Access Road

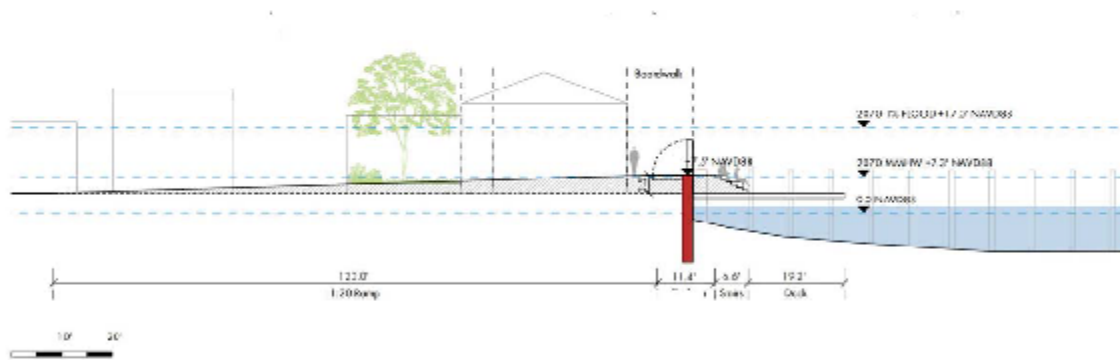


The Potential Solutions



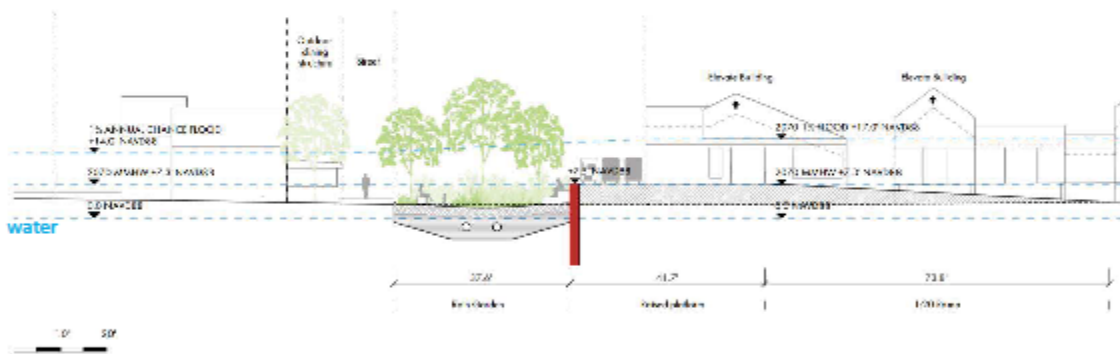
The Potential Solutions

Water's Edge



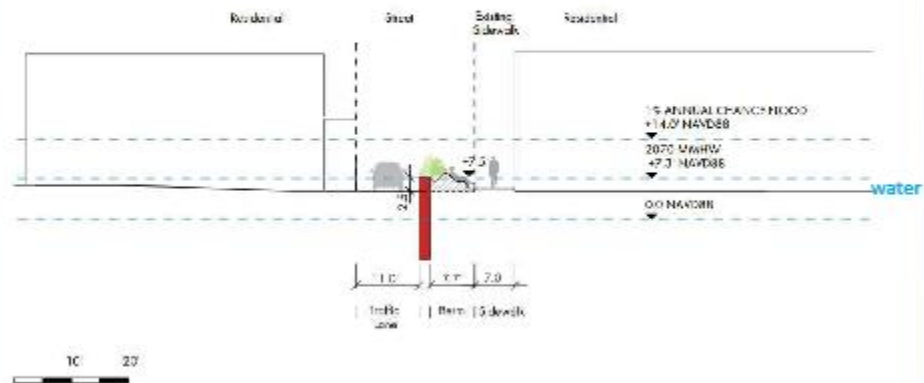
The Potential Solutions

Inland Open Space



The Potential Solutions

Public Right-of-Way



The Potential Solutions

Long term ideas – Post 2050

Just starting the conceptual conversation now. Not a recommendation in the current CRP



The Potential Solutions

Long term ideas – Post 2050

Just starting the conceptual conversation now. Not a recommendation in the current CRP



The Potential Solutions



The Potential Solutions



The Potential Solutions

Other solutions around the island

Including as this is an island wide plan, but will be brief

The Potential Solutions



The Potential Solutions



The Potential Solutions



The Potential Solutions



The Potential Solutions



The Potential Solutions



The Potential Solutions



The Potential Solutions

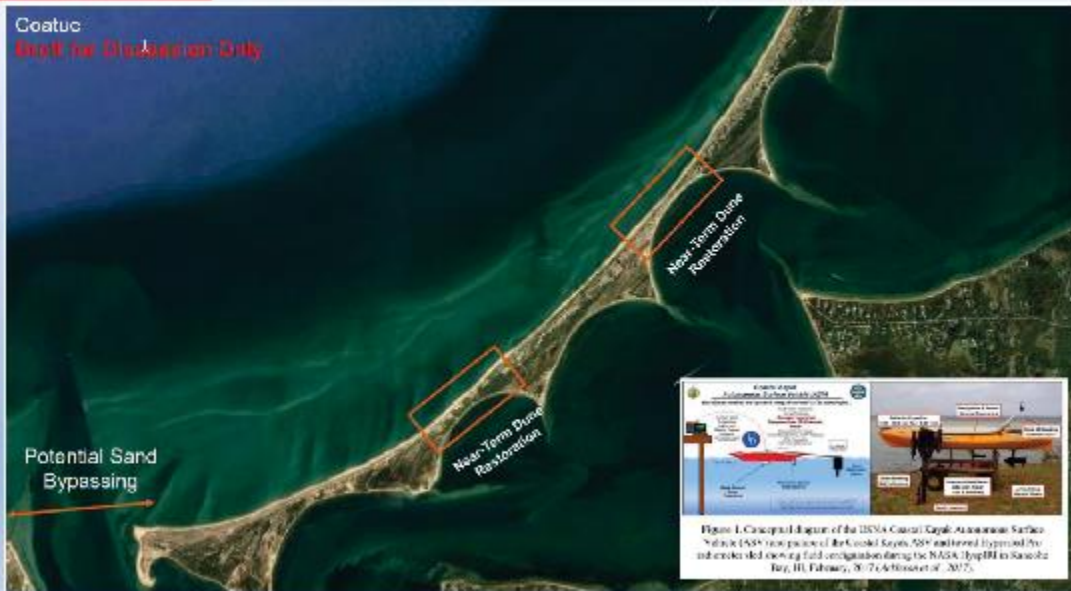
Codfish Park / Sconset Bluff



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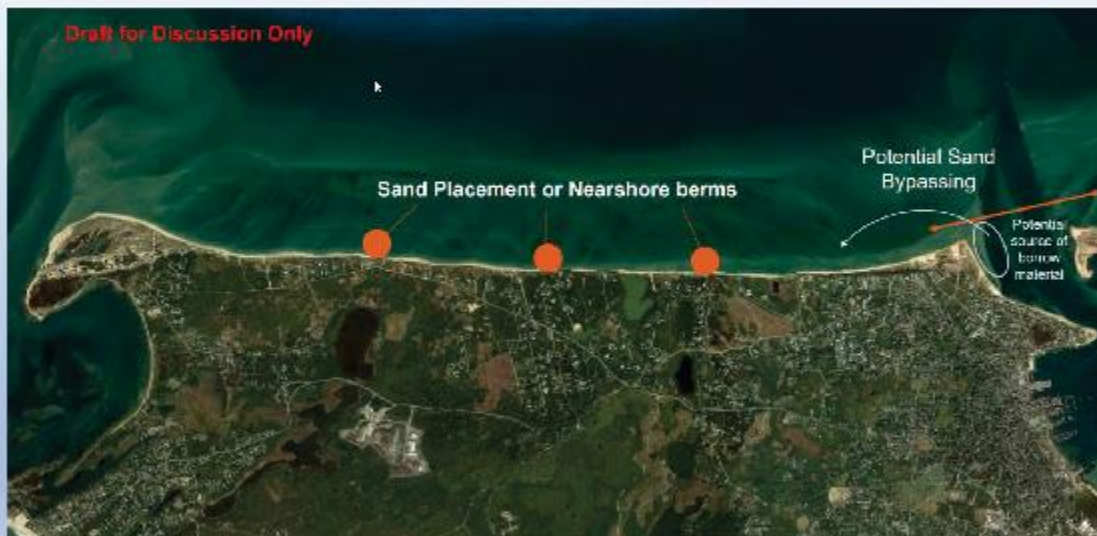
The Potential Solutions

Coastline
Draft for Discussion Only



The Potential Solutions

Draft for Discussion Only





COASTAL RESILIENCE ADVISORY COMMITTEE



Homeowner Toolkits & Policy

The Potential Solutions - Policy

Lower Cost Options

- Elevate appliances and utilities
- Seal foundation and basement walls
- Use flood-resistant building materials
- Install flood vents

Draft for Discussion Only



Elevate Utilities



Seal Foundation



Install Flood Vents

Moderate Cost Options

- Reduce impervious surfaces
- Raise first floor level
- Fill basement
- Anchor home

Draft for Discussion Only



Permeable Paved



Raise Harder



Fill Basement

Higher Cost Options

- Elevate property
- Re-locate home

Draft for Discussion Only



Elevate Structures



Relocate Structures



Land Acquisition

Historic Considerations

- Consistent with Resilient Nantucket: Flooding Adaptation & Building Elevation Design Guidelines
- Call outs throughout to indicate considerations for historic properties



Utilities mounted on the exterior of a historic building should not be readily visible from the street or public right-of-way and should be screened with appropriate landscaping to remain consistent with Nantucket's traditional design.



New shutters should be appropriately sized to cover the window opening and should be in a historical style appropriate for Nantucket. The addition of storm windows and doors is encouraged to protect historic materials.

Resilient Nantucket: Flooding Adaptation & Building Elevation Design Guidelines

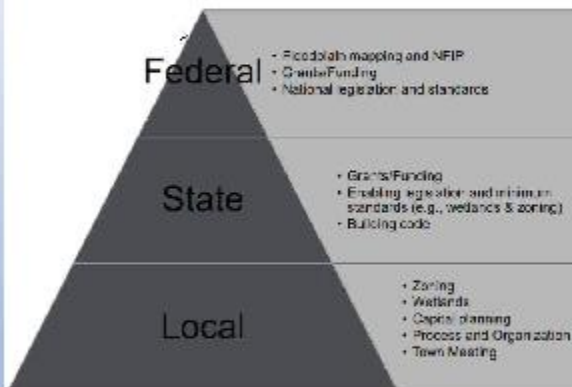
Suggested Practices for Historic Nantucket
Buildings at Risk of Flooding & Sea Level Rise

Nantucket, Massachusetts
2021

Draft for Discussion Only

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The Governance Context



Federal

- Federal Emergency Management Agency
- U.S. Army Corp of Engineers
- Environmental Protection Agency
- National Park Service

Massachusetts

- Massachusetts Emergency Management Agency
- Mass Department of Environmental Protection
- Board of Building Regulation and Standards
- Office of Coastal Zone Management
- Department of Conservation and Recreation
- Office of Energy & Environmental Affairs

Nantucket

- Select Board
- Conservation Commission
- Natural Resources
- Planning Board
- Zoning Board of Appeals
- PLUS
- Historic Districts Commission
- Steamship Authority Governing Board
- Department of Public Works
- Water & Sewer Departments

Draft for Discussion Only

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The Potential Solutions - Policy

Zoning

What can zoning do and how has it been used in other communities?

- Zoning controls the density, dimensions, location, and use of development
- Zoning can influence what people build and where but has little control of structures already in place
- Communities are beginning to integrate coastal resilience into local zoning codes to advance resilient design and manage land use in the floodplain

Draft for Discussion Only



Wetlands

Draft for Discussion Only

What can wetlands regulations do and how have they been used in other communities?

- Local wetlands ordinance / regulations protect natural areas and their buffers from encroachment and impacts
- Wetland regulations can ensure buildings and infrastructure are located to minimize impacts to natural resources, like filling
- Some communities are beginning to integrate coastal resilience into local wetlands regulations to account for SLR and enable resilient design



Governance

What are we trying to accomplish?

Draft for Discussion Only

- Ensure effective management of high-impact projects and initiatives related to coastal resilience and sustainability
- Create opportunities for communication and collaboration
- Establish a formal, predictable structure for town staff and leadership to meet and discuss issues related to long-term coastal resilience, sustainability, and adaptation
- Facilitate coordinated decision-making by town staff on issues related to coastal resilience and sustainability
- Enable sharing of resources and knowledge around key issues related to long-term coastal resilience, sustainability, and adaptation between town staff

Recommendations

40 detailed recommendations

1 example here

Recommendation	Strategy	Priority	Impact	Timeline	Responsible Party	Dependencies	Resources	Implementation Status	Monitoring & Evaluation	Availability
1. Establish a formal, predictable structure for town staff and leadership to meet and discuss issues related to long-term coastal resilience, sustainability, and adaptation	1.1. Establish a formal, predictable structure for town staff and leadership to meet and discuss issues related to long-term coastal resilience, sustainability, and adaptation	High	High	1-2 years	Town Staff	None	None	Not Started	None	Not Available

Focus Area	Strategy ID	Strategy or Project Title
ISLAND-WIDE (section 06)	1-1	Community Outreach on Homeowner Resilience Best Practices
	1-2	Update the Zoning Ordinance
	1-3	Update the Wetland Ordinance and Regulations
	1-4	Strategic Forest and Palmetto Program
	1-5	Coastal Hazard and Sustainability Interdepartmental Working Group
	1-6	Annual Risk Review of Development Proposals
	1-7	Coastal Resilience and Sustainability Program
	1-8	Seashore Change Monitoring Program
	1-9	Seashore Transport Study
	1-10	Stormwater Management Plan
	1-11	Seashore Budget
	1-12	Stormwater By-Laws Assessment
	1-13	Stormwater By-Laws and Regulations Update
	1-14	Update Seashore Database with Level One Analysis and Best Available Flood Hazard Data
Focus Area	Strategy ID	Strategy or Project Title
DOWNTOWN (section 07)	2-1	Steamboat Wharf Resilience
	2-2	Downtown Neighborhood Flood Barrier
	2-3	Easton Street and Hubert Avenue Road Raising
	2-4	Washington Street Extension and Converse Springs Walkway Raising
	2-5	Building Scale Resilience at 37 Washington Street
	2-6	Downtown Neighborhood Flood Barrier - Phase 1 Project

Focus Area	Strategy ID	Strategy or Project Title
MADAKET (section 07)	3-1	Madaket Road Raising and Bridge Construction
	3-2	Madaket Resilience
	3-3	Madaket Best Practices
	3-4	Madaket Emergency Action Plan
	3-5	Department of Public Works Safety and Flood Resilience
Focus Area	Strategy ID	Strategy or Project Title
NANTUCKET HARBOR & COATUE (section 07)	4-1	Public Road Raising and Bridge Construction Projects
	4-2	Public Road Raising, Bridge Repairs, and Flood Resilience at Coatue Beach
	4-3	Coatue Beach Raising and Flood Resilience
	4-4	Coatue Beach Raising and Flood Resilience
Focus Area	Strategy ID	Strategy or Project Title
SCONSET (section 07)	5-1	Scenescape Best Practices
	5-2	Scenescape Database
	5-3	Scenescape Database Funding
	5-4	Scenescape Database Feasibility Study
Focus Area	Strategy ID	Strategy or Project Title
SOUTH SHORE (section 07)	6-1	South Shore Resilience
	6-2	South Shore Resilience
	6-3	South Shore Resilience
	6-4	South Shore Resilience
	6-5	South Shore Resilience
Focus Area	Strategy ID	Strategy or Project Title
NORTH SHORE (section 07)	7-1	North Shore Resilience
	7-2	North Shore Resilience

Resilience is a process

Always
planning to
improve
resilience



**COASTAL
RESILIENCE
ADVISORY
COMMITTEE**



**Thanks to Nantucket Town
Association
&
Question?**