Vision for the Estuary

Vision Statement

The Hampton-Seabrook Estuary (HSE) is a thriving and resilient estuarine environment, home to healthy, diverse populations of fish, shellfish, birds, plants, and other native species and sustainably used by surrounding communities for its aesthetic, recreational, and economic benefits. Local governments, residents, and visitors recognize, respect, and enjoy the watershed's connective habitats, litter-free beaches, and clean waters which form the bedrock of their community. Development occurs in a manner that protects both natural resources and infrastructure and allows the estuary and its watershed to naturally adapt to the effects of climate change, including, but not limited to, groundwater and sea level rise, coastal storm surges, and flooding.

Visioning Process

A vision statement provides a brief and compelling mental image of the estuary and its watershed as the community envisions it and serves as the aspirational pinnacle for the more detailed goals, objectives, and strategies that follow in this plan. The vision above reflects input from a broad spectrum of residents, visitors, municipal officials, business owners, water related professionals, and high school students in the watershed. This input was collected over two years though workshops, surveys, and interviews summarized below.

In June 2021, SHEA with assistance from the Farrell Strategic Group deployed a 30-question online survey to residents and visitors of Hampton, Hampton Falls, and Seabrook. The results of that survey effort are presented in the *Public Visioning Survey Report* (Farrell Strategic Group, 2021). A



Figure 1: Word cloud of one-word responses to why respondents love living in or visiting Hampton, Hampton-Falls, and Seabrook (Farrell Strategic Group, 2021).

summary of respondent demographics is provided in Table 1. Most of the 104 respondents were residents (54%) of Hampton (44%) and visitors or former residents (31%). Words used to describe why respondents enjoy living in or visiting the area are shown in Figure 1. They prominently featured themes of nature and beaches and their relaxing and peaceful attributes. Over 90% of respondents saw the estuary as vital to flood protection, recreation, and shellfish habitat and agreed that a healthy balance between protection and recreational use of the estuary is important. Clamming and fishing have been long-standing recreational

activities in the estuary for both novice and experienced harvesters. Hampton Harbor provides a working waterfront for commercial and recreational fishing interests. Many respondents hoped that conditions for clamming and fishing improve, leading to fewer resource closures and a return of this storied aspect of the estuary. Respondents also highly valued the watershed for its estuarine and upland habitat for wildlife, as well as its aquifers, which provide clean water for drinking. A large majority (89%) of respondents indicated that abundant diversity of fish, birds, shellfish, and plants were very or critically important to the health of the estuary.

The most common activity cited by respondents was walking/jogging, along with several other nature-based activities, such as swimming, trail use, birdwatching, and seafood dining. The most common concerns reported by respondents included sea level rise, climate change, public access, and overdevelopment (Figure 2). Regarding what the coastline would look like in the future, respondents felt that there would be fewer buildings along the coastline, better building standards to withstand climate change impacts, more open space and conservation land, more people aware of their impact on the estuary, and better water quality for swimming, fish, and other species.

Relatively few respondents to the above survey (less than 5%) were under the age of 18, so SHEA conducted additional listening sessions with Winnacunnet High School biology classes in 2022. Responses from the high school students aligned with the other community members. Words used to express the students' values about the estuary are presented in Figure 3. The students felt that fish and shellfish populations need to be protected through limitation of catch allotments and improvement of the species' habitat, as well as protection of land in and around the estuary, which could be achieved by implementing development restrictions and



Figure 2. Word cloud of survey responses for "What's the biggest concern about the future of the estuary?" (Farrell Strategic Group, 2021).



Figure 3: Word cloud presenting Winnacunnet High School student values about the estuary. Source: SHEA.

conservation. The students also wanted to see less intrusive and more conscientious motor boating and felt that education and signage could help reduce the impacts this type of recreation has on shoreline erosion. They also discussed the need to reduce pollution, both as solid waste and water quality contaminants

including nutrients, which could be achieved largely through education of the community on good lawn care techniques and water pollution prevention more broadly. In general, the high school students felt more education about the estuary was needed for the community to best protect it.

Finally, an additional round of surveys and interviews were conducted in 2022 with six municipal officials or employees, including a planner, department of public works director, and conservation commission member from Hampton, a planner and water and sewer superintendent from Seabrook, and a conservation commission member from Hampton Falls. Two additional private sector professionals were also interviewed: a drinking water system director from Hampton and a local environmental engineer from Seabrook. From their collective experience, they described a community that greatly values the estuary as an essential feature and resource in Hampton, Hampton Falls, and Seabrook. It is part of the coastal community's identity both due to its high visibility and geographic centrality, as well as its cultural and historical significance.

Overall, the workshops, surveys, and interviews highlighted strong support by the community for environmental protection of the estuary and its watershed. To many whose family history is rooted in the area, the estuary represents their heritage. For generations if not thousands of years when considering use by the Abenaki people, the estuary has been well-loved and has served as an economic engine driving social community structure. To protect the estuary's functional integrity and biodiversity and the ecosystem services it provides, the watershed community, led by SHEA and the three municipalities, will need to collaboratively identify and manage threats and implement effective management strategies described herein.

Table 1. Summary of respondent demographics from the public visioning survey (Farrell Strategic Group, 2021). The left-hand table summarizes the count of responses by affiliation, town live in, and age range. The two right-hand tables summarize the count and percentage of responses by affiliation and town live in.

Affiliation	Town Live In	Age Range	Count
Municipal	Hampton	45-54	1
Municipal	Hampton	65+	2
Resident	Hampton	Under 18	2
Resident	Hampton	18-24	3
Resident	Hampton	25-34	1
Resident	Hampton	35-44	5
Resident	Hampton	45-54	6
Resident	Hampton	55-64	9
Resident	Hampton	65+	15
Resident	Hampton Falls	35-44	1
Resident	Hampton Falls	45-54	1
Resident	Hampton Falls	55-64	2
Resident	Hampton Falls	65+	1
Resident	Seabrook	45-54	1
Resident	Seabrook	55-64	2
Resident	Seabrook	65+	7
Visitor	Other	25-34	4
Visitor	Other	35-44	8
Visitor	Other	45-54	4
Visitor	Other	55-64	5
Visitor	Other	65+	9
Visitor	Other	No Response	1
Worker	Other	55-64	1
Former Resident	Hampton	65+	1
Business Owner	Hampton	Under 18	1
No Response	No Response	No Response	11
		Total	104

Affiliation	Count	Percentage	
Municipal	3	3%	
Resident	56	54%	
Visitor	31	30%	
Worker	1	1%	
Former Resident	1	1%	
Business Owner	1	1%	
No Response	11	11%	
Total	104	100%	

Town Live In	Count	Percentage
Hampton	46	44%
Hampton Falls	5	5%
Seabrook	10	10%
Other	32	31%
No Response	11	11%
Total	104	100%

Goals & Objectives

The following goals and objectives are based on the vision statement and review of documents relevant to the Hampton-Seabrook Estuary, notably the HSE Salt Marsh Management Goals Explored at the Hampton-Seabrook Estuary Working Webinar 1 Getting on the Same Page (Jalbert Leonard, Dionne, Lucey, Mattera, & Meaney, 2021), as well as review of other estuary management plan approaches.

Five goals are presented below, each followed by several objectives. Each of the five goals are topical themes derived from the vision statement for the estuary. Objectives identified for each goal provide specific targets to fulfill each goal. Some objectives are relevant to multiple goals but are only shown once under the most applicable goal. Subsequent sections of the plan will identify strategies or specific actions to achieve each objective, along with criteria to evaluate the successful execution of each strategy or action item.



Conceptual diagram of the planning components and their chapter locations (smaller header text).

Goal 1. A thriving, healthy estuarine environment with an abundant diversity of fish, birds, plants, and other native species is achieved and maintained.

Objectives:

- 1.1. Maintain clean, clear waters which sustain designated uses through the institution of stormwater, wastewater, and other pollutant management measures including buffer enhancement that reduce contaminated runoff and groundwater to surface waters.
- 1.2. Implement habitat and ecosystem services restoration activities where and as needed, including upland buffer protection, ditch remediation, fish passage restoration, and oyster bed and clam flat restoration.
- 1.3. Track and manage invasive species to limit competition with or degradation of native populations.
- 1.4. Identify, monitor, and protect endangered and threatened native species and species at risk or of greatest conservation need.

Goal 2. Flood storage and mitigation benefits are protected and enhanced for ecosystem resiliency and sustainable infrastructure protection.

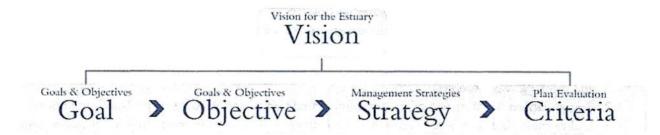
Objectives.

2.1. Monitor and minimize bank and shoreline erosion through improved stabilization and resiliency of living shorelines.

Goals & Objectives

The following goals and objectives are based on the vision statement and review of documents relevant to the Hampton-Seabrook Estuary, notably the HSE Salt Marsh Management Goals Explored at the Hampton-Seabrook Estuary Working Webinar 1 Getting on the Same Page (Jalbert Leonard, Dionne, Lucey, Mattera, & Meaney, 2021), as well as review of other estuary management plan approaches.

Five goals are presented below, each followed by several objectives. Each of the five goals are topical themes derived from the vision statement for the estuary. Objectives identified for each goal provide specific targets to fulfill each goal. Some objectives are relevant to multiple goals but are only shown once under the most applicable goal. Subsequent sections of the plan will identify strategies or specific actions to achieve each objective, along with criteria to evaluate the successful execution of each strategy or action item.



Conceptual diagram of the planning components and their chapter locations (smaller header text).

Goal 1. A thriving, healthy estuarine environment with an abundant diversity of fish, birds, plants, and other native species is achieved and maintained.

Objectives:

- 1.1. Maintain clean, clear waters which sustain designated uses through the institution of stormwater, wastewater, and other pollutant management measures including buffer enhancement that reduce contaminated runoff and groundwater to surface waters.
- 1.2. Implement habitat and ecosystem services restoration activities where and as needed, including upland buffer protection, ditch remediation, fish passage restoration, and oyster bed and clam flat restoration.
- 1.3. Track and manage invasive species to limit competition with or degradation of native populations.
- 1.4. Identify, monitor, and protect endangered and threatened native species and species at risk or of greatest conservation need.

Goal 2. Flood storage and mitigation benefits are protected and enhanced for ecosystem resiliency and sustainable infrastructure protection.

Objectives.

2.1. Monitor and minimize bank and shoreline erosion through improved stabilization and resiliency of living shorelines.

- 2.2. Accommodate and encourage marsh migration.
- 2.3. Monitor subsidence/accretion of the saltmarsh, with accretion enhanced to build up saltmarsh elevation.
- 2.4. Protect dunes from development pressures to better safeguard existing infrastructure from more frequent and larger storm surges.
- 2.5. Maintain, restore, or mimic natural hydrology.

Goal 3. Recreational and commercial opportunities are well-managed and sustainable, with equitable, safe, and enjoyable access to the public.

Objectives.

- 3.1. Maintain healthy and sustainable resource populations to support fishing and clamming activities.
- 3.2. Create and maintain a healthy, litter-free natural environment with clean water for recreation such as bird watching, hiking, swimming, kayaking, etc.
- 3.3. Manage access points to maximize safe and fair access and minimize environmental damage from human, animal, and vehicle traffic, overcrowding, or other negative effects.

Goal 4. Education, outreach, and volunteer activities link the community with the estuary. The community is well-informed and active in protecting the estuary and its watershed.

Objectives.

- 4.1. Keep the community well-informed so it can actively support protecting the estuary, watershed, and drinking water sources.
- 4.2. Engage citizen scientists and other community members to partner with research and monitoring.
- 4.3. Utilize multiple channels for outreach and education to reach the most community members and stakeholder groups.
- 4.4. Encourage and support voluntary actions to protect the watershed (e.g., land trusts, conservation easements, sustainable landscaping).
- 4.5. Organize and publicize regular environmental clean-up events.

Goal 5. Planning and management efforts utilize sound science and are coordinated and implemented to protect vital ecosystem services, adapt to the effects of climate change, and ultimately ensure the health, safety, and well-being of the people who live in and visit the watershed.

Objectives.

- 5.1. Implement zoning and building code updates and/or planning documents to prevent overdevelopment and ensure infrastructure resilience to heightened storms and flooding.
- 5.2. Coordinate land conservation of critical habitats, particularly in support of marsh migration and/or habitat connectivity across jurisdictions at the watershed level.
- 5.3. Protect drinking water sources with zoning, regulation, maintenance, and sustainable funding.
- 5.4. Maintain navigation of Hampton Harbor, including managing the extraction and placement of dredge materials in an environmentally sound manner based on the best available data.
- 5.5. Coordinate levels of government (local, state, and federal), academic institutions, and other stakeholder groups to protect and monitor the environment.
- 5.6. Conduct research and monitoring to address data gaps, with results made readily accessible to resource managers for decision making.
- 5.7. Consider environmental justice pfinciples for communities, especially marginalized populations that will be most impacted by climate change.