

Existing plans and Resources

Hazard Mitigation Plan

In 2019 Nantucket accepted a Hazard Mitigation Plan which cover some of the same coastal resilience issues that may be considered. If there are overlapping issues or infrastructure required, they should be referenced in the CRP. (Required by FEMA)

Municipal Vulnerability Preparedness Community status

Municipal Vulnerability Preparedness was also completed in January 2019. Workshop was in Jan '19 and report in Apr '19.
Gives direction to resilience and preparedness issues as listed in the report. (State program, makes Nantucket eligible for MVP Action grants)

Nantucket Master Plan (2009, planned redraft 2020?)

Guidelines for the physical development of the Island

Coastal Management Plan

Establishes priorities and procedures for protecting and managing town owned infrastructure, public access points and roads around the island adjacent to the coastline

Nantucket and Madaket Harbors Action Plan (potential update in 2020)

Outlines management areas and practices for the two harbors in Nantucket

Storm Surge and inundation Pathways

Empowering Coastal Communities to Prepare for and Respond to Sea Level Rise and Storm-related Inundation: A Pilot Project for Nantucket Island. CZM and Mark Borelli

Online databases

- NOAA has online database on tides. Publishes SLR predictions
- MORIS – office of CZM has state wide database of erosion, and other historic factors.
- Nantucket GIS – Town has its own online mapping tool with several predictive layers (hurricane, stormtide pathways, separate to Borelli work) and other resources

Developing plans & projects and other resources

- **Developing plans**

Coastal Resilience Strategies document (expecting delivery any day from Milone & McBroom)

The Town of Nantucket commissioned a Coastal Resilience Strategies document. This is a primary background resource document that outlines the methods and strategies that are available to the Town of Nantucket.

Nantucket Beach Management Plan (2004, and 2018/9 draft plan. Accepted spring 2020?)

The current working draft of the beach management plan is from 2004. Natural Resources Department staff are in the process of updating the plan, which was redrafted in 2018 and 2019.

Resilient Nantucket: Designed for Adaption (in development)

Services to develop guidelines for flooding adaptation and building elevation design details for historic properties and streetscapes on Nantucket

Nantucket's Sustainability Program (in development)

Developing sustainability program with actions and branding for the Town. Working with Kim Lundgren Associates, Inc.

Compass report. FEMA Region 1 coastal erosion study (in development / review. No know dates)

Stormwater and drain study commissioned by DPW (in development)

Fuss & O'Neill are undertaking a stormwater study with the Downtown /Brant Point area. Clarification needed.

- **Other potential plans**

Sediment Transport Study (uncommission – begin in 2020?)

Required for Harbors Dredge Plan and Beach Nourishment Plan.

Harbors Dredge Plan (Begin in 2021?)

Beach Nourishment Plan (Begin in 2022?)

- **Other resources**

Nantucket One Big Beach Project

A Town initiated easements project to allow access for beachgoers to walk from one beachfront property to the next without impediments or barriers.

<https://www.nantucket-ma.gov/687/One-Big-Beach-Easements>

Project evaluation method – STAPLEE

Warning.

This is an example of an evaluation method to rank project necessity. Consultants will not be bound by the RFP to use this method and may choose another method.

A methods to evaluate and rank potential mitigation projects. Method developed by FEMA

Used at the end of mitigation and resilience planning documents

Takes all of the proposed and required mitigation and resilience plans and is used to rank them

Uses 7 categories

S – Social

T – Technical

A – Administrative

P – Political

L – Legal

E – Economic

E – Environmental

Project evaluation method – STAPLEE

Uses 7 categories

- Each Category has considerations

S – Social

- Community Acceptance
- Effect on segment of population

T – Technical

- Technical feasibility
- Long term solution
- Secondary impacts

A – Administrative

- Staffing
- Funding Allocated
- Maintenance / Operation

P – Political

- Political support
- Local champion
- Public Support

L – Legal

- State Authority
- Existing local authority
- Potential legal challenge

E – Economic

- Benefit of Action
- Cost of Action
- Contributes to economic goals
- Outside funding required

E – Environmental

- Effect on Land / water
- Effect on Endangered Species
- Effect on HAZMAT/ /waste sites
- Consistent with community environmental goals
- Consistent with Federal law

Each consideration has an accompanying question that asks about the potential positive and negative outcomes of the project, and potential mitigation – to decide the Category score



Each category gets a + for favorable and – for less favorable
0 for neutral

Project evaluation method – STAPLEE

In practice – Example from Sussex County HPM – simplified version

Table D.1
Prioritization of Sussex County Hazard Mitigation Goals, Objectives, and General Actions

Action	Social	Technical	Administrative	Political	Legal	Economic	Environmental	Total	Priority
1.A.1: Develop <i>All Hazards</i> public education and outreach program for hazard mitigation and preparedness.	+	+	+	0	+	+	+	6	High
1.A.2: Initiate a public awareness program on local cable TV for hazard safety.	+	0	+	+	0	0	+	4	Medium
1.A.3: Conduct yearly workshops related to the Federal Emergency Management Agency (FEMA) hazard mitigation grant programs, including Flood Mitigation Assistance (FMA) program, Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM) program, Severe Repetitive Loss (SRL) program, and Repetitive Flood Claim (RFC) program, with a focus on those aspects available to private firms and property owners (coordinated with Action 1.B.1, below).	+	+	+	+	+	0	+	6	High
1.A.4: Educate the public through New Jersey Office of									

Generally
 0-3 = low
 4 = medium
 5-7 = high

Project evaluation method – STAPLEE

In practice – Example from Nantucket HPM – detailed considerations

Action or Strategy #	Table 11-1: Mitigation Actions and Strategies for Nantucket	Status - Carried Forward - New	Responsible Department ¹	Fiscal Year					Cost	Potential Funding Sources ²	Weighted STAPLEE Criteria ³														Total STAPLEE Score				
				7/2018-6/2019	7/2019-6/2020	7/2020-6/2021	7/2021-6/2022	7/2022-6/2023			Benefits																		
											Costs																		
											Social	Technical (x2)	Administrative	Political	Legal	Economic (x2)	Environmental	STAPLEE Subtotal	Social	Technical (x2)	Administrative	Political	Legal	Economic (x2)		Environmental	STAPLEE Subtotal		
All Hazards																													
A1	Obtain necessary radios and chargers for DPW staff and equipment to operate efficiently during town-wide emergencies	New	DPW	X	X				Minimal	CIB	0	1	1	1	0	1	0	6.0	0	0	0	0	0	0	0	0	0	0.0	6.0
A2	Provide Incident Command System training to essential staff	New	EM	X	X	X	X	X	Minimal	OB	1	0	1	1	0	0	0	3.0	0	0	0	0	0	0	0	0	0	0.0	3.0
A3	Review NMP, and associated Area Plans, for consistency with this HMP, and revise as needed	New	PLUS	X	X				Low	OB	0	1	0	1	1	0	0	4.0	0	0	0	0	0	0	0	0	0	0.0	4.0
A4	Add a 5-year review of natural hazard mitigation priorities, to coincide with updates of the HMP, to the NMP implementation schedule	New	PLUS					X	Minimal	OB	0	0	0	1	1	1	0	4.0	0	0	0	0	0	0	0	0	0	0.0	4.0
A5	Review the Nantucket Intermediate School and the Elementary School and determining their abilities to serve as emergency shelters.	New	EM		X	X			Low	OB	1	1	0	1	1	1	0	7.0	0	0	0	0	0	0	0	0	0	0.0	7.0
A6	Develop a comprehensive checklist that cross-references bylaws, regulations, and codes related to natural hazard damage prevention that may be applicable to proposed development project.	Carried Forward	PLUS	X	X				Minimal	OB	0	1	0	1	1	1	0	6.0	0	0	0	0	0	0	0	0	0	0.0	6.0
A7	Identify potential locations and costs, in collaboration with the Steamship Authority, for development of an alternative shipping terminal and navigation channel capable of accepting high-capacity ferries and/or freight boats to maintain critical access to the mainland in case of blockage of the main channel. Outline steps to follow to develop such a terminal.	New	PLUS/SSA				X	X	Low	Grant	1	1	0	1	1	0	0	5.0	0	0	0	1	0	0	0	1.0	4.0		

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