



# HAMPTON BEACH AREA COMMISSION



*The symposium was  
produced in  
cooperation with the  
NHDES  
Coastal Program*

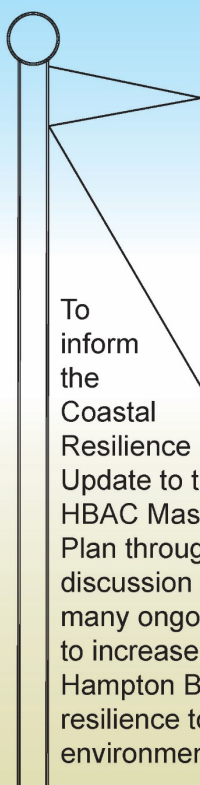
## COASTAL RESILIENCE SYMPOSIUM

February 9, 2021

## SUMMARY REPORT

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A virtual meeting held  
in preparation for  
updating the  
Environment portion  
of the  
HBAC Master Plan



To inform the Coastal Resilience Update to the HBAC Master Plan through discussion of the many ongoing works to increase Hampton Beach resilience to coastal environmental hazards.

# SAVE THE DATE

## Tuesday, February 9, 2021

### HAMPTON BEACH AREA COMMISSION

# Coastal Resilience Symposium

Moderated by Robert A. Casassa, Esq.

8:30AM - 2:30PM presentations & discussion  
2:30PM - 3:00PM HBAC Commission meeting, open to the public

#### COMMISSIONERS

Nancy Stiles, Chairman  
Dean Merrill, Vice Chairman  
Mike Housman, Treasurer  
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#### ADVISORS

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Roger Stephenson (UCS)  
Kirsten Howard (NH DES)  
Rick Friberg (TEC)  
Jamie Sullivan (Town Mgr Hampton)  
Tim Roache (theRPC)  
Rep. Renny Cushing (NH House)  
Johanna Lyons (State Parks)  
Tom McGuirk (McGuirk Properties)  
John Nyhan (HACoC)  
Hampton Master Plan Phase II consultant (if available 2/9/21)

#### PRESENTERS

Senator David Watters (NH Senate)  
Nathalie DiGeronimo (NH DES)  
Julie LaBranche (theRPC)  
Jay Diener (SHEA)  
Alyson Eberhardt (UNH)  
Kevin Lucey (NH DES)  
Jennifer Reczek (NH DOT)  
Noah Slovin (MMI)  
Jason Bachand (Hampton Planner)  
Samara Ebinger (NH OSI)  
Chris Meaney (USFWS)  
Coral Siligato (USACE)  
Jennifer Hale (Hampton DPW)

**Remote event - All are welcome - registration deadline is February 5**

**More information and registration:**

**<https://www.nhcaw.org/hbac-coastal-resilience-symposium/>**

Questions - contact Liz Durfee, Symposium Coordinator, at [efd.planning@gmail.com](mailto:efd.planning@gmail.com) 1/24/21

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Appendix 2: Panel of Advisors Bios

Appendix 3: HBAC Commissioners, Master Plan Subcommittee Bios, and Moderator Bio

Appendix 4: Post-Symposium Survey

Appendix 5: Submissions by Presenters in Advance of Symposium

Appendix 6: Links to Relevant Work and Website

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# I. INTRODUCTION

On February 9, 2021, the Hampton Beach Area Commission (HBAC) hosted a day long, web-based Coastal Resilience Symposium.

The goal of the Symposium was to inform the Coastal Resilience Update to the HBAC Master Plan through discussion of the many simultaneously ongoing works to increase Hampton Beach resilience to coastal environmental hazards. The current [HBAC Master Plan](#) last received a major update in 2001. The [Transportation Component](#) of the Master Plan was updated in 2018.

***Coastal resilience is the development and implementation of a comprehensive, coordinated, and cooperative strategy to address the impacts of climate changes, increased precipitation, sea level rise, and storm surge in order to prevent hazardous events such as hurricanes, coastal storms and flooding from resulting in long-term community-wide disasters from which recovery would be limited or unlikely.***  
-HBAC Symposium Planning Committee

The event featured 13 brief presentations from scientists, engineers, non-profits, business representatives, and local, regional, state, and federal staff, followed by a Q&A session, and a moderated advisory panel discussion. Advisors and presenters are listed in Section III and Section VI with bios provided in Appendix 1 and Appendix 2, respectively. More than 100 individuals attended the event.

This Symposium Report summarizes each of the presentations followed by the comments and recommendations of the Panel of Advisors who volunteered to assist HBAC to develop the resilience strategy for updating the environmental segments of the Hampton Beach Area Master Plan. Results from a post-symposium survey administered to attendees can be found in Appendix 4. Descriptions of each presentation submitted by the presenters in advance of the Symposium are provided in Appendix 5. Additional resources provided by presenters and advisors are linked in Appendix 6, and additional information about the event, including the [packet of materials](#) provided to participants, [presentation slides](#) and event recordings ([Part I](#), [Part II](#), [Part III](#)), can be found on the [event webpage](#). Recordings of the Symposium sessions are also posted on the [HBAC website](#). The HBAC will now move forward utilizing these advisory recommendations as it readies the update to its Master Plan.

**The HBAC, enabled per [RSA 216-J](#), was established to assist the Town of Hampton and State of New Hampshire agencies and departments in the long-range planning for the Hampton Beach area through the implementation of the Hampton Beach Master Plan.**

**HBAC's Master Plan becomes part of the Town's Master Plan. The Hampton Beach Village District (HBVD) is a separate governing body over a defined area. HBVD relies on the Town's Master Plan, which includes HBAC's Master Plan.**

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## II. AGENDA

### Coastal Resilience Symposium

Tuesday, February 9, 2021

8:30 AM – 2:30 PM

#### HBAC Commission Meeting

2:30 PM (all welcome)

*- Please be advised that the Symposium and HBAC Meeting will be recorded -*

The goal of the Symposium is to inform the Coastal Resilience Update to the HBAC Master Plan through discussion of the many ongoing works to increase Hampton Beach resilience to coastal environmental hazards.

#### AGENDA

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**8:30 - 9:00 AM**

**Sign On**

**9:00 – 9:15 AM**

**Welcome & Introductions**

Nancy Stiles, Chair, HBAC

**9:15 – 10:30 AM**

**Presentations, Bob Casassa, Moderator**

Senator David Watters, NH Senate

Nathalie DiGeronimo, NH Department of Environmental Services

Julie LaBranche, Rockingham Planning Commission

Jay Diener, Seabrook-Hampton Estuary Alliance

Alyson Eberhardt, University of New Hampshire

Kevin Lucey, NH Department of Environmental Services

**10:30 – 10:45 AM**

**Break**

**10:45 – 11:45 AM**

**Presentations (continued)**

Jennifer Reczek, NH Department of Transportation

Noah Slovin, Milone & MacBroom

Jason Bachand, Town of Hampton Planning Department

Samara Ebinger, NH Office of Strategic Initiatives

Chris Meaney, US Fish & Wildlife Service

Coral Siligato, US Army Corps of Engineers

Jennifer Hale, Town of Hampton Department of Public Works

**11:45 AM – 12:30 PM**

**Q&A and Discussion with Presenters and Symposium Participants**

Bob Casassa, Moderator

<b>12:30 – 1:15 PM</b>	<b>Lunch Break</b>
<b>1:15 – 1:25 PM</b>	<b>Debrief of Morning Sessions and Introduction of Afternoon Sessions</b> Nancy Stiles, Chair, HBAC
<b>1:25 – 2:25 PM</b>	<b>Advisory Panel, Bob Casassa, Moderator</b> Laurel Adams, Regional Economic Development Center Roger Stephenson, Union of Concerned Scientists Kirsten Howard, NH Department of Environmental Services Rick Friberg Jr., TEC Engineering Jamie Sullivan, Town of Hampton Town Manager Tim Roache, Rockingham Planning Commission Rep. Renny Cushing, Minority Leader, NH House of Representatives Johanna Lyons, NH State Parks John Nyhan, Hampton Area Chamber of Commerce Tom McGuirk, McGuirk Properties Steve Whitman, Resilience Planning & Design, LLC, Phase II Consultant to the Hampton Master Plan
<b>2:25 – 2:30 PM</b>	<b>Closing Remarks and Next Steps</b> Nancy Stiles, Chair, HBAC
<b>2:30</b>	<b>HBAC Commission Meeting (all welcome)</b> Nancy Stiles, Chair, HBAC



### III. PRESENTERS

See Appendix 1 for short biographies of the Symposium presenters.

**Senator David Watters**, NH Senate

**Nathalie DiGeronimo**, NH Department of Environmental Services  
Coastal Program

**Julie LaBranche**, Rockingham Planning Commission

**Jay Diener**, Seabrook-Hamptons Estuary Alliance

**Alyson Eberhardt**, New Hampshire Sea Grant

**Kevin Lucey**, NH Department of Environmental Services Coastal  
Program

**Jennifer Reczek**, NH Department of Transportation

**Noah Slovin**, Milone & MacBroom

**Jason Bachand**, Town of Hampton Town Planner

**Samara Ebinger**, NH Office of Strategic Initiatives

**Chris Meaney**, US Fish and Wildlife Service

**Coral Siligato**, US Army Corps of Engineers

**Jennifer Hale**, Town of Hampton Department of Public Works

**Robert Casassa**, Esq, Moderator

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## IV. PRESENTER SESSION NOTES INCLUDING Q&A AND DISCUSSIONS

This Section includes notes taken during the Presentation Session and notes capturing the discussion related to the presentations during the Coastal Resilience Symposium.

### PRESENTATIONS

#### **Senator David Watters, NH Senate**

- Legislature requires revisiting the science every 5 years
- NH Coastal Adaptation Workgroup (CAW) and other groups have assisted municipalities
- Legislature can help inform the Hampton Beach Area Master Plan, the breadth of planning needed, and suggest areas needing assistance from state agencies
- Recent relevant bills
  - 2017 bill to enable municipalities to create a coastal resilience incentive zone
    - Identify potentially impacted structures and areas, provide tax incentives for construction and landscaping to increase resilience, allows municipalities to sequester money over time for larger projects
  - SB285: broad reaching bill that looks at regional planning issues
    - Municipalities can unify as a result of climate change emergencies
    - Create municipal development and revitalization districts that can be shared across multiple municipalities
    - Address cultural assets and buildings that might need to be moved as a result of sea level rise
    - Department of Transportation (DOT) to inform citizens about changes to transportation
  - SB53: allows communities to use funds for preservation and resilience
    - Identifies the mitigation challenges resulting from storm surge and sea level rise
  - LSR0255: puts the coastal program into state statute
    - Establish a fund to receive more grants and federal funding
  - LSR210824: relates to outdoor/environmental education
    - Encourage workforce development in outdoor recreation industry

#### **Nathalie DiGeronimo, NHDES**

- Provided an overview of NH Coastal Flood Risk summary
- Coastal flooding is already a serious problem and local sea level has risen about 7.5 inches from 1912-2018
- Groundwater rise is projected to extend up to 3 miles inland from the coast
- Frequency of extreme precipitation events expected to increase, higher risk of freshwater flooding
- Not all projects require the same standard of preparedness and projects with low tolerance (wastewater treatment facility, power plant) should plan for higher sea level rise that is less likely
- HBAC encouraged to use the guidance to select the appropriate scenarios to plan for

### **Julie LaBranche, Rockingham Planning Commission**

- Seacoast Transportation Corridor Vulnerability Assessment focused on communities served by I-95, route 1, and route 1A
- Evaluated the changes in traffic volume, travel patterns, road capacity, and road conditions using sea level rise projections to 2050, then identified priority sites through a scoring method
- Work with University of New Hampshire (UNH) partners to identify adaptation and resilience strategies for ~10 priority sites
- Mostly focused on primary travel corridors with considerations to how local roads may be impacted by changes to primary travel corridors
- Hopes the results will be used to inform DOT with management, policy, and planning decisions and for state and local coordination
- Master planning organization's purpose is to plan for the long-term needs of the regional transportation system
- Outcomes
  - Better understanding of the risks to the transportation network
  - Identify critical links and impacts on the transportation networks
  - Concepts of adaptation/resilience

### **Jay Diener, Seabrook-Hamptons Estuary Alliance**

- 9 ft is the tide height at which there is minor flooding of roadways and structures
- Salt marsh migration can help mitigate some of these issues
- Acquisitions of private land by towns for salt marsh migration
- Coastal Hazards and Adaptation Team – evaluate and propose a range of options to keep the water out or get out of the water's way
- Draft adaptation concepts
  - Planning, policies and ordinances, data collection and public outreach
  - Incentivize development in areas at less risk of flooding
  - Conduct an economic assessment to understand the financial impacts of sea level rise
- Need for an estuary management plan encompassing all 3 municipalities

### **Alyson Eberhardt, UNH**

- 5 years of beach profiling and erosion data from stations at Hampton Beach and 2 at North Beach
- Comprehensive data report is forthcoming
- Higher elevation beaches recover more quickly from storms
- Lower elevation beaches are highly erosive and more vulnerable to storms occurring in succession
- Seawalls at the landward edge of beaches increase erosion, but beach grass in front of seawalls reduces erosion
- Beaches and dunes work together in coupled systems on the coast
- Dunes provide important sand storage and protection from storm waves, so it's important to get sand resources into the system (i.e. through nourishment)
- Beaches and dunes are similar to marshes in that they require a sediment source and space to migrate
- Beaches and dunes are some of the strongest storm protection methods

### **Eberhardt, continued**

- Examples of methods to maintain or supply sediment include dune walkover structures or leaving seaweed on beaches to catch sediment
- Nourishment activities need to be planned years in advance of implementation
- Landowner Technical Assistance Program (LTAP) provides technical assistance to coastal residents to better understand their flood risk and mitigation options, available to residents of all coastal communities
- Concerns from other Hampton residents in the LTAP program
  - Looking to better understand their flood risk, many underestimate their risk
  - Looking for parcel specific information, although many solutions need to occur at a neighborhood scale
  - Interest in rebuilding sand dunes
  - Concerns about groundwater rise
  - Some people will consider a buyout option
- Considerations for coastal environmental hazard master plan update
  - Provide landowners technical assistance regarding flood risk/mitigation
  - Develop a long-term plan for dune restoration and maintenance
  - Further explore groundwater impacts
  - Buyout options

### **Kevin Lucey, NHDES**

- Summary of policy that NH Department of Environmental Services (DES) has recently enacted related to tidal crossing replacement
- Focused on restoring tidal flow in order to restore salt marsh
- Protocol of 15 different scores within 3 themes: infrastructure, ecological, combined scores
- Central component is an elevation survey
- Inundation risk to the roadway
  - More common on the Atlantic coast than surrounding Great Bay
  - Some crossings and roads in Hampton are inundated on a regular basis
- 86% of crossings in Hampton-Seabrook Estuary had some indicator of tidal restriction
- Presence and severity of scour pools in the Hampton-Seabrook Estuary were unexpected
- DES recently implemented new rules that are specific to tidal crossings
  - Structure must be sized to accommodate the 100-year, 24-hour design storm and prevent restriction of tidal flows

## **Jennifer Reczek, NHDOT**

- Seabrook-Hampton bridge replacement project
  - Focus on providing a safe, reliable crossing
  - Bridge is narrow and doesn't have space for pedestrians, bicyclists, etc.
  - Managed to 3.9 ft sea level rise for intermediate-high scenario
  - Final design in the next 2 years, construction 2024-2026
- Roadway project
  - Improve safety and mobility for vehicles, bicycles, pedestrians
  - Public meeting coming up this spring
  - Balance parking needs with mobility
  - Incorporate treatments to mitigate storm events and drainage issues
- Coastal resilience challenges
  - Minimal elevation difference between roadway and tide elevations
  - Municipal Separate Storm Sewer System (MS4) requirements: need to treat the stormwater
  - Close proximity of homes and businesses to roadway, marsh, beaches
  - Areas of 1A are inundated under a 4ft sea level rise scenario
  - Need for a multi-agency coordination
- Considerations
  - Financial investment
  - How much property needs to be acquired?
  - How does this change the character of the area?
- Resiliency approach
  - Early in the project, still gathering data
  - Considering project design life and criticality of roadway
  - Identify areas that may flood under normal tide cycles
  - Plan for inundation during storm events
  - Ensure that water has a path out when the surge recedes and the storm passes
  - Consider methods to minimize rocks and debris that come into the roadway
- Next steps
  - Public comment period is still open
  - Data collection
  - Public meeting is upcoming
  - Alternatives development over the summer

## **Noah Slovin, Milone & MacBroom**

- The previous comprehensive update to the Hampton master plan was in 1985. Since then any updates have been made on an individual chapter basis
- There are 2 aspects of the master plan: vision and coastal resilience
- Vision
  - Broad view for the town's future
  - Specific goals, objectives, and actions
  - Getting input from the community to develop this
  - Balance growth & sense of place, connecting inland and coastal areas of Hampton and strengthening municipal services
  - Encourage and support small businesses and multiple modes of transportation

**Slovin, continued:**

- Flood and climate change resilience, protect environmental resources
  - Emphasis on equity
- Coastal resilience
  - Resiliency of the built environment as well as social, economic, and environmental wellbeing
  - Big picture strategies include
    - Investing in low risk areas
    - Protect resilience hubs
    - Live with the water (floodproofing, planning and response for chronic flood events)
    - Support local business resiliency
    - Advance social capital
    - Enhance coastal habitats
    - Elevate public awareness
- Next steps
  - Develop a draft document for the coastal plan
  - Opportunities for public input, online survey is still open
  - Neighborhoods focus group on Feb. 11 and workshop to review the draft products on March 11

**Jason Bachand, Town of Hampton Planning Department**

- Emphasis on phase 2 of the town's master plan update
- Revisions to the plan are recommended every 5-10 years
- Reasons for a comprehensive update
  - Many aspects of the current document are outdated
  - Most relevant to the current issues in the town
  - Preserve, protect, and enhance the property values and quality of life for Hampton residents
  - Enables the town to apply for more grants
- Robust public participant process, public attendance and comments are strongly encouraged by master plan steering committee
- Updated master plan will be permanently available online
- Next steps of phase 2
  - Continue monthly meetings of the master plan steering committee
  - Data collection and analysis in mid-2021
  - Focus groups later in the year, then working on plan elements and an implementation plan
  - Project completion anticipated December 2022



### **Samara Ebinger, NH Office of Strategic Initiatives**

- National Flood Insurance Program
  - Voluntary Federal Emergency Management Agency (FEMA) program that communities can choose to join
  - If a community participates, it must adopt a local floodplain ordinance
  - Flood insurance is made available for purchase to everyone in the community
- New coastal flood hazard analyses
  - The coastal high hazard area (VE Zone on FEMA Flood Insurance Rate Maps) has increased in Hampton
  - Maps show a 1% annual chance flood
  - FEMA's maps do not account for future effect of climate change, including sea level rise
- Community Rating System
  - Optional incentive program that communities can choose to join
  - Receive credit points for adopting policies that increase the community's resilience
  - Credits will result in a discount on flood insurance policies
  - Examples of activities that can generate credits:
    - Freeboard requirements
    - Preserving open space in special flood hazard areas (a lot of points)
  - Process to join
    - Outstanding compliance issues related to the floodplain ordinance must be resolved
    - Letter of intent to FEMA
    - Town identifies creditable activities they're performing

### **Chris Meaney, US Fish & Wildlife Service**

- Important to work on resilience issues now because there is momentum and interest in coordinated planning and management and because there is funding available for this type of work now
- Collaborative goals
  - Common vision and goals for partners
  - Coordinated short term investment in salt marsh monitoring and assessment
- Process and outputs
  - Virtual meetings, steering committee, stakeholder survey, working webinars starting 2/11 focused on salt marshes as an organizing principal
  - Produce an informal framework/work plan with objectives and potential roles of participating organizations
- Improve coordination among partners involved in coastal resilience
- Raise awareness of the challenges and opportunities this area is facing

### **Coral Siligato, US Army Corps of Engineers**

- Federal navigation project at Hampton Harbor
- Navigation improvements needed in the inner harbor
- 8 ft channel frequently dredged in the 70s-80s
- North jetty repairs are upcoming in 2022
- Federal maintenance protocol
  - Need to start with a congressionally authorized feature
  - State or town notifies the corps if a repair is needed, then the corps conducts hydrographic (channels) or topographic (jetties) surveys
  - Sampling and testing plan after dredging
  - Many projects compete nationally for funding, which poses a challenge
- Hampton Harbor
  - Material type is sand, which is suitable for beneficial reuse (preferred)
  - Placed directly on the beach as an enrichment method
- 2019 maintenance dredging effort
  - Work with the towns and the state to complete the project
- Upcoming study effort in the harbor
  - Ways to reduce rapid shoaling on the Seabrook side of Hampton Harbor

### **Jennifer Hale, Town of Hampton Department of Public Works**

- Some areas of concern:
  - Flooding on Brown Ave./Ashworth Ave.
  - More frequent flooding in the beach areas
  - Identified issues of public concern from Meadow Pond south
- Modeling of flooding during King Tides revealed flooded roadways and inundated yards
- Next step was looking at future scenarios including sea level rise
- Alternatives analysis concepts
  - No action, avoid, accommodate, resist, relocate
- Flood mitigation options for Meadow Pond:
  - Elevate roads and improve drainage systems
  - Dredge Meadow Pond
  - Remediation of marsh ditching
  - Elevate flood prone housing
- Some of these options had a positive impact (improving drainage on King's Highway), others created a bigger problem (replacing Winnicunnet Road culvert)
- Seawalls are not effective for flood mitigation in Hampton Harbor
- Managed retreat was not modeled in this work, but it is one of the options
- Next steps
  - Publish final reports and recommendations
  - Complete 50-60% designs
  - Develop monitoring plans
  - Present findings and results

## Q&A AND DISCUSSION

- Question: How does the town work with DOT to ensure consistent sea level rise estimates are used?
  - Hale: This can be accomplished through interagency collaboration.
- Question: How can dune installation thrive from Boar's Head to Bicentennial Park given the wave action/heights?
  - Eberhardt:
    - North Beach is at the lowest mean elevation of all NH beaches, and it is regularly inundated up to the seawall
    - For dunes to form, they need space so this is probably not a viable option without the removal of a lot of infrastructure
    - Explore nourishment options
    - Living shorelines are challenging in high energy environments, but they are not impossible. Living breakwaters may be an option here. These exist off Staten Island, and that project could be used as an example
    - Relationship to the dredging project: planning needs to be done on the municipality level. This is a long and complicated process, so logistics planning needs to be done early
    - NH dredge management taskforce could be a leader here
- Question: Do you see a role for breakwaters in the North Beach area?
  - Eberhardt: This question could be explored by some other experts as to site suitability and potential options.
- Question: Where will the dredged material go from the current projects?
  - Siligato:
    - Work with the towns, state, and property owners on placement sites
    - The amount of material found in shoaling in each town is typically sent to that town
    - Much of the material ends up shoaling on the Seabrook side, so that would get sent to Seabrook
- Question: Does the master plan address climate change impacts to the town's coastal historic resources?
  - Bachand and Slovin:
    - Some recommendations for historic resource protection have been incorporated in the category of living with the water
    - Adopting design guidelines related to mitigating historic resources against flooding, but it is a challenge to do so while maintaining its historic qualities and designation if applicable
    - There will be a section involving cultural and historical resources, and phase 1 info will be incorporated into phase 2
- Question: Are you aware of the Hampton rail trail and Seacoast greenway efforts?
  - Meaney: Others on the steering committee are likely aware of these efforts, and RPC and others are encouraged to join the upcoming webinars

- Question: What should the implementation committee look like and where would the flood plain manager position sit?
  - Diener:
    - CHAT recommendations are in draft form, and they are looking for input
    - Everyone is encouraged to go to the Seabrook-Hamptons Estuary Alliance (SHEA) website and offer input/feedback
    - Implementation committee: not a lot of detail yet, whoever is on that committee should be closely involved with the town planning department and HBAC and stay with them after the master plan development for implementation
    - Floodplain manager: it would be good to have one person who coordinates all associated activities, but it is not up to him to decide who this position would report to. The town manager would be a good place to start for this info.
- Question: What are the priority road segments that Hampton needs to focus on?
  - Labranche:
    - Ashworth Ave. and all side streets that connect to it to the west
    - Sections of Winnicunnet Rd., King's Highway
    - All tidal areas behind Meadow Pond
- Question: How did you rate the Winnicunnet Bridge? It is causing severe erosion.
  - Lucey:
    - Ecological score of 1, which means the upstream and downstream water levels are the same
    - Good opportunity for marsh migration
    - Good infrastructure score, not frequently inundated
    - Freshwater discharge and water being hung up on falling tides is causing the problem
- Question: Rising groundwater could impact as much as 3 miles inland. What educational outreach should be undertaken to advise inland landowners of the risk?
  - DiGeronimo:
    - Outreach about coastal hazards needs to be conducted on a community wide scale
    - People in the upland areas can know how issues near the beach may affect them
    - Flood risk disclosure to prospective buyers and renters
    - Opportunity to incorporate disclosures into the master plan
- Question: Is there a particular type of dredge that facilitates material reuse?
  - Siligato: Typically choose the lowest cost option with a preference for beneficial reuse of dredged material
- Question: what is the timeframe for the Seabrook bridge project to be completed?
  - Reczek:
    - Planned to be started 2023
    - They are early on in the route 1A project, and funding is only available for the roads and mitigation requirements. Funding cannot cover living shoreline construction, beach nourishment, etc.
    - Parking areas and walls on the side of the roads are controlled by NH state parks and are not under DOT jurisdiction
    - Funding available for the project is ~\$6 million, so it will not cover everything the community envisions

- Question: What is the state/federal/local cost share for replenishing the beaches with sand?
  - Siligato & Hale:
    - Dredging and marine authority fall under the jurisdiction of the Pease Development Authority and Ports and Harbors
    - 6 ft anchorage in the harbor is maintained by the state and can piggyback on federal dredge efforts. The state pays for their portion only and all other costs are covered by federal funds
    - Maintenance dredging and jetty repairs are already an authorized project, so it is 100% federally funded
- Question: What do you think is needed for Hampton to create a sea level rise plan and raise money in a meaningful way?
  - Senator Watters:
    - If Hampton becomes a sea rise district, this gives the community flexibility in funding through the tax system to deal with many of the issues they are facing
    - Set up a fund and have some tax incentives to encourage businesses and local property owners to do the work
    - Comprehensive planning so that things are done in a coordinated way

## V. FOLLOW UP RESPONSES TO DIRECT QUESTIONS POSED DURING THE SYMPOSIUM CHAT

This Section includes questions that Symposium participants submitted via the chat box during the event that were not answered during the Q&A Session due to time constraints. Following the Symposium, NHDES staff reached out to several presenters seeking responses to the outstanding questions.

QUESTION: Does the Master Plan address climate change impacts to the town's coastal historic resources?

NATHALIE DIGERONIMO ANSWER: The Town's Draft Master Plan Coastal Resilience Content acknowledges that the Town's historical and cultural resources are at risk to coastal hazards and includes recommendations to perform additional site-specific vulnerability assessments, integrate protection of cultural and historical resources into land use management and hazard mitigation plans, and to create adaptation strategies and guidelines for cultural and historic sites affected by climate change.

QUESTION: what is meant by 'expanding municipal capacity'?

NATHALIE DIGERONIMO ANSWER: The Town's Draft Master Plan Coastal Resilience Content recognizes that an essential step moving forward in order for the Town to implement actions already identified and expand resiliency efforts in the future will be to grow its municipal administrative capabilities. For example, the Draft Content recommends that Hampton can further its resilience-building efforts by establishing new staff positions, developing operational procedures, directing funding toward resiliency projects, and securing additional funding through grants. For more information, see Strategy 2.6, "Strengthen Administrative Capabilities" in the Coastal Resilience Report, which is available on the Town's website at [www.tinyurl.com/planHampton](http://www.tinyurl.com/planHampton).

QUESTION: Do you think the committee to create a long-term plan for beach nourishment activities should be Hampton focused? or should it be more regional and involve all neighboring beachfront communities like Rye, North Hampton, and Seabrook?

DR. ALYSON EBERHARDT ANSWER: I suggest both a Hampton-focused and a regional planning approach. Planning will be required at the municipal level to identify town priorities for nourishment and to plan for any additional costs associated with transporting sediment to new areas.

A regional planning approach will be beneficial for identifying regional priorities for uses of dredged material and to identify opportunities for leveraging resources among towns. An entity already exists for participating in regional conversations called the Dredge Management Task Force. It would be beneficial for each town that is interested in beach nourishment to have representatives at the Dredge Management Task Force meetings. Chris Williams at the NH DES Coastal Program is the chair of this workgroup; Chris can be contacted with any questions about meeting schedules, topics, or how to get involved - [christian.williams@des.nh.gov](mailto:christian.williams@des.nh.gov)

QUESTION: How will local planning incorporate and support the wider regional economy (tourism). Many of the efforts to adapt to climate change socializes the costs. Is there an economic tool to evaluate the ROI, locally, regionally and statewide?

JASON BACHAND ANSWER: A major element of the Town of Hampton Comprehensive Master Plan Update will be economic development, which is something the Town's current plan lacks. In addition to local economic development issues to be addressed, I would anticipate the plan also looking (at least to some extent) at the region as a whole. As the Phase II Master Plan consultant incorporates the coastal content being prepared under Phase I of the Master Plan update, and also develops additional environmental content, questions concerning the local/regional economy (including tourism) should be addressed as they relate to the topic of climate change. Personally, I am not familiar with economic tools used to evaluate ROI. Perhaps the Chamber would have an idea?

QUESTION: Will beach renourishment be addressed (need, cost), in this resiliency section of the master plan?

JASON BACHAND ANSWER: The draft coastal content being prepared as part of Phase I of the Town's Comprehensive Master Plan Update includes some mention of sand nourishment projects. There is also discussion of "Living Shorelines" as a potential method of preserving and enhancing coastal habitats. NHDES defines Living Shorelines as "a management practice that provides erosion control benefits; protects, restores or enhances natural shoreline habitat; and maintains coastal processes through the strategic placement of plants, stone, sand fill and other structural organic materials. This helps provide habitat value and protects against coastal hazards." I am unaware of specific cost information at the present time.

QUESTION: What were the findings in the survey that would interest Hampton Beach Area stakeholders?

CHRIS MEANEY ANSWER: 33 individuals from the surrounding communities, private, state, federal, and non government organizations responded to the Hampton Seabrook Estuary Collaborative Survey. The purpose of the survey was to identify the type of work that is happening associated with the Hampton Seabrook Estuary, as well as to identify any science, data, and management gaps and needs, in addition to any general areas of interest associated with the ecosystem.

97% of respondents indicated that there are critical gaps in the data or science needed to understand and support work related to Hampton Seabrook salt marshes. Gaps associated with water quality, water levels, and fish and wildlife management were among those identified. More specifically, the survey indicated a need for detailed elevation data, information on the marsh's response to sea level rise, data on water levels, information on sediment levels and accretion rates, and how sediment could be used in restoration. The survey also indicated that there are several groups and organizations working on different aspects of the Hampton Seabrook Estuary, and that increased coordination and collaboration is needed to inform management decisions.



Meany, continued:

Results of the survey and report generated from the survey and subsequent three webinars focused on identifying short term opportunities for collaboration will be posted on the Piscataqua Region Estuaries Partnership's website later this Spring.

QUESTION: We have a property on the south side of the Winnacunnet Bridge over Eel Creek. Due to increased water flow and what appears to be poor planning when the new bridge was built our foundation and the Town pump house on the other side are in serious peril. It seems everyone we have asked about our, and the town's, problem give us some sort of brush-off. Where do we go for help?

KEVIN LUCEY ANSWER: the location of the referenced properties is within an area of known flood risk. In order to sustain existing uses of these assets under the prospect of future changing conditions, NHCP recommends that the owners of these sites retain a qualified engineer and natural resource scientist to further evaluate and characterize the risk. The consultation should also consider adaptation strategies to prepare for rising sea levels and increased storm frequency and intensity.

QUESTION: Eel Creek, between the salt marsh and Meadow pond is going to be a critical part of any plan for draining the increasing volumes of water being forecast for that ecosystem. Yet today the banks of the creek are being torn up by erosion and have reached a critical state. What can be done now, today, to repair and reinforce the banks of the creek below the bridge so that it will be able to handle the increased volumes of water expected?

KEVIN LUCEY ANSWER: NHCP is not aware of the specific condition referenced in this comment; however, we understand that salt marsh dominated tidal shorelines are erodible. This generally only becomes problematic when assets are positioned adjacent to these dynamic systems. Private landowners are ultimately responsible for managing erosion on their properties. Steps for this often include procuring consultation services to prepare engineering designs, securing regulatory approvals, and enacting the on-the-ground remedies. This parcel-by-parcel management often solves a problem in one location but may exacerbate erosion on an adjacent parcel. In this case, it may be prudent to work at a neighborhood scale to build a solution that can benefit multiple parcels. Please consider submitting a request to participate in the Landowner Technical Assistance Program at <https://seagrant.unh.edu/LTAP>.

QUESTION: Will, and if so how will the Route 1A project incorporate the results from the Seacoast Transportation Corridor Vulnerability Assessment and Plan?

JENNIFER RECZEK ANSWER: The Seacoast Transportation Corridor Vulnerability Assessment (STCVA) and Plan shows one section of roadway within the initial Hampton 40797 study limits, near Boar's Head, that would become affected by daily tide cycles between the 1.7' and 4' of sea level rise scenarios. This same section of roadway has been brought to our attention as an area that currently experiences flooding during storm events. The Hampton 40797 project will consider these results, along with other factors, such as changes in development at the beach due to daily tidal inundation caused by sea level rise, impacts to private property, and the effect on natural resources during the development of corridor alternatives. The current project budget will not be sufficient to improve the entire length of NH 1A within the initial study limits, so it is too early to determine whether the final project(s) that are

Reczek, continued:

implemented will address this location, or in what way. Other locations of concern identified by the STCVA on State roadways will require further coordination with Rockingham Planning Commission and would need to be included within a future version of the Ten Year Transportation Improvement Plan.

QUESTION: I am a long time resident of Glade Path, will there be a plan to improve road condition, raising grade, new pavement etc? The pavement is over 30 years old and in terrible condition.

JENNIFER HALE ANSWER: The flooding study looks at the Glade Path Area to see what can be done to raise the grades and how that will impact rising waters and flooding. There could be permitting challenges associated with this work as well concerns of how the roadways raised would affect properties and structures that are not raised at the same time. The Town will need to implement a long term plan to address and prioritize what needs to be done to address the reoccurring and more frequent flooding hoping that residents and officials can work together to find the funding to get the work done.

QUESTION: Most if not all of the drainage plans being considered for Meadow Pond and Kings look like they could work for the immediate future IF the Creek into which all of this water will flow out is prepared and reinforced. Otherwise it will destroy much of the north end of the Salt marsh. So my question is what can be done right now to prepare the creek to handle the expected volumes of water?

JENNIFER HALE ANSWER: The models that were completed as part of the study look at the impact of sea level rise and increased flooding and how that relates to velocity through the channel. If there is a need of reinforcement of the channel due to the flow in the creek this would need to be looked at during the design by the engineers. However, it is important to note that development along the channel also has an impact of the stability and it may be necessary for property owners to also make efforts to provide enforcement.

QUESTION: What's the timeline for Jay's (SHEA's) estuary mgmt. Plan?

JAY DIENER ANSWER: We'll be working on research and writing for the Vision chapter of the estuary management plan this spring and summer. However, we don't have a firm deadline by which to publish a draft of the management plan. Part of what will determine that is the length of time the new science collaborative will need to provide us with baselines and other information about the key indicators in the estuary. Once that is completed, we can work on Management Goals and Timelines.

We currently have grant funding for the project that will take us to the end of 2022. So my goal, pending the time the collaborative needs, is to get at least a draft of the management plan completed by then.

## VI. PANEL OF ADVISORS

See Appendix 2 for short biographies of the Symposium advisors.

**Laurel Adams**, Regional Economic Development Center

**Roger Stephenson**, Union of Concerned Scientists

**Kirsten Howard**, NH Department of Environmental Services Coastal Program

**Rick Friberg**, TEC Engineering

**Jamie Sullivan**, Town of Hampton Town Manager

**Tim Roache**, Rockingham Planning Commission

**Representative Renny Cushing**, NH House of Representatives

**Johanna Lyons**, NH State Parks

**Tom McGuirk**, McGuirk Properties & Beach Resident

**John Nyhan**, Hampton Area Chamber of Commerce

**Steve Whitman**, Resilience Planning & Design, LLC

**Robert Casassa, Esq.**, Moderator

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## VII. PANEL OF ADVISORS SESSION NOTES

This Section includes the notes taken during the Advisory Panel Session of the Coastal Resilience Symposium.

### GOAL OF THE SESSION

- Provide HBAC with recommendations from a panel of advisors based on their knowledge and expertise as well as what they heard during the presentations and discussion today.
- Recommendations should be: focused on helping to identify how the recent and ongoing works and discussion shared by presenters and participants should inform the coastal resilience update to the HBAC master plan chapter

### RECOMMENDATIONS FROM ADVISORS

#### **Laurel Adams, Regional Economic Development Center**

- Flooding impacts have been felt throughout seacoast economy
- Would like to see HBAC take an expanded look at projects that make Hampton Beach safe and sustainable for residents and the tourist economy
- Support legislation Senator Watters introduced (Coastal Resilience Incentive Zone (CRIZ)) and encourage continued focus on the economy

#### **Roger Stephenson, Union of Concerned Scientists**

- In 2009, we gathered a group of stakeholders to discuss sea level rise impacts for the first time. It was said that in order to respond to sea level rise, decision makers need some degree of certainty to lean on. Since then, science has come a long way. The more it is studied, the more certain and reliable projections are
- 1<sup>st</sup> recommendation: include science in your chapter, make it accessible to the general reader, and make sure science is revisited again and again. Could have the high school help write this piece because language that everyone can understand is important
- 2<sup>nd</sup> recommendation: Lead with relationships. People don't make decisions with science alone. Hampton has tough road ahead with complicated questions and getting warrant articles approved.
  - Make sure SHEA and CHAT are brought into development of the chapter
  - Bring in local businesses
- 3<sup>rd</sup> recommendation: Encourage chapter to consider taking advantage of CRIZ legislation

### **Kirsten Howard, NH Department of Environmental Services**

- Over last few years, DES Coastal Program team has been working with residents, staff, boards in Hampton to collectively come to understand extent of flood risk
- Many have asked “what should we do?” and “what projects do we need?”
- Lots of older HBAC plans that answered question fairly well, but in general, items were not implemented particularly well
- More important question is HOW – how does HBAC and the Town of Hampton create capacity, responsibility, and accountability to make sure we do what we need to do to manage sea level rise
- Likely sea level rise and other coastal hazards will keep getting harder to manage for remaining existence of Hampton
- Hire a resilience and floodplain administrator at the Town
- Establish implementation committee for Hampton and HBAC master plans that would be supported in that role
- Implement CRIZ in Hampton beach area village district or HBAC jurisdiction
- Kirsten ready to help Hampton get federal funds to help pay for projects
- Local match money is needed
- More emphasis on exciting development potential on main street away from vulnerable areas – valuable to think about for both Hampton and HBAC

### **Rick Friberg Jr., TEC Engineering**

- As a business owner with property on beach, living with the water really resonated with me
- Science all points to fact that living with water will be a more common occurrence
- Important to continue high quality development at the beach, to ensure social and economic considerations do not diminish
- Implement zoning ordinances to resist flooding or make properties more resilience to flooding
  - Flood hazard special permit process – properties within zone need to demonstrate the flood risk reduction measures they are taking
- Stormwater – even when tides recede, we still have flood water staying in the streets
- Suggest exploring a beach stormwater master plan to identify projects that address flooding that occurs after tides recede and minimize the time water sticks around and therefore minimize damage

### **Jamie Sullivan, Town of Hampton Town Manager**

- Need to try to continue conversations like the one we’re having today, with subject matter experts to move the ball forward – vital for more symposiums happening more frequently
- Move toward a more proactive way of dealing with hazards
- Have to fund projects and some funding will have to come from funding outside local taxpayers

### **Tim Roache, Rockingham Planning Commission**

- HBAC should be looking at the regional scale – there is a lot going on to the north and south, even down to MA and southern ME
- RPC working on coastal innovative land use guide which will be useful to HBAC
- Decisions and goals will impact others and decisions of neighbors will also impact you
- Like to see all of us work toward a common denominator for sea level rise numbers to plan for
- We're on borrowed time – worried about near term tropical storm/nor'easter and what damage could be done to our shorelines
- Need to invest now instead of pay to fix damages when they happen

### **Rep. Renny Cushing, NH House of Representatives**

- Need funding for projects
  - Hopeful funds will be committed at federal level with new administration
  - Revenue from local taxes are at their capacity limit
  - Missing component is state stepping up to provide funding assistance
- Dialogue with rest of state and other state legislators is that although we're only 18 miles of coastline, we are the jewel of state parks system and are important for the whole state
- Addressing these challenges really does need a regional approach

### **Johanna Lyons, NH State Parks**

- Time to act is now, and HBAC is poised to act now – HBAC has a collective body of lots of stakeholders that have knowledge and expertise to inform the master plan chapter
- Stewardship of our natural resources is very important and act as a buffer for flooding
- Need an integrated beach/estuary marsh plan to see how it all works together
- Changing of the beach area has struck me over the years. Developers are replacing single family cottages with multi-story, multi-resident units
  - What is risk to those properties over time?
- Capacity question needs to be asked
  - Capacity of tourism as well as residents in the beach area – what can the built environment support?
- What happens when the next big storm hits?
- Need to figure out where the money will come from
- We've learned that FEMA comes in with their money, but only comes in for 75% and the remaining 25% has be borrowed from elsewhere



**John Nyhan, Hampton Area Chamber of Commerce**

- State did a review of statewide commissions and HBAC was applauded for how active it has been and the work they've accomplished
- Missing stakeholder: NextEra – need to be included
- Have to consider developing an adequate evacuation plan as part of the master plan that will fit with decisions regarding sea level rise
- Children/grandchildren's future of Hampton Beach may look different than it does today
- Would hate for Hampton Beach to turn into an island
- Need to coordination between town and DOT to make sure whatever roadways and other infrastructure we build will be able to handle increases in water coming in

**Tom McGuirk, McGuirk Properties & Beach Resident**

- Problems with flooding have been known for a long time in Hampton
- Local residents and tourists are important stakeholders that should continue to be part of these discussions
- Lots of work needed to make sure Hampton stays a place for tourists to come and enjoy

**Steve Whitman**

- Important to continue to take a systems perspective as you have done today
- Look at interconnected issues and solutions
- Continue to step back and look at Hampton Beach area in the context of Town and the context of region
- As town works on their master plan, encourage HBAC to do anything they can to help town understand HBAC needs
- Collaborate with town on development of each other's master plans
- Encourage a joint implementation effort between the Town and HBAC plan

## DISCUSSION

Senator Tom Sherman:

- Key is to not only coordinate with Town of Hampton, but also coordinate with entire seacoast region
- Plum Island, MA provides an example of what could happen and dilemmas that could present themselves in Hampton in the future
- We learned from Covid the power of communication
- Attended a meeting with all towns on seacoast and was helpful to have the space for regional communication
- Need to coordinate this effort in a way that efforts becomes synergistic rather than competing
- Need to make sure everyone who has stake in outcomes is involved
- Happy to help through role as a legislator and/or coordinate within the district

Moderator:

- Who would've thought we wouldn't be allowed on the beach (due to COVID) earlier this year? That experience showed how much we value the beach and today has been about how we preserve that resource for business community, residents, and tourists

Moderator asks Jamie Sullivan: What are town needs/problems/concerns?

Sullivan:

- Dealing with boots on the ground issues. How do we deal with issues as quickly as we can?
- I'm seeing flooding, roads blocked off, that had not happened 30 years ago. How do we move that water somewhere else?
- Have to address immediate issues related to water inundation impacts to the Wastewater Treatment Facility
- Issues continue to grow and the Town is challenged with how we deal with the day to day issues coastal hazards present
- When we have a bad storm, had to purchase/borrow vehicles to rescue folks
- First priority is the immediate problem, then need to figure out how we prevent it problems

Moderator asks John Nyhan: What is it that you see in your position as concerns of the chamber of commerce membership regarding sea level rise and what would they like to see be done?

Nyhan:

- Membership extends to five communities around seacoast
- Large percentage come from Hampton and Hampton beach
  - 125 members have businesses around the Hampton Beach area
- Businesses need education on issues, especially if they have a business that they plan on passing on to future generations. Many don't understand coastal hazard impacts
- Chamber needs to work with HBAC to continue education and highlight importance

Stephenson:

- We had Lunch and Learns with local chambers of commerce to see what businesses thought about adjusting to a changing climate
- Brought businesses working with Hampton Chamber of Commerce to talk about business continuity training

Stephenson, continued:

- Fire chief asked how long you could keep doors open after disaster – lion share said week or week and a half
- Also asked if they did any disaster preparedness – most said no
- Hampton benefits from Rockingham Planning Commission (theRPC), UNH, SHEA, Coastal Program, Town staff who are knowledgeable
- Congressional delegation (Chris Pappas) ready for infrastructure legislation that needs to be informed by people on this call
- Warrant articles to pass, word has to get around, and businesses will be really important for doing that
- Three things needed for action: Aware, see it affects them personally, they can do something about it

Moderator asks Johanna Lyons: State parks are a major operator in Hampton. Does state parks have anything they would like to do with the town or issues state parks are facing that have not been mentioned?

Lyons:

- NH state parks are self-funded
- Five top earners, one of which is Hampton Beach
- Most state parks break even or lose money
- State parks manages seawalls, which is a huge investment
  - Seawall is infrastructure that has nothing to do with recreational development or management of people on the seacoast
  - We know seawall is inadequate – getting over washed
  - Need to refocus on how we are going to manage that common piece infrastructure along with other stakeholders who rely on it
- Looking at redoing the roadways, but sometime we might have to start thinking about moving a roadway
- Need more buffer land to protect roads, homes, and other infrastructure

Moderator:

- Hampton beach clearly important for state parks budget. Want to protect it and sustain that revenue brought in by Hampton Beach
- Recall exploration of creating parking spaces outside of beach area to bring foot traffic into state parks

Moderator asks Tim Roache: Have there been high level discussions/views on things Johanna has mentioned?

Roache:

- Yes, seacoast transportation vulnerability assessment project is one example
- Satellite parking is certainly not new and there are opportunities to move those ideas forward and having this conversations is crucial to start thinking about making these things happening

Moderator: Has anyone looked at how a storm like the storm of 1978 would impact our region today?

Roache:

- have not quantified it yet
- Believe 1978 damage cost was around 1 billion dollars and it would certainly be more now
- We are way overdue for a major storm and we're not ready right now

Rep. Renny Cushing:

- Relationship between state and municipality – seawall was paid for by funds paid for by roads, bridges, and highways
- Thinking back then was that we can free up more funds for transportation if we use state park funding to pay for seawall
- State can capture revenue through gas tax that can be used for transportation, including seawall, because without seawall, roads are at great risk

Moderator asks Jamie Sullivan: any impact on drinking water?

Sullivan:

- Yes. Hampton water services provided by a private company
- Town meets with private entity quarterly
- They have pipes that fail, done lots of upgrades in beach area over last several years
- We believe private entity is adequately prepared and communicate consistently with Town

Howard:

- After 2018 nor'easters, most impacted neighborhoods mobilized
  - They started email lists, got together regularly and made a list of requests to the town
- Town has help them obtain funding for projects they requested
- Message to residents and small businesses: Don't underestimate impact you can have by getting together and asking for things you need. That is how there is free parking space for residents in frequently flooded areas – residents asked for that
- Next time storm comes around, we need to have stronger recovery plan in place
- There are opportunities after a storm to take advantage funding from the state and federal government
- DES will continue to stick around and provide technical assistance
- Have small grants available and will keep thinking of ideas to help advance your goals

Moderator asks Laurel Adams: who would you like to partner with moving forward?

Adams:

- John Nyhan has been a strong partner, and so has RPC
- Educating businesses about change is key point I heard during discussion
- Need to have ambassadors to take on that roll and do that education
- Without buy-in, it is hard to get businesses to make needed changes

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## VIII. RECOMMENDATIONS FROM PANEL OF ADVISORS

This Section includes the written recommendations provided by Advisors following the Coastal Resilience Symposium. Advisors were asked to provide HBAC with 3-5 written recommendations, and these recommendations, as well as select recommendations offered during the symposium, are listed below. The recommendations are organized under several overarching categories. Some fall in multiple categories.

### **Regional Approach**

- Take a regional view. This was echoed by participants at the symposium and should help the HBAC take a regional perspective and learn from the efforts of other oceanfront areas in the region while planning for the future.<sup>1</sup>
- Take a step back to the 30,000 foot level. In doing so, recognize the goals and objective the HBAC sets could impact Hampton, Seabrook, Hampton Falls, and North Hampton directly. From an even higher level, the health of the Beach area has a direct impact on the region and State.<sup>2</sup>
- Dialogue with rest of state and other state legislators is that although we're only 18 miles of coastline, we are the jewel of state parks system and are important for the whole state.<sup>3</sup>
- Addressing these challenges really does need a regional approach.<sup>3</sup>

### **Cross-Sector Planning**

- A concerned effort needs to take place to develop a plan that not only takes into account coastal environmental changes (no matter the cause, the effect or the timeframe); but also takes into account the seasonal tourist community — both economic and residential. Property rights and protecting the economic engine should be one of the primary focuses of any plan. It should also include improving infrastructure that protect the characteristics that make Hampton Beach (and neighboring beaches and estuaries) so special.<sup>4</sup>
- We need to understand and quantify the cost of business as usual vs. investing to preserve our future.<sup>2</sup>

### **Education / Communication / Engagement**

- Natural Environment: More education not just for “locals” but visitors, legislators and regional partners on the economic effects of not caring for the marsh and oceanfront systems.<sup>5</sup>
- Include science in your chapter, make it accessible to the general reader, and make sure science is revisited again and again. Could have the high school help write this piece because language that everyone can understand is important.<sup>6</sup>
- Missing stakeholder: NextEra – need to be included.<sup>7</sup>

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<sup>1</sup> Steve Whitman

<sup>2</sup> Tim Roache

<sup>3</sup> Rep. Renny Cushing

<sup>4</sup> Tom McGuirk

<sup>5</sup> Johanna Lyons

<sup>6</sup> Roger Stephenson

<sup>7</sup> John Nyhan

## **Collaboration / Coordination**

- Continue to participate in and make use of the data and understanding available through the Town of Hampton's Master Planning effort. This will provide an opportunity to take a look at the Hampton Beach Area as one distinct portion of the community and inform the Town's long-range plan. It will also provide the HBAC with public input, maps, and other data that can be used to inform the Coastal Resilience Update to the HBAC Master Plan. These two documents provide detail at different scales, but should be coordinated and inform each other.<sup>1</sup>
- Working collaboratively we need to come together on a common denominator for projected sea-level rise and develop a coordinated response. HBAC can and should be part of this discussion.<sup>2</sup>
- Need to try to continue conversations like the one we're having today, with subject matter experts to move the ball forward – vital for more symposiums happening more frequently.<sup>8</sup>
- Look for synergies and overlap between the messages and data that were shared, and get consensus from the partnering organizations on these statements and figures. This came across most clearly on the issue of having one agreed upon sea level rise figure, but could result in several other findings that all parties will agree to and work toward over time.<sup>1</sup>
- Dialogue with rest of state and other state legislators is that although we're only 18 miles of coastline, we are the jewel of state parks system and are important for the whole state.<sup>3</sup>
- Lead with relationships. People don't make decisions with science alone. Hampton has tough road ahead with complicated questions and getting warrant articles approved. Make sure SHEA and CHAT are brought into development of the chapter. Bring in local businesses.<sup>6</sup>
- Need coordination between town and DOT to make sure whatever roadways and other infrastructure we build will be able to handle increases in water coming in.<sup>7</sup>

## **Restoration**

- Infrastructure: Twentieth century infrastructure hardened the living shoreline. Need to plan on restoration of marsh and oceanfront habitat to absorb the energy of storms and flooding events. The North Beach seawall and beach armoring should be studied. Need to assign the management of the seawalls (North Beach and Boar's Head) to an agency that has technical and engineering proficiency and funding.<sup>5</sup>

## **Land Use Regulations and Development Standards**

- HBAC should encourage the town to require use of the NH Coastal Flood Risk Guidance in zoning, and do not allow new buildings or retrofits in the area that is inundated at 1 foot of sea level rise (as a start). That area is surely going to be inundated at high tide in the next 30 years.<sup>9</sup>
- Building standards need to be adopted that not only projected the coastal environmental concerns but also encourage property owner to improve upon their properties without stripping Hampton Beach of its personality; desirability and affordability. Taking too drastic of a step in the wrong direction will cripple the area. A long range goal of constant improvement and compliance will serve us well. We will need to develop a plan that encourages property owners to improve their properties and bring them into compliance without feeling burdened.<sup>4</sup>
- We need to change the attitude of improvement in Hampton. Developing burned out lot of land into vacation condos (most of which are rentals) and tearing down functionally obsolete

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<sup>8</sup> Jamie Sullivan

<sup>9</sup> Kirsten Howard



structures (cottages; motels and apartment buildings) may be more damaging to nostalgia than reality. If building Hotels and Motels are important to Hampton Beach, which they should be, then we need to develop an incentive for such developments to be accomplished.<sup>4</sup>

- Development: Single family cottages are being replaced by multi-unit condos increasing the risk loss of catastrophic storms.<sup>5</sup>
- Consider zoning regulations that incentivizes redevelopment within the beach area that improves the resistance and resilience to flood water (i.e. density bonus for resistance / resilience measures).<sup>10</sup>

### **Infrastructure Planning / Physical Planning**

- Infrastructure: Twentieth century infrastructure hardened the living shoreline. Need to plan on restoration of marsh and oceanfront habitat to absorb the energy of storms and flooding events. The North Beach seawall and beach armoring should be studied. Need to assign the management of the seawalls (North Beach and Boar's Head) to an agency that has technical and engineering proficiency and funding.<sup>5</sup>
- Evaluate the wastewater treatment plan to identify infrastructure needs to accommodate sea level rise.<sup>10</sup>
- Create a Stormwater Masterplan with the Hampton Beach area, identifying capital improvement infrastructure projects to more efficiently drain storm / flood waters accounting for sea level rise projections.<sup>10</sup>
- Retreat: Need to identify areas for retreat and have a buy-out program to lessen infrastructure costs (water/sewer to build to standards of submersion). Do we turn areas into green space that has a less of a development cost (road to parking lot/houses to public space...boat launches, scenic areas).<sup>5</sup>
- HBAC's master plan should provide some visual concepts for how to shift use and maintain value of the Hampton Beach Area under 2 feet and 4 feet of sea-level rise, respectively. Include architectural drawings depicting the Ocean Boulevard/business area, the beach, and some vulnerable neighborhoods. Also consider key access routes and what needs to be done to maintain access under 2 feet and 4 feet of sea level rise.<sup>9</sup>
- Identify and raise low-lying portions of Ocean Boulevard to improve access for emergency vehicles during storm / flood events.<sup>10</sup>
- Need coordination between town and DOT to make sure whatever roadways and other infrastructure we build will be able to handle increases in water coming in.<sup>7</sup>

### **Funding**

- Have to fund projects and some funding will have to come from funding outside local taxpayers.<sup>8</sup>
- Need funding for projects; Hopeful funds will be committed at federal level with new administration; Revenue from local taxes are at their capacity limit; Missing component is state stepping up to provide funding assistance.<sup>3</sup>

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<sup>10</sup> Rick Friberg

### **Coastal Resilience Incentive Zone (CRIZ)**

- HBAC should encourage the town to establish a Coastal Resilience Incentive Zone and associated fund to support resilience actions at Hampton Beach. You need sustained funding to address this problem—I know that sounds vague and unspecific, but that is only because there are so many actions that need funding, that it is hard to recommend only one. If you need a specific project to start with in order to advocate for the establishment of the fund, I would point to the immediate actions needed as a result of the flood engineering study completed by DPW—the CRIZ fund could provide the match funds needed to apply for a FEMA grant to pay for a drainage force main on Kings Highway. It could fund a detailed engineering analysis to help design a secure evacuation and recovery plan in the event of a major hurricane (or any other number of engineering studies needed to figure out how to raise critical local roads, etc.). It could help fund the Resilience and Floodplain Administrator position which would enable you to participate in the Community Rating System. The fund revenue does not have to come from resident taxes or fees. It can be funded by warrant article fundraising or other revenue sources. It can also sit empty to begin with, but creating one is a good first step.<sup>9</sup>
- Encourage chapter to consider taking advantage of CRIZ legislation.<sup>6</sup>

### **Emergency Management / Hazard Mitigation**

- Identify and raise low-lying portions of Ocean Boulevard to improve access for emergency vehicles during storm / flood events.<sup>10</sup>
- Finally, putting on my Meteorologist hat, consider that the threats to the beach area are upon us. The region is overdue for a significant weather event. We have grown into vulnerability in the last 30 years and have not adequately planned to mitigate disaster from significant weather. Tying in emergency management and hazard mitigation is critical.<sup>2</sup>
- Move toward a more proactive way of dealing with hazards.<sup>8</sup>
- Have to consider developing an adequate evacuation plan as part of the master plan that will fit with decisions regarding sea level rise.<sup>7</sup>

### **Program Development and Coastal Management Capacity**

- The HBAC should plan for how to work with the town to create a sustained flood management/coastal resilience program specifically for Hampton and the Hampton Beach Area. The program would be tasked with coordinating with the many entities that are making important decisions that will affect Hampton Beach resilience, implementing HBAC and town plans, refining and taking action on the many specific actions that need to be taken to improve resilience (i.e., engineering feasibility studies, refining land use regulations, coordinating FEMA Community Rating System compliance/participation, etc.), and mobilizing funding/applying for grants to both pay for the program staff person (or people) and fund implementation of actions. When I say actions, I mean everything from helping homeowners elevate/protect their houses and/or secure voluntary buyouts to working with emergency management to improve evacuation planning to advocating for Hampton Beach’s resilience interests when DOT or State Parks are making improvements to holding outreach and education events with residents to writing warrant articles, etc. There are tons of actions that HBAC and the town will identify in their respective plans and we know there is no one empowered to focus on this issue enough to implement those actions, so creating that capacity/program is critical for success.<sup>9</sup>

- As a starting point, HBAC's master plan should support and advocate for the hiring of a Resilience and Floodplain Administrator. NHDES would be happy to help with recruitment for this position—I think if marketed correctly, you would find a lot of excellent candidates. While I do agree that a Rockingham Planning Commission regional resilience and sustainability staff person funded by multiple seacoast towns would be helpful, I do not think that staff person would be able to meet the very specific needs of Hampton and the Hampton Beach area if their attention were divided between multiple communities and focused on both flood resilience and sustainability. I completely support the regional shared staff person concept in addition to a local Hampton-based position, but the regional position would not achieve Hampton Beach's most pressing needs for floodplain administration and coastal resilience coordination at the town and beach.<sup>9</sup>
- The HBAC should work with the town to create a joint Implementation Committee between HBAC and the Town of Hampton to implement the two master plans. This committee would be staffed by the Resilience and Floodplain Administrator.<sup>9</sup>

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## APPENDIX 1: PRESENTER BIOS

This Section includes the bios of the presenters from the Coastal Resilience Symposium.



### SENATOR DAVID WATTERS

#### NH SENATE

Senator David Watters is in his fifth term representing District 4, comprised of Barrington, Dover, Rollinsford, and Somersworth. He serves on the Senate Energy and Natural Resources, Transportation, and Capital Budget Committees. He is the New Hampshire Legislative Member on the Atlantic States Marine Fisheries Commission. Senator Watters and former Senator Nancy Stiles worked together on legislation on many coastal issues, including the Coastal Risk and Hazards Commission. He also passed legislation to form the Commission on Marine Natural Resources and Environment, and other bills to enable communities to respond to storm surge, sea-level rise, and extreme precipitation.

**Email:** [David.watters@leg.state.nh.us](mailto:David.watters@leg.state.nh.us)



### NATHALIE DIGERONIMO

#### NH DEPARTMENT OF ENVIRONMENTAL SERVICES COASTAL PROGRAM

As the Resilience Project Manager for the NHDES Coastal Program, Nathalie DiGeronimo provides outreach and technical assistance to help state agencies, coastal municipalities, and other local and regional stakeholders understand and adapt to current and future coastal flood risks. She is a Certified Floodplain Manager, active member of the New Hampshire Coastal Adaptation Workgroup, and co-chair of the Coastal States Organization Coastal Hazards Planning and Adaptation Work Group. Previously, Nathalie served as a Planning and Policy Analyst for the Hawaii Coastal Zone Management Program. She holds a Master of Coastal Environmental Management from Duke University and a B.A. in Marine Science from Occidental College.

**Email:** [nathalie.m.digeronimo@des.nh.gov](mailto:nathalie.m.digeronimo@des.nh.gov); **Website:** <https://www.des.nh.gov/water/coastal-waters>



JULIE LABRANCHE

**ROCKINGHAM PLANNING COMMISSION**

Julie LaBranche is a Senior Planner with the Rockingham Planning Commission in southeast New Hampshire. Her work in the region includes assisting communities with development of plans, zoning ordinances and regulations relating to land use, natural resource protection, climate change and resiliency, energy efficiency and conservation, and stormwater management; developing Master Plans and other planning documents and policies; and integrating land use and transportation planning concepts. Julie participates as a member of the NH Sea Grant Policy Advisory Committee, NH Coastal Adaptation Workgroup, and served on the Executive Committee for the Northern New England Chapter of the American Planning Association from 2009-2015. She holds a B.S. in Geological Sciences from Salem State College, MA and a M.S. in Earth Sciences-Geology from Montana State University, Bozeman.

**Email:** [jlabranche@therpc.org](mailto:jlabranche@therpc.org); **Website:** [www.therpc.org](http://www.therpc.org)



JAY DIENER

**SEABROOK-HAMPTONS ESTUARY ALLIANCE**

President of SHEA; current chair of the Hampton Conservation Commission; member of the board of the NH Association of Conservation Commissions; member of the Coastal Adaptation Workgroup and CAW Talks; member of the Hampton Bridge Project and the Improvements to Ocean Boulevard PACs; founder of the Coastal Conservation Commissions Roundtable.

**Email:** [jdiener@shea4nh.org](mailto:jdiener@shea4nh.org); **Website:** <http://shea4nh.org/>

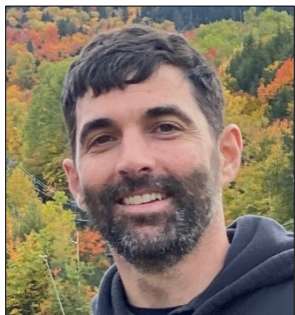


DR. ALYSON EBERHARDT

**NH SEA GRANT EXTENSION**

Alyson Eberhardt is a Coastal Ecosystems Specialist for NH Sea Grant Extension. She works with community members, natural resource managers, and researchers to support efforts to protect and restore coastal ecosystems. She manages the Coastal Research Volunteers, a citizen science program that partners with community volunteers to work on local, coastal research projects to inform local decision making.

**Email:** [Alyson.Eberhardt@unh.edu](mailto:Alyson.Eberhardt@unh.edu); **Website:** <https://seagrant.unh.edu>



KEVIN LUCEY

**NH DEPARTMENT OF ENVIRONMENTAL SERVICES**

Kevin Lucey, Habitat Coordinator for the NHDES Coastal Program (NHCP), manages projects for the restoration, conservation, and evaluation of jurisdictional coastal ecosystems in NH. Kevin has worked for NHDES for 15 years and has focused on stream habitat assessment, salt marsh monitoring, management of invasive plant species, dam removal, and most recently a project to assess the condition and ecological impact of tidal culverts and bridges along NH's seacoast. His work plays a vital role in supporting coastal communities in their identification of high priority restoration and conservation opportunities.

**Email:** [Kevin.P.Lucey@des.nh.gov](mailto:Kevin.P.Lucey@des.nh.gov); **Website:** <https://www.des.nh.gov/water/coastal-waters>



JENNIFER RECZEK, P.E.

**NH DEPARTMENT OF TRANSPORTATION**

Jennifer has over 15 years of diverse experience in engineering design, project management, and construction. For the last four years, she has served as a Project Manager for the New Hampshire Department of Transportation. With a history of providing innovative solutions to complex challenges, she leads the design coordination, public outreach, and financial oversight of many challenging bridge and roadway projects. Outside of work, she enjoys participating in her local triathlon club and serves as Vice-President of the newly formed NH Chapter of WTS-International. Jennifer graduated with a Bachelor of Science degree in Civil Engineering from Bucknell University and is a licensed Professional Engineer in NH.

**Email:** [Jennifer.E.Reczek@dot.nh.gov](mailto:Jennifer.E.Reczek@dot.nh.gov); **Website:** <https://www.nh.gov/dot/>



NOAH SLOVIN

**MILONE & MACBROOM**

Mr. Slovin is a Project Resiliency Planner at Milone & MacBroom. His experience centers around climate and hazard resilience planning. He is particularly interested in community engagement and public outreach. He is currently working on development of the Vision and the Coastal Resilience content for the Town of Hampton Master Plan Update.

**Email:** [nslovin@mminc.com](mailto:nslovin@mminc.com); **Website:** [www.mminc.com](http://www.mminc.com)



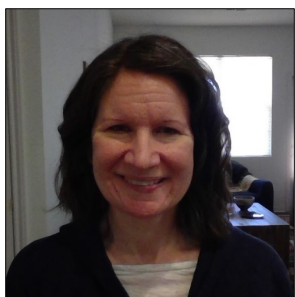


## JASON BACHAND

### TOWN OF HAMPTON TOWN PLANNER

Jason Bachand has served as Town Planner for the Town of Hampton since September of 2014. Mr. Bachand's responsibilities in this position include but are not limited to the review of land use and development applications, drafting and amending local regulations, providing staff support to the Planning Board and other local Boards/Commissions, and directing the daily operations of the Town's Planning Office. In addition to leading the ongoing Town of Hampton Master Plan Update, he has collaborated on several other special projects for Hampton such as the development of Architectural and Site Design Guidelines, an update of the Town's Floodplain Management Ordinance, and an assessment of the Town's eligibility for acceptance into the FEMA Community Rating System. Mr. Bachand earned a Master of Regional Planning (M.R.P.) Degree from the University of Massachusetts at Amherst, and has 20 years of professional planning experience in the public and private sectors. He is also a member of the American Institute of Certified Planners (AICP) and a Certified Floodplain Manager (CFM).

**Email:** [jbachand@hamptonnh.gov](mailto:jbachand@hamptonnh.gov); **Website:** <https://hamptonnh.gov>



## SAMARA EBINGER

### NH OFFICE OF STRATEGIC INITIATIVES, FLOODPLAIN MANAGEMENT PROGRAM

Samara is a Principal Planner at the New Hampshire Office of Strategic Initiatives where she assists in the coordination of the National Flood Insurance Program at the state level. She has a Bachelor of Arts degree in Geography from George Mason University in Fairfax, Virginia and a Master of Arts degree in Geography from the University of New Orleans. She has spent much of her career focused on community floodplain management issues and hazard identification mapping in both the public and private sectors.

**Email:** [Samara.M.Ebinger@osi.nh.gov](mailto:Samara.M.Ebinger@osi.nh.gov); **Website:** [www.nh.gov/osi/planning/programs/fmp](http://www.nh.gov/osi/planning/programs/fmp)



## CHRIS MEANEY

### US FISH AND WILDLIFE SERVICE GULF OF MAINE COASTAL PROGRAM

Chris is the Project Leader and Field Office Supervisor of the United States Fish and Wildlife Service Gulf of Maine Coastal Program located in Falmouth, Maine where he oversees efforts to protect and conserve species and habitats of the Gulf of Maine ecosystem. Prior to his current position, Chris served as Deputy Chief of the NOAA Fisheries Habitat Protection Division in Silver Spring, MD and previously served as a Policy Advisor to the NOAA Administrator. His Masters Degree is in Environmental Management from the Yale School of the Environment and he has a Bachelor of Science in Environmental Conservation from the University of New Hampshire. Chris is a Knauss Sea Grant Fellow and National Conservation Leadership Institute Fellow.

**Email:** [Christopher\\_meaney@fws.gov](mailto:Christopher_meaney@fws.gov); **Website:** <https://www.fws.gov/gomcp/>





## CORAL SILIGATO

### US ARMY CORPS OF ENGINEERS

Coral Siligato is a Project Manager (PM) with US Army Corps of Engineers (USACE), New England District in the Navigation Section. Her work covers maintenance of Federal Navigation Projects (FNP) located within the New England region and includes dredging and repairs to coastal structures. She is the PM for Hampton Harbor FNP and most recently worked on the maintenance dredging project and her next effort will include maintenance to the North Jetty. Coral has a background in Civil Engineering and has worked with USACE for 15 years.  
**Email:** [Coral.e.siligato@usace.army.mil](mailto:Coral.e.siligato@usace.army.mil); **Website:** <https://www.nae.usace.army.mil/>



## JENNIFER HALE, P.E.

### TOWN OF HAMPTON DEPARTMENT OF PUBLIC WORKS DEPUTY DIRECTOR

Jennifer Hale is the Deputy Director of Hampton Department of Public Works (DPW) with 25 years of experience working alongside both private and public entities related to engineering design, policy decision and project management. Since joining DPW in 2005, she has overseen millions of dollars in project expenditures for both emergency and planned projects. These projects have included emergency seawall repairs and new designs, flood studies related to sea level rise and repetitive loss as well as many other infrastructure and roadway projects. Throughout her career, Jennifer has developed exceptional leadership and communication skills demonstrated by her commitment to working with fellow employees, regulating agencies and the public. Jennifer earned her Bachelor of Science in Civil Engineering from the University of New Hampshire. She is professional engineer licensed in New Hampshire and Massachusetts; a licensed septic designer, a certified professional in erosion and sediment control and a graduate of Leadership Seacoast. Jennifer resides in Hampton with her husband and loves the community in which she lives and works.

**Email:** [jhale@hamptonnh.gov](mailto:jhale@hamptonnh.gov); **Website:** [www.hamptonnh.gov](http://www.hamptonnh.gov)

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## APPENDIX 2: PANEL OF ADVISORS BIOS

This Section includes the bios of the Advisors to the Hampton Beach Area Commission during the Coastal Resilience Symposium.



**LAUREL ADAMS**

### **REGIONAL ECONOMIC DEVELOPMENT CENTER**

Laurel Adams has been the President of REDC, a non-profit economic development agency and alternative lender serving Southern NH since 2009. She holds degrees in Business Administration from NH College, and Government and Environmental Studies from Harvard University and is currently studying for a certificate in Mastering Design Thinking from MITMs. Adams was recognized as the 2012 SBA New Hampshire Financial Services

Champion, a member of the 2013 Union Leader 40 under 40 and is a graduate of the Leadership NH Class of '16 as well as the winner of the 2020 Peter Quinlan Award for significant service to the region. And recently helped REDC receive an award from the International Economic Development Council for Equity and Inclusion for the NH New American Loan Fund, the only state-wide fund designed to help first generation foreign born immigrants start or grow their businesses.

**Email:** [laurel@redc.com](mailto:laurel@redc.com); **Website:** [www.redc.com](http://www.redc.com)



**ROGER STEPHENSON**

### **UNION OF CONCERNED SCIENTISTS**

Roger Stephenson is the Northeast Regional Advocacy Director for the Climate & Energy program at the Union of Concerned Scientists. In his role, he works with UCS analysts, outreach specialists, and campaign managers to expand and strengthen the program's outreach, and to engage UCS supporters, Science Network members, and community leaders to promote state and federal climate and clean energy policies. In public service, he served as a special assistant to Secretary of the Interior and in the White

House Council on Environmental Quality. He has worked with hundreds of community leaders to inform the public on climate and energy solutions through speeches, op-eds and contributing articles. In 2011, he co-authored Strategies to Accelerate Climate and Energy Action at the Local Level. Mr. Stephenson earned a BA in zoology and an MS in wildlife biology from the University of New Hampshire.

**Email:** [rstephenson@ucsusa.org](mailto:rstephenson@ucsusa.org); **Website:** [ucsusa.org](http://ucsusa.org)



## KIRSTEN HOWARD

### NH DEPARTMENT OF ENVIRONMENTAL SERVICES COASTAL PROGRAM

Kirsten Howard is the Resilience Program Coordinator for the NH Department of Environmental Services Coastal Program. She works with partner organizations to provide NH coastal communities and state agencies with technical assistance and funding to prepare for coastal climate changes, including sea-level rise and changing weather patterns. She graduated with a B.A. in economics and sociology from Brown University and a M.S. in environmental policy from the University of Michigan. Kirsten is a Certified Floodplain Manager. She lives in Portsmouth with her husband Andy and dog Timber.

**Email:** [Kirsten.B.Howard@des.nh.gov](mailto:Kirsten.B.Howard@des.nh.gov); **Website:** <https://www.des.nh.gov/>

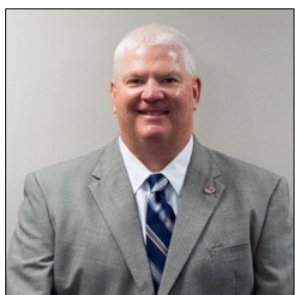


## RICK FRIBERG

### TEC, INC.

Rick Friberg is a Principal and Chief Strategy Officer at TEC, Inc., a full-service civil engineering consulting firm, with offices in Hampton, Andover, and Worcester. Rick is the “minder and refiner” of TEC’s corporate vision, continuously evolving his company’s framework to deliver on its mission, vision, and goals. He has been with TEC for over 15 years and was responsible for establishing TEC’s Hampton office. Rick has led some of the most challenging and transformative land development projects north of Boston. He is a University of New Hampshire graduate and is a Registered Professional Engineer in New Hampshire, Massachusetts, and Maine. Rick is also a member of the Urban Land Institute (ULI) and serves on its Real Estate Advisory Committee. He is enthusiastic about coastal resiliency and believes that it will be one of the great challenges facing engineering professionals and coastal communities over the next 20 years.

**Email:** [rfriberg@theengineeringcorp.com](mailto:rfriberg@theengineeringcorp.com); **Website:** [www.theengineeringcorp.com](http://www.theengineeringcorp.com)



## JAMIE SULLIVAN

### TOWN MANAGER, TOWN OF HAMPTON

Town Manager Sullivan has 37 years of municipal government experience, all with the Town of Hampton. After serving over 30 years with the Hampton Police Department and retiring as Chief of Police, Mr. Sullivan then transitioned to the Town Manager’s Office as Deputy Town Manager. He was appointed as Town Manager on July 1, 2020. Mr. Sullivan holds a Bachelor’s Degree in Public Service: Administration of Criminal Justice from UMass-Lowell and a Master’s in Business Administration from Southern New Hampshire University. He is a graduate of the FBI National Academy Session 198 and the FBI Law Enforcement Executive Development Seminar Session 70.

**Email:** [Jsullivan@hamptonnh.gov](mailto:Jsullivan@hamptonnh.gov); **Website:** [www.hamptonnh.gov](http://www.hamptonnh.gov)



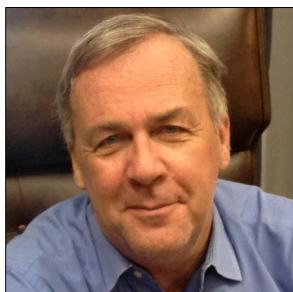
## TIM ROACHE

### ROCKINGHAM PLANNING COMMISSION

Tim Roache is the Executive Director of the Rockingham Planning Commission. He is responsible for overall management of the agency and works with the Commission's highly experienced staff, its Executive Committee, and community representatives on policy and strategic planning initiatives. For nearly three decades Tim has applied his experience Environmental Sciences and Planning to support the communities of New

Hampshire and Eastern Massachusetts. As a degreed Meteorologist, Tim brings a unique perspective to the topics coastal resilience, sea level rise and climate change.

**Email:** [troache@theRPC.org](mailto:troache@theRPC.org); **Website:** [www.therpc.org](http://www.therpc.org)



## REPRESENTATIVE RENNY CUSHING

### NH HOUSE OF REPRESENTATIVES

Representative Cushing is a Democratic member of the New Hampshire House of Representatives from the town of Hampton. He has served several non-consecutive terms (previously representing Rockingham Districts 15 and 22). He serves on a number of committees including the Commerce and Consumer Affairs Committee, Coastal Risk and Hazard Commission, Coastal-

Marine Natural Resources and Environmental Commission, New Hampshire State House Bicentennial Commission, National Conference of State Legislatures Law Criminal Justice & Public Safety Committee, and the Commission on Pretrial Detention, Pretrial Scheduling, and Pretrial Services. Representative Cushing is currently serving his 7th term in the NH House. Since 1993 he has served as a moderator for the Winnacunnet School Board. He co-founded Murder Victims' Families for Human Rights (2004-2015) and has been a member of the National Writers Union-UAW since 1994.

**Email:** [renny.cushing@leg.state.nh.us](mailto:renny.cushing@leg.state.nh.us)



## JOHANNA LYONS (STATE PARKS)

### NH STATE PARKS

Johanna Lyons is the State Park Planning and Development Specialist for the Division of Parks and Recreation. She has worked for the Division for over 30 years starting her career at Hampton Beach State Park. Ms. Lyons lives in Portsmouth.

**Email:** [Johanna.Lyons@dn-cr.nh.gov](mailto:Johanna.Lyons@dn-cr.nh.gov); **Website:** [www.nhstateparks.org](http://www.nhstateparks.org)



JOHN NYHAN

**HAMPTON AREA CHAMBER OF COMMERCE**

Mr. Nyhan is a graduate of Ball State University where he majored in Social Work and Political Science. He has spent most of life in the Human Resources Management field both domestically and internationally.

Mr. Nyhan was past Chairman of the Hampton Beach Area Commission for (10) years and was heavily involved with coordinating a successful campaign to secure \$14.5 Million from the State of New Hampshire to Redevelop Hampton Beach State Park. Mr. Nyhan has coordinated a number of private/public partnerships around a number of economic development initiatives totally over \$40 Million dollars.

He has been an active member of the Hampton Rotary Club for over seventeen years and has been very active with Experience Hampton since 2010 and was the President until 2017. Since 2018, he has been the President of the Hampton Area Chamber of Commerce serving (5) seacoast communities and over (500) members. In addition to his role at the Chamber, he is serving on the Governor's Reopening Task Force, Governor's appointed member to the NH State Parks Advisory Council was and recently elected to the Board of the NH Association of Chamber of Commerce Executives.

He has been married to Pamela Shattuck Nyhan for 40 years and has three children and three grandchildren.

**Email: [john@hamptonchamber.com](mailto:john@hamptonchamber.com); Website: [www.hamptonchamber.com](http://www.hamptonchamber.com)**



TOM MCGUIRK

**MCGUIRK PROPERTIES / MCGUIRK'S OCEAN VIEW**

Tom has worked in Real Estate since 2004 after spending 8 years in California working on Sitcoms for Paramount Studios. He holds a Bachelor's degree from Rensselaer Polytechnic Institute, Troy, NY and a Master's degree from Emerson College, Boston, MA.

Specializing in Beach Properties, Tom is well-known on Hampton Beach as a member of the McGuirk family -- whose Restaurant has been a landmark on Hampton Beach since 1991. Tom is a lifelong resident of Hampton Beach; summers in his youth and year-round starting in 2003.

Tom has served on Hampton's Zoning Board of Adjustment since 2005; General Manager of McGuirk's Ocean View since 1991 and as the Owner / Broker of McGuirk Properties since 2015.

**Email: [tommcguirk@icould.com](mailto:tommcguirk@icould.com); Website: [Mcguirkproperties.com](http://Mcguirkproperties.com)**



## STEVEN WHITMAN

### RESILIENCE PLANNING & DESIGN, LCC

Dr. Steven Whitman is a professional planner and educator who has been working in the public, nonprofit, and private sectors in New England for twenty-four years. Steve also works on ecological design projects and courses elsewhere in the US and internationally. Steve established Resilience Planning & Design to assist communities with comprehensive planning initiatives, and on implementation actions that reinforce their vision and future land use plans. His firm will be assisting the Town of Hampton with a new municipal master plan. Steve is a part-time faculty member at Plymouth State University and an alternate on the Plymouth, NH Planning Board.

**Email:** [steve@resilienceplanning.net](mailto:steve@resilienceplanning.net); **Website:** <https://resilienceplanning.net/>

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## APPENDIX 3: HBAC COMMISSIONERS, MASTER PLAN SUBCOMMITTEE BIOS, AND MODERATOR BIO

### HBAC COMMISSIONERS

**Nancy Stiles**, Chairman, Hampton Representative

**Dean Merrill**, Vice Chairman, At Large Member

**Mike Housman**, Treasurer, NH Department of Natural and Cultural  
Resources Representative

**Bob Preston**, Hampton Area Chamber of Commerce Representative

**Bob Ladd**, Hampton Beach Village District Representative

**Rick Griffin**, Hampton Representative

**William Watson**, NH Department of Transportation Representative

**Barbara Kravitz**, Rockingham Planning Commission Representative

**Chuck Rage**, Hampton Beach Village District Representative

**Jason Bachand**, Ex Official Member, Town Planner

**Ann Carnaby**, Administrative Assistant

### HBAC CONTACT INFORMATION

Address: 100 Winnacunnet Road Hampton, New Hampshire 03842

Email: [hbacchair@comcast.net](mailto:hbacchair@comcast.net)

Website: <https://www.hamptonnh.gov/316/Hampton-Beach-Area-Commission>

## MASTER PLAN SUBCOMMITTEE BIOS



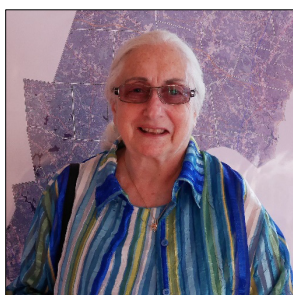
NANCY STILES

### HBAC CHAIR AND EVENT SUBCOMMITTEE

Senator Nancy Stiles is Chair of the Hampton Beach Area Commission. Nancy is married, has three sons, five grandchildren and two-soon to be three great-grandsons. As a Credentialed School Nutrition Director she spent thirty years serving the Hampton School District. She served her professional association representing the nine northeast states and was the first nationally elected Public Policy chair.

After her professional retirement Nancy was elected and served twelve years in the NH Legislature, three terms in the House and three terms in the Senate. In the Senate she served as Chair of Education; Chair of the powerful Health, Education and Human Services Committee as well as Chair of Transportation. Stiles chose to retire from the Senate in 2016 after which she was appointed to the Hampton Beach Area Commission and elected Chair. Nancy has served on many local, state, and international boards. A dedication in the 2019 Hampton Town Report recognized her for her public service.

**Email:** [hbacchair@comcast.net](mailto:hbacchair@comcast.net)



BARBARA KRAVITZ

### HBAC COMMISSIONER AND EVENT SUBCOMMITTEE

Commissioner HBAC, representing the Rockingham Planning Commission (the RPC); Immediate Past Chair, the RPC and Commissioner representing the Town of Hampton; Member At Large, Steering Committee, Hampton Comprehensive Master Plan Update; Member, Steering Committee, Regional Economic Development Center Comprehensive Economic Development Strategy, representing the RPC. For 9 years she served as the Planning Board

Administrator for the Town of Seabrook. When active in her strategic business consulting firm, Barbara was invited to serve on the Securities and Exchange Commission Government-Business Forum on Small Business Capital Formation. Barbara received her BA degree from Brandeis University and is a member of the Board of Fellows. She lives in Hampton with her husband Sunny and our daughter.

**Email:** [bkravitz777@yahoo.com](mailto:bkravitz777@yahoo.com)



## ANN CARNABY

### HBAC ASSISTANCE AND EVENT SUBCOMMITTEE

Ann is recently retired as the owner/designer of Tracy Theatre Originals, a nation-wide theatrical costume rental house specializing in Broadway musicals and was the designer for the Hampton Playhouse before it closed. Ann has served several terms on both the Hampton Planning Board and as one of Hampton's three commissioners to the Rockingham Planning Commission. She also serves on the reestablished Hampton Heritage

Commission. She holds an MA from New York University.

She is honored to have been part of the crafting this symposium, and looks forward to the added dimension this work will lend to the comprehensive update of the Hampton Master Plan currently under way by the Hampton Planning Board.

**Email: [annthehatter@gmail.com](mailto:annthehatter@gmail.com)**

## MODERATOR BIO



## BOB CASASSA

### CASSASSA LAW OFFICE

Lifelong resident of Hampton. Moderator for Town of Hampton from 2004 - present. Attorney with Casassa Law Office in Hampton since 1988. Practice includes concentrations in real estate conveyancing and land use. Graduate of Dartmouth College and Boston College Law School.

**Email: [rcasassa@casassalegal.com](mailto:rcasassa@casassalegal.com)**

**HBAC wishes to thank the New Hampshire Department of Environmental Services Coastal Program and Kirsten Howard, Resilience Program Coordinator. Thank you also to Liz Durfee, EF | Design and Planning, LLC, Symposium Coordinator.**

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## APPENDIX 4: POST-SYMPOSIUM SURVEY

A follow up online survey was conducted from February 19-26, 2021. The purpose of the survey was to collect input from all Symposium participants to help guide and enhance efforts to build coastal resiliency in the Hampton Beach area and beyond. The survey was also designed to provide an opportunity for participants to give feedback on the format of the event and their interest in joining in future efforts.

A total of 17 people completed the survey. Results from the survey are summarized below.

**Question 1** asked survey respondents to identify themselves. The most prevalent respondents included Hampton residents followed by regional professionals and state professionals. Individuals who selected other identified as ‘Town employee,’ ‘Hampton resident and Town Employee,’ and ‘Summer Resident.’ Table 2 displays the responses to this question.

**Table 2. Responses to the survey question “Please select the option that most accurately reflects you”**

Stakeholder Group	% of Responses
Hampton resident	29%
Regional professional	18%
State professional	18%
Other (please specify)	18%
Hampton board or commission volunteer	6%
Elected official	6%
Business representative	6%
Non-profit representative	0%
Federal professional	0%

**Question 2** was an open-ended question that asked, “What was your #1 takeaway from the Symposium?” The responses to this question included positive feedback about the event, recognition of the complexity of both the challenges faced by the community as a result of sea level rise as well as those faced by the HBAC in developing the Master Plan, and understanding of the need to collaborate. The individual responses to this question follow:

- There is an enormous amount of information and energy out there related to this topic, and that it will take time and momentum to implement various solutions.
- The well-presented data is massive and will be hard to condense to the points that should be included in HBAC’s master plan.
- There was a lot of very useful information, especially given the 7-minute (or so) presentation segments.
- Impressed by the level of effort in and around Hampton and with the level of interest among HBAC members.
- Worthwhile.

- There are many agencies at the local, state, and federal levels involved in climate change resilience that might benefit from greater coordination.
- Take some planning actions now.
- The sheer complexity of the challenges.
- A wide cross section of people believe that sea level is rising and are concerned about enough to start planning for it.
- Great information on data sharing.
- Collaboration will provide the best result.
- I was only on for a short time as I was working (Planning Office in Hampton). What I heard was enlightening and amazing. Great job.
- We are late to planning for sea level rise.
- Boards and agencies need to work together - all have similar problems to address. The Hampton Master Plan is a very important piece.
- The Town doesn't seem quite ready to tackle the reality of 4' of sea level rise and the way that will alter the community. The sea has altered the landscape of Hampton Beach many times and dramatically, up until the 1930's, and will do so again in the next 80-100 years.
- There is an impressive of work going on by multiple agencies. A method of coordination is urgently needed to make sure that work is divided up and not duplicated, and communication is greatly needed to inform the public.
- Very informative.

**Question 3** sought feedback on specific actions that survey respondents intend to take or advocate as a result of what they learned during the Symposium. Survey respondents provided input on issues including sharing findings with the public and providing education, coordinating and collaborating, natural adaptation measures such as buffers and living shorelines, and considering policies and regulations to appropriately guide development in vulnerable areas. The individual responses to this question follow:

- Continue to share our results with the public.
- To include actions to "live with" water in a way that would be appropriate for master plan language.
- Yes. Continued efforts and advocacy to ensure that the updates of both the Town and Beach Master Plans effectively address coastal resilience issues.
- Continue to support the work in Hampton where we can and identify opportunities for resources to support projects.
- Talk to the folks in Hampton
- I want to learn more about the possibility of moving sand from the dredging of Hampton Harbor to North Beach where the beach is eroding rapidly.
- Stop building hard walls; living shorelines work better
- I'm interested in learning more about the role of wetlands in addressing the challenges.
- Educating the business community
- Collaboration.

- I am working on the Master Plan with Jason Bachand; I will be working and continue to work on Coastal and Vision and the entire Plan.
- Plan on retreat and disruption of business practices.
- As a resident I will try to be aware of what is happening.
- That we need to make sure the investments we make now fit with the changing landscape of the community. Don't just set 4' as the standard. We need to be considering policies that manage redevelopment and limit new development in these areas, and plan for much of this area to be reclaimed by nature. Make sure we are not investing in projects that are designed for a community that will not be there in the future, instead, look at what we can do to improve the experience before area is too impacted to be habitable.
- Yes. I am involved in helping to identify needs in my very local community of Boars Head to Winnacunnet. I will reach out to some of those who spoke in order to get better information.
- Very aware of flooding issues.

**Question 4** was another open-ended question that honed in on a theme that many participants in the Symposium and survey respondents highlighted: collaboration. In response to the question "What opportunities do you see for collaboration among Symposium participants," survey respondents said:

- To share information and resources.
- I think that is something that "may" have been evident to the presenters. I am hopeful that those identified will continue the work seeking possible action solutions.
- The presentations involves a variety of business and government sectors all working toward a common goal. Sharing and applying that individual knowledge will be of great benefit to Hampton.
- Recommendations from CHAT incorporated into the HBAC Master Plan.
- The collaborative group discussed by Chris Meaney was unknown to me and others at the symposium. How might that group's activities focused on the Hampton-Seabrook Estuary inform the outreach work of SHEA and Hampton's DPW's flood studies.
- Planners working with policy makers, policymakers working with lawmakers.
- Unsure.
- Continue discussions with additional participants.
- Regular, scheduled meetings to ensure that resources are best used.
- It would be great to have them actively involved in our Comprehensive Master Plan to obtain amazing feedback, ideas and results.
- It would be great to have an annual symposium of newest science, practice and agency/municipal response.
- The town and state need to work closely together. Parks system is an integral part.
- Continued discussion amongst all these participants on policy development to manage building and use in the coastal area, planning for a landscape that will change and be reclaimed by nature in the future, and figuring out how to fund the changes that are made, since very limited funding is available.
- It is an absolute necessity.
- Resident participation.

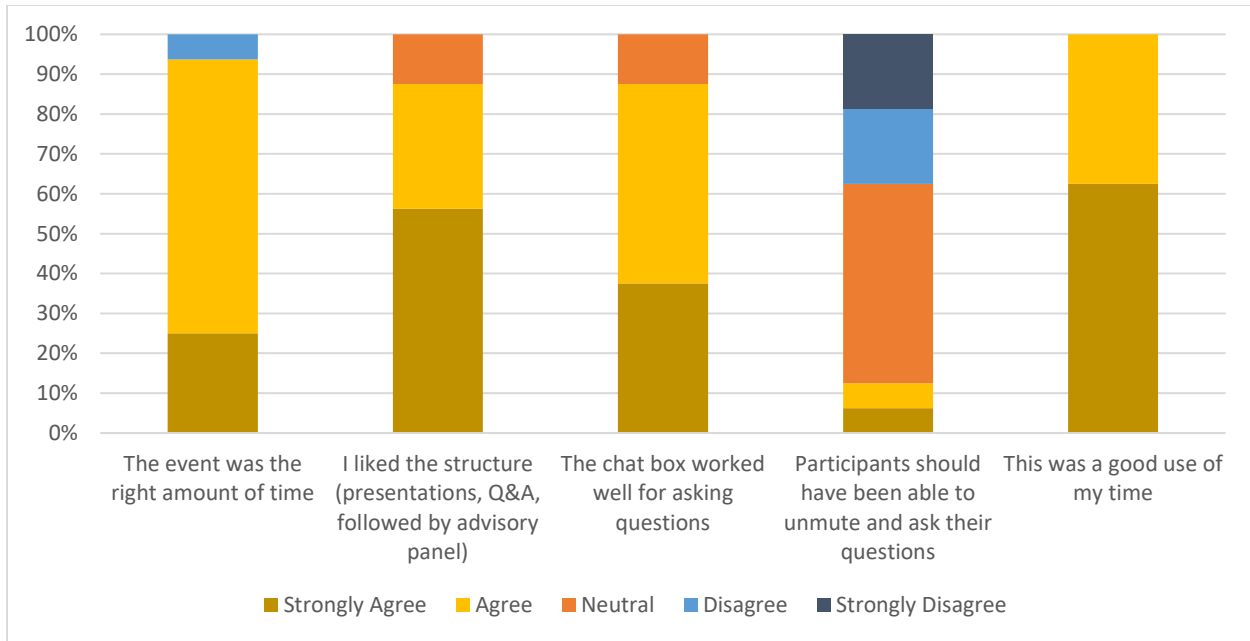
**Question 5** provided survey respondents the opportunity to provide additional input on increasing coastal resiliency in the Hampton Beach area and to identify additional stakeholders that need to be involved. Respondents noted a need for more outreach, the need to make this issue (coastal resiliency) a priority, and the need to include cost factors. Specific groups that were identified were residents, businesses, town boards, town officials, police, fire, local, state, and federal government, regional planning agencies, non-profits, local business owners, legislative leaders, and local neighborhoods. Individual responses to this question follow:

- The experts to provide guidance to HBAC, the residents and businesses to acknowledge what should/can be done and the town boards when reviewing plans and/or requiring recommendations.
- Involve everyone - local, state, federal government; regional planning agencies, non-profits, local business owners, residents, etc.
- Unfortunately I was unable to attend the full event, but I think it would be great to have students involved.
- We need more outreach to raise the awareness of town residents about resilience initiatives currently underway and solicit their views on priority actions.
- Everyone needs to find their place in the chain & support the whole chain of resilience activities.
- Not at this time.
- Legislative leaders with the ability to address climate change need to be involved.
- Everyone needs to be involved. Police, Fire, Town Officials. We need to make this a priority for Hampton. Coastal flooding is getting scarier by the month/year.
- No.
- It would be useful to involve residents in local neighborhoods as the needs are different based on geography. I think people would volunteer where needed if someone would coordinate.
- Good to listen to residents. Also cost factors.

**Question 6** sought feedback on the event itself. Responses were positive and are summarized below and displayed in Figure 1.

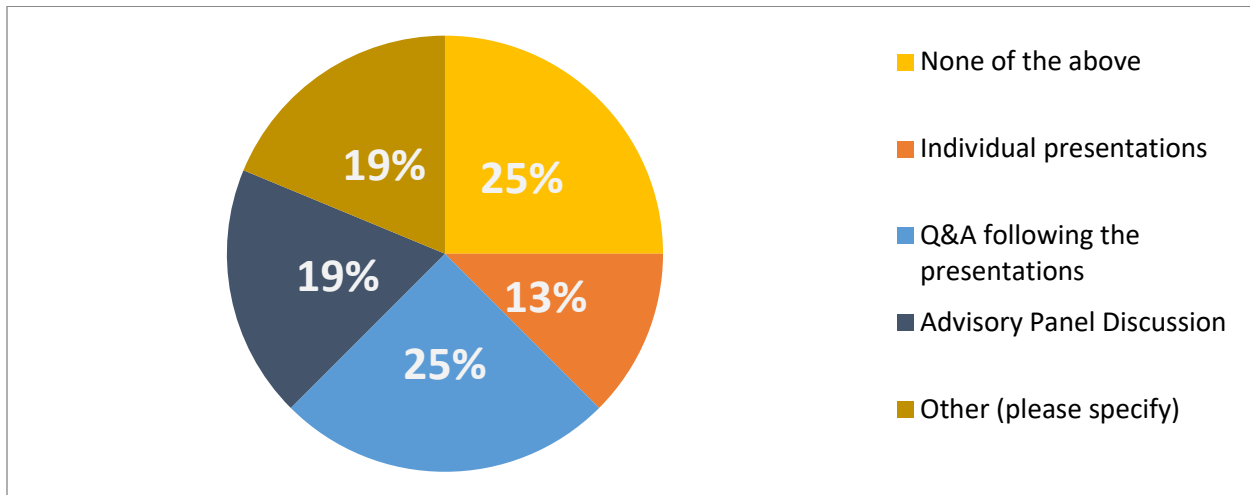
- 94% agreed or strongly agreed that the event was a good amount of time. One individual disagreed.
- 88% liked the structure of the event. Other respondents were neutral on this topic.
- 88% thought the chat box worked well for asking question. Other respondents were neutral on this topic.
- Responses were more mixed about unmuting. 12% agreed or strongly agreed that participants should have been able to unmute, 38% disagreed or strongly disagreed that participants should have to unmute, and 50% were neutral on this topic.
- 38% agreed and 63% strongly agreed that the event was a good use of their time.





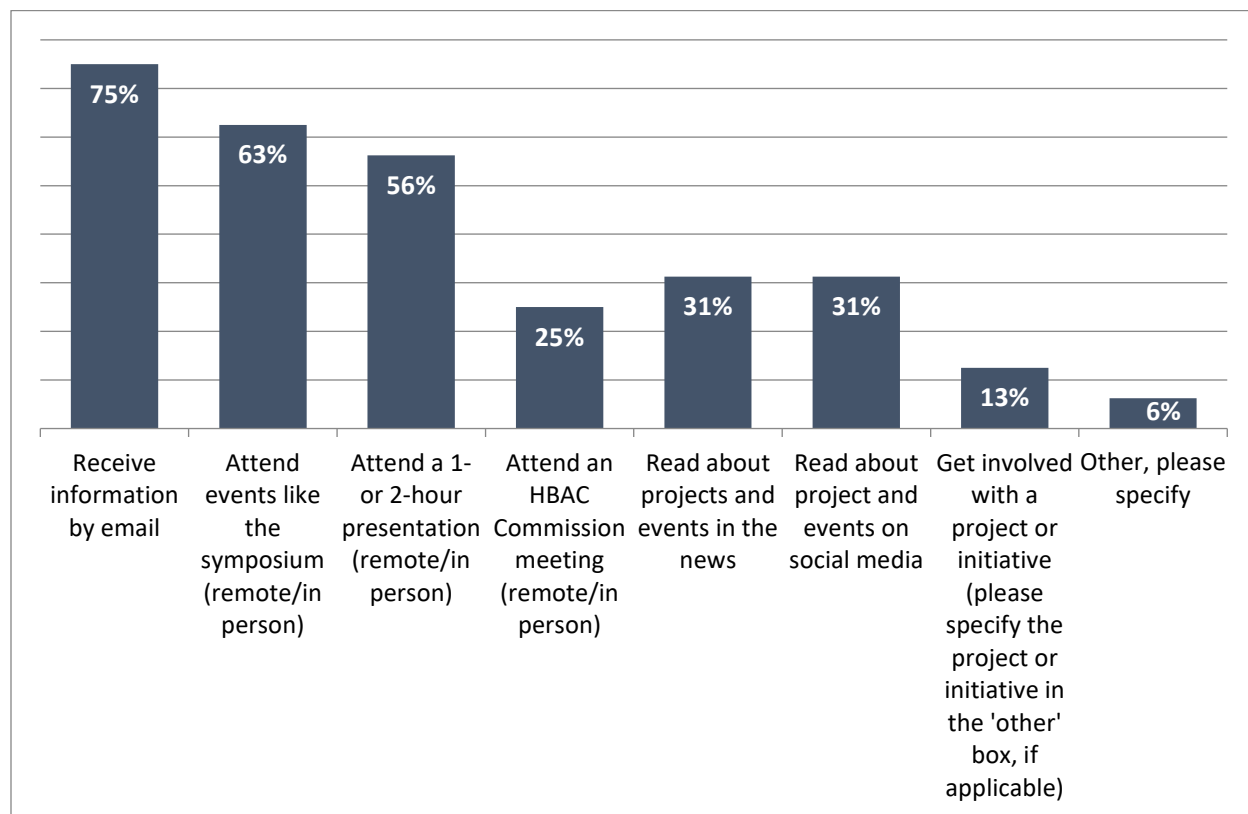
**Figure 1. Responses to survey questions about the time, logistics, and structure of the event Symposium**

**Question 7** asked survey respondents to provide feedback about which Symposium sessions they would have allocated more time to. Responses were divided on this topic, as shown in Figure 2. Three individuals selected ‘other’ and said: “there should be a section for municipal/state agencies to talk about their management (existing/future),” and “next steps.” One individual indicated that they only attended the morning session and therefore did not provide a response.



**Figure 2. Responses to the survey question “What would you have allocated more time to?”**

**Question 8** asked for feedback on how participants wanted to stay involved moving forward. Respondents were asked to choose all that apply. A majority of respondents indicated a preference for email, attending events like the Symposium, and/or attending a 1- or 2-hour presentation. One individual commented that they would like to get involved with possibilities for increasing sand/dune buildup in the North Beach area. Figure 3 displays the results of this question.



**Figure 3. Responses to the survey question “How would you like to stay involved and informed moving forward? Select all that apply.”**

## APPENDIX 5: SUBMISSIONS BY PRESENTERS IN ADVANCE OF SYMPOSIUM

In advance of the Symposium, presenters submitted short descriptions of their presentations. Appendix 5 includes the presentation descriptions, as provided by each presenter.

## PRESENTATION SUMMARIES & LINKS TO ADDITIONAL INFORMATION

### NEW HAMPSHIRE COASTAL RISK AND HAZARDS COMMISSION REPORT AND LEGISLATIVE UPDATE

#### SENATOR DAVID WATTERS, NH SENATE

The NHCRHE report presented the best available scientific analysis of current and projected sea-level rise and offered a full menu of planning responses. The legislature moved to require state agencies to adopt recommendations and revisit the science every five years, and this process has been accomplished. CAW and other groups have assisted municipalities in planning for changes in the coastal environment. To address other environmental issues, such as ocean acidification, nitrogen, plastics, PFAS, and other environmental threats, CoMNaRE was established and issued three reports to date. Other legislation has been passed to give municipalities a toolkit to assist businesses and residents make needed changes to their properties, develop funding mechanisms, and preserve historical, cultural, and natural resources. This work can inform the master plan update by indicating the breadth of planning needed now to avoid future costs and to keep a resilient economy and community, and suggesting areas of assistance from state agencies.

**Additional Information:** [New Hampshire Coastal Risk & Hazards Commission \(nhcrhc.org\)](http://nhcrhc.org)  
[NH Coastal Marine Natural Resources & Environment Commission \(COMNARE\) \(unh.edu\)](http://unh.edu)

### NH COASTAL FLOOD RISK SUMMARY

#### NATHALIE DIGERONIMO, NH DEPARTMENT OF ENVIRONMENTAL SERVICES COASTAL PROGRAM

The 2019-2020 New Hampshire Coastal Flood Risk Summary is comprised of two parts. [Part I: Science](#) (2019) provides a synthesis of the state of the science relevant to coastal flood risks in New Hampshire and includes updated projections of relative sea-level rise, coastal storms, groundwater rise, precipitation and freshwater flooding. [Part II: Guidance for Using Scientific Projections](#) (2020) provides science-based and user-informed guiding principles and a step-by-step approach for incorporating the updated coastal flood risk projections from Part I into private, local, state, and federal projects, including planning, regulatory and site-specific efforts. Together, Part I and Part II provide a framework to help decision-makers:

- Select and plan for relative sea-level rise (RSLR) estimates that range from 1.3-2.3 feet by 2050, 2.9-6.2 feet by 2100, and 4.6-11.7 feet by 2150, assuming that global greenhouse gas concentrations will stabilize by the end of the Century (note: higher RSLR estimates are advised should decision makers prefer to assume that global greenhouse gas concentrations will continue to grow through 2100 and that the rate of ice mass loss from Antarctica will accelerate even more rapidly);
- Adjust current coastal storm surge depths and extents, and augment existing floodplain management and protection standards to account for RSLR;
- Assess risks associated from increasing groundwater levels which are projected to rise as a percentage of RSLR up to 3 miles inland from the coast;

- Account for projected increases in extreme precipitation by multiplying present-day extreme precipitation rainfall estimates by at least 15%; and
- Identify and evaluate adaptation options to minimize coastal flood risks.

**Additional Information:**

New Hampshire Coastal Flood Risk Summary, Part I: Science (2019)

New Hampshire Coastal Flood Risk Summary, Part II: Guidance for Using Scientific Projections (2020)

## SEACOAST TRANSPORTATION CORRIDOR VULNERABILITY ASSESSMENT (STCVA)

### JULIE LABRANCHE, ROCKINGHAM PLANNING COMMISSION

The goal of the Seacoast Transportation Corridor Vulnerability Assessment (STCVA) is to enhance regional coordination in New Hampshire for transportation networks vulnerable to sea-level rise and other coastal hazards in order to maximize information sharing, identify opportunities to fill data gaps, and develop shared understanding of options for future transportation planning. Coastal storms and flooding already threaten state and local transportation infrastructure in New Hampshire's seacoast. These risks are expected to increase with sea-level rise, causing potential daily inundation of some transportation assets within the next 80 years. Sea-level rise and other climate change impacts will need to be considered as municipalities and NHDOT maintain or replace aging existing transportation assets and design and construct new systems. Effective adaptation to increasing coastal flood risks will depend upon coordination among transportation decision-makers, municipalities, regulators, and other authorities to share information and develop consistent (or complimentary) transparent methods to ensure a safe and functioning NH Seacoast transportation network.

**Additional Information:** <https://www.therpc.org/regional-community-planning/climate-change/STCVA>

## SEABROOK-HAMPTONS ESTUARY ALLIANCE (SHEA) INCLUDING HAMPTON CHAT, HAMPTON SITUATION ASSESSMENT SURVEY, HAMPTON-SEABROOK ESTUARY LAND USE PLANNING AUDIT, HAMPTON CONSERVATION COMMISSION

### JAY DIENER, SEABROOK-HAMPTONS ESTUARY ALLIANCE

Focusing on three projects SHEA has spearheaded, identifying parcels for salt marsh migration, the Coastal Hazards Adaptation Team process and recommendations, and the developing estuary management plan, I will touch on the work that SHEA is doing to address flooding issues in Hampton Harbor that can contribute to the information included in the HBAC Coastal Environmental Hazards master plan update.

**Additional Information:** <http://shea4nh.org/>

## HAMPTON BEACH AREA BEACH AND DUNE PROFILING, DUNE RESTORATION EFFORTS, AND NH COASTAL LANDOWNER TECHNICAL ASSISTANCE PROGRAM

### ALYSON EBERHARDT, NH SEA GRANT EXTENSION

This presentation will share results of projects of the Coastal Research Volunteers including the NH Volunteer Beach Profile Monitoring Program and sand dune restoration and monitoring efforts. Data

from both projects provide evidence that beaches and dunes are valuable storm protection assets in Hampton and should be restored and maintained wherever possible. In addition, findings from the Coastal Landowner Technical Assistance Program, which provides technical assistance to coastal residents concerned about flooding and/or erosion on their property, will be shared including a summary of concerns, priorities, and information needs.

**Additional Information:**

**NH Volunteer Beach Profiling Program:** <https://seagrant.unh.edu/beach-profiling>

**Coastal Landowner Technical Assistance Program:** <https://seagrant.unh.edu/LTAP>

**Coastal Habitat Restoration:** <https://seagrant.unh.edu/CoastalHabitatRestoration>

**\*see attached project data sheets\***

## RESILIENT TIDAL CROSSINGS STUDY

### KEVIN LUCEY, NH DEPARTMENT OF ENVIRONMENTAL SERVICES COASTAL PROGRAM

In 2018, the NHCP and The Nature Conservancy (TNC) assessed all known tidal crossings in NH's 17 coastal communities in accordance with the NH Tidal Crossing Assessment Protocol. Tidal crossing assessment data were used to rank and prioritize sites based on structure condition, flood risk and ecosystem health. The Resilient Tidal Crossings NH Project was designed to better enable community officials and road managers to enact the strategic repair/replacement of tidal crossing infrastructure and to identify high priority restoration and conservation opportunities at tidal crossing sites. Kevin's presentation will provide an overview of the Resilient Tidal Crossings Project with specific emphasis on the Hampton Seabrook Estuary.

**Additional Information:** <https://www.des.nh.gov/water/coastal-waters/tidal-stream-crossings>

## INCORPORATING PRESENT-DAY AND FUTURE COASTAL FLOOD RISK INFORMATION INTO THE ROUTE 1A UPDATES AND THE HAMPTON BRIDGE DESIGN PROJECT

### JENNIFER RECZEK, NH DEPARTMENT OF TRANSPORTATION

This presentation will provide a brief summary of how existing coastal flood risk information has been or will be incorporated into the Hampton Harbor bridge replacement project and the NH 1A roadway improvement project. It will also touch on the current status and next steps for each project.

**Additional Information:** <https://www.nh.gov/dot/projects/hampton40797/index.htm>,

<https://www.nh.gov/dot/projects/seabrookhampton15904/index.htm>

## HAMPTON MASTER PLAN PHASE I

### NOAH SLOVIN, MILONE & MACBROOM

The presentation will discuss the Hampton Master Plan update timeline and progress, report on public input received so far, and summarize the contents of the current draft Vision and Coastal Resilience content.

**Additional information:** [www.tinyurl.com/PlanHampton](http://www.tinyurl.com/PlanHampton).

**Provide input through online survey:** [www.surveymonkey.com/r/planhampton](https://www.surveymonkey.com/r/planhampton).

## OVERVIEW OF THE TOWN OF HAMPTON MASTER PLAN – PHASE II PROJECT

### **JASON BACHAND, TOWN OF HAMPTON TOWN PLANNER**

The current Town of Hampton Master Plan was adopted in 1985, with some subsequent chapter amendments since that time. Recognizing the need for a modern, user-friendly Master Plan, the Planning Board established a Master Plan Steering Committee to help guide the process. Phase II of this important project is the comprehensive update of all Master Plan content (less the Vision and Coastal Management components currently being prepared under Phase I), including the required Land Use component and other content including but not limited to transportation, natural resources, recreation, historical resources, and housing. It will also introduce essential topics absent from the current Master Plan such as economic development and regional concern. The updated Town Master Plan will also include a detailed implementation component, which identifies potential funding sources, responsible parties, and suggested timeframes, ensuring that the plan is a living document that does not collect dust on a shelf. A modern, user-friendly Master Plan will better position the Town of Hampton when pursuing grant funding opportunities, will provide a basis for updates to the Zoning Ordinance and other Town regulations, and will help the Planning Board with its decision-making activities. This will be the focus of my presentation at the February 9<sup>th</sup> Symposium.

The Planning Board and its Master Plan Steering Committee formally initiated this planning effort in June of 2019, although substantial preliminary activity occurred prior to that time. A consultant for the Phase II Comprehensive Master Plan Update is expected to be selected in February of 2021, with work to commence shortly thereafter. We anticipate work being completed on this project in late 2022.

The HBAC holds an important seat at the table on the Master Plan Steering Committee, providing a critical link between the Town-wide Plan update and the ongoing efforts of the HBAC. The Town's Phase I Coastal Management work is currently underway and will be further incorporated during the Phase II process. The timing is ideal, as it would allow the HBAC to build upon the Town's Phase I work, while also allowing the Town-wide plan to be further informed by HBAC's plan update, should that work occur concurrently with Phase II.

**Additional information:** <https://hamptonnh.gov/516/Hampton-Master-Plan-Update>

## NEW FEMA FLOOD INSURANCE RATE MAPS AND HAMPTON'S COMMUNITY RATING SYSTEM STATUS

### **SAMARA EBINGER, NH OFFICE OF STRATEGIC INITIATIVES, FLOODPLAIN MANAGEMENT PROGRAM**

Samara's presentation will provide a high level overview of the National Flood Insurance Program (NFIP) and the new Flood Insurance Rate Maps for Hampton that are effective January 29, 2021. She will also discuss the Community Rating System (CRS) incentive program and community requirements for joining.

Reducing local flood risk by going beyond minimum NFIP requirements and participating in CRS will result in a more flood-resilient community. In practical terms, this can mean the potential reduction of:

- Loss of human life
- Property and infrastructure damage
- Environmental damage

- Displacement of residents
- Disruption of businesses
- Burden on community infrastructure, services, staff.

**Additional Information:** <https://www.nh.gov/osi/planning/programs/fmp/coastal-mapping-project/rockingham-county.htm>

**Community Rating System webpage:** <https://www.nh.gov/osi/planning/programs/fmp/crs.htm>

## HAMPTON-SEABROOK ESTUARY COLLABORATIVE

### CHRIS MEANEY, US FISH AND WILDLIFE SERVICE GULF OF MAINE COASTAL PROGRAM

The Hampton Seabrook Estuary Collaborative is an informal group of local, state, and federal organizations focused on aligning resources and activities to improve the long-term health and vitality of the Hampton Seabrook Estuary and its surrounding communities. This presentation will highlight how and why the group formed, the current approach to gathering information, and the anticipated next steps. The current focus of the collaborative is on the estuary's salt marsh ecosystem. The science, data, and management information associated with the estuary, as well as any gaps, needs, and potential future actions could inform HBAC's master plan update or contribute to resilience goals.

## HAMPTON HARBOR FEDERAL NAVIGATION PROJECT

### CORAL SILIGATO, US ARMY CORPS OF ENGINEERS

The presentation will include an overview of the Hampton Harbor Federal Navigation Project, discuss the general process leading to maintenance of a project and details regarding Hampton Harbor maintenance dredging and placement locations. HBAC will gain situational awareness from this presentation.

## HAMPTON FLOOD MODELING STUDY AND ENGINEERING RECOMMENDATIONS

### JENNIFER HALE, TOWN OF HAMPTON DEPARTMENT OF PUBLIC WORKS DEPUTY DIRECTOR

The Town of Hampton, along with its consultants' Milone & Macbroom and Hoyle Tanner Associates, have spent over two years collecting data, analyzing results, validating models and working toward developing recommendations to alleviate the continued and devastating flooding that occurs in Hampton. The final report, expected shortly, has provided recommendations on the next steps for Hampton to present for future design and funding. In 2020, the Town received a grant through the National Fish and Wildlife Foundation (NFWF) from the national Oceanic and Atmospheric Administration (NOAA) to move forward the design of 2-4 selected recommendations and will be presenting this selection for approval in the upcoming weeks. In addition to constructed methods, it is necessary for recommendations to include regulatory changes and the possible need to "retreat".

**Additional information:** <https://hamptonnh.gov/262/Public-Works>



## APPENDIX 6: LINKS TO RELEVANT WORK AND WEBSITES

Relevant work and websites provided by presenters and advisors to the Symposium participants are provided in Appendix 6. Other resources from the HBAC Coastal Resilience Symposium, including recorded videos of the event, can be accessed via the event webpage at: <https://www.nhcaw.org/hbac-coastal-resilience-symposium/>.

**Hampton Beach Master Plan (2001):**

<http://www.hampton.lib.nh.us/hampton/town/masterplan/index.htm>

**Hampton Beach Area Master Plan – Transportation Update:**

[https://www.nh.gov/dot/projects/hampton40797/documents/40797\\_rpt\\_08012018.pdf](https://www.nh.gov/dot/projects/hampton40797/documents/40797_rpt_08012018.pdf)

**Underwater, Rising Seas, Chronic Floods, and the Implications for US Coastal Real Estate, Union of Concerned Scientists, June 18, 2018:** <https://www.ucsusa.org/resources/underwater>

**New Hampshire Coastal Adaptation Workgroup:** <http://nhcaw.org/>

**New Hampshire Coastal Risks and Hazards Commission Final Report and Recommendations:**

<https://www.nhcrhc.org/final-report/>

**New Hampshire Coastal Flood Risk Summary, Science and Technical Advisory Panel steering committee:** <https://www.des.nh.gov/about/boards-and-committees/coastal-flood-risk>

**Living Shorelines:** <https://www.des.nh.gov/water/coastal-waters/living-shorelines>

**Coastal Hazards and Adaptation:** <https://www.des.nh.gov/climate-and-sustainability/resiliency-and-adaptation/coastal>

**Climate Change (theRPC):** <https://www.therpc.org/regional-community-planning/climate-change>

**From Tides to Storms (theRPC):** <https://www.therpc.org/regional-community-planning/climate-change/tides-storms>

**Hampton Master Plan Update:** <https://tinyurl.com/planhampton>

**REDC Comprehensive Economic Development Strategy:** <https://www.redc.com/ceds>

**Hampton Public Works Flood Study:** <https://hamptonnh.gov/262/Public-Works>

**Rockingham County Coastal Floodplain Mapping Project:**

<https://www.nh.gov/osi/planning/programs/fmp/coastal-mapping-project/rockingham-county.htm>

**Community Rating System:** <https://www.nh.gov/osi/planning/programs/fmp/crs.htm>

Hampton Master Plan Update: <https://hamptonnh.gov/516/Hampton-Master-Plan-Update;www.tinyurl.com/PlanHampton>

Ocean Blvd / Route 1A Project: <https://www.nh.gov/dot/projects/hampton40797/index.htm>;  
<https://www.nh.gov/dot/projects/seabrookhampton15904/index.htm>

NHDES Resilient Tidal Crossings: <https://www.des.nh.gov/water/coastal-waters/tidal-stream-crossings>

NH Volunteer Beach Profiling Program: <https://seagrant.unh.edu/beach-profiling>

Coastal Landowner Technical Assistance Program: <https://seagrant.unh.edu/LTAP>

Coastal Habitat Restoration: <https://seagrant.unh.edu/CoastalHabitatRestoration>

Seabrook-Hamptons Estuary Alliance: <http://shea4nh.org/>

Seacoast Transportation Corridor Vulnerability Assessment: <https://www.therpc.org/regional-community-planning/climate-change/STCVA>

New Hampshire Coastal Flood Risk Summary, Part I: Science (2019):  
<https://scholars.unh.edu/ersc/210/>

New Hampshire Coastal Flood Risk Summary, Part II: Guidance for Using Scientific Projections (2020):  
<https://scholars.unh.edu/ersc/211/>

New Hampshire Coastal Risk & Hazards Commission: <https://www.nhcrhc.org/>

NH Coastal Marine Natural Resources & Environment Commission (COMNARE):  
<https://mypages.unh.edu/comnare/home>