## MARINE RESOURCES



The Kittery waterfront along the Back Channel, a hub for commercial fishing and recreational boating, with the Portsmouth Naval Shipyard, a key local employer, located across the channel.

Waterfronts are in fact one of valuable and productive assets, state and local policies should not be indifferent to the fate of Maine's working waterfronts. Rather policies should recognize their value and seek to promote and preserve them wherever possible.

-Charles S. Colgan<sup>1</sup>

With every drop of water you drink, every breath you take, you're connected to the sea. No matter where on Earth you live. Most of the oxygen in the atmosphere is generated by the sea.

- Sylvia Earle<sup>2</sup>

Without water, our planet would be one of the billions of lifeless rocks floating endlessly in the vastness of the inky-black void.

- Fabien Cousteau<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Charles Colgan is a Professor of Public Policy and Management at the Muskie School of Public Service, University of Southern Maine, and author of "The Contribution of Working Waterfronts to the Maine Economy", 2004.

<sup>&</sup>lt;sup>2</sup> Sylvia Earle is an acclaimed oceanographer and was the first female chief scientist of the U.S. National Oceanic and Atmospheric Administration.

<sup>&</sup>lt;sup>3</sup> The grandson of Jacques Cousteau, Fabien Cousteau is an ocean conservationist and documentary filmmaker who works to restore local water ecosystems.

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#### State Goal:

To protect the State's marine resources industry, ports and harbors from incompatible development and to promote access to the shore to the shore for commercial fishermen and the public.

(Growth Management Act 30-A M.R.S.A. 4312-4350)

**GOAL STATEMENT 7:** TO PROTECT THE TOWN'S COASTLINE, THE WORKING WATERFRONT, AND INCREASE ACCESS TO AND ENJOYMENT OF THE WATER WHILE PROTECTING IT FROM ENVIRONMENTAL IMPACTS

Objective 7.1. Increase access to the waterfront

Objective 7.2. Promote working waterfront

**Objective 7.3.** Protect marine resources

Throughout the comprehensive planning process, citizens of Kittery identified the town's marine resources as central to the identity and economy of the community. With its mix of ocean shorelines, bays, estuaries, public parks, and working waterfront, Kittery's prized assets, and core component of the community's character. The resources are also widely appreciated by residents, and there is widespread agreement on the importance of their preservation, and where possible, enhancement. While the busy



Dinghies tied up at Fishing Pier at Pepperrell Cove, the primary Town-operated mooring facility

recreational piers, major public parks, and the Portsmouth Naval Shipyard may be the best known aspects of the Kittery waterfront, the estuaries, creeks, and backbays provide extensive

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opportunities for public access and are valuable natural resource areas. Marine resources in Kittery include 34 miles of shoreline, with rock outcrops, salt marshes, sandy beaches, waterfront recreational areas, coves and moorings, commercial marinas, and the major federal shipbuilding and repair facility at the Naval Shipyard.

In the adjacent offshore areas are Badger's Island, Seavey (site of the Naval Shipyard) and Wood Island, site of the Wood Island Life Saving Station, which is now under renovation. The Isles of Shoals archipelago are a unique historic site and active harbor and destination for visitors. Important waterfront natural areas include Seapoint Beach, Rachel Carson National Wildlife Refuge, Fort Foster, and Fort McClary. The primary Town-operated mooring is Pepperrell Cove, and Government Street Pier is a key facility for commercial fishermen to load and unload their vessels.

To preserve, protect, and best utilize these resources, residents of Kittery will need to concentrate on a number of issues. While residents appreciate the beauty of the local waterways, not all may understand the extent of the resources' role in the local economy, contribution to property values, and as core components of what makes Kittery a unique place. The environmental impacts of activities such as lawn fertilization, dog walking, and property development are also not fully understood or accounted for. The Town-operated marinas are well-managed, but 12-15 year waiting lists for moorings limits the ability of new users to utilize them. There are concerns about the availability of parking in numerous locations, accompanied by concerns that increasing access will strain environmentally sensitive areas. Underlying all of these discussions is the fact of rising sea levels, water temperatures, and increased risks from flooding. The

management of Kittery's marine resources will need to take the both the day-to-day concerns and the longer-term changing circumstances into account.

Topic area #6 of the comprehensive plan focuses on protecting the town's marine resources by encouraging residents, business owners, and visitors to identify opportunities to increase access to the waterfront where needed and without causing undue impact on adjacent properties, support the economic viability of marine-based industries (including fishing and lobster) through protection of landside facilities such as docks, and continue to monitor and improve water quality and overall health of the waterways through reduction in pollutants.

## KITTERY VOICES: RESIDENTS' THOUGHTS REGARDING MARINE RESOURCES

As part of the comprehensive planning process, a number of public engagement tools encouraged residents to voice opinions, concerns, and ideas about the town's historic and cultural resources. The social media website CoUrbanize provided a map with interactive tool that allowed users to locate problem and opportunity areas. A web-based survey, conducted through SurveyMonkey, asked users to respond to several burning issues (listed below). These questions were also posed at public forums, held in March and June of 2016. A sampling of the comments received follows:

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## "What actions should be taken to improve water quality in Kittery?"

"Educate the public regarding the use of fertilizer, pesticides, and other contaminants."

"Restrict/prohibit the application of lawn fertilizers on those properties where surface runoff can go to estuaries, the ocean, or fresh water bodies that drain to the estuaries and ocean. Promote the use and creation of water collection systems from buildings roofs to be used for gardening and waste water flushing functions."

"Restrict development."

"Continue funding grants to protect Spruce Creek."

"Give tax incentives for decreased impervious coverage."

"Incentives for re-use and development of existing facilities instead of more development."

"Fix Pierce Island (Portsmouth) wastewater treatment plant 1st! Send a message to Portsmouth—no more sewage overboard."

"There are no public pumpout stations on the Piscataqua River from Great Bay to the Portsmouth Harbor entrance. Let's get serious about protecting and improving our water quality... Pepperrell Cove is the perfect location for a pumpout station with the new town docks and improved access."

"How do we strike a balance between the dog owner's desire to bring their dogs to the beach and the desire of others for clean and peaceful beaches?

"Prominent disregard to dog waste on Seapoint Beach."

"Bags and waste receptacles should be made available at Rogers Park, Fort Foster, Seapoint and Crescent Beaches."

"Disposal should be enforced by police and/or student intern at Fort Foster; raise the fine."

"[D]o you think the working waterfront in Kittery is facing redevelopment pressure? If yes, what measures would you support for its preservation?"

"Fishermen should get priority."

"Don't let gentrification force out existing marine economic activities, fishing, etc."

"Support our fishermen! They provide our food, character, local economy."

"Protect working waterfront – since University of Maine studies show that economic benefits of waterfront jobs outweigh revenue from luxury waterfront residential development. Once it is gone, it is gone forever. In particular, protect waterfront access for fishing industry – consider public, cooperative, or public-private pier and shoreside facilities."

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#### Other comments included:

"Encourage more use of Traip Academy [parking] lot, and buy Frisbee's Market lot for town parking."

"Need additional access for parking on all public waterfront areas."

"No more additional access-How about Fort Foster?"

"We need a 'Caution No Wake Zone' buoy here (at Hicks Rocks, south of the Rt. 103 bridge). There was one there two years ago. Boaters speed all the way up to the Pepperrell Cove (Rt. 103) bridge all too often."

#### **ISSUES AND IMPLICATIONS**

- Demand for access to the waterfront and for boating access is consistently high, and at times, is greater than the ability of existing landside facilities and moorings to meet. Much of the shoreline is privately owned or in dedicated public parks or conservation land, and sites suitable for development of marina/launch facilities are limited. Challenges include exposure to rapid currents in the Piscataqua River, exposure to ocean winds and waves, and limited land area suitable for parking and marina construction.
- Storm winds and waves limit opportunities for additional moorings in exposed areas such as Fort Foster. Floating docks are vulnerable to damage during storms.

- As a coastal community with a densely-developed shoreline, extensive waterfront recreational areas, and a working waterfront, Kittery is going to experience direct impacts from sea level rise. Gulf of Maine waters are warming faster than 99.8% of the world's oceans, with 5.5 degrees Fahrenheit of increase in the last decade. Kittery has not developed a sea level rise or climate adaptation plan, unlike the nearby communities of Exeter and Wells, and Portsmouth, NH.
- A significant portion of the available parking at Pepperrell Cove is in a lot across Route 103/Pepperrell Road. While the lot is deed-restricted as parking, the property is in private ownership and the deed restriction does not require the parking lot to be available to the general public.
- The Town-operated mooring facilities at Pepperrell Cove and Traip Academy are heavily used and there is a 12-15 year waiting list for moorings and there is no available space at these locations for installation of additional moorings. Traip Academy is well-suited for launching trailerable boats and kayaks.
- Swift currents in the Piscataqua can pose a hazard to small vessels, particularly to human-powered craft such as kayaks.
   Boaters, particularly visitors to Kittery, who want to kayak or sail on the Piscataqua should be made aware of tides and currents.
- Run-off and direct source pollution have led to the contamination of area waters and to shellfishing restrictions, with prohibitions in certain areas. Major sources affecting the

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Piscataqua River are wastewater treatment plants (WWTP) outfalls from South Berwick and Kittery, and from Portsmouth and Newington in New Hampshire. The Portsmouth Naval Shipyard is also a major pollution and effluent source. Portsmouth is upgrading its Pierce Island treatment plant but the facility will bypass stormwater from secondary treatment during wet weather.

- The Spruce Creek watershed is identified by Maine Department of Environmental Protection as a "nonpoint source pollution priority watershed", and water quality is actively monitored by the Town of Kittery. However, water quality is further threatened by development pressure in the watershed, and there are no restrictions on pesticide and fertilizer use.
- The numerous waterfront public areas, such as Fort Foster and Seapoint Beach, are widely used and regarded as major assets by the community. There are concerns about the impacts the users have on the parks, with the issue of dog waste (and also horse waste at Rogers Park) a primary concern.
- Residents are divided on whether to build facilities, e.g., parking, for increased usage of certain parks. Some residents have called for expanded access, while others feel increased usage will be damaging to environmentally sensitive locations. There is also a difference of opinion on whether any increased access should be open to all or limited to Kittery residents.

- There is no fixed location public pumpout facility from Great Bay to the Portsmouth Harbor entrance. While there is a State-operated pumpout boat, it has limited hours and capacity. Thus, it can be difficult for boat owners to dispose of waste in an environmentally responsible fashion.
- Long-term siltation in Pepperrell Cove and a lack of dredging have decreased available water depths and thus limit the draft and size of boats able to access the moorings and piers.
- The town's many scenic views, including views of the water, are currently unprotected by town ordinances. Additionally, ordinances do not regulate fence height and placement which have potential to obstruct many waterfront views.
- Due to underlying soil conditions, septic system failures have been reported in areas near the border with York, ME. This is long-term problem first evaluated in the late 1990s. The area is considered as high-value for land conservation, and is also facing development pressure.

#### **KEY RECOMMENDATIONS**

The following are the recommended policy directions for the Topic Area of Marine Resources. See the Table that follows for specific Actions Steps for achieving these.

## OBJECTIVE 6.1 INCREASE ACCESS TO THE WATERFRONT

- 6.1.1. A public education campaign to inform boaters about safe boating practices and the navigational challenges and hazards in area waterways, with emphasis on the strong currents in the Piscataqua River and avoiding interference with commercial vessels, such as lobster boats and freighters.
- 6.1.2. Provision of long-term public access rights to the parking spaces at the Frisbee Store property, including the lot across Route 103/Pepperrell Road.
- 6.1.3. Explore opportunities for water-based visitation to Kittery, such as a water-taxi from Portsmouth, and to provide a docking location for existing boat trips (such as the various harbor tours) to drop off visitors in Kittery. Emphasis should be on developing opportunities in the Kittery Foreside, which is the commercial area nearest to the waterfront.
- 6.1.4. Publication of a map to existing points of access for boaters, particularly kayaks and small craft that can be launched from trailers or hand-carried. The sites shown

- should be appropriate in size, location, adjacent land uses, and access (e.g.; availability of parking).
- 6.1.5. Determine whether appropriate locations exist for additional public access, whether for sailboats, motorboats, or human-powered craft, or a combination thereof.
- 6.1.6. In areas such as Seapoint Beach and Crescent Beach, there is limited parking available and the relative isolation and limited usage are seen as key to the quality of the area and helpful in reducing environmental impacts. For such locations, evaluate the placement of bicycle racks and any needed improvements to walking paths to allow visitors to arrive without using (and parking) an automobile.
- 6.1.7. Continued collaboration with Wood Island Life Saving Station Association (WILSSA), including support for construction of a pier and restoration of the marine railway.
- 6.1.8. Install signs to parking lot at Mitchell School, which can serve as overflow parking for Pepperrell Cove in summer and on non-school days.
- 6.1.9. Install No Wake Zone signs and buoys where needed, including at Hicks Rocks, south of Route 103 Bridge.

#### **OBJECTIVE 6.2 PROTECT WORKING WATERFRONT**

- 6.2.1. Promote the long-term viability of the working waterfront through coordination with marine-based industries (including fishermen and lobsters), other commercial boat operators, and operators of associated facilities such as marinas and dockyards to identify challenges to their operations, whether from limitations on shoreside facilities, water quality, economics, or other.
- 6.2.2. Identify any needed improvements or operational changes to the Government Street Pier to enhance its use by commercial fishermen.
- 6.2.3. Identify whether additional shoreside facilities for commercial access would benefit marine-based industries.
- 6.2.4. Evaluate whether any additional areas should be categorized as Commercial Fisheries/Maritime Uses (OZ-CFMU) zoning; this classification is located within the upland area 75 feet of the normal high-water line or to the property boundary line as identified on the Zoning Map. Add clarifying language to this zoning description to state that on-site boat storage is explicitly allowed in this zone.
- 6.2.5. Identify locations where reduced water depths (due to siltation and sedimentation) have reduced access for working vessels, and pursue any necessary dredging to restore channel depths. Foremost would be an evaluation of Pepperrell Cove, which has significant sedimentation. However, careful assessment must be made for any dredging activity is done. In many areas of the Piscataqua

- River, silt covers sediments containing heavy metals such as mercury and arsenic that were used in the tanning industry on upstream tributaries. Exposing these pollutants would adversely affect the fishing and lobster industry.
- 6.2.6. Develop a self-guided tour of the working waterfront for visitors and residents to learn more of its history and present-day role in Kittery.

#### **OBJECTIVE 6.3 PROTECT MARINE RESOURCES**

- 6.3.1. An education and outreach effort to inform residents about the effects of pollutants, pesticides, and stormwater runoff.
- 6.3.2. Evaluation of an ordinance regulating the use of lawn chemicals, such as fertilizers and pesticides, either in areas adjacent to the waterfront, or town-wide.
- 6.3.3. Evaluation of the range of impacts from sea level rise and preparation of a climate change adaptation and response plan. Study should focus on potential impacts to community facilities, roadways, increases in the regulated floodplain, potential for increased property damage, and for increased risks to life and safety. Existing efforts in Wells and Eliot, ME can be used as examples and guides.
- 6.3.4. Work with Portsmouth Naval Shipyard to identify and reduce impacts of flooding on the facility, and to lessen or eliminate outflows of pollutants and hazardous materials during floods and storms.

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- 6.3.5. Identification a suitable site for storage of the town's floating docks during coastal storms, and prepare specific operational plans to move floats there in advance of storms.
- 6.3.6. Creation of a robust dog waste ordinance to reduce impact of uncollected waste on beaches, particularly Seapoint Beach. An associated measure could be the provision of dog waste bags, designated locations for collection (e.g., waste bins), and a waste collection schedule. Signage explaining the environmental impact of dog waste would be useful in explaining the need for cleanup to visitors and dog walkers, accompanied by signs stating hours and times of the year where dogs are allowed, and penalties for non-compliance.
- 6.3.7. Evaluation of a ban on dogs during specific times of day during summer months at specific locations, most notably Seapoint Beach.
- 6.3.8. Evaluate the feasibility of a public waste pumpout facility in Kittery, particularly one located at Government Street Pier which offers a connection to the municipal sewer system.
- 6.3.9. Identify high-value scenic views of the water and designate them for protection through proactive development regulations (including regulation of fence heights).

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# MARINE RESOURCES AND THREE KEY PLANNING PRINCIPLES

Environmental Stewardship	By maintaining and maximizing water quality and the health of its marine resources, Kittery will be safeguarding irreplaceable environmental assets for its future as a coastal community.
Health & Wellness	By improving water quality and facilitating access to the water and waterfront areas, Kittery will be promoting the health of its residents and their access to recreational and exercise opportunities.
Economic & Social Vitality	By protecting its working waterfront, Kittery will support a major sector of the local economy, and preserve a central aspect of its community character.
	By promoting a broad user base for its marine resources, Kittery will interest and involve many people from the community in its stewardship, and further increase its social capital as a community



Commercial fishing boats docked adjacent to the Government Street Pier in the Kittery Foreside

OBJECTIVE 6.1: I	OBJECTIVE 6.1: INCREASE ACCESS TO THE WATERFRONT								
Strategy	Existing Resources	Actions	Funding	Notes	Lead & Partners	Priority			
6.1.1 Public education campaign to inform boaters on navigational challenges, such as strong currents in Piscataqua River and avoiding commercial vessels	NOAA Navigation Charts; Kittery Port Authority's (KPA) website info on launching sites; Local expert boaters/kayakers; Maine Department of Inland Fisheries & Wildlife Boating Education Courses	Review existing documents on navigation in Kittery area		Use existing information to greatest extent possible; added value is in making information easily accessible and tailored to Kittery waterways	LEAD Kittery Port Authority PARTNERS Local boaters/Kayaking and boating clubs/Marinas and boatyards	1			
		Meet with local boaters to compile/check information			LEAD Kittery Port Authority PARTNERS Kayaking and boating clubs and guides	1			
		Design easy-to- understand pamphlets and posters for public education			Same as above	1			
		Encourage local boaters and visitors to take boating education courses			LEAD Kittery Port Authority PARTNERS Maine Dept. of Inland Fisheries/Commercial fisherman/marina operators	1			
6.1.2 Provision of long-term public access to parking at Frisbee Store property	Deed restrictions on property that require it to be available as parking. Note: restrictions do not require it to be available as parking to the general public	Evaluate whether an additional easement can be taken on the property to stipulate it be available for public parking			LEAD Kittery Town Council PARTNERS Kittery Planning Dept., Kittery Port Authority	1			

		Evaluate fee purchase of property			Same as above	1
6.1.3 Explore opportunities for water-based tourism to Kittery	Commercial boat operators in greater Kittery/Portsmouth area	Evaluate demand, identify potential docking locations, and determine level of interest from local businesses		Government Street Pier is publicly-owned but is predominantly used by commercial fishermen	LEAD Kittery Port Authority PARTNERS Economic Development Committee, commercial boat operators	2
6.1.4 Publication of map showing existing access points for boaters	KPA website with information on launching locations; 2014 Quality Improvement Plan for Kittery's Shore and Harbors; Maine Coastal Public Access Guide-Southern Region: South Berwick to Freeport	Compile list of locations suitable for publication, based on site access, size, adjacent land use, and water access		Information is readily available on sites, but a review of sites suitable for inclusion (and likely increased usage) must be performed.	LEAD Kittery Port Authority PARTNERS Local boaters, Coast Guard, and commercial fishermen	1
		Prepare one-page document for distribution and posting on KPA and Town of Kittery websites			LEAD Kittery Port Authority PARTNER Public information staff	1
6.1.5 Determine whether appropriate locations exist for additional public access to water/waterfront	Town land use and zoning maps	Determine level of demand and site usage constraints.	Town budget	New sites for public access will need some level of parking, compatible adjacent land uses, and direct access to water	Planning Department PARTNER Kittery Port Authority	2
	Open space inventories	Review town land use and zoning maps for potential parcels/sites	User fees from site users		Same as above	2
		Inform and involve public	Possible grants		Same as above	2

6.1.6 For environmentally sensitive and secluded locations like Seapoint Beach, encourage additional nonmotorized visitors through installation of bike racks and bike/pedestrian paths.	Locations identified for improved bicycle/pedestrian access, as identified in Comprehensive Plan update process	Engineering/planning study of site access requirements, such as dedicated paths or "Share the Road" signage; bicycle racks for storage.	Town DPW maintenance budget for signage, "Complete Streets" programs and other transportation improvement grants.	Any site improvements should be done in context of larger bike/pedestrian access improvements throughout Kittery. For example, linking waterfront parks to commercial areas like Kittery Foreside	Planning Department PARTNER Kittery Public Works, York County DOT, Maine DOT, Kittery Transportation Advisory Council	1
6.1.7 Continued collaboration with Wood Island Life Saving Station (WILSSA)	Existing tenure and concession agreements with WILSA	Support WILSSA permit application for new pier and marine railway restoration at Wood Island Station	No direct cost to Kittery		LEAD Kittery Town Council PARTNER Kittery Port Authority, Wood Island Life Saving Association (WILSSA)	3
	In-progress restoration and remediation efforts at Wood Island	Existing funds obtained by WILSSA is paying for restoration and remediation			LEAD WILSSA	
6.1.8 Install signage to parking lot at Mitchell School, which is available to public in summer and on non-school days, and offers overflow parking to Pepperrell Cove		Install signage and maps for public information.	Town DPW maintenance budget for signage, "Complete Streets" programs and other transportation improvement grants.		LEAD Kittery Public Works PARTNER Kittery Planning Department, Kittery Transportation Advisory Council	
6.1.9 Install No Wake Zones signed where needed		Evaluate locations and determine best method of installation	Kittery Port Authority operating funds		LEAD Kittery Port Authority PARTNERS Fisheries Advisory Committee	

Strategy	Existing Resources	Actions	Funding	Notes	Lead & Partners	Priority
6.2.1 Coordinate with fishermen and other commercial boaters to promote long- term viability of working waterfront and to identify challenges	List of commercial mooring holders; The Contribution of Working Waterfront to the Maine Economy (2004), Charles S. Colgan	Conduct poll/outreach/meetings with commercial fishermen and boat operators to determine needs and challenges they face			LEAD Kittery Port Authority PARTNERS Kittery Economic Development committee, Fisheries Advisory Committee, commercial boaters and fishermen, shore facility operators (marinas, etc.)	
6.2.2 Identify any needed improvements or operational changes to Government Street Pier	2014 Quality Improvement Plan for Kittery's Shore and Harbors contains a physical condition assessment of the pier	Discuss with commercial users of the pier to identify operating constraints and identify any engineering requirements for expansion (if needed)		Any modifications would need to be done so as to minimize disruptions to users	LEAD Kittery Port Authority PARTNERS Pier users, Kittery Public Works	
62.3 Identify whether additional shoreside facilities would benefit commercial fishermen	2014 Quality Improvement Plan for Kittery's Shore and Harbors	Conduct poll/outreach/meetings with commercial fishermen and boat operators to determine need			LEAD Kittery Port Authority PARTNERS Fisheries Advisory Committee, other commercial boat operators and shore facility operators	
6.2.4 Evaluate whether any additional land areas should be categorized as Commercial Fisheries/Maritime Uses (OZ-CFMU) zoning	Kittery Zoning Map Kittery Town Land Use and Development Code	Conduct poll/outreach/meetings with commercial fishermen and boat operators to determine need, and review zoning of candidate locations and suitability			LEAD Kittery Planning Department PARTNERS Fisheries Advisory Committee, other commercial boat operators and shore facility operators	

6.2.5 Identify locations where reduced depths have limited commercial access; prioritize these areas for dredging (pending analysis of environmental impact)	NOAA navigational chart for Kittery area; Authorized depths for specific locations, such as Pepperrell Cove	Conduct poll/outreach/meetings with commercial fishermen and boat operators to identify areas where navigation is difficult or impossible due to shallow depths	Dredging is typically cost-shared between Federal and non-Federal (State and local) parties	LEAD Kittery Port Authority PARTNERS Fisheries Advisory Committee, other commercial boat operators and shore facility operators	3
		Coordinate with USACE dredging program		LEAD Kittery Port Authority PARTNERS Town Council, USACE New England District	3
6.2.6 Develop a self-guided tour of the working waterfront		Identify and map points of interest; prepare descriptive text for a brochure and/or signage.		LEAD Kittery Planning Department PARTNERS Kittery Port Authority, Fisheries Advisory Committee	3

OBJECTIVE 6.3:	OBJECTIVE 6.3: PROTECT MARINE RESOURCES									
Strategy	Existing Resources	Actions	Funding	Notes	Lead & Partners	Priority				
6.3.1 Education and advocacy effort to inform residents on effects of pollutants, pesticides, and stormwater runoff	Town of Kittery annual water quality monitoring programs; State of Maine water quality monitoring programs	Prepare easy-to-read materials that summarize Kittery's water quality challenges, and the effects of pollutants and pesticides. Distribute to property and business owners, and post on municipal website.	Town budget	Effort should include focus groups of residents and property owners	LEAD Kittery Shoreland Resource Officer PARTNERS Kittery Planning Department, Building Department, Dept. of Public Works, Southern Maine Planning and Development Commission (SMPDC)	1				
6.3.2 Evaluation of a Town ordinance regulating use of lawn chemicals, either in waterfront areas or town-wide	Town of Kittery annual water quality monitoring programs; State of Maine water quality monitoring programs	Evaluate future impacts of "build-out" development using existing zoning and chemical use		Evaluate whether ordinance should apply Town-wide to achieve greatest reduction in pollutant inflows	LEAD Kittery Town Council PARTNERS Code Enforcement/Kittery Shoreland Resource Officer, Planning Department	1				
		Literature review of existing ordinances in other communities			LEAD Kittery Shoreland Resource Officer PARTNER Planning Department	1				

6.3.3 Evaluation of potential impacts from sea level rise and climate adaptation	FEMA Flood Insurance Rate Maps (in preparation); studies from neighboring/area communities; National Climate Assessement sea level rise projections; NOAA/USACE sea level rise projections	Inventory of public facilities (roads, buildings, etc.) vulnerable to flooding under sea level rise  Identify site-specific actions that may reduce	Use best available data (Eliot and Wells, ME plans and New England Climate Adaptation Project)	LEAD Kittery Planning Department PARTNERS Dept. of Public Works, Emergency Preparedness, Code Enforcement, Southern Maine Planning and Development Commission (SMPDC), FEMA Region I, Maine Emergency Management Agency LEAD Kittery Planning	1
		elevating or flood- proofing)		PARTNERS Dept. of Public Works, Emergency Preparedness, Code Enforcement, Transportation Advisory Council	
		Join New England Climate Adaptation Project to participate in regional efforts to address changing water levels and temperatures		LEAD Kittery Town Council PARTNERS Kittery Shoreland Resource Officer, Planning Department	1

6.3.4 Work with Portsmouth Naval Shipyard (PNS) to identify and reduce effects of flooding on facility, and to reduce pollutant outflows	FEMA Flood Insurance Rate Maps (in preparation); EPA remediation studies and mitigation plans; Union of Concerned Scientists (UCS) report ("The U.S. Military on the Front Lines of Rising Seas")	Establish a working partnership with Shipyard and conduct site-specific identification of areas that would be flooded more frequently under future scenarios		UCS report notes that under highest sea level rise projections, more than a quarter of PNS would become part of tidal zones, effectively experiencing daily flooding	LEAD Town Council PARTNERS Kittery Shoreland Resource Officer, Planning Department, Portsmouth Naval Shipyard	2
6.3.5 Identify a suitable site for storage of floating docks during storms	Local knowledge of area waterways and shore locations	Determine needed storage capacity, whether on shore or in a protected waterbody	Kittery Port Authority budget and Department of Public Works budget	Removal of floats will require a phased plan (similar to Town's Storm Preparedness Plan)	LEAD Kittery Port Authority and Harbor Master PARTNER Dept. of Public Works	1
6.3.6 Reduce dog and horse waste at area beaches and parks (particularly Rogers Park and Seapoint Beach) through robust waste collection ordinance and installation of waste stations.	Existing dog ordinance; many waterfront areas that appeal to dog owners; regulations enforced by other towns including York, New Castle, Rye, Ogunquit, Wells, and Hampton Beaches	Increase awareness regarding enforcement of dog ordinance; evaluate passage of a more robust animal waste ordinance			<b>LEAD</b> Town Council <b>PARTNERS</b> Dept. of Public Works, Health Department	1
		Provide dog waste bags and disposal sites at beaches			Same as above	1
		Increase enforcement by police or student intern			Same as above	1
		Raise fines for uncollected dog and horse waste (say \$100 per incident)			Same as above	1

		Place kiosks or bulletin boards explaining need to collect and dispose of waste properly, and the negative effects of uncollected waste.			Same as above	1
		Place signs with regulations pertaining to conduct of dogs and their owners at the beaches			Same as above	1
		Note: see Topic Area 2: Natural Resources and Recreation for additional actions				1
6.3.7 Evaluation of restricted hours/times of year for dog access to beaches	Existing dog ordinance and site- specific regulations				PARTNERS Dept. of Public Works, Health Department	2
6.3.8 Evaluate feasibility/location for a public boat waste pumpout facility, with emphasis on Government Street Pier	State of Maine Pumpout Boat, which requires an appointment and has to cover a large service area	Forecast demand (number of users and volume of waste)	Kittery Port Authority	Existing pumpout boat service does not operate 24 hours a day, and was out of service for much of summer 2015.	LEAD Kittery Port Authority PARTNER Department of Public Works, Solid Waste Facility staff	1
		Identify locations and evaluate for engineering feasibility and necessary utility connections or disposal methods.	User fees	Priority is for locations with connection to municipal sewer system (such as Government Street Pier). Pepperell Cove does not a connection to municipal system.	Same as above	1

		Establish operating rules and fee schedule	Pumpout Grants (administered by Maine DEP and funded by US Fish and Wildlife Service with additional funding from Clean Vessel Act Grant Program (CVA).	Same as above	1
6.3.9 Identify high- value scenic views of the water and designate for protection through proactive development regulations (including regulation of fence heights)	Existing zoning, with waterfront Commercial Fisheries/Maritime Uses zoning; extensive public parklands on the waterfront	Conduct survey to identify highest-value scenic views		LEAD Kittery Planning Department PARTNERS Town Council; interested residents	3
		Work with property owners on voluntary measures, such as limiting fence heights		Planning Department PARTNERS Town Council; interested residents	3
		Evaluate feasibility of a view protection ordinance and designation of specific sites		Planning Department PARTNERS Town Council; interested residents	3

#### **TOPIC AREA 6: MARINE RESOURCES**

#### **End Notes**

- 1. Potential funding sources for improvements to marine resources were identified in the 2014 Quality Improvement Plan for Kittery's Shore and Harbors. Potential sources include:
  - Shore and Harbor Grants
  - Community Development Block Grants
  - User Fees
  - Tax Increment Financing
  - Maine Department of Environmental Protection (DEP)
     Pump Out Grant Program
  - Maine Department of Marine Resources (DMR)
     Waterfront Access Protection Program
  - Public/Private Collaboration
  - Other Miscellaneous State Funding Programs
- 2. Strategies 6.1.4 and 6.1.5.: The Town of Kittery will use discretion in deciding which specific public access locations are to be included in lists and maps for public usage. Criteria for inclusion include availability of automobile parking, level of environmental sensitivity of the site, and adjacent land uses. Some sites may be accessible by pedestrians or bicyclists only, which will be noted.

The Maine Coastal Public Access Guide, Southern Region: South Berwick to Freeport (Noordyk, Julia, ed. Maine: Maine Coastal Program, Maine Department of Agriculture, Conservation and Forestry, 2013) includes useful disclaimer language that may be applicable to Kittery's list and maps, such as:

"The Guide is not inclusive of all public access on the Maine Coast:

- Island sites reachable only by private boat were not included.
- Areas not yet ready for visitation, such as those without trails, were excluded.
- Based on recommendations from land managers, some sites containing very sensitive ecological features, prone to damage by heavy visitation, were not included."

The *Guide* also includes useful instructions to visitors to public areas to help ensure maintenance of environmental quality (see the "Good Visitor" Guidelines in the introduction, under the headings of *Respect Private Property*, *Abide by Rules and Guidelines*, and *Protect Ecologically Sensitive Areas*, which may be useful for Kittery's documents.