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2014 Quality Improvement Plan for Kittery's Shore and Harbors

WRIGHT-PIERCE 
Engineering a Better Environment



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- Nancy Colbert Puff – Town Manager
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- Norman Albert - Kittery Public Works, Acting Director
- Peter Walsh – Kittery Public Works
- Bob Melanson – Kittery Port Authority, Town Planning Board
- Mike Blake – Town Harbormaster
- Tom Allen – Owner, Kittery Point Yacht Yard
- Dave Kaselauskas – Owner, *Jersey Girl*
- Richard Demarco, Jr. – Kittery Parks Commission
- Debbie Driscoll – Town Planning Board

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All oblique aerial photographs © Pictometry International Corporation

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Part 1 – Plan Purpose and Process

1.1 Plan Purpose

The Quality Improvement Plan for Kittery's Shore and Harbors is a specific plan to implement the adopted Town of Kittery Comprehensive Plan and recommend updates and projects to the year 2020. The Plan is intended to identify community needs with respect to both physical and policy-related enhancements to shore and harbor-related facilities within the community. In addition, the Plan should include prioritization for implementation of the identified enhancements, and provide guidance with respect to the implementation. The Plan builds off earlier planning efforts, much of which was tied to the last update of the community's Comprehensive Plan. Information relative to coordination with the Comprehensive Plan is included in the Appendices.

1.2 The Planning Process

The planning process was developed to incorporate input from a variety of interests, including business and natural resource oriented organizations, boating interests, tenants, commercial fishermen, tourists, the Kittery Port Authority, the Kittery Planning Board, the Town Council, and others.

Meetings were held monthly between the Planning Consultant and the Plan's Steering Committee.

Town Public Forums were conducted on June 5, and November 7, 2013, and each drew in excess of 40 attendees. In addition, representatives from Wright-Pierce and committee members engaged in a number of discussions with other members of the community, business people and regulators to ensure that the all stakeholder groups had provided input into the process.

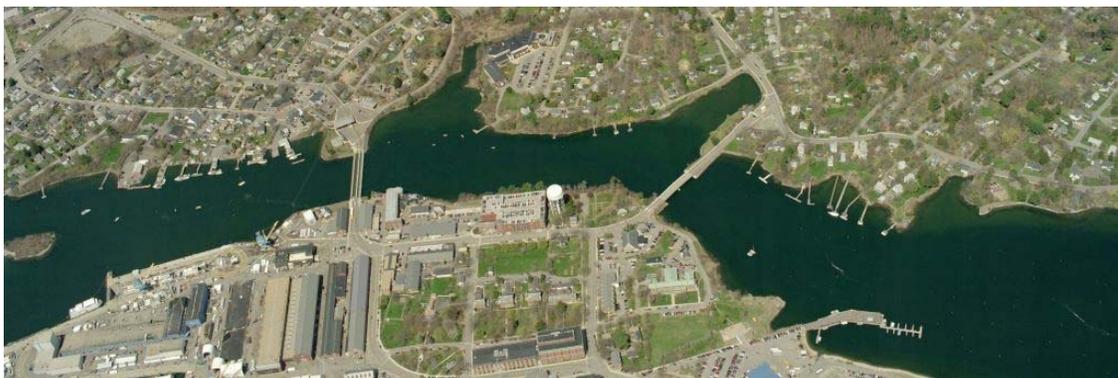
We are confident that this community participation process has resulted in a Shore and Harbor Plan that identifies key physical and policy-related improvements and includes appropriate strategies to encourage sustainable, ecologically-oriented, tourist opportunities and active harbor facilities capable of accommodating commercial and recreational uses, and that the goals identified enjoy support from the residents of the community.

1.3 Implementation

The sections of this Shore and Harbor Plan discuss the specific goals that were identified by the Community as well as the range of implementation strategies that have been developed in response to those Goals. Section 5 of the Plan discusses the implementation strategies in the context of responsibility for implementation as well as financial considerations.

To achieve the goals that have been identified through the performance of this public planning process, citizens, Town officials and local business owners have a number of implementation strategies to consider. Each could act independently to try to accomplish their goal, however, working together offers greater opportunities for success. In summary, implementation strategies involve working together to adopt town ordinances and implement programs and projects. The various implementation strategies include:

1. Implementing the projects identified in the Plan for the various shore and harbor locations within the community.
2. Including projects within the appropriate sections of the Town's Capital Improvement Program.
3. Continuing to fund capital maintenance and improvements.
4. Seeking additional federal, state, and private funding and investment.
5. Updating land use development ordinances where appropriate for resource protection and / land use improvement.
6. Coordinating with Federal and State agencies relative to planned improvements.
7. Where appropriate, encouraging private development and conservation organizations to implement the plan.



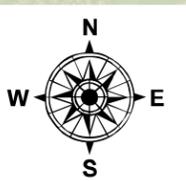


Eliot, ME

York, ME

Portsmouth, NH

New Castle, NH



Approximately 6 mi. Southeast of Kittery

Maine
New Hampshire

KITTERY HARBOR PLAN		Public Workshop	FIGURE: N/A
PROJ. NO.:	12681		
WRIGHT-PIERCE		Engineering a Better Environment	

Part 2 – Kittery’s Shore and Harbor Assets, Goals and Implementation Strategies

2.1 Introduction and History

To proceed with a Planning effort associated with Kittery’s Shore and Harbors, it was necessary to inventory and assess the community to understand the nature and extent of what currently exists. The assessment included a review of:

- Municipally Owned Shoreline Areas;
- Town Piers, Wharves and Floats;
- Mooring Areas;
- Commercial Fishing, Shellfish and Aquaculture Resources; and
- Ecologically Sensitive Areas.

The inventory and assessment was completed through a review of past plans, reports and maps, discussions with Committee members, and visits to the various sites.

In undertaking a Planning effort associated with Kittery’s Shore and Harbors, one cannot fail to develop an appreciation for the extensive history of maritime activities that exists in this area, as well as a grasp of how the early development of the community was integrally tied to Shore and Harbor issues.

Settlement around the natural harbor of the Piscataqua River estuary began as early as 1623. The Town of Kittery was incorporated in 1647, hence it is generally considered the earliest incorporated Town in Maine. Fishing, shipbuilding and shipping of cargoes were the mainstays of the early economy Land and water-based routes connecting into the interior provided access to lumber, furs and other products that were the foundation of much of the export trade of colonial times.

From the very beginning, the mouth of the Piscataqua was a key location for shipbuilding. Badger’s Island was home to several early shipyards and saw the launching of the *USS Ranger* which was commanded by John Paul Jones during the Revolution. The nation’s first naval shipyard, Portsmouth Naval Shipyard, was established in 1800 and continues to be one of the area’s major employers to this day.

Development patterns and transportation networks that we see today are the result of the influences of Kittery’s past role as a maritime community.



2.2 Shore and Harbor Assets

The map preceding this section (as well as more detailed mapping included in Appendix A) provides an overview of the community as a whole, and identifies the locations of a number of the following locations, which have been determined to be key shore and harbor resources and which are the subject of this Plan.



A. Kittery Point Village/Town Dock/Frisbee Pier

This area comprises one of the community's key anchorages and provides access for recreational and commercial boaters via two separate municipally-owned piers and systems of floats. One of the two piers was recently reconstructed and the other is slated for reconstruction in 2014, utilizing funding from the state and federal governments under a Boating Infrastructure Grant (BIG). The Town's harbormaster maintains an office at this location, and there is a public boat launch located at the site. Note that the conditions of the grant funding dictate that the facility must be available to transient recreational vessels. It is hoped that the project will include addressing limitations in the utility service to the pier facilities.

Identified limitations of the existing facilities include: wave protection for the anchorage, utility service, parking and storage space for dinghies.

Based upon the work of the Committee and through outreach efforts that included public meetings, the following goals and implementation strategies/projects were identified:

1. Town Goal(s)

Enhance facilities and services to meet the needs of residents and visitors without negatively impacting the adjacent neighborhood.

2. Implementation Strategies/Projects

- a. Implement pier improvements contemplated under the Boating Infrastructure Grant (“BIG”) Project
- b. Explore means to expand parking.
- c. Investigate the potential for wave attenuation for Pepperrell Cove.
- d. Expand space available for dinghies.
- e. Consider launch services for access to moored vessels.
- f. Increase potable water & pumpout facilities for vessels.
- g. Assess the need for future federal dredging in support of long-term viability of the mooring basin.



- B. Kittery Foreside (Including the Government Street Pier and Adjacent Areas)
Kittery Foreside appears to offer a number of opportunities, and significant interest was expressed during the public input process with respect to the potential development of additional facilities due to its location adjacent to the most developed part of the community. At the same time, the nature and extent of the existing development, together with the proximity of the Naval Shipyard, seem to offer some of the greatest constraints.

After review of the nature and intensity of uses within the area, it was determined that the public access point in the vicinity of Warren’s offers a better opportunity for increased access by recreational boaters than the Government Street pier.



The Government Street Pier is used primarily by commercial fishermen for loading and unloading their vessels. A review of anecdotal information did not provide a date for the original construction of the pier, although photographic evidence suggests that there has been a municipal pier at this location since at least 1936. The condition of the piles and pile caps seems consistent with reports that the facility was substantially reconstructed following the two major coastal storms in the winter of 1978. The decking, railings and curbing were replaced in 2009 with pressure treated materials.

The current configuration of the pier is generally rectangular, extending to a length of about 36 feet from shore, approximately 32 feet wide. The geometry is slightly skewed. No floating docks (“floats”) are present, hence access to vessels is via the face of the pier, with use of a fixed ladder depending on the tide.

The pier is of timber construction, supported primarily on driven timber piles with 12x12 pile caps, 3 x10 cross bracing, 6 x12 stringers (joists), 3 x 12 decking. The pier is connected to a stone masonry abutment/retaining wall.



Based the work of the Committee and through outreach efforts that included public meetings, the following goals and implementation strategies/projects were identified:

1. Town Goal(s)

Enhance facilities and services to meet the needs of both residents and visitors to the community, in a way that is sensitive to the needs of commercial fishermen.

2. Implementation Strategies / Projects

- a. Implement capital maintenance improvements to the Government Street pier in support of commercial fishing uses (hoist, safety railings, potable water, etc.)
- b. Explore means to create public outdoor seating/viewing.
- c. Explore the feasibility of water taxi service with Portsmouth.
- d. Look for opportunities to expand public parking.
- e. Explore means to expand recreational boat access without adverse impact to commercial fishing interests.
- f. Explore the feasibility of constructing a new dock in conjunction with Warren's.
- g. Explore the feasibility of water taxi service with Portsmouth.

- h. Explore means to create public outdoor seating/viewing.

C. Traip Boat Launch

The Town maintains a public boat launch adjacent to Traip Academy. The launch is heavily used during the summer, and on weekends during the late spring and early autumn. The school and boat launch utilize the same parking areas, which is possible due to the relative timing. Approximately 15 moorings exist within the area.



The two potential areas of enhancements were those of the floats along the boat launch itself and parking. The KPA is currently working to expand the floats and hopes to be able to implement this in 2014 or 2015. There was some debate with respect to the issue of expanded parking. The facility is co-located with the Traip school and parking for the boat launch is available during periods when school is not in session (not surprisingly, the boat launch sees most of its use during the summer and on spring/fall weekends when school is not in session). There does not appear to be justification for construction of additional parking at this time, but the situation should be monitored.

The Kittery Port Authority is currently engaged in a project to extend the floats available for loading and unloading of boats at this site, using funding from the Small Harbor Improvement Program (SHIP) administered by the Maine Department of Transportation.

Based the work of the Committee and through outreach efforts that included public meetings, the following goals and implementation strategies/projects were identified:



1. Town Goal(s)

Enhance facilities and services to meet the needs of residents and visitors.

2. Implementation Strategies / Projects

- a. Proceed with implementation of the planned expansion of the floats.
- b. Continue to monitor potential parking issues at this location.

D. Rice Avenue Neighborhood

The Town owns an undeveloped shorefront parcel of about 1.25 acres with access onto Rice Avenue which was identified as offering opportunities for enhanced public access. The site possesses frontage on the Piscataqua River across from the upper end of Badger's Island, as well as a tidal channel that extends into an open saltmarsh just north of the site. There is visible erosion of the shoreline along the riverfront.



The Rice Avenue site appears to offer significant opportunity as a public point of access to the community's waterfront, although significant concern was expressed relative to the substantial currents that exist nearby that constitute a risk for boaters (especially those in kayaks) that may be unfamiliar with boating hazards in the area. The site also abuts residential properties. Given those concerns, it appears that a waterfront park with limited hours of use and passive recreation opportunities may be the best fit.

Based the work of the Committee and through outreach efforts that included public meetings, the following goals and implementation strategies/projects were identified:

1. Town Goal(s)

Creation of facilities to serve residents and visitors without negatively impacting the existing residents.

2. Implementation Strategies

Consider potential use of the site for passive recreational uses that are sensitive to the adjacent residences.

E. Eagle Point

Eagle Point is a sizeable municipally-owned parcel (approximately twenty acres) with substantial shoreline frontage on the Spruce Creek estuary. The site is the former home of the community's wastewater treatment facilities, which were relocated a number of years ago to take advantage of more appropriate receiving waters.



The site appears to offer significant opportunity for enhanced public access due to its size, accessibility and scenic nature. Anecdotal evidence suggests

that the community had explored use of the site, from a public recreational standpoint, some years ago. Planning for the site will need to consider the potential for impacts to the abutting residential neighborhoods.



Based the work of the Committee and through outreach efforts that included public meetings, the following goals and implementation strategies/projects were identified:

1. Town Goal(s)

Creation of facilities to serve residents and visitors, without negatively impacting the existing residents.

2. Implementation Strategies

Undertake a public process to develop a plan for tapping into this sites potential in a way that balances impacts to adjacent neighborhoods and addresses the ecological sensitivity of the area.

F. Fort McClary

Fort McClary is a 27 acre state park on the site of several former fortifications, dating back into the 1680's. A permanent fort was constructed in 1715 including redoubts with several cannon. The fort was upgraded again and given its current name shortly before the War of 1812, and was manned to defend the harbor and Naval Shipyard during subsequent conflicts, including the American Civil War. The current blockhouse and several other features were renovated in 1987.



Based the work of the Committee and through outreach efforts that included public meetings, the following goals and implementation strategies/projects were identified:

1. Town Goal(s)

Enhanced capacity for accommodating transient boaters to the community, through proving an anchorage area for large transient vessels (i.e. over 75').

2. Implementation Strategies

Review bathymetry and navigational charts and assess impacts to current commercial fishing interests in the event the community was to designate an anchorage area for large transient vessels.

G. Fort Foster Park

Fort Foster is one of the community's most significant waterfront properties. As its name suggests, the facility once served as a military installation offering protection to the mouth of the Piscataqua River, Portsmouth Harbor and the Portsmouth Naval Shipyard. While initial planning for a fort to provide coastal defense at the mouth of the estuary was planned in the 1870's, the fort was constructed starting in 1899, following the Spanish American War. Additional modifications and addition of batteries continued into the Second World War, and remnants of many of the structures remain to this day.



The Park consists of approximately 89 acres of mixed terrain with extensive shoreline, varying from gravelly beaches to ledges and rocky promontories. A number of valuable habitats are present, including coastal wetlands.

The facility offers parking and public restrooms, as well as a pier, and has a pavilion that can be reserved for functions and events for up to 100 people. The Fort Foster pier has been determined to be a popular destination for visitors to the park, but it has deteriorated over the years and has been damaged by storms in recent years. The Town has considered restoration of the pier, but the cost would be significant. Further studies may be warranted to establish future uses for the pier in order to confirm the necessary level of reconstruction and justify the investment.

The facility is open primarily during the summer months and is jointly managed by the Parks Commission, Recreation Department and Public Works Department. The facility is a key recreational amenity for the community.

Based on the work of the Committee and through outreach efforts that included public meetings, the following goals and implementation strategies/projects were identified:

1. Town Goal(s)

Maintain, modify and enhance the current facilities and services to meet the needs of residents and visitors alike.



2. Implementation Strategies

Evaluate demand and uses of the pier to confirm the nature and extent of rehabilitation to allow for continued use and accessibility.

Enable public access for recreational use; especially kayaks.

Further assess interest in the potential for extending public access during periods in the spring and fall.

Monitor the wetlands with respect to the occurrence of invasive plant species.

Initiatives should be coordinated closely with the Town's Parks commission.



H. Seapoint Beach

Seapoint Beach is located on the community's Atlantic shoreline. Parking and amenities at Seapoint Beach are currently very limited, which results in a low intensity of usage. The area provides valuable habitat in the form of extensive salt marshes.

Based the work of the Committee and through outreach efforts that included public meetings, the following goals and implementation strategies/projects were identified:

1. Town Goal(s)

Enhance the cleanliness of the beach, but recognize that the relative isolation and limited use are key to the quality of place.

2. Implementation Strategies

Implement measures to enhance the cleanliness of the beach, such as signage, and enforcement of the existing "carry-in / carry-out" policy for waste. Seaweed removal will be limited to infrequent occasions when storm conditions result in unusually large depositions that become a nuisance.

Limit the number of parking spaces to restrict the number of visitors.

Avoid construction of significant amenities (such as public restrooms).

I. Crescent Beach

Crescent Beach, like Seapoint Beach, is located on the community's Atlantic shoreline, and parking and amenities are currently very limited, resulting in a low intensity of usage. In years past, the Beaches possessed more parking and a public restroom facility, but these were destroyed in the winter storms of 1978 and not replaced.



Based the work of the Committee and through outreach efforts that included public meetings, the following goals and implementation strategies/projects were identified:

1. Town Goal(s)

Enhance the cleanliness of the beach, but recognize that the relative isolation and limited use are key to the quality of place.

2. Implementation Strategies

Implement measures to enhance the cleanliness of the beach, such as signage, and enforcement of the existing "carry-in / carry-out" policy for waste. Seaweed removal will be limited to infrequent occasions when storm conditions result in unusually large depositions that become a nuisance.

Limit the number of parking spaces to restrict the number of visitors.

Avoid construction of significant amenities (such as public restrooms).

J. Rachel Carson Refuge

The Rachel Carson Refuge is a larger federal preservation area, owned and maintained by the US Fish and Wildlife Service. The refuge consists of a number of parcels located in several communities (Kittery, York and Wells) and is intended to provide both protection of habitat for a number of species of flora and fauna, as well as public access for hiking, birdwatching and related "low impact" recreational activities.



Based the work of the Committee and through outreach efforts that included public meetings, the following goals and implementation strategies/projects were identified:

1. Town Goal(s)

Explore means to enhance access/parking, but recognize that the relative isolation and limited use are key to the quality of place.

2. Implementation Strategies

Initiate discussions with the Refuge Management (US Fish and Wildlife Service) with respect to the above-stated goals. Jointly assess potential improvements.

K. Braveboat Harbor

Braveboat Harbor is located along the Atlantic shore on the boundary between Kittery and the adjacent community of York. While the Harbor provided a useful navigational refuge in times past, it presents a number of navigational hazards (including breaking surf) which can render it unsafe for unfamiliar boaters. It is primarily used by residents of the area who possess private piers and access points. The area is known for its scenic beauty, but offers little in the way of convenient public access from the landside.

Based the work of the Committee and through outreach efforts that included public meetings, the following goals and implementation strategies/projects were identified:

1. Town Goal(s)

Explore means to enhance access/parking, but recognize that the relative isolation and limited use are key to the quality of place and that expanded use would need to be considered in the context of potential impacts to the adjacent residents.

2. Implementation Strategies / Projects

Review Town-owned property within and adjacent to the area, including rights-of-access associated with the old trolley right of way that extended through the area. Consider potential impacts to adjacent residential properties.

L. Isles of Shoals

The Isles of Shoals are a cluster of small islands located approximately 6 miles southeast of the mouth of the Piscataqua River. The state boundary between Maine and New Hampshire bisects the archipelago, leaving Appledore, Duck, Smuttynose, Malaga and Cedar within the state of Maine and the Town of Kittery. The islands constitute a recreational destination and several moorings are maintained within Gosport Harbor, which is formed by

the stone breakwaters which connect Cedar, Smuttynose, Malaga and Star Islands.

According to the US Army Corps of Engineers “Work in the Isles of Shoals began as early as 1821, when private interests constructed a stone breakwater between Malaga and Smuttynose islands. In 1904, the Corps repaired and strengthened the breakwater to a length of 240 feet and constructed a second stone breakwater, 700 feet long, between Smuttynose and Cedar Islands. In 1913, the Corps repaired and strengthened the existing breakwaters and constructed a third stone breakwater, 530 feet long, between Cedar and Star islands. The breakwaters provide vessels with a safe refuge in Gosport Harbor.”

It was noted that the existing breakwater that provides shelter for the anchorage is in need of repairs.

It was also noted that demand for moorings at this location often exceeds the supply. It does not appear, however, that the harbor can accommodate additional sheltered moorings.

Based the work of the Committee and through outreach efforts that included public meetings, the following goals and implementation strategies/projects were identified:

1. Town Goal(s)

Enhanced potential for use by community residents and maintenance of existing facilities.

2. Implementation Strategies / Projects

Conduct an engineering assessment of the breakwater to determine an appropriate scope of work and budget for the rehabilitation effort, and, as appropriate, initiate discussions with the Corps of Engineers.

M. Wood Island

Wood Island is a small (1.25 acre) island located a short distance from the mainland adjacent to Fort Foster. The Island is the site of the former Wood Island Lifesaving Station.

Based the work of the Committee and through outreach efforts that included public meetings, the following goals and implementation strategies/projects were identified:



It was acknowledged that ongoing initiatives to restore the former Coast Guard lifesaving station have been politically divisive within the community, based primarily on the potential fiscal impacts. In general, stakeholders approval of the restoration in concept, but there was less than uniform support for use of municipal revenues for the project.

It was determined that the community should support restoration of the exterior of the Wood Island lifesaving station to the extent this can be accomplished without burdening the Town's finances, and in a way that is appropriate given consideration of long-term sea level rise and other environmental factors.

N. Spinney Creek

Spinney Creek is an estuary/embayment located along the municipal boundary with the community of Eliot, located at the extreme northern side of the Town's frontage along the Piscataqua River. The Creek is the site of aquaculture leases.



Based the work of the Committee and through outreach efforts that included public meetings, the following goals and implementation strategies/projects were identified:

1. Town Goal(s)

Ensure that water quality is maintained in a way to support both commercial aquaculture and recreational uses.

2. Implementation Strategies / Projects

Continue to support enforcement of land use ordinances and municipal initiatives aimed at addressing non-point source water pollution.

O. Chauncey Creek

Chauncey Creek is a narrow embayment that provides a sheltered harbor for a number of small recreational and fishing vessels toward the southern end of the Creek. The Creek has provided a valuable locale for safe mooring of vessels during severe storms. The presence of a bridge and overhead power lines limit navigation by certain craft.

Based the work of the Committee and through outreach efforts that included public meetings, the following goals and implementation strategies/projects were identified:



1. Town Goal(s)

Ensure that any future development is implemented in a way that promotes continued use by both commercial and recreational boaters.

2. Implementation Strategies / Projects

Continue to support enforcement of land use ordinances that balance landside desires with marine interests.

P. Spruce Creek

Spruce Creek is the community's largest estuary/embayment, providing frontage for a number of residential properties, but with extended areas of undeveloped shoreline. The Town has been working for some time on a variety of initiatives aimed at addressing non-point source water pollution within the estuary and its tributaries. The creek was once home to many acres of productive shellfishing areas.



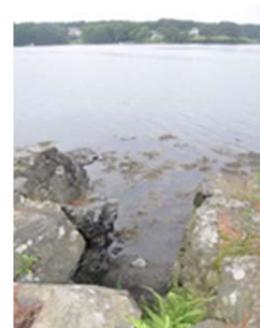
Based the work of the Committee and through outreach efforts that included public meetings, the following goals and implementation strategies/projects were identified:

1. Town Goal(s)

Ensure that water quality is maintained in a way to support both commercial aquaculture and recreational uses.

2. Implementation Strategies / Projects

Continue to support enforcement of land use ordinances and municipal initiatives aimed at addressing non-point source water pollution.



Part 3 – Policy-Related Enhancements

3.1 Introduction

As noted earlier in this Plan, the identified goals and strategies included action items that could be categorized as either policy-related enhancements, or physical improvements that are connected to a specific location. This section discusses those quality improvement goals that may relate more to policy topic than a specific location within the community.



3.2 Desired Policy Updates

A. Enhanced Public Access

Through both public forums and discussion within the committee, there was much discussion relative to the issue of increased public access. It was determined that initiatives to enhance access should be focused on specific locations where the impacts of such increased access could be effectively managed. Locations where it was determined that enhancements to public access could best be accommodated are discussed in Section 4 of this Plan.

1. Town Goal(s)

Increased public access to the water, but specific projects to be considered in the context of potential impacts to other existing uses and adjacent landowners, particularly residential uses.

2. Implementation Strategies

Support implementation of related initiatives identified elsewhere within this Plan.

B. Navigational Considerations

A key component of the Shore and Harbor Planning process includes consideration of marine traffic, hence it is important that the Planning effort be informed with regard to navigational considerations.

The Piscataqua estuary, as a whole, is home to a number of navigational challenges, in many cases to the combination of rocky shoals with strong currents as tidal flow to and from the Great Bay passes through the area. The main navigational channel is a federally designated dredge project with

depths on the order of 30 to 35 feet, at mean low water. The channel extends to an upstream turning basin approximately 3.5 miles above the Memorial Bridge. Mean tidal range in Kittery Harbor is on the order of 8.7 feet.

There are numerous of ledges present, to which the reader is referred to navigational charts. Some are marked with buoys, while others are not.

In the development of this Plan, a number of locations were identified with respect to the potential for new or enhanced public access for kayaks. The Committee and consultant team endeavored to balance the desire for enhanced access with the potential safety issues associated with currents and other hazards at the locations under consideration.



1. Town Goal(s)

Improved navigational safety.

2. Implementation Strategies / Projects

Work with federal agencies to replace/upgrade the current navigational markers at the north and south ends of Badgers Island.

C. Clean Beaches

Given the overwhelming desire to maintain the Community's beaches as more natural areas, it was determined that seaweed will generally be left *in situ*, but that manmade debris will be periodically removed by municipal forces. The Town's Public Works Department may remove seaweed periodically if it accumulates to the point where it is found to be a nuisance.

The strategies commonly available for addressing dog waste include the placement of signs and the installation of dispensers for "dog waste bags" and trash receptacles for their disposal. After considerable discussion, which included review of past experience with placement of waste receptacles at these locations it was determined that the best course to pursue is increased education and enforcement of the current "carry-in / carry-out" policy for waste.

1. Town Goal(s)

Enhance the cleanliness of municipal beach areas. Public comment relative to cleanliness issues focused primarily on dog waste and man-made debris, with some requests for improved management of seaweed.

2. Implementation Strategies

Increase education and enforcement of the current “carry-in / carry-out” policy for waste.

Continue coordinating with the state Clean Beaches initiative administered by the Maine Department of Environmental Protection.

Remove seaweed only when it is determined to constitute a nuisance.

D. Clam flats and Aquaculture

The two primary factors limiting the productivity of the community’s clam flats are the presence of invasive green crabs and issues associated with water quality (primarily non-point source pollution).

State and local officials throughout the state’s southern coastal areas are working collaboratively to pilot and test the effectiveness of a range of alternative mechanisms to combat the green crab menace. The crabs have few natural predators and cost-effective solutions thus far have not been identified. Increased seeding of the flats by the community is likely to be a part of the answer.

The community, through its public works department, has been engaged in several initiatives aimed at addressing non-point source water pollution, particularly within the Spruce Creek area.

1. Town Goal(s)

Enhance the productivity of clam flats and areas suitable for aquaculture, primarily in the context of their role as a component of the local economy.

2. Implementation Strategies

Continue to monitor, and where possible, support efforts to manage depredation of juvenile clams by green crabs.

Continue to implement initiatives aimed at protecting and enhancing water quality along the community’s shorelines and within its estuaries.

E. Funding for Waterfront Improvements and Maintenance

1. Town Goal(s)

Provide adequate funding to allow for timely maintenance and capital



improvements to waterfront facilities in Kittery Foreside and other locations of municipal Shore and Harbor facilities.

2. Implementation Strategies

Assess the revenue potential associated with: marketing opportunities to transient boaters, commercial sponsorships, events (such as “Blessing of the Fleet”, etc.), business improvement district, tax increment financing district, user fees, grants, etc.

Keep abreast of available grant funding programs administered by state and federal agencies and relevant to shore and harbor facilities.

F. Coordination between the Municipal Government, Portsmouth Naval Shipyard and Kittery Port Authority.

1. Town Goal(s)

Continue to seek opportunities for enhanced communication between Kittery’s municipal government, the Portsmouth Naval Shipyard and Kittery Port Authority

2. Implementation Strategies

Consider creating a standing community task force or liaison committee to discuss Shore and Harbor issues with Shipyard management.

G. Mitigation of Shoreline Erosion

The primary mechanism for achieving this goal relates to reduction in the erosive action of boat wakes in areas with erodible shorelines. This is best done through better education and enforcement of boat speeds.



1. Town Goal(s)

Take steps to address erosion of shoreline areas within the community.

2. Implementation Strategies

Increase efforts aimed at education and enforcement of speed limits in areas with erodible shorelines.

H. Mitigation of Water Pollution

The primary sources of coastal water pollution typically include both point (wastewater and storm drain outfalls) and non-point (runoff from lawns and

agricultural areas) sources. The community is regulated by the Maine DEP as a municipal small separate storm sewer (MS4) community, and through that mechanism has been required to implement a number of measures to address water pollution.

1. Town Goal(s)

The mitigation of water pollution within coastal waters.

2. Implementation Strategies

Continue support of the MS4 program, and consider support for future related opportunities as they are identified.

I. Planning for Long Term Sea Level Rise/Climate Change

Many people within the community have some level of awareness regarding the potential for impacts associated with Long-Term Sea Level Rise and Climate Change.

The community is seeking advice with respect to confirming the accuracy of the latest version of Flood Insurance Rate Maps for coastal areas as issued by the Federal Emergency Management Agency (FEMA).

1. Town Goal(s)

Anticipate long-term sea level rise and take steps in the planning for existing and new shoreline facilities (both publicly and privately-owned) to mitigate anticipated impacts.



2. Implementation Strategies

Integrate consideration of Long Term Sea Level Rise and Climate Change into town planning and development processes, especially within shoreland areas and as related to marine facilities.

Support efforts to evaluate and, as appropriate, implement wave protection measures for the port and harbor facilities at Pepperrell Cove.

Part 4 – Implementation Program

4.1 Introduction

This section discusses actions to be taken in order to implement the identified projects established in Parts 3 and 4 of this Planning document, and likely entity(ies) having responsibility for leading the implementation effort.



4.2 Implementation Program

Town Policy – Related Implementation Strategies:

1. Continue coordinating with the state Clean Beaches initiative administered by the Maine Department of Environmental Protection.
Primary Responsibility: Kittery Public Works, Kittery Planning Office
2. Stay abreast of State and Regional initiatives to pilot and test the effectiveness of mechanisms to combat the green crab menace.
Primary Responsibility: Kittery Planning Office, Conservation Commission
3. Continue to support, through the Public Works Department, initiatives aimed at addressing non-point source water pollution.
Primary Responsibility: Kittery Public Works
4. Assess the revenue potential associated with: marketing opportunities to transient boaters, commercial sponsorships, events (such as “Blessing of the Fleet”, etc.), business improvement district, tax increment financing district, user fees, grants, etc. as mechanisms to support capital maintenance and enhancements to municipal shore and harbor facilities.
Primary Responsibility: Kittery Port Authority
5. Keep abreast of available grant funding programs administered by state and federal agencies to support capital maintenance and enhancements to municipal shore and harbor facilities.
Primary Responsibility: Kittery Port Authority
6. Consider creating a standing community task force or liaison committee to discuss community Shore and Harbor issues with Portsmouth Naval Shipyard management.
Primary Responsibility: Kittery Port Authority, Kittery Planning Office

7. Implement education and better enforcement of boat speeds as a mechanism to address the erosion issues stemming from boat wakes in “high risk” areas of the community.

Primary Responsibility: Kittery Port Authority

8. Integrate consideration of long term sea level rise into town planning and development processes especially in shoreland areas and as related to marine facilities.

Primary Responsibility: Kittery Port Authority, Kittery Public Works, Kittery Planning Office

9. Support efforts to evaluate and, if appropriate, implement wave protection measures for the port and harbor facilities at Pepperell Cove.

Primary Responsibility: Kittery Port Authority

Implementation Strategies for Specific Locations:

Kittery Point Village/Town Dock/Frisbee Pier

- Implement pier improvements contemplated under the Boating Infrastructure Grant (“BIG”) Project
Primary Responsibility: Kittery Port Authority, Kittery Public Works
- Explore means to expand parking.
Primary Responsibility: Kittery Port Authority, Kittery Public Works
- Investigate the potential for wave attenuation for Pepperrell Cove.
Primary Responsibility: Kittery Port Authority (see above)
- Expand space available for dinghies.
Primary Responsibility: Kittery Port Authority
- Consider launch services for access to moored vessels.
Primary Responsibility: Kittery Port Authority
- Increase potable water & pumpout facilities for vessels.
Primary Responsibility: Kittery Port Authority, Kittery Public Works
- Assess the need for future federal dredging in support of long-term viability of the mooring basin.
Primary Responsibility: Kittery Port Authority



Kittery Foreside – Including Government Street Pier and Adjacent Areas

- Implement capital maintenance improvements to the Government Street pier in support of commercial fishing uses (hoist, safety railings, potable water, etc.)
Primary Responsibility: Kittery Port Authority

- Explore means to create increased water access and public outdoor seating/viewing.
[Primary Responsibility: Kittery Planning Office](#)
- Explore the feasibility of water taxi service with Portsmouth.
[Primary Responsibility: Kittery Planning Office, Kittery Port Authority](#)
- Look for opportunities to expand public parking.
[Primary Responsibility: Kittery Planning Office](#)
- Explore means to expand recreational boat access without adverse impact to commercial fishing interests.
[Primary Responsibility: Kittery Planning Office, Kittery Port Authority](#)



Traip Boat Launch

- Expand the floats along the boat launch ramp.
[Primary Responsibility: Kittery Port Authority](#)
Monitor the need for construction of additional parking or implementation of parking management protocols.
[Primary Responsibility: Kittery Port Authority](#)

Rice Avenue Neighborhood

- Explore opportunities for a waterfront park with limited hours of use and passive recreation opportunities. Include consideration of potential impacts to adjacent residential uses.
[Primary Responsibility: Kittery Planning Department](#)

Eagle Point

- Undertake a public process to develop a plan for tapping into this sites potential in a way that balances impacts to adjacent neighborhoods and addresses the ecological sensitivity of the area.
[Primary Responsibility: Kittery Planning Department, Kittery Port Authority, Conservation Commission](#)

Fort McClary Area

- Review bathymetry and navigational charts and assess impacts to current commercial fishing interests in the event the community were to designate a anchorage area for large transient vessels.
[Primary Responsibility: Kittery Port Authority](#)
[Funding requirement: None for initial assessment](#)



Fort Foster Park and Pier

- Rehabilitate/modify the pier to allow for continued use and accessibility.
[Primary Responsibility: Kittery Parks Commission, Kittery Port Authority, Kittery Public Works](#)
- Enable public access for recreational use; especially kayaks.
[Primary Responsibility: Kittery Parks Commission](#)
- Assess the economics and other factors to determine the potential for extending public access to Park facilities during periods in the spring and fall.
[Primary Responsibility: Kittery Parks Commission, Kittery Public Works](#)



Seapoint Beach

- Implement measures to enhance the cleanliness of the beach, such as signage, “dog waste bags” and trash receptacles.
[Primary Responsibility: Kittery Parks Commission, Kittery Public Works](#)
- Limit the number of parking spaces to restrict the number of visitors.
[Primary Responsibility: Kittery Parks Commission](#)

Crescent Beach

- Implement measures to enhance the cleanliness of the beach, such as signage, “dog waste bags” and trash receptacles.
[Primary Responsibility: Kittery Parks Commission, Kittery Public Works](#)
- Limit the number of parking spaces to restrict the number of visitors.
[Primary Responsibility: Kittery Parks Commission](#)

Rachel Carson Refuge

- Initiate discussions with the Refuge Management (US Fish and Wildlife Service) with respect to increased access. Jointly assess potential improvements.
[Primary Responsibility: Kittery Parks Commission, Kittery Planning Office](#)

Braveboat Harbor

- Review Town-owned property within and adjacent to the area, including rights-of-access associated with the old trolley right of way that extended through the area. Consider potential impacts to adjacent residential properties.
[Primary Responsibility: Kittery Parks Commission, Kittery Planning Office](#)

Isles of Shoals

- Conduct a more in-depth assessment of current mooring areas and consideration of the potential for their expansion.
[Primary Responsibility: Kittery Port Authority](#)
- Conduct an engineering assessment of the existing breakwater to establish capital maintenance needs.
[Primary Responsibility: Kittery Port Authority](#)

Wood Island

- Support restoration of the exterior of the Wood Island lifesaving station without burdening the Town's finances.
[Primary Responsibility: Kittery Parks Commission, Kittery Planning Office](#)

Channel at Badgers Island

- Work with federal agencies to replace/upgrade the current navigational markers at the north and south ends of Badgers Island.
[Primary Responsibility: Kittery Port Authority](#)
- Request that the federal government/Corps of Engineers conduct a survey of the Back Channel with respect to the potential for future dredging.
[Primary Responsibility: Kittery Port Authority](#)



4.3 Community Priorities

As with most Plans of this nature, the number and magnitude of the desired initiatives are greater than the community can undertake within the immediate future. In order to provide some guidance to those entities tasked with implementation of the Plan, the November 7, Public Forum included elements aimed at soliciting input from community members as to their idea of priorities. The priority-setting exercises included components based both on specific locations/facilities within the community and areas of policy. The results of the exercises are as follows, with the numbers preceding the location or policy initiative representing the “votes” received for that item.

Locations:

- 15 Fort Foster
- 9 Kittery Point Village / Frisbee Pier
- 9 Seapoint Beach

- 8 Traip Boat Launch
- 7 Commercial Center / Rogers Park
- 7 Kittery Foreside / Government Street Pier
- 1 John Paul Jones



Policy Topics:

- 26 Maintain What We Have / Maintain or Increase CIP Funds
- 8 Increased Funding for Waterfront Maintenance
- 8 Storm Planning / Climate Change
- 5 Address Cleanliness of Beaches
- 5 Address Non-point Source Water Pollution
- 3 Enhanced Coordination with the Navy Yard
- 3 Maintain/Improve the Working Waterfront
- 3 Maintain/Enhance Productivity and Health of Clam Flats
- 2 Increase Public Access to Shoreline/Water

4.4 Project Funding

While a number of the identified initiatives consist of policy decisions which can be implemented with little or no fiscal impact, it is clear that many of the desired elements will require funding in order to proceed. As with most communities, The Town of Kittery and its Port Authority are subject to a number of fiscal constraints, and it is reasonable to expect that timely implementation of many of these initiatives will be depending on the availability of funding sources other than local property tax revenue. The following is an overview of potential funding sources which may be considered to support the implementation of Kittery’s shore and harbor improvement efforts. Included in this overview are:

- Shore and Harbor Grants
- Community Development Block Grants
- User Fees
- Tax Increment Financing
- MaineDEP Pump Out Grant Program
- MaineDMR Working Waterfront Access Protection Program
- Public/Private Collaboration
- Other Miscellaneous State Funding Programs



Shore and Harbor Grants

Shore and Harbor Grants are administered by the Maine Department of Agriculture, Conservation and Forestry, through the Maine Coastal Program. The Town is familiar with this funding program, having applied for and received planning grant funds through this program in support of this study effort. These funds are available by grant application on an annual basis. The Town should continue to seek funding through this program for in those cases where the grant selection criteria are consistent with the initiative. It is important to note that these funds are not eligible for any local, state or federal regulatory permitting efforts. Further information is available at: <https://www.maine.gov/dacf/mcp/grants/shore-and-harbor-planning-grants.html> or by calling the Coastal Program at (207) 287-1419

Community Development Block Grants (CDBG)

This program is a federally-funded initiative administered by the Maine Department of Economic and Community Development (MaineDECD). The purpose of the program is to provide grants to local communities to support economic and community development that primarily benefits low and moderate income persons. Federal funding to underwrite the program is provided through the U.S. Department of Housing and Urban Development (HUD).

The CDBG program consists of several grant programs that support initiative aimed at economic and community development. For the improvements identified above, the community may wish to consider applying for a Public Facilities Grant. These funds are available on an annual basis. Each year the program statement is evaluated and adjusted. Current information regarding Maine's CDBG program is available at: <http://www.maine.gov/decd/meocd/cdbg/categories.shtml>

User Fees

User fees for public facilities are not unusual and are currently in place at a number of municipal facilities within the community. They often provide a “pay as you go” source of funding to continue to fund the operations and maintenance of these facilities. It may be worth evaluating the current fee structures to ensure that they are appropriate given the benefits received by users.



Tax Increment Financing Districts (TIF's)

Tax Increment Financing is a commonly used funding mechanism in Maine in which certain designated improvements can be funded through the dedication of increased local property tax revenues resulting from private investment within a designated district. TIFs are further supported by sheltering new property valuation within the

“TIF district” from a community’s state valuation so that the community avoids losses in state aid to education and state municipal revenues sharing as well as increases in its county tax. Revenues captured within a designated TIF district can be used to fund both local costs for infrastructure and economic development efforts as well as private costs for building construction and improvements as well as site related costs. Kittery currently has three TIF districts.

More information regarding the use of TIF’s can be found at the following link:
<http://www.maine.gov/decd/start-grow/tax-incentives/tax-increment-financing.shtml>

Pumpout Grants

Pumpout Grants are administered by MaineDEP and are managed under the Maine Pumpout Grant Program funded by the United States Fish and Wildlife Service with additional funding from the Clean Vessel Act Grant Program (CVA). These CVA funds are provided annually through Maine’s Pumpout Grant Program, providing 75% of project funding for installation, operation and maintenance of boat holding tank pump out and dumping equipment to marinas, boatyards and municipalities. The Town has been in recent conversation with MaineDEP regarding these funds and should continue to do so as they are currently the most direct source of funds for such boat waste handling facilities. Applications and grant administration information is available at:

<http://www.maine.gov/dep/water/grants/pumpout/index.html>

Working Waterfront Access Protection Program

The Maine Department of Marine Resources administers the Working Waterfront Access Protection Program in cooperation with the Maine Coastal Program, Coastal Enterprises, Inc. and the Land for Maine’s Future Program.

The process involves a competitive application process and provides matching funds “to assist commercial fisheries businesses, co-ops, municipalities and other interested parties in securing strategically significant working waterfront properties. Funds can be used to purchase property, or for the purchase of access easements, rights of way, or development rights to preserve walk-in or small boat access, properties entirely dedicated to commercial fisheries uses, or mixed use properties.” Information relative to applications and grant administration is available at:

<http://www.maine.gov/dmr/council/WWAP/WorkingWaterfrontAccessProgram.shtml>

Public / Private Partnerships

The Town and Port Authority should continue discussions with key stakeholders to assess opportunities to assist in cost sharing to benefit both owner interests.

Other Miscellaneous State Funding Programs

The State of Maine periodically enacts “special” grant funding programs using revenue from state bond issues. Examples of such initiative include Riverfront Community Development Bond program and the Municipal Investment Trust Fund, both of which were administered by the Maine Department of Economic and Community Development (DECD). While this is an inconsistent funding source and may not be available to meet Kittery’s near-term project goals, the community should continue to monitor the potential for future funding sources of this nature and be prepared to be opportunistic in terms of filing applications based on eligibility of Plan initiatives.



Part 5 – Appendices

Appendix A – Relevant Maps and Plans

Appendix B – Materials from First Public Forum

Appendix C – Materials from Second Public Forum

Appendix D – Coordination with Kittery’s Comprehensive Plan/Growth Management Program