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FROM: Milone & MacBroom, Inc
RE: Review of Existing Plans and Data Sources
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PLANNING DOCUMENTS RELATED TO VISIONING AND COASTAL MANAGEMENT

This memorandum describes a selection of planning and regulatory documents that are relevant to coastal management and master plan visioning in Hampton, NH. The purpose of this exercise is to identify prior studies and plans that can inform efforts to develop a vision and coastal management content for the Hampton Master Plan update, and to enable more efficient cross-referencing of town-wide planning initiatives.

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State of New Hampshire

New Hampshire Beaches: Shoreline Movement and Volumetric

In 2017, N. Olson and F. Chormann, of the New Hampshire Geological Survey, produced a study exploring changes in shoreline location and sediment volumes at sandy and gravelly beaches in New Hampshire.

Volumetric changes were calculated through investigation of digital elevation models developed from LiDAR point data collected in the years 2000, 2007, 2010, 2011, 2013, and 2014. The study found that Hampton Beach has shown both gain and loss of volume over time, with an overall gain in volume between 2000 and 2014. The only period of sediment loss was from May 2010 to May 2011. North Beach in Hampton showed a loss of beach sediment during each period of analysis, as well as a net loss overall. Regionally, the study found that the southernmost New Hampshire beaches (Hampton and Seabrook) have increased in volume, while the northern beaches have lost volume.

Shoreline change was analyzed using shorelines drawn from NOAA charts, USGS maps, orthophotography, and LiDAR. The dataset dates back to the mid-1800s or early 1900s, depending on location. The analysis shows net seaward movement of the Hampton Beach shoreline at a rate of 0.4 to 1.0 meters per year, approximately. North Beach has shown a variable shoreline movement rate, from 0.3 meters per year of recession to 0.1 meter per year of growth. Regionally the shoreline change trend matches that seen in sediment volume, described above.

While the study does not propose specific explanations for the patterns in shoreline change, it does present two forces that may have an impact: sediment input from Hampton Harbor and the Merrimack River, and differences in shoreline orientations and wave patterns.

The study also lists known historic beach nourishment events along the New Hampshire Coast. The following table presents those listed for Hampton beaches. The effects of these known beach nourishment events were removed from the analysis.

Year	Volume (yards ³)
1935	1,000,000
1955	400,000
1965	169,000
1972	70,000
?	340,000
1987	21,000
2012	52,000

New Hampshire Coastal Flood Risk Summary

The New Hampshire Coastal Flood Risk Science and Technical Advisory Panel (STAP), a program of the New Hampshire Department of Environmental Services (NHDES), has published a two-part document titled *New Hampshire Flood Risk Summary*.

"Part I: Science" was published in 2018 and provides projections sea level rise, coastal storms, groundwater rise, precipitation, and freshwater flooding for coastal New Hampshire. Sea level is likely to rise by 1.5-3.8 feet by 2100, increasing the impacts of storm surge and causing a corresponding rise in groundwater levels. Increased groundwater salinity may degrade the Hampton-Seabrook estuary, and rising high tides may increase the tidal currents within that estuary by more than 85%. Increasing storm intensity is also expected.

"Part II: Guidance for Using Scientific Projections," currently in draft form, provides state-preferred design guidelines for projects in coastal areas, and includes consideration of sea level rise, groundwater rise, increasing storm intensity, and changing coastal currents and sediment dynamics. Methodology for identifying sea level rise and increased precipitation scenarios to apply to specific projects is presented. This methodology depends in large part on the risk tolerance of a given project. A variety of coastal flood risk management techniques are presented.

Hampton Municipal Documents

2013 Hampton Vision

In 2011, the Town of Hampton solicited input from stakeholders and members of the public about an updated vision for the community, completed in 2013. Input tended to focus on the downtown area (Route 1 / Lafayette Road) and the Hampton Beach area. Ideas included traffic abatement, improved walkability, preservation of open space and natural areas, construction of a community center, improved architectural guidelines to develop a "village" aesthetic, and a more supportive and transparent government. Some details from the final Vision, completed in 2013, are summarized below:

- Downtown Neighborhood Revitalization
 - Improve streetscapes, diversify uses, and lessen traffic to create a pedestrian-friendly centralized nucleus for residents and visitors
 - Create a village atmosphere and architectural standard
 - Encourage development of small shops with residential units on upper stories
- Hampton Beach
 - Enable year-round use of the area
 - Maintain a visually attractive and clean neighborhood
 - Upgrade the west side of Ocean Boulevard
- Government and Community
 - Develop a more proactive, supportive, and transparent government
 - Design community facilities that are energy efficient and have multiple uses
 - Preserve historic character
 - Create suitably-located and well-maintained open-spaces for recreation
 - Improve utilities and infrastructure
 - Develop transportation options
 - Attract businesses
- Environment
 - Encourage energy efficiency and conservation
 - Reduce energy costs
 - Reduce environmental impacts
 - Adapt to climate change and sea level rise, in part through well-designed development standards
 - Preserve open space, wetlands, and beaches
 - Control drainage runoff

Zoning for the Town of Hampton

Hampton's zoning regulations lay out permissible land uses and development activities throughout the town.

Section 2.3 addresses the Wetlands Conservation District. The stated purposes of the regulations covering the Wetlands Conservation District are to prevent destruction of and preserve wetlands, prevent development of structures and land use on wetlands, minimize expenses for maintenance and services, protect wildlife habitat, preserve and enhance aesthetic values, and prevent construction or earth moving activities. The district includes all tidal wetlands, inland wetlands, areas of very poorly drained soils and areas of poorly drained soils, and the buffers surrounding each of these areas. Buffers are 50 feet for tidal or inland wetlands, and 100 feet from fourth-order (Strahler methodology) streams or rivers; buffers are regulated in the same way as the rest of the Wetlands Conservation District.

Section 2.4 is the Floodplain Management Ordinance (dated March, 2017). This ordinance describes construction requirements and permitted use within the floodplain district, defined as the FEMA-mapped 1% annual chance flood zone. The ordinance requires one foot of freeboard in AE and VE zones, meaning that buildings are required to be elevated or floodproofed to one foot above the base flood elevation. Maximum height requirements are relaxed up to three feet for buildings that are in compliance with this rule. New buildings and those that undergo Substantial Improvement (improvements with a cost that is 50% or more than the value of the structure) must be brought into compliance with these regulations. Substantial Improvement is calculated on a project-by-project bases; this potentially allows for

improvements with a cumulative cost greater than 50% of the value of the property to be completed without the property needing to be brought into compliance, if those improvements are performed over multiple different timeframes and projects.

The Hampton zoning map shows that significant portions of the Hampton coastline fall within the Business-Seasonal zoning district (Hampton Beach and North Beach) and the Residence C – Seasonal zoning district (portions of Hampton Beach).

Town of Hampton Hazard Mitigation Plan Update, 2016

The 2016 Hampton Hazard Mitigation Plan Update describes natural hazards that pose a threat to the community, identifies geographic areas and specific assets at risk, identifies municipal capabilities with regards to hazard mitigation and loss reduction, and lists specific recommended strategies and actions for improving capabilities and further mitigating hazards.

The plan lists critical facilities at risk from coastal hazards (specifically, flooding). Category 1 facilities are defined as those needed during a hazard event, category 2 are municipal facilities that are not needed during an event, and category 3 are other population centers. Critical facilities listed are:

Category 1 & 2	Category 3
Hampton Police Station	Hampton Beach
Highway Garage / Transfer Station / WWTP	Hampton Beach Casino
13 Sewage Lift Stations	Inn of Hampton Conference Center
Town Dock	Ashworth Hotel
Religious Facilities (6 plus 2 seasonal)	Downtown District
Hampton Public Schools	Fish Houses on Ocean Boulevard

A selection of municipal capabilities identified in the plan, which are relevant to coastal management, follows:

Emergency Operations Plan	Road and Bridge Design Requirements
Building Code (NH State Building Code)	Bridge, Culvert, and Storm Drain Maintenance
Floodplain Development Regulations	Shoreland Protection Program
Maintenance of Elevation Certificates	Public Education Programs
Emergency Warning System	Capital Improvement Program

The list of mitigation actions presented in the plan include many relevant to coastal management. These are paraphrased below:

- Improve drainage at lower end of High Street
- Repair Bicentennial Park Seawall (shallow embedment into beach)
- Study for improved drainage at Meadow Pond Area
- Improve drainage at Kings Highway Street Area
- Add cumulative substantial improvement requirement to floodplain ordinance
- Improve drainage at Brown Ave area
- Plan for emergency responders to respond to flooding at Ocean Blvd area during storm surge.
- Reduce tidal flooding (through elevation of road) at Island Path / Glade Path Area
- Reduce tidal flooding (based upon current engineering practices) at Plaice Cove area
- Reduction and removal of *Phragmites* populations with the salt marsh restoration
- Education/Clarification of wetlands conservation ordinance
- Coordinate with NH DOT to improve drainage at Great Boar's Head
- Drainage/Sand Maintenance at Whites Island
- Drainage improvements at Campton, Portsmouth, and Plymouth Ave (ocean discharge)

Hampton Beach Master Plan

The Hampton Beach Master Plan (HBMP) lays out a vision, as well as recommended actions and improvements, for the Hampton Beach and North Beach neighborhoods of the Town of Hampton (with a focus on Hampton Beach). The plan was developed in November 2001 through collaboration between the Town of Hampton, the New Hampshire Department of Resources and Economic Development, and the Hampton Beach Master Plan Advisory Committee (HBMPAC). The Plan is scheduled to be updated in 2020-2021.

The Vision laid out by the HBMP is for Hampton Beach to be enjoyed by both residents and visitors, have a variety of uses and activities spread throughout a number of distinct sub-areas, have healthy environmental systems, and be more pedestrian and bicycle oriented.

According to the plan, the area it covers includes 77 acres of beach and 700 acres of wetlands. Twenty-one sites of historic and cultural value, located in the Hampton Beach and North Beach area, are listed, including buildings, natural features, parks, and agricultural sites.

Flooding is identified as a problem, both from coastal storm surge and severe rain events. A series of major past structural mitigation projects is listed, including construction of breakwaters, beach restoration, harbor dredging, and seawalls.

A set of general strategies, as well as more specific planning recommendations, is listed in the plan. All of these strategies are relevant to community visioning. A selection is listed below:

- Define neighborhood sub areas to provide a sense of place.
- Establish an overall look and character of the area.
- Identify and recognize important historic buildings and landmarks.
- Change the zoning ordinance to improve the design and quality of buildings and uses.
 - Reduce maximum amount of sealed surface per lot in RA and BS districts
 - Establish front yard setbacks
 - Establish design guidelines and landscape standards
 - Ensure that the zoning ordinance reflects current flood zones
- Revitalize and enhance the uses at the State's park areas
- Enhancing Ocean Boulevard amenities for non-motorized vehicle and pedestrian users.
- Add several beach pavilions along the central area of Hampton Beach.
- Encourage investments and improvements to commercial and residential areas.
- Change land uses at the core activity areas to create the character of a neighborhood village.
- Maintain the existing character and scale of the residential areas.

Key recommendations and improvements highlighted in the plan include:

- Set aside more land near beach for pedestrians and activities, less for traffic and parking
- More large and small park amenities on waterfront
- Higher Hampton River Bridge to improve vehicle and vessel traffic
- Better enforcement of zoning and building codes
- Protect Estuarine Resources
- Protect Shellfish Resources
- Maintain dredging of Hampton harbor Channel.
- Flood protection programs and infrastructure improvements around Meadow pond
- Environmental protection of Meadow Pond
- Sand Management plan at North Beach
- Conservation Easements and stormwater protection

Meadow Pond and Kings Highway Flood Mitigation Study

The Town of Hampton has contracted two consultants to perform a comprehensive flood study of the wetland side of the Hampton Beach area (west of Ashworth Ave) and the Meadow Pond area (west of Kings Highway), and to prepare preliminary designs for flood mitigation strategies that restore natural hydrology and improve salt marsh habitat. For this study, a detailed hydraulic and hydrologic analysis of the Hampton-Seabrook Estuary complex, including Meadow Pond, is being performed; one key phenomenon the study is investigating is the interaction between seawater from the ocean and freshwater from runoff and the wetland during flood events. The study is also looking at issues with the storm drainage network, which is often full of water and unable to function properly. Public engagement around flooding issues has already taken place.

In addition to the hydraulic and hydrologic investigations, a suite of mitigation and adaptation alternatives will be developed, and public engagement around those alternatives will be performed. In a later phase of the project, alternatives that have ranked highest based on scientific analysis and public opinion will be brought to later stages of design, and eventually implemented.

2019 Coastal Hazards and Adaptation Team Review

The Hampton Coastal Hazards Adaptation Team (CHAT) published its 2019 review on January 28, 2020, summarizing the accomplishments of its first year in existence. The objectives of the CHAT are to improve coordination of coastal hazard management and adaptation in Hampton, research and recommend adaptation strategies to the town, and inform and educate residents about coastal risks and adaptations.

The review lists actions that have been taken by Hampton to increase coastal hazard resiliency, which include participation in regional and state initiatives, updating local planning documents, strengthening municipal regulations, implementing local education efforts, and funding adaptation actions (including through warrant articles and grants). Proposed upcoming projects include:

- Revise the definition of the Highest Observable Tide Line (HOTL) in the Wetland Conservation District to be consistent with NHDES
- Strengthen FEMA VE-Zone construction standards
- Implement flood control designs identified through the current flood studies in the Kings Highway and Ashworth areas.
- Participate in the FEMA Advanced Assistance Grant Program, which would improve the town's ability to secure HMGP funding for projects such as property elevations or acquisitions.

The CHAT review identified key topics of interest to the team, which include funding sources, financial impacts of adaptation, adaptation science and best practices, social impacts of coastal hazards, and public communication. A suite of public communication venues are identified:

- Friends of Hampton Beach Website
- www.HamptonBeach.org
- Facebook: Nick Bridle, Friends of Hampton, Village Precinct
- Town Website
- Channel 22

Finally, the review provides four general recommendations, with information about costs, benefits, maintenance needs, and more, about each. The recommendations are:

- Constructing Living Shorelines
- Elevating Homes
- Voluntary Buyouts and Relocation of Homes, and Planning for the Future of a Buyout Area
- Establishing a Flood Vulnerability Overlay District

Other Studies, Reports, and Documents

From Tides to Storms: Preparing for New Hampshire's Future Coast

In September of 2015, the Rockingham Planning Commission (the Commission) published the "From Tides to Storms" report to lay out a regional understanding of the geography of future coastal flood risks. The report assesses the vulnerabilities of roadways and other transportation infrastructure, critical facilities, other critical infrastructure such as utilities, and natural resources. The Commission utilized the 2014 National Climate Assessment, 2015 Preliminary FEMA Flood Insurance Rate Maps (FIRMs), and high-resolution digital elevation data from 2012, to define future sea level rise and precipitation scenarios, and identify risk zones. The Commission determined that precipitation in the 2071-2099 period is expected to be as much as 20% higher than that in the 1970-1999 period. Additionally, the Commission defined the following sea level rise scenarios:

Scenario	Sea Level Rise by 2100 (over 1992 levels)
Intermediate Low	1.7 feet
Intermediate High	4.0 feet
Highest	6.3 feet

The report notes the following vulnerabilities and risks in Hampton:

- **Roads:** Hampton has the most miles of roadway at risk in the region. By the year 2100, during non-storm conditions, a range of 3.4 to 20.6 miles of road will be inundated, depending on the sea level rise scenario investigated. The report specifically notes that the expected NH DOT reconstruction of Ocean Boulevard will need to account for sea level rise and future coastal flooding.
- **Natural Resources:** The Taylor River freshwater system and the Hampton Seabrook Estuary are both expected to be impacted by sea level rise. The Hampton Seabrook Estuary is projected to experience the greatest loss of salt marsh of any system along the New Hampshire Coast, with a net loss of up to 127 acres in Hampton. Under a lower sea level rise scenario, there is potential for a net gain in salt marsh through landward migration.
- **Critical Facilities:** The Police Station, one Fire Station, and the Wastewater Treatment Facility are all noted as being at risk from sea level rise and coastal flooding.

The report lists numerous planning recommendations and Policy and Capacity-Building Recommendations, including identifying areas most at risk, instituting creative financing mechanisms to pay for adaptation projects, adopting freeboard standards, and discouraging hard shoreline protection structures in favor of preserving and restoring existing natural shorelines where feasible. The report also lists more specific municipal planning recommendations. A selection of these relevant to Hampton is listed below:

- M2 - Master Plan Coastal Hazards Chapter. Adopt a Coastal Hazards Chapter in the Master Plan that incorporates information and recommendations from the Tides to Storms Assessment.
- M5 - Land Conservation. Land conservation offers the greatest opportunities to provide for adaptation to the effects of sea-level rise and coastal storm flooding and climate change impacts.
- M6 - Wetlands Mitigation Site Inventory. Identify land where protection or restoration of wetlands would protect against flooding, and remove barriers to tidal function and marsh migration.
- RM1 - Elevate Structures Above Base Flood Elevation. Adopt standards that require development and redevelopment to be elevated a minimum of 2 feet above base flood elevation, protecting structures from flooding based on the highest sea-level rise projection of 2 feet by 2050. For critical facilities or high cost projects with long lifecycles, require up to 4 feet above base flood elevation.
- RM2 - Coastal Flood Hazard Overlay District. Adopt a Coastal Flood Hazard Overlay District that includes performance-based standards that protect against flood impacts from sea-level rise and coastal storm surge. Establish the overlay district boundaries based on current flood hazard areas and projected future high-risk flood areas mapped by the Tides to Storms Vulnerability Assessment.
- RM3 - Coastal Buffers and Tidal Marshes. Adopt buffers and setbacks that separate development and infrastructure from wetlands and surface waters to sustain flood storage capacity, and allow for inland migration of tidal marsh and conversion of freshwater systems to tidal systems.

- OM3 - Implement FEMA's High Water Mark Initiative. Implement the High Water Mark Initiative by providing information on past floods, such as documenting high water marks in public places and posting maps and photographs of past floods on the town website.
- OM5 - Living Shorelines and Landscaping. Provide information to property owners about living shorelines and the importance of retaining the functions of natural shorelines, and implementing landscaping best practices. Implement living shorelines projects on town lands to demonstrate best practices, and the benefits and effectiveness of living shorelines approaches.

Flooding in Hampton Situation Assessment

This assessment, prepared for the Seabrook-Hamptons Estuary Alliance (SHEA) in January 2019, compiled existing relevant documents and information about flood impacts to Hampton, gathered public input through a survey and interviews, and contributed to formation of the Hampton Coastal Hazards Adaptation Team (CHAT).

The assessment begins by giving the local context for Hampton flood risk. There are 5.4 miles of sandy beach and rocky shores in Hampton. Other than a 0.5-mile stretch of sandy beach north of the Hampton Harbor inlet, all of the beaches in Hampton are backed by seawalls, riprap, and revetments. Nineteen-percent of the tidal shoreline in Hampton (including the ocean-facing and tidal wetland-facing shoreline) is armored. Based on 2015 land use data, of the 14 square miles of land area in Hampton, 31% is wetlands and salt marsh, 18% is forested, and 27% is impervious cover. Major natural features in Hampton are Hampton harbor, the Hampton River, Taylor River, and the Hampton Salt Marsh Conservation Area. Major transportation routes near the coast are I-95, NH-101, NH-27, NH-101E, and Route 1A. The FEMA 1% annual-chance floodplain covers almost 3,000 acres of land in Hampton, 17% of which is developed. Population in town is steady at around 15,500, with a large seasonal population. Residential development is continuing at a high rate, mostly for seasonal residences.

The report presents a problem statement that summarizes flood concerns in Hampton. Tides that reach 10 feet above mean lower-lower water (MLLW) cause street and property flooding along the salt marsh. Low-lying properties located along the salt marsh have limited natural or constructed protections, while those along the beaches tend to be somewhat protected by elevated land features, sand dunes, and constructed revetments. The assessment reports that some homeowners are interested in selling their land and relocating out of high flood risk areas, and recognizes that this kind of retreat may be necessary in some areas.

Critical facilities vulnerable to flooding, and specific areas at risk of flooding, are listed. This list is mostly taken from the Hampton Hazard Mitigation Plan.

A public survey was conducted as part of this assessment. The responses of participants indicate that many residents are familiar with flood risk and sea level rise, and property owners in and out of SFHA have flood insurance. Participants indicate that their top concerns with regard to flooding are damage to roads, safety of people and property, and impacts on natural resources and businesses. Responsibility for flooding should be shared by property owners, the municipality, the state, and to a lesser extent the federal government. Nature-based strategies, hard structural projects, and stricture development regulations were selected as the most effective adaptation strategies for Hampton. 68% of participants would participate in a discussion about voluntary buyout or managed retreat, 71% felt that managed retreat will be a component of long-term adaptation in Hampton, but only 7 out of 32 owners of flood-prone properties would consider moving to a safer location.

In the public survey, respondents described their visions for the future of Hampton. There is a recognition that the community will change as sea levels rise and flooding becomes a more and more significant problem. At the same time, respondents expressed concern about overdevelopment, and would like to see the town balance commercial and residential development, maintenance of single-family homes and community feel, preservation of open space and natural features, and flood mitigation and protection.

Integrated Analysis of the Value of Wetland Services in Coastal Adaptation; Methodology and Case Study of Hampton-Seabrook Estuary, New Hampshire

This study was performed by a University of New Hampshire team headed by Paul Kirshen in 2018. The authors analyzed current and future conditions in the Hampton-Seabrook Estuary, performed a social vulnerability assessment, and recommended adaptation options. The NOAA Sea Level Affecting Marshes Model (SLAMM) was used to assess future conditions of area marshes with sea level rise.

The researchers find that socially vulnerable residents are more likely to be located in a flood zone than residents with low social vulnerability. With sea level rise, this inequity will become stronger.

The report notes that present day storms regularly send water and stones over the seawalls protecting Ocean Boulevard, and that storms with rising sea levels will transport massive amounts of beach sediment over the walls. The report recommends fortifying and elevating the seawalls, elevating Ocean Boulevard in some areas, building a greenway that is raised so users can see over the wall, and nourishing beaches on the ocean side of the road to protect the walls and attract tourists. Building back-barrier berms on the salt-marsh side of the road, nourishing beaches and dunes, and using green adaptation solutions wherever possible, is also recommended. Heavily used roads in tidal wetland areas should be elevated.

The report authors note that socio-economic factors should be considered when identifying climate adaptation approaches. Hard structures or "grey" adaptation solutions can result in significant debt for communities, ultimately degrading the community's ability to sustain those structures or even its own economic viability.

It has been noted that the development of this academic report was performed with limited participation by Hampton stakeholders and residents. While many of the findings will be useful to consider for the Hampton Master Plan, not all of the recommendations and conclusions are applicable

Seabrook-Hamptons Estuary Alliance Flood Smart Program

The Seabrook-Hamptons Estuary Alliance (SHEA) began the "Flood Smart" program in 2018. The first component of the program was the "Flood Smart Seacoast"; a series of three informative workshops presented in partnership with the New Hampshire Departments of Environmental Services Coastal Program. The "Flood Smart Roundtable" is an ongoing series of informal discussions with coastal property owners and residents on topics related to coastal flooding from sea level rise and storm surges.

In a blog-post dated August 28, 2018, Nathalie Morison summarized key takeaways from the workshops

- High tide flooding is happening now and is expected to occur more frequently in the future
- Salt marshes and dunes provide coastal storm and flood protection, and many other co-benefits (such as aesthetics, recreation, fisheries)
- Everyone lives in a flood zone (including moderate and low flood risk areas; 20% of all NFIP flood insurance claims are from policy holders outside high risk areas)
- Flood insurance rates are going up
- Green infrastructure helps minimize runoff, drainage flooding, and pollution from runoff, but does not affect tidal flooding (and may not function well once flooded by seawater)
- There is no one size fits all solution

Summary Matrix

Source			Relevance To:			
Year	Title	Authors	Vision for Hampton Master Plan	Characterizing Vulnerabilities and Risks	Management & Adaptation Strategies	Implementation of Master Plan
State of New Hampshire						
2017	New Hampshire Beaches: Shoreline Movement and Volumetric	NHGS	Context for shoreline processes	Sediment dynamics (erosion, loss of natural protections)	Behavior over time of beach & dune nourishment projects	Historic beach nourishment; Regional context
2018 2020	New Hampshire Coastal Flood Risk Summary	NHDES	Consideration of "Risk Tolerance," acceptance of intermittent flooding in some cases	Projections for sea level rise, precipitation, groundwater rise, coastal storms, salinization of freshwater systems	Coastal flood risk management techniques	Design guidelines
Hampton Municipal Documents						
2013	2013 Hampton Vision	Town	Previous Vision & stakeholder priorities	Valued spaces and assets needing support. Not coastal management specific.	Information on priorities and interests. Not coastal management specific	Information on past actions taken.
2019	Zoning for the Town of Hampton	Town	Zoning map; Development regulations	Wetlands Conservation & Floodplain districts	Wetlands Conservation Floodplain Management	Is a framework for implementation
2016	Town of Hampton Hazard Mitigation Plan Update	Town	Hazard mitigation vision	Existing vulnerable areas and assets	Hazard mitigation strategies and actions	Provides & is a framework for implementation
2001	Hampton Beach Master Plan	Town	Vision for Hampton Beach & North Beach	Flood Risk in Hampton Beach & North Beach	Broad management recommendations	Incorporate into Master Plan; Ensure consistency
Under-way	Meadow Pond & Kings Highway Flood Mitigation Study	Town	Public perception of risk and adaptation options	Tidal wetland flooding at Hampton Beach & Meadow Pond	Nature-based solutions Drainage needs	Includes framework for implementation of priority projects
2019	Coastal Hazards and Adaptation Team Review	Town	Local successes show local political & public priorities	Summarizes findings regarding vulnerable areas	Past successes; recommendations for future actions	Team of stakeholders & staff to drive implementation

Source			Relevance To:			
Year	Title	Authors	Vision for Hampton Master Plan	Characterizing Vulnerabilities and Risks	Management & Adaptation Strategies	Implementation of Master Plan
Other Studies, Reports, and Documents						
2015	From Tides to Storms: Preparing for New Hampshire's Future Coast	RPC	Focus on roads, critical facilities, natural resources for building resilience	Projections for sea level rise, precipitation; Lists vulnerable assets (roads, natural resources, critical facilities)	Planning and policy recommendations	Provides regional context
2019	Flooding in Hampton, NH Situation Assessment	SHEA	Public visions of resilient Hampton; methods of living with flooding	Vulnerable assets & areas; critical facilities	Adaptation options; managed retreat	Public preference of adaptation options
2018	Integrated Analysis of the Value of Wetland Services in Coastal Adaptation	UNH	Social vulnerability considerations	Social Vulnerability Existing Vulnerabilities	Provides specific recommendations	None
2018 Ongoing	SHEA Flood Smart Workshops	SHEA	Adaptation options and benefits	Science of climate change & sea level rise impacts; focus on tidal wetlands	Adaptation options and benefits	Example of public outreach & involvement around adaptation planning