



Coastal Resilience and what Nantucket is DOING



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Presentation at Nantucket Civic League Forum
Coastal Resilience
Structure, Planning and Next Steps

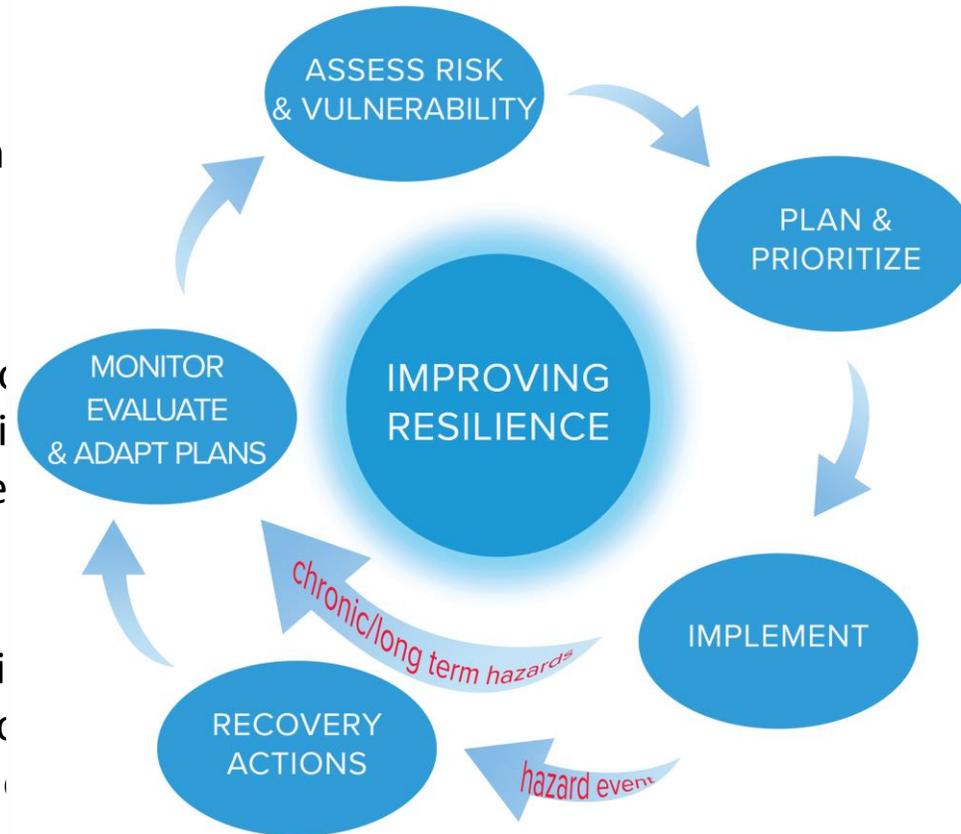
Coastal Resilience

The Resilience Cycle

NOAA's Definition
Coastal resilience means
hurricanes, coastal storm

Nice, but doesn't include
Also doesn't account for c
➤ The Coastal Resili
➤ Historic structure

Coastal Community Resili
natural events to adapt to
acceptable level of functi



"risk" after hazardous events such as
acts

community exposed to extreme
er to reach and maintain an

Basic Adaption Strategies

Accommodate

Protect

Retreat



Regulatory tools and adaptations are also a valuable strategy

What is Nantucket doing now?

Approach to Coastal Resilience

Nantucket is developing a Coastal Resilience Plan

- As recommended in the Hazard Mitigation Plan (HMP)
- HMP recommended a Coastal Resilience Coordinator
- HMP recommended a Coastal Resilience Advisory Committee

Base concept is that it is a whole island approach

- Also considered a whole county approach
- Whole island, including potential affects on interior of island
- Includes Tuckernuck & Muskeget

The Town has now accepted a Coastal Resilience Strategies Document

- Also discusses some vulnerabilities and risks
- Not a whole island or county approach
- A guiding document for CRAC

What is Nantucket doing now?

Organizational model

Coastal Resilience Advisory Committee (CRAC)

- 9 member committee created by the Select Board

1 member each from;

- Select Board
- Conservation Commission
- Planning Board
- Harbor and Shellfish Advisory Board
- Advisory Committee of Non-voting Taxpayers
- Nantucket Conservation Foundation

3 members of the Public

Charge from Select Board;

The committee will work with the Coastal Resilience Coordinator to oversee and finalize the Coastal Resilience Plan...

Also details how the committee is to undertake this.

Coastal Resilience Coordinator (CRC) Town Staff

- Working to develop Coastal Resilience Plan
- Work to implement Coastal Resilience Plan

CRAC meets on the first and third Tuesday of the month at 10.45 am to 12.45 pm

Exception for special and rescheduled meetings

Open public meeting – all welcome

CRAC Mission statement

This committee will work with the Coastal Resiliency Coordinator in the development, oversight, and implementation of a Coastal Resiliency Plan for the Town of Nantucket to address the impact of climate change and sea level rise. The Plan shall address planning across the system-wide needs of the community and include social, cultural and economic needs, infrastructure needs, and needs of the natural environment. The preservation of historical landmarks shall be a component of the Plan.

What is Nantucket doing now?

Path to getting a Coastal Resilience Plan and implementation

Method to develop a **Coastal Resilience Plan (CRP)**

- Develop Request for Proposals (RFP)
- Send to Procurement
- Advertise RFP
- Secure contract with consultants
- Approx. 12 months of research
- CRAC and CRC review and advise through the process
- Community meetings & community input
- Consultants deliver CRP
- Review and accept by CRAC and by SB

Plan implementation

- CRC find funding for projects
- CRAC review to aid in project selection
- Adaption option
- Infrastructure
 - Green and gray infrastructure where possible
- Water management
 - Help our wetlands! Recovery and expansion
- Erosion management (where possible)
- Policy changes
- Continue to review and look for adaption opportunities

Initial RFP written by CRC. Reviewed by CRAC. Including and adopting their recommendations to meet their concerns

Unusual for a committee to have such input into a RFP

Underlines the importance of this plan

Shows the expertise on the committee and available resources on Island

What is Nantucket doing now?

Estimated timeframe to produce a Coastal Resilience Plan																																
	Months																															
Steps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24								
Secure/ identify funding for Plan	Yellow																															
Develop RFP	6-8 weeks																															
Procurement			1-2 months																													
Advertise RFP				6 weeks min																												
Evaluation of submissions						2 months min																										
interviews with consultant & documentation							1-2 months																									
Award to consultant									Yellow	Yellow																						
Specified time for consultant to develop Plan										12 months																						
Review (Town & CRAC)																Yellow			Yellow				Yellow	Yellow								
Select Board approval																								Yellow	Yellow							
Development (condense where possible)	Red																															
Production & review										Orange																						
Acceptance																									Green							

Took a little longer than expected – had to get it right – takes longer to get a better product
 Should be going to procurement next week

What is Nantucket doing now?

Other complementary plans

Hazard Mitigation Plan (HMP)

Completed in April 2019

- Contains many recommendations that will improve island resilience – in general
- Aimed at general public safety
- CRP is partly about filling in gaps in HMP, and looking at flooding and erosion (coastal zone) resilience

Resilient Nantucket; Designs for Adaption

In Progress

- This project is aimed at the historic districts and historic structures on Island
- The CRP will work in concert with this project – much overlap
- Advantage is that the historic areas and structures will already be given due resilience consideration

Stormwater drain survey and recommendations

In progress

- Investigating the public stormwater drain network on island, understanding what we have and recommending potential improvements

Climate Action Plan

In research

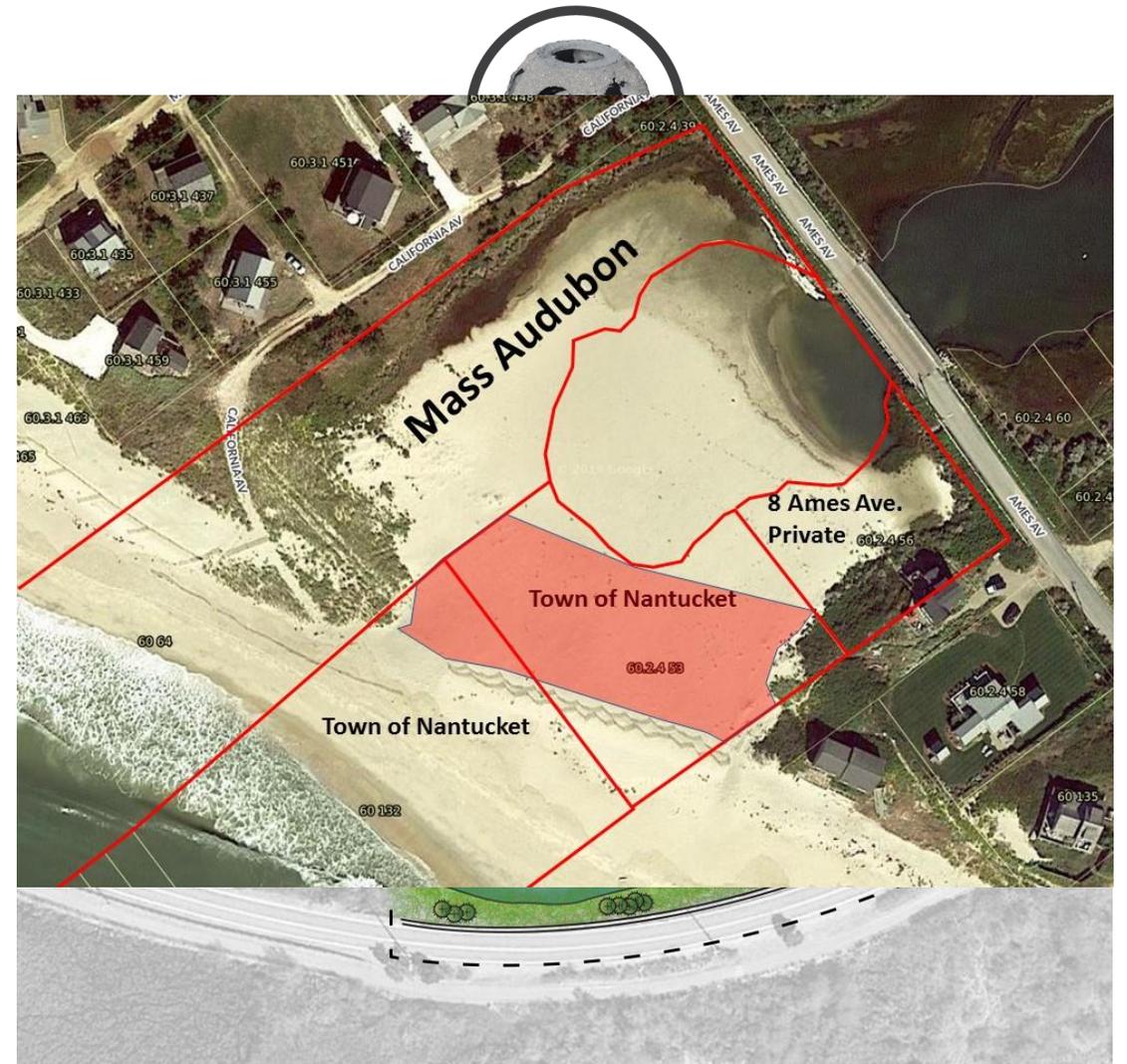
- Will investigate and make recommendations on energy consumption and climate resilience

What is Nantucket doing now?

Active project examples

- Sesachacha Pond Living Shoreline and Breakwater project
 - Gray infrastructure project

- Dune Stabilization Project, Millie's Pond
 - Green infrastructure project



Resilience is a process

The Resilience Cycle



**Always
planning to
improve
resilience**

Questions?

2/7/2020



Street flooding at Easy Street
Storm water backup



Washover into Miacomet Pond

Resilience measures could improve both of these and lessen the impacts