

Nantucket Coastal Conference

Preliminary Agenda

June 26, 2019

Location:

Nantucket Atheneum
1 India St., Nantucket

Join us for a free continental breakfast during sign-in (starts at 8:15)

Please Register:

[https://2019nantucket-](https://2019nantucket-coastal-conference.eventbrite.com)

[coastal-](https://2019nantucket-coastal-conference.eventbrite.com)

[conference.eventbrite.com](https://2019nantucket-coastal-conference.eventbrite.com)

Questions?

Send an email to

Greg Berman, gberman@whoi.edu

or Steve McKenna,

stephen.mckenna@state.ma.us

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AGENDA

June 26, 2019

8:45 Kickoff

Steve McKenna, MA CZM
Greg Berman, CCCE and WMSG

9:00 Keynote

Prof. Ruperto Chaparro, Director, Puerto Rico Sea Grant College Program
The situation that hurricane Maria represents to island residents in the context of politics, economy, environmental changes (human influences and natural ecological processes) and culture. Current efforts on resilience and hazard planning.

Coastal Risks and Vulnerability 9:45 - 11:00

Metocean analysis and wave modeling of Nantucket Harbor

Daniel Stapleton, Senior Principal, GZA
Evaluation of water/wave characteristics including: metocean data analysis, development of flood and wave frequency, and numerical wave modeling under sea level rise. Results were used for development of a "risk-based" design basis for the Town Pier.

Responding to coastal change

Tom O'Shea, Director of Coast and Natural Resources, The Trustees
An overview of The Trustees' coastal strategy with a focus on the most vulnerable places and interventions to increase coastal resilience in partnership with local communities. Discussion of a coastal vulnerability assessment and risk management project which covered thirty-five Trustees properties and conservation-restricted areas along 120 miles of Massachusetts coastline.

Assessing the island's coastal resilience through a conservation lens

Sara Bois, PhD, Director of Research and Education, Linda Loring Nature Foundation
This collaborative assessment seeks to characterize the island's conservation value in combination with vulnerability to climate change and potential adaptive capacity. Identify opportunities to protect unique resources; providing climate refugia and ecological connectivity.

11:00 - 11:15 BREAK

Coastal Stability: Marshes & Banks 11:15 - 12:30

Progressive bioengineering: The latest developments in nature-based shoreline stabilization

Seth Wilkinson, Restoration Ecologist, President, Wilkinson Ecological Design, Inc.
The fundamentals of bioengineering techniques for coastal shores as well as new developments in these techniques will be presented. Dunes, beach nourishment, coastal banks, fringe marshes and associated vegetation will be covered including case studies of new developments in various bioengineering techniques for coastal banks and fringe marshes.

Understanding and preserving our coastal buffers in response to erosion and over-sedimentation

Dr. Jennifer Karberg, Research Program Supervisor, Nantucket Conservation Foundation
Healthy salt marshes are key for the resilience of Nantucket's coasts but are currently experiencing impacts from erosion and over-sedimentation. This talk explores the response of a salt marsh buried under meters of sand from a single washover event near Millie's Bridge as well as methods to prevent salt marsh erosion and dieback in Polpis Harbor.

12:30 LUNCH - Provided

Shellfish 1:00 - 2:30

Ocean acidification in the Massachusetts coastal zone

Jennie Rheuban, Research Coordinator, Woods Hole Sea Grant
Ocean and coastal acidification is an emerging problem associated with increased carbon dioxide emissions and has the potential to significantly affect shell-building shellfish in particular. This talk focuses on the causes of ocean and coastal acidification and how this problem may influence stakeholders of Massachusetts.

Shellfish restoration on Nantucket

Tara Anne Riley, Shellfish Biologist, Town of Nantucket
Will discuss the past restoration efforts for the shellfish populations on Nantucket and include where we are now in our modern day efforts and new challenges that we face.

Preliminary investigations into quantifying scallop enhancement: The costs and benefits of noninvasive methods

Yvonne Vaillancourt, Director, Nantucket Field Station, School for the Environment, UMass, Boston
How might we estimate the impact of hatchery enhancement on the population of Nantucket Scallops? This talk is an overview of the current project between the University of Massachusetts Boston Nantucket Field Station and the Nantucket Department of Natural Resources Brant Point Hatchery as we test a non-invasive method to determine the origin of harvested scallops using mass spectroscopy and the elements found in the early developed shell.

2:30 - 2:45 BREAK



Nantucket Planning and Resilience 2:45 - 4:45

Highlights of a MVP on Nantucket

Chuck Larson, Manager of Strategic Projects, Town of Nantucket
In FY19 the Town updated the Hazard Mitigation Plan, conducted the Municipal Vulnerability Preparedness (MVP) workshop process and completed work to develop a Coastal Resilience Plan document. This talk will summarize our MVP experience and how the MVP components integrate with the other plans.

Nantucket's 2019 hazard mitigation plan

Holly Backus, Land Use Specialist, Town of Nantucket
Nantucket's vision of the HMP is "to mitigate the detrimental impacts of natural hazards to Nantucket while maintaining and enhancing the Island's quality of life, historic essence, aesthetic beauty, and natural and habitat resources." The updated plan provides 55 prioritized hazard mitigation strategies or actions to accomplish within 5 years.

Status of Nantucket resiliency planning

Noah Slovin, Environmental Planner, Milone&MacBroom, Inc.
Will discuss the town's Hazard Mitigation Plan, Municipal Vulnerability Preparedness (MVP) Plan, and Coastal Resilience Plan. He will provide an update about the status of these resiliency planning efforts, including information about plan contents, interactions, and next steps.

What's next for Nantucket?

Jeff Carlson, Natural Resources Director, Town of Nantucket
With the Hazard Mitigation and Coastal Resiliency Plan complete or well underway, this talk covers a description and timeline of ongoing projects, planning and initiatives being carried out by the Town of Nantucket related to these planning efforts.

4:45 Wrap-up

5:00 End

