

TOWN OF NORTH KINGSTOWN Harbor Management Plan



2017

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TOWN OF NORTH KINGSTOWN Harbor Management Plan

1.1 STATEMENT OF PURPOSE

The Town Council of North Kingstown, in recognition of the valuable environmental and commercial assets provided by the tidal and other waters of North Kingstown, hereby adopts this Harbor Management Plan (HMP) as a comprehensive evaluation of current activities and a long term guide for activities on or adjacent to the tidal waters of North Kingstown.

The Harbor Management Plan has been prepared by citizens of North Kingstown as a guide to establish and revise ordinances for the benefit of all waterway users within the jurisdictional boundaries of the waters managed by the Town of North Kingstown under this HMP. The HMP was developed to be compatible with relevant management and regulatory policies of both Federal and State programs. The Plan also promotes the principal authority for implementation of the HMP to the Town of North Kingstown.

1.2 METHODOLOGY

This document is an update of an extensive community planning process that attempted to consolidate the knowledge, recommendations and concerns of a diverse representation of the users and abutters to the state waters contiguous with North Kingstown.

Twelve members were appointed by the Town Council to the Harbor Management Plan Steering Committee, with ex-officio representation extended to Warwick, Narragansett and South Kingstown. The Steering Committee established six subcommittees to investigate the following subjects:

1. Commercial Fishing
2. Recreational Boating
3. Moorings, Slips and Docks
4. Wildlife and Conservation
5. Public Access/Rights of Way
6. Water Quality

Upon the establishment of the subcommittees and relevant charges, a hearing was conducted to ascertain input from the public as to the subject matter that would become the basis of the plan. The Steering Committee extended an invitation to the community for additional members to participate on the subcommittees. Many individuals, residents and non-residents contributed their time to the subcommittee efforts.

1.3 GOALS OF THE PLAN

The overall goal of this plan is to manage the state owned coastal waters, harbor areas, and other water bodies under the jurisdiction of the Town of North Kingstown as authorized by the CRMC's approval of the HMP, as described herein, by establishing policies, goals and regulations that balance and manage the diverse uses of the waters, harbor areas, waterfront, and minimize user conflict.

Additional goals of the Harbor Management Plan include:

- Providing a mechanism that will ensure that the administration and operational costs of the Harbor Management Plan and ordinances are identified and adequately supported;
- Maintaining, improving and developing public access opportunities to the coastal waters of the Town of North Kingstown for the benefit of all user groups;
- Remaining consistent with the goals and regulations of the Rhode Island Coastal Resources Management Council, the Rhode Island Department of Environmental Management, and the United States Army Corps of Engineers.
- Maintaining compliance with the Town of North Kingstown Comprehensive Community Plan.

1.4 OBJECTIVES OF THE PLAN

- 1.4.1** Safeguard and improve the water quality of the Harbors and Coastal waters to ensure their continued use for safe public contact recreation, recreational and commercial fishing activities, and boating.
- 1.4.2** Gain the proper balance between the preservation of the diversity of living resources of the harbors and the intensity of harbor activities and use.
- 1.4.3** Provide defined mooring fields for the equitable and efficient distribution of private and commercial moorings without compromising public health and safety.
- 1.4.4** Recognize the importance, historically and economically, of the local fin and shellfisheries and take appropriate measures to prevent encroachment on and impairment of these resources.
- 1.4.5** Provide a forum for ongoing discussion concerning the coordination among the different authorities responsible for boating safety and enforcement.
- 1.4.6** Provide guidance for improving public access to the waters.

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- 1.4.7 Set forth a means for implementation of the goals of the North Kingstown Harbor Management Plan.
 - 1.4.8 Identify and provide opportunities for marine related and water dependent industries.
 - 1.4.9 Promote North Kingstown as a desirable destination harbor by supporting the development of facilities and activities that enhance the recreational boating experience.
 - 1.4.10 Designate areas for opportunities for swimming, conservation and wildlife.
 - 1.4.11 Protect the scenic and historic character of the harbors by incorporating the policies of the North Kingstown Historic District regulations, where applicable, with the Harbor Management Plan.
 - 1.4.12 Recommend for consideration such zoning or other land use criteria which would serve to protect waterfront views and encourage architectural designs that complement the surrounding area and the goals of the Harbor Management Plan.

1.5 JURISDICTION AND AUTHORITY

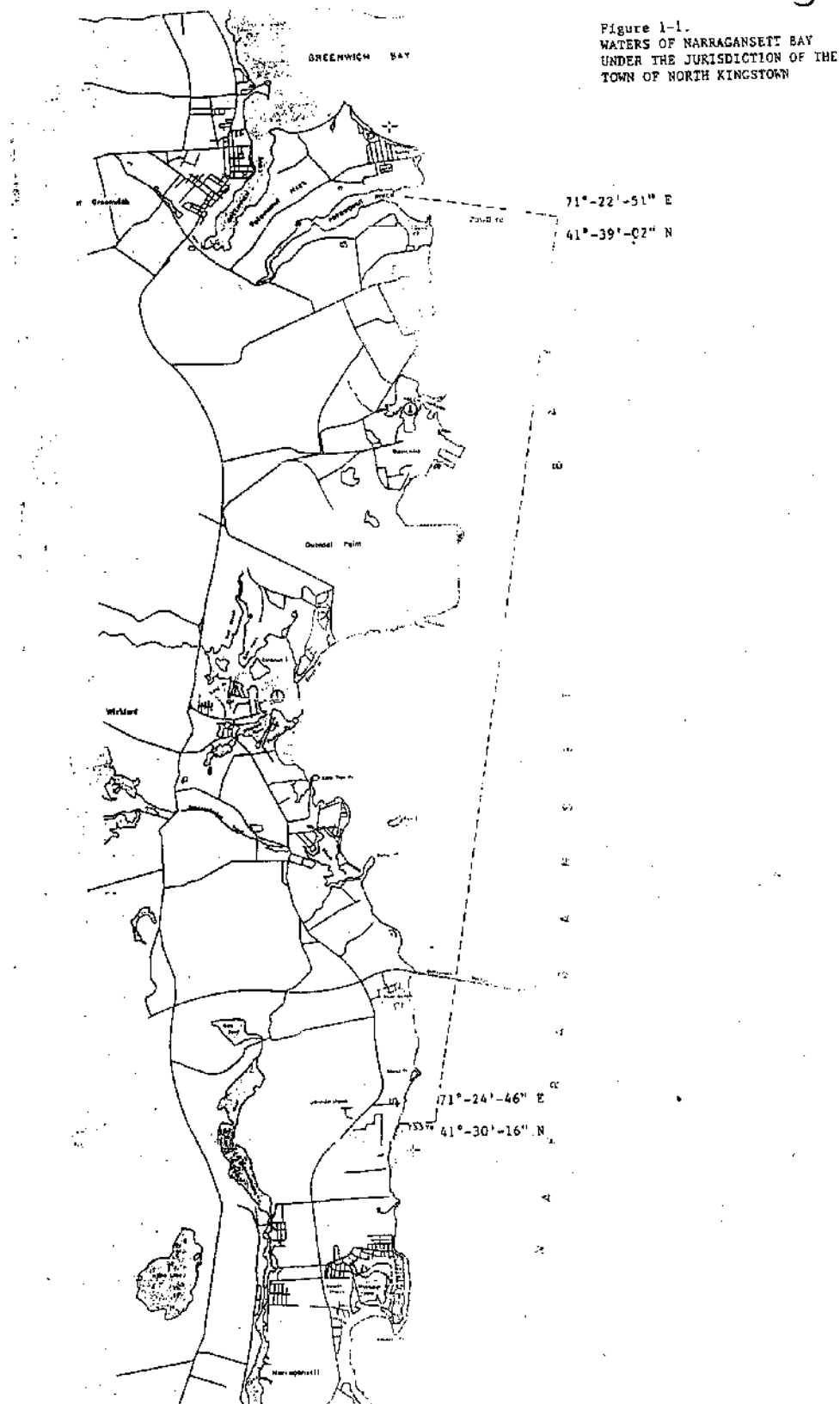
Coastal waters: The state coastal waters and harbor areas of the Town of North Kingstown included under the jurisdiction and authority of this ordinance are those coastal waters and harbors areas within the jurisdiction of the corporate boundaries of the Town of North Kingstown. The northern coastal boundary of North Kingstown begins at a line between the City of Warwick and the Town of North Kingstown at a point on Forge Road Bridge; then proceeding down the center line of the Potowomut River to a location halfway between Marsh Point and Pojac Point; from this point easterly to Round Rock "1" (41°-39'-24.39"N and 071°-23'-26.286"W). The Town boundary extends southerly to a point in the Narragansett Bay, 733 yards from shore (41°-30'-16" N: 071°-24'-46" W). There are approximately 30 miles of coastline along the Narragansett Bay that constitute the coastal jurisdictional boundaries of North Kingstown. (See Figure 1-1)

Narrow River: The northern section of the Narrow River (Pettaquamscutt), a tidal estuary, is within the corporate boundaries of North Kingstown. In 1986 the R.I. Coastal Resource Management Council designated this river and its watershed, to be protected under the Special Area Management Plan (SAMP). The CRMC adopted a comprehensive amendment to the SAMP on April 12, 1999. (See - Figure 1-2). Sections of the plan were further amended on June 13, 2012. The Narrow River SAMP can be reviewed on the CRMC web site at http://www.crmc.ri.gov/regulations/SAMP_NarrowRiver.pdf.

Belleville Pond & Secret Lake: In 1991 the North Kingstown Town Council instructed that the public water bodies Secret Lake and Belleville Pond be regulated under Town Ordinances

Chapter 7, Harbors and Wharves. (See Figure 1-3.) These ordinances are still in effect.

1.5.1 Authority: Section 46-4-6.4 of the Rhode Island General Laws confers limited powers upon the North Kingstown Town Council to regulate public waters in its jurisdiction.



Water Bodies of the Narrow River System

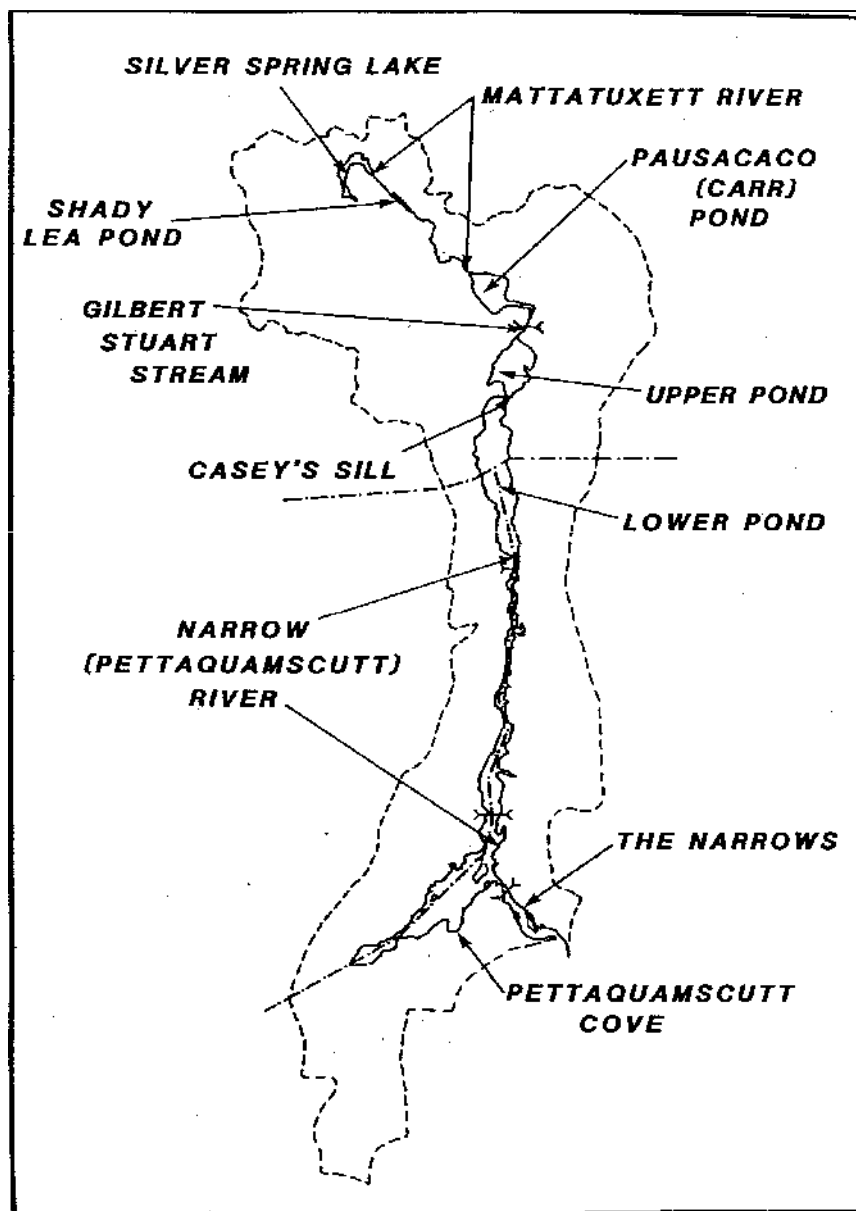
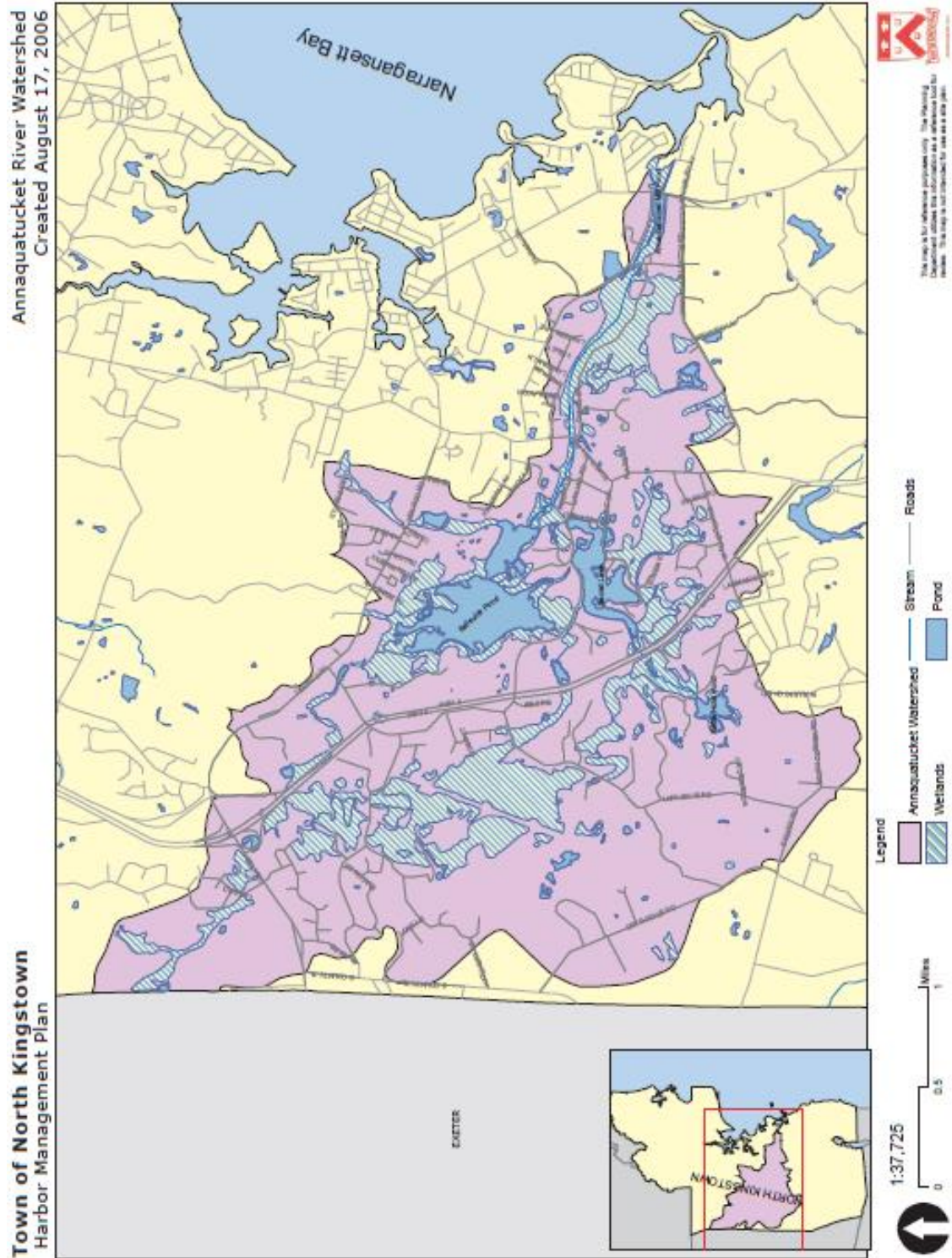


Figure 1-2. Water bodies of the Narrow River System.

Source: CRMC Narrow River Special Area Management Plan

Figure 1-3



2.0 HISTORY AND GEOGRAPHY OF NORTH KINGSTOWN WATERS

The Town of North Kingstown has a rich and storied history, dating back to the 1600's, much of which centered along the coastline. A brief history and description of the coastal areas follows.

2.1 WICKFORD HARBOR COMPLEX

The Wickford Harbor Complex consists of a set of shallow coves indented into the western shore of Narragansett Bay's West Passage and is protected by two breakwaters. The history of this harbor and the village, for which the harbor was eventually named, extends back to the seventeenth century when Richard Smith and Roger Williams established a trading post and farm in 1643. Over the years this harbor flourished as a mercantile center, for farm and other products produced and processed from the expanding development of the interior lands. In the early 1700's Updike's Newtown was renamed Wickford, for the city in England. In spite of the early historic trade activity the area never became a major metropolitan center. The village has retained its historic charm and the harbor is presently used primarily for recreational boating and yet maintains its historical ties to commercial fishing.

2.2 ALLEN HARBOR

During the onset of World War II in 1941 the United States Navy established the Davisville Naval Construction Battalion Center (NCBC) and Quonset Point Naval bases to facilitate research and development on a wide range of technologies and provide training facilities for the Seabees. Over the 30 years that the Navy used these facilities the topography of Allen Harbor changed substantially.

The harbor itself served as a Naval dredging school, with the dredged materials creating significant expansion to the surrounding land area and creating an additional 50% in harbor area.

In 1974 the Navy closed its Quonset Point operation, and portions of the Davisville NCBC installation. In 1980 the Town acquired from the Department of Interior 14.76 acres of land on the eastern side of Allen Harbor. The Town currently operates a municipal marina, with services currently limited to slips, moorings and boat launching areas.

The Base was selected for closure under the Base Closure and Realignment (BRAC) Act of 1991 and was officially closed in April 1994. At the time, there were approximately 1,000 acres held by Navy, all of which were scheduled for release by 1997. A Base Reuse Plan developed by representatives of the State, local and tribal governments has been completed. This plan had recommended the conveyance of the western side of Allen Harbor to the Town of North Kingstown. The Town held a lease from the Quonset Davisville Corporation (QDC) for 47 acres on the western side of Allen Harbor until 2000/2001, when the Town relinquished the lease. In 2010, Mill Creek Marine entered into a lease with the QDC for 4.5 acres in western Allen Harbor and constructed a dry stack boat storage facility in 2011. A portion (3.6

acres) of western Allen Harbor is also currently leased to the Quonset/ Davisville Navy Yacht Club (QDNYC) dba the Allen Harbor Boating Association (AHBA).

Over the years QDNYC established, through "sweat equity" and other contributions, an approximately 65 slip boating facility, serving 200 members of active and retired military personnel.

In 2000, the Town, with the assistance of a consultant, completed a master plan for the Allen Harbor Calf Pasture Point (AHCPP) complex. This plan provides a long-term vision for the Allen Harbor and Calf Pasture Point area in ten years and beyond. It also identifies feasible development opportunities and use options for the complex. In 2001, the Town received title to Calf Pasture Point. Calf Pasture Point is approximately 189 acres in the northern harbor area. The Town is planning a series of trails throughout the point for passive recreation. A variety of amenities are also proposed including benches, interpretative signage, kayak haul-outs, and restroom facilities. Access to the site will be allowed just south of the Allen Harbor landfill. A parking lot is proposed at this location as well. In 2003, the Town hired another consultant to assist in the implementation of the recommendations of the AHCPP master plan.

Since 1980, the Town has owned and operated a marina on the eastern side of Allen Harbor on approximately 14.7 acres of land. Various improvements have been made to the marina property over the past twenty plus years. The Town recently received permission from CRMC to add 22 slips to the existing dock configuration. In addition, the Town has recently completed new restroom facilities and a sewer line extension from the Quonset Development Corporation (QDC) wastewater treatment facility. In addition, parking lot improvements are under consideration as well.

In 2004, the Town received the title to the Allen Harbor landfill. The landfill is approximately 15 acres in size. The landfill was capped as part of the Navy Restoration Program in 1998. Pedestrian access is allowed on the landfill where a simple trail layout is in place. The top of this elevated plateau offers scenic views of the harbor and Narragansett Bay.

2.3 QUONSET NAVAL BASE - DAVISVILLE NAVAL CONSTRUCTION BATTALION CENTER

As discussed in the previous section these bases were fully active between 1941 and 1974. As in Allen Harbor extensive dredging occurred along the shore with the dredged materials being used to significantly extend the land area. On this filled land the Navy developed two cargo piers, a carrier pier, an airport, sewage treatment plant and numerous buildings and facilities. The bases accounted for approximately 2000 acres of land with 4.7 miles of waterfront. These facilities and associated parcels have become a foundation for the State's Quonset Business Park now managed by an entity known as the Quonset Development Corporation (QDC). Many marine related businesses have located within the QDC. For the latest information on QDC, please visit www.Quonset.com.

2.4 WEST PASSAGE - NARRAGANSETT BAY

North Kingstown was conferred limited powers from the State of Rhode Island to regulate the waters within its jurisdictional boundaries in 1974 (RIGL 46-4-6.4). The Town's northern boundary begins at the halfway point of the Potowomut River between Pojac Point and Marsh Point, Warwick and extends to a location seaward in the Narragansett Bay with the following coordinates: 41°-39'-24" N: 071°-23'-24"W. The boundary extending south is consistent with the County boundary, to a location in Narragansett Bay with the following coordinates: 41°-30'-16"N: 071°-24'-46"W.

2.5 NARROW RIVER WATERSHED / PETTAQUAMSCUTT RIVER

The Narrow (Pettaquamscutt) River is an environmentally sensitive watershed located in the southern portion of North Kingstown. Its source begins in North Kingstown and flows south through the two communities of Narragansett and South Kingstown to the Narragansett Bay.

The Narrow River Watershed was designated by the Coastal Resources Management Council (CRMC) in 1986, as amended on April 12, 1999, to be managed under the SAMP. The SAMP provides a comprehensive approach toward protecting critical watersheds by imposing best management practices in the use and development of properties within the watershed. While the CRMC has direct and comprehensive authority over the Narrow River and its watershed, the Town's role is in coordinating the individual actions of the various State and local authorities toward the implementation of a consistent management policy. The Town exercises additional authority through its Zoning Ordinances particularly the Groundwater Reservoir and Groundwater Recharge Overlay Districts, and through subdivision development regulations. Because of its sensitive nature, the North Kingstown Comprehensive Plan (1992), as amended in 2008, recommended that the Narrow River be designated primarily for low-density residential development.

2.6 BELLEVILLE POND & SECRET LAKE

Belleville Pond and Secret Lake are adjacent water bodies within the Annaquatucket River Watershed. In 1990 the Town Council voted to include these water bodies under its authority to regulate public waters granted under Section 46-4-6.4 of the RI General Laws.

Belleville Pond is a 159-acre waterbody and is a focal point of the Town's 350 acre Ryan Park which surrounds the Pond. The impetus behind acquiring the property for this park was to protect the groundwater through preservation and the managed development of the natural resources and critical habitat for rare and endangered species. The park now includes nature trail networks and ball fields.

Secret Lake is approximately 60 acres in size. Three of the Town's public wells are located on 41 acres of Town land adjacent to this pond. A wellhead delineation study determined that there is some induced infiltration from this pond to the wells. The intensity of land use adjacent to this water body and its watershed varies from open space to heavy business. The degradation of water quality has been of concern. In its continuing effort to protect groundwater resources, the Town through open space bonds, acquired, an additional 40 acres of land in this watershed. Other uses adjacent to the shore or that contribute to the water quality include single-family residential units and an auto salvage yard.

Belleville Pond and Secret Lake form the source of the Annaquatucket River system that discharges to Bissel Cove on Narragansett Bay. The RIDEM Division of Fish & Wildlife has constructed a complete fish ladder system within the Annaquatucket watershed for spawning alewives.

3.0 FINDINGS AND RECOMMENDED ACTIONS

3.1 RECOMMENDED REVISIONS TO THE ORDINANCE

In 1994 the Town adopted it's first Harbor Management Plan. The Harbor Management Plan Steering Committee had the opportunity to review the Town's historic harbor management operations. There was also an opportunity to observe the many unique features of the Town's public waters and the diverse relationships of the water users. As result of this undertaking, it was recommended that the structure currently used to manage the public waters be modified to include the following:

3.1.1 Creation of a Harbor Management Commission: This Commission shall be the local advisory body to the North Kingstown Town Council regarding the public waters and harbor areas of the Town.

3.1.2 Composition of the Harbor Management Commission: The Commission shall consist of seven (7) members, with recommended representation from each of the following groups: Recreational Boating Community; Commercial Fishing Industry; Marina and/or Boatyard Operators; Environmental/Conservation Groups; General Public Access interests; Waterfront property owner and one citizen at large.

3.1.3 Appointments: Members shall be appointed by the Town Council for terms consisting of two years. Initial appointments were staggered, with four (4) members appointed for a three (3) year term and three (3) members for a two (2) year term. Currently, all members serve a two year staggered term.

3.1.4 Vacancies: shall be filled as necessary and in accordance with the initial appointment.

3.1.5 Absences: Any member absent more than two consecutive meetings, without good cause, would be considered as a resignation from the Commission. An affected member would be afforded an appeal to the remaining Commission members and a majority vote would be required to reverse the action.

3.1.6 Officers: A Chairperson, Vice Chairperson, and Secretary shall be elected by the members of the Commission. The Commission shall meet monthly and all meetings shall conform to open meeting laws. Any additional meetings shall be called by the Chairperson or by the request of at least four (4) members of the Commission. The Secretary shall keep minutes of all meetings and file such minutes with the Town Clerk.

3.1.7 Powers and Duties: The Harbor Commission serves as shall be the local advisory body authorized to recommend policy for the coastal waters and harbor areas of the Town through the implementation of the Harbor Management Plan and its subsequent ordinances. The Harbor Commission shall adopt rules of procedure and operation for its meetings and is authorized to:

- a) Recommend to the Town Council the adoption of rules, regulations, fees, penalties and other amendments to the Harbor Management Plan and its subsequent ordinances which may be necessary to fulfill the goals and objectives of the Harbor Management Plan and meet the requirements of its ordinances;
- b) Recommend additional duties and responsibilities for the Harbor Division, herein detailed.
- c) Review and suggest revisions as necessary the Harbor Management Plan and its subsequent ordinances for Town Council and Coastal Resource Management Council approval. The Harbor Management Plan and its ordinances shall be reviewed at least once every five years;

3.1.8 Ex-Officio Members: (1) The Harbormaster shall be a non-voting, ex-officio member of the Harbor Commission. (2) To enable the Harbor Commission to coordinate issues of mutual concern between adjacent coastal municipalities, there may be one non-voting, ex-officio member from the Harbor Commissions of Warwick, Narragansett, South Kingstown and Jamestown. (3) The North Kingstown Town Council provides one, ex-officio, non-voting member.

3.2.0 FUNDING OF HARBOR MANAGEMENT ACTIVITIES

The Harbormaster and Planning Department staff are funded via the Town General Fund.

3.3.0 Reserved

3.4.0 PLAN ELEMENTS AND RECOMMENDATIONS

This Harbor Management Plan was developed as result of findings and recommendations of six subcommittees. Each subcommittee had specific charges to research and develop recommendations regarding the conditions, operations and management of the Town's contiguous state owned harbors and waters. Those committees were as follows:

Commercial Fishing,
Recreational Boating,
Moorings, Slips, and Docks,
Wildlife and Conservation,
Public Access/ Rights of Way,
Water Quality

The following provides the recommendations of each subcommittee report excerpted by the Harbor Management Plan Steering Committee. Full subcommittee reports are on file in the North Kingstown Department of Planning and Development.

3.4.1 WATER QUALITY

A. Statement of Purpose

As the population and development in North Kingstown continues to increase possible effects to the water quality include increased algal growth, decreased water transparency, and a decline in the biological and recreational quality of the waters in North Kingstown. Furthermore, many other factors affect the fish, shellfish and overall water quality. These factors include hydrocarbons, such as oil and grease from roads and outboard motors; inorganic fertilizers used in landscaping practices; nitrogen and bacterial impacts due to failed or substandard onsite wastewater treatment systems (OWTS); trash left on beaches which is unable to break down into organic matter, especially plastics and Styrofoam; common automotive spills of transmission fluid, antifreeze, and ethylene glycol; organic chemicals and metals from antifouling paints; herbicides; over-fishing; disturbance and shading of the bottom of docks and the transport of sand into the ponds through the breach ways.

The Town of North Kingstown acknowledges the unique and precious resource inherent with coastal waters and is committed to protecting and improving the water quality for future generations. It is paramount to identify, measure, and document all sources of present and potential threats to the quality of our waters. Through Town Ordinances and North Kingstown Storm Water Management Plan, programs and policies are in place to minimize water pollution and regulate inorganic waste disposal. Additional programs and policies, recommended below, will be encouraged to further minimize water pollution and improve water quality. It is the goal of the Town of North Kingstown to maintain and improve the water quality and aesthetic values of this community for fishing, shell fishing

and recreational uses.

B. North Kingstown Water Quality

North Kingstown has approximately 30 miles of tidal shoreline along Narragansett Bay, in Allen Harbor and Wickford Harbor, as well as other public waters within the Town's jurisdiction. The quality and use of North Kingstown's waters have been classified by two State agencies:

The RI Department of Environmental Management, Division of Water Resources measures and classifies the magnitude of water quality for the various harbors, inlets and waterways of the State into water quality standards. These standards are water quality goals for the use of a particular waterbody and require the control of pollutants entering a waterbody to maintain its classification (See Table 3-1); and

The R.I. Coastal Resource Management Council classifies the types of uses that can be conducted in the various waters and on the adjacent lands (See Table 3-2). These classifications have been outlined within the sector inventory description and map.

B. Areas of Water Quality Concern

There are several areas within Town with conditions and/or activities that have the potential to contribute to water quality degradation. Those areas and conditions are as follows:

1. Allen Harbor is subject to intensive boating use and is adjacent to a former Navy dumpsite.
2. Wickford Harbor Complex has extensive boating activity and other water dependent uses such as marinas and boatyards. There is also the presence of high-density residential development adjacent to the shore. With the exception of the Wickford Point and Intrepid Drive neighborhoods, residences and businesses in the Wickford area are not connected to sewer service. There are many estuaries, coves and inlets within this harbor that lack efficient tidal flushing;
3. The Quonset Business Park, (the site of the former Quonset and Davisville Navy Bases), had been subject by the Navy to indiscriminate dumping of various materials and substances throughout the site. The Navy has been charged with site reparation and is identified as a Superfund site on the National Priority List (NPL).
4. Much of the Quonset Business Park has been designated for industrial purposes. This has placed the onus upon the Town and State to assure that appropriate technology, zoning and regulation is imposed to minimize further negative impacts to the water quality.

5. There is a sewage treatment plant at Quonset that was constructed by the Navy in the 1940's and 1950's. There have been subsequent upgrades and repairs conducted. The outfall for this facility discharges into Narragansett Bay.
6. There are other situations along the coast that warrant similar concern, particularly with point and nonpoint sources of pollution as are found with runoff from roads and failed septic systems. There is concern with non-point sources of pollution in the Town's following coastal neighborhoods; Mount View, Shore Acres, Wickford, Poplar Point, Hamilton and Plum Point.

C. Available Water Quality Data

The Town of North Kingstown is committed to maintaining and improving water quality throughout its coastal rivers, estuaries and harbor areas. See enclosed maps regarding current DEM and CRMC water quality data.

In March of 2013, the Town received from the RIDEM a Water Quality Certification in compliance with the State Water Quality Regulations.

D. Policies / Implementation

Stormwater Management

1. The Town's Public Works Department conducted a survey utilizing handheld GPS devices to identify and map all roadway drainage structures, catch basins, manholes, outfalls, and any other drainage structures in Town. The survey also identified adjacent land uses, vegetation, wildlife, debris and any other significant features that would substantiate action to rectify or protect water quality. This information will assist with the continual monitoring of these sites to identify the source, condition, and maintenance of potential polluters, especially near coastal features. The Town is currently working to develop a plan to GPS all piping between drainage structures.
2. In conjunction with the results of the water quality sampling, a basis to identify areas that require some type of intervention will be formulated.
3. Ensure the review of all highway improvement projects by the North Kingstown Planning and Engineering Departments to determine the level of pollutant mitigation measures incorporated in the stormwater management systems. Appropriate comments and recommendations are to be forwarded to the RI Department of Transportation or other design control agencies.
4. The Town will support measures to improve water quality through its Stormwater Management Plan, 2004. Specific items to be addressed by the Public Works Department within the next three years are to detect illicit discharges from the outfalls and perform Best

Management Practices (BMP's) such as storage and treatment of stormwater runoff.

5. The Town will uphold Division I Prohibition of Illicit Discharges and Illegal Connections, under Article IX Stormwater Management, regulating illicit connections and discharges.
6. Roadway improvements for Main Street in Wickford have been completed. These improvements included the addition of stormwater quality structures (votecn units), designed to remove most suspended solids.
7. The Town is also working with property owners along Walmsley Lane to place stormwater retention basins and improve stormwater outfall in the Narrow River.

Water Quality

1. To ensure current water quality standards are maintained and improved, periodic monitoring and testing should be conducted. A water testing effort is in the process of being organized similar to the Watershed Watch Program to establish base line data for the coastal waters of North Kingstown. The North Kingstown Engineering Department will be sponsoring two sampling sites in Wickford Harbor and the North Kingstown Harbormaster has indicated his willingness to sponsor a third site (preferred site being the Mill Cove area). A site near Loop Drive has been sampled for a number of years by a local resident. Funding sources should be identified to support additional sampling locations outside of Wickford Harbor such as Bissel Cove and Allen Harbor.
2. Ensure that all new and significantly expanding mooring areas do not cause significant adverse effects on water quality.
3. Ensure that new mooring fields are located in areas that have adequate tidal flushing.

Wastewater

1. The Quonset Business Park wastewater treatment plant discharges to Narragansett Bay. As this business park expands the impact of this treatment plant could be significant to the water quality of North Kingstown. It will be important to develop and maintain relations with the QDC, park businesses and other agencies that use the facility.
2. The Town will uphold its Wastewater Ordinance (Chapter 8, Article VIII), in accordance with RIGL 1956, § 45-24.5-3, establishing the North Kingstown Wastewater Management District (NKWWMD) to ensure that individual sewage disposal systems are properly operated, regularly inspected and routinely maintained to prevent malfunctioning systems.

Boat Sewage Waste

1. Continue to support and enforce measures to improve the water quality of North Kingstown and qualify for Federal No-Discharge Harbor status.

The Town will prohibit the overboard discharge of untreated vessel generated waste by endorsing RIGL 46-12-39 and directing the Harbormaster to enforce the law. The Town will uphold Town Ordinance Section 7-82 "Boat Sewage Waste" and RIGL 4612-39 requiring the entire Bay to be a no-discharge zone.

3. Dockside marine sewage pump-out facilities are provided at Allen Harbor (3- Allen Harbor Marina, Mill Creek Marine & QDNYC), Brewer's Wickford Cove Marina, Wickford Marina and at Wickford Shipyard in order to improve water quality and to qualify for Federal No-Discharge status. Dutch Harbor Boat Yard and the West Ferry Town Dock, located in West Passage of Narragansett Bay in the Town of Jamestown provide boaters quick and easy access to pump-out facilities in the southern end of North Kingstown. Figure 3.1
4. The Town will continue to support and educate the public about existing pump-out facilities in North Kingstown and to establish additional pump-out facilities. All marine pumpout facilities should be designed and positioned for convenient and inexpensive use of the boating public.
5. In addition, all marine pumpout facilities that are required by CRMC and/or DEM to mitigate adverse impacts to water quality associated with recreational boating shall be available for the general public's use. Marina operators may charge a fair and nondiscriminatory fee to defray the cost of constructing and operating these facilities. Signs shall be posted directing the public to the location of the facility and should indicate the charge for pumping out and the operational hours.
6. In accordance with the Rhode Island Coastal Resources Management Program, Section 300.5, houseboats or floating businesses are prohibited from mooring or anchoring, unless within the boundaries of a marina.

Waste Disposal

1. The Town has developed an emergency response capability for oil and other hazardous type spills that could threaten water quality. Encourage a hazardous materials response network be maintained among North Kingstown Department of Public Safety, Harbor Division, RI DEM, QDC, boatyards, marinas, and other water dependent users. The intent of this network would be to identify the response capability of the community, expand it if necessary, and disseminate such information to users of North Kingstown waters.
2. Reinforce the obligation of recreational boaters to dispose of oil, plastics, trash, paint, varnish and other pollutants at the transfer station or other approved facilities.
3. The Town will encourage the development of a hazardous waste recycle program. The program will provide for the proper disposal of oil, paint, varnish and other inorganic materials.
4. The Town will work with RIDEM to develop an organic waste plan and ordinance to

implement it.

Operation and Maintenance of Marinas

1. Encourage CRMC operation and maintenance plans for all marinas.
2. The Town will encourage compliance with state and federal operation and maintenance measures for the marinas located in Town waters. The Harbormaster will continuously monitor the marinas' conditions.
3. In order to prevent/minimize pollution from boating activities, encourage the use of best management practices during any in-water servicing of vessels. Vessels should be serviced only at marinas that implement best management practices to prevent water quality degradation.

Efforts to Minimize Pollutants

1. Promote public education on water quality, specifically targeting boating, septage, refuse, waterfront land use, individual septic disposal systems, and stormwater runoff. Emphasis should be put on what an individual can do to improve water quality.
2. The Town will uphold Section 21-326 of the North Kingstown Zoning Ordinance, regulating ISDS units within 150 feet of any river, stream, surface water body (including seasonal surface water body), coastal or freshwater wetland, or within 150 feet of the mean high tide line. The Planning Commission, Zoning Board, and Conservation Commission continuously approve development adjacent to the coast or wetlands conditional upon the development standards set forth in the ordinance. In addition, no adverse impacts are to occur from the development especially runoff during the construction phase.

Protection of Natural Resources

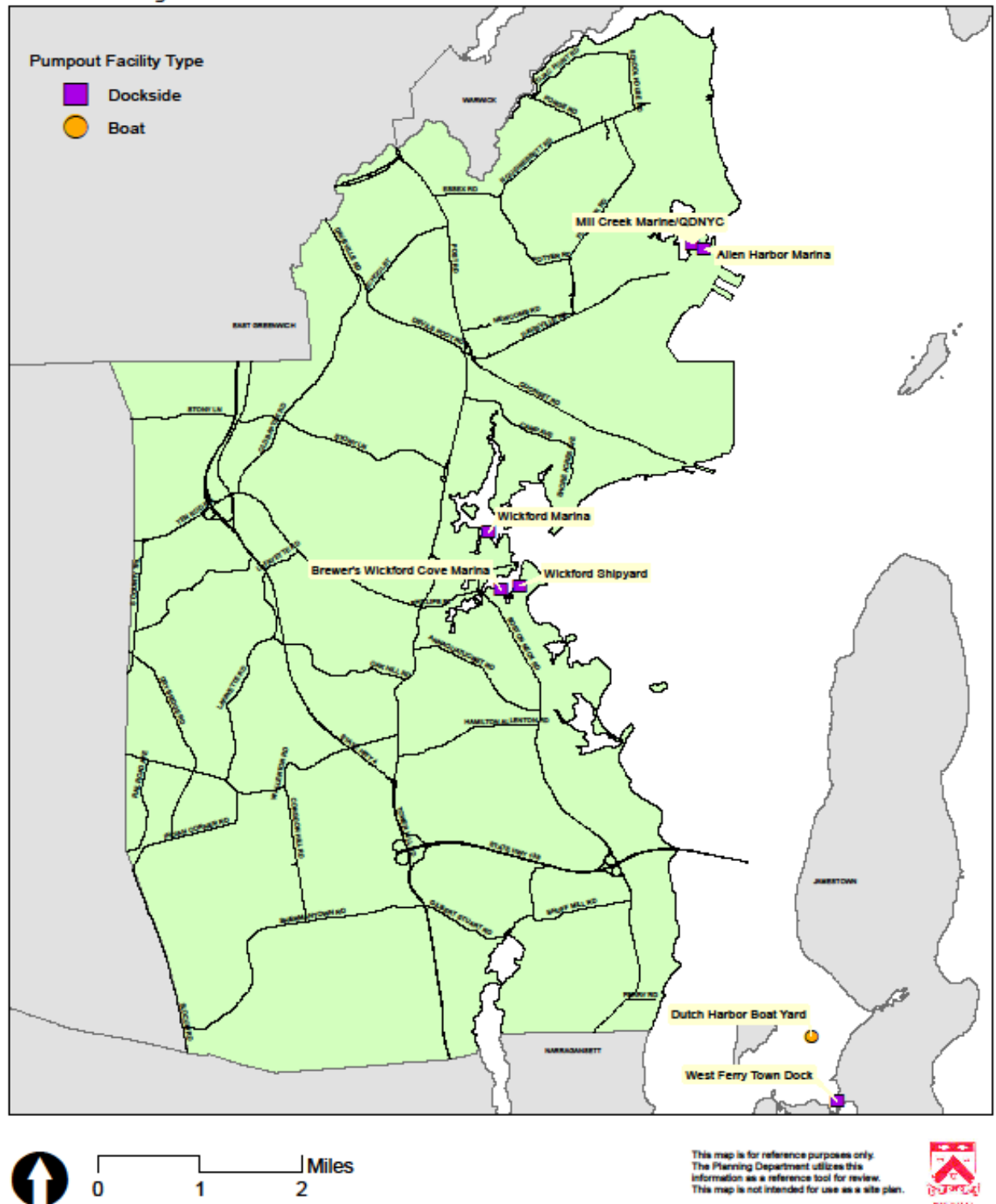
1. To protect existing shellfish resources and improve water quality, it is recommended that activities in areas suitable for the propagation of shellfish be regulated. Some suggested methods of regulating activities include;
 - Establishing mooring fields away from areas conducive to shellfish propagation;
 - Increasing setback requirements for waterfront development;
 - Imposing innovative/alternative ISDS regulations for waterfront development;
 - Effecting the repair or replacement of failing septic systems on or near the waterfront.

- Using best management plans to control stormwater discharges.
2. Where significant shallow-water habitat is identified, restrict boating activities as necessary to decrease turbidity and physical destruction of such habitat

Town of North Kingstown
Harbor Management Plan

Figure 3-1

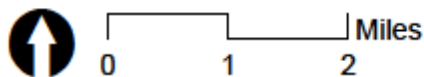
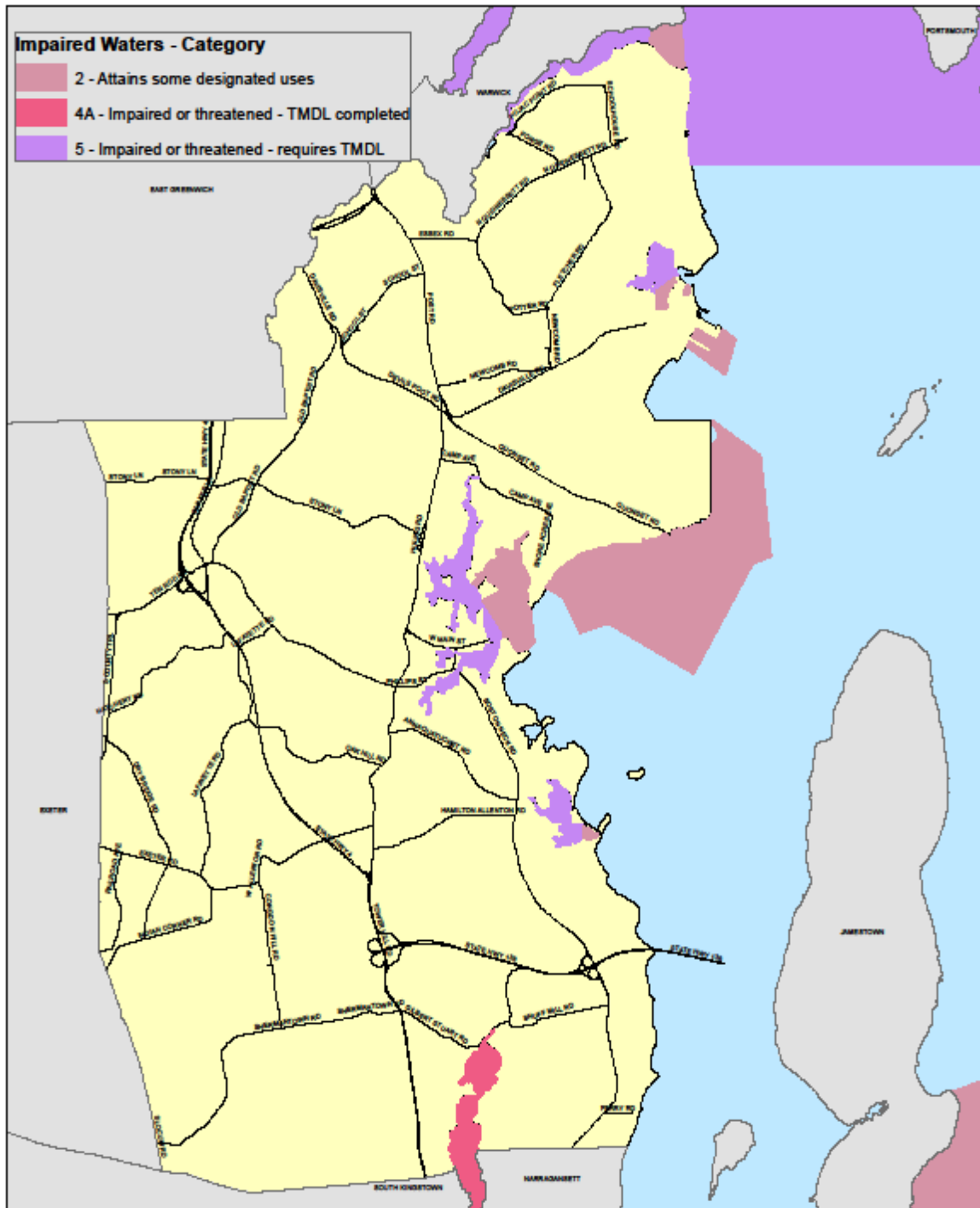
Pumpout Facility Locations
Created August 23, 2019



Town of North Kingstown
Harbor Management Plan

Figure 3-2

303(d) Impaired Waters
Created August 23, 2019



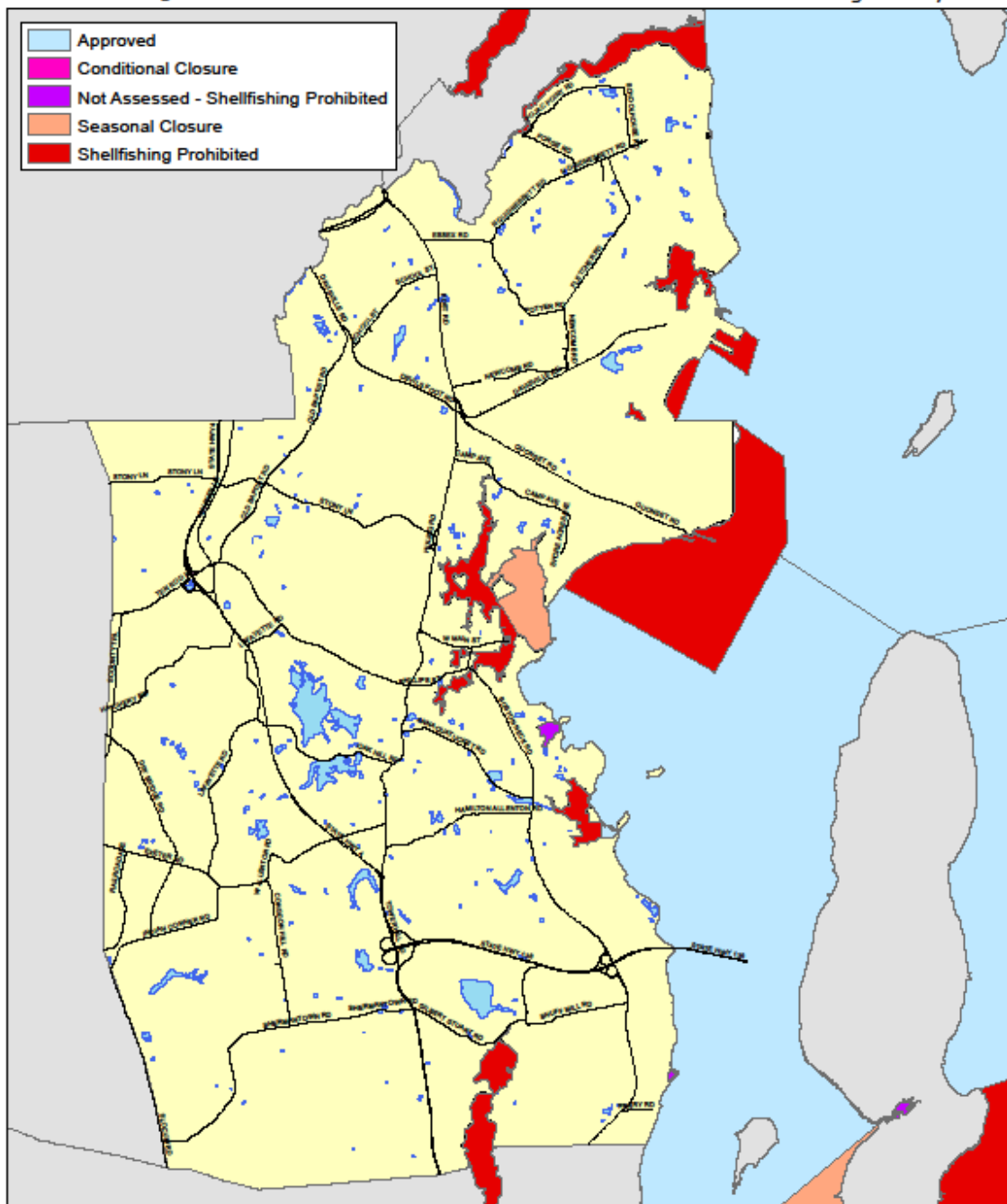
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The Planning Department utilizes this
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This map is not intended for use as a site plan.



Town of North Kingstown
Harbor Management Plan

Figure 3-3

RI DEM Shellfish Restrictions 2017
Created August 23, 2019



0 0.5 1 2 Miles

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TABLE 3-1
RIDEM Water Quality Classifications

Salt Water

Class SA	<ul style="list-style-type: none"> - primary and secondary contact recreation activities - shellfish harvesting for direct human consumption - fish and wildlife habitat - aquaculture - industrial cooling
Class SA{b}	<ul style="list-style-type: none"> - restriction of shellfishing in the summer
Class SB	<ul style="list-style-type: none"> - shellfish harvesting for human consumption after depuration - primary and secondary contact recreation activities - fish and wildlife habitat - aquaculture - navigation - industrial cooling
Class SB1	<ul style="list-style-type: none"> - primary contact recreation activities dependent on pathogen levels from approved wastewater discharges - secondary contact recreation activities - fish and wildlife habitat - aquaculture - navigation - industrial cooling
Class SC	<ul style="list-style-type: none"> - boating, other secondary contact recreational activities - fish and wildlife habitat - industrial cooling

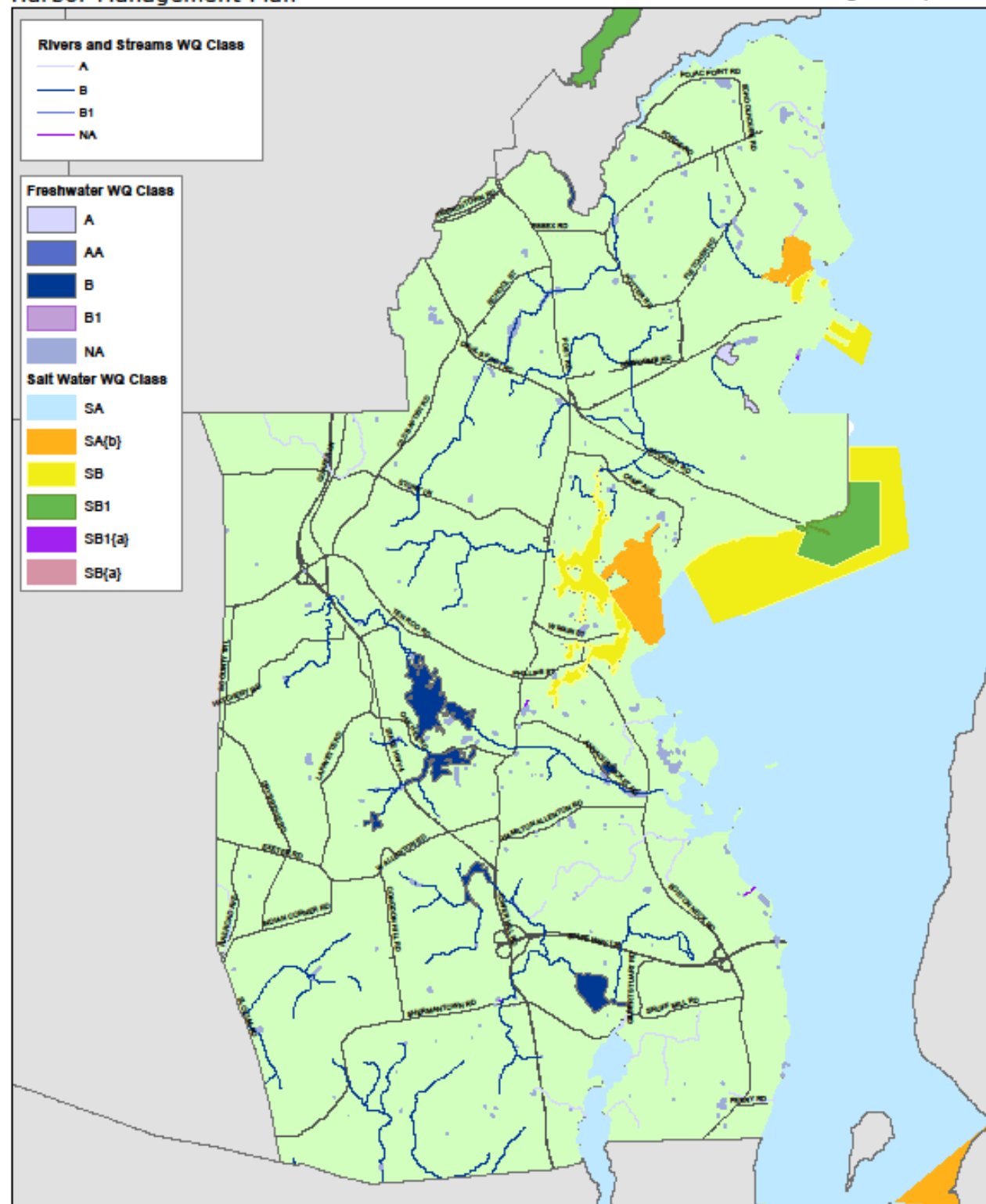
Freshwater

Class AA	<ul style="list-style-type: none"> - public drinking water supply - bathing, other primary contact recreational activities - fish and wildlife habitat
Class A	<ul style="list-style-type: none"> - primary and secondary contact recreational activities - fish and wildlife habitat - industrial processes and cooling - hydropower - agricultural uses - navigation
Class B	<ul style="list-style-type: none"> - fish and wildlife habitat - agricultural uses - primary and secondary contact recreational activities - industrial processes and cooling - navigation
Class C	<ul style="list-style-type: none"> - boating, other secondary contact recreational activities - fish and wildlife habitat - industrial processes and cooling

**Town of North Kingstown
Harbor Management Plan**

Figure 3-4

DEM Water Quality Classification
Created August 23, 2019



0 1 2 Miles

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**TABLE 3-2
CRMC WATER TYPES**

Section 200.1 Type 1. Conservation Areas

Included in this category are one or more of the following: (1) water areas that are within or adjacent to the boundaries of designated wildlife refuges and conservation areas, (2) water areas that have retained natural habitat or maintain scenic values of unique or unusual significance, and (3) water areas that are particularly unsuitable for structures due to their exposure to severe wave action, flooding, and erosion.

CRMC's goal is to preserve and protect Type 1 waters from activities and uses that have the potential to degrade scenic, wildlife, and plant habitat values, or which may adversely impact water quality or natural shoreline types.

Section 200.2 Type 2. Low-Intensity Use

This category includes waters in areas with high scenic value that support low-intensity recreational and residential uses. These waters include seasonal mooring areas where good water quality and fish and wildlife habitat are maintained.

CRMC's goal is to maintain and, where possible, restore the high scenic value, water quality, and natural habitat values of these areas, while providing for low-intensity uses that will not detract from these values.

Section 200.3 Type 3. High-Intensity Boating

This category includes intensely utilized water areas where recreational boating activities dominate and where the adjacent shorelines are developed as marinas, boatyards, and associated water-enhanced and water-dependent businesses.

The highest priority uses of Type 3 waters and adjoining land areas within CRMC jurisdiction are (a) marinas, mooring areas, public launching ramps, and other facilities that support recreational boating and enhance access to tidal waters; and (b) boatyards and other businesses that service recreational boaters.

Section 200.4 Type 4. Multipurpose Waters

This category includes (1) large expanses of open water in Narragansett Bay and the Sounds which support a variety of commercial and recreational activities while maintaining good value as a fish and wildlife habitat; and (2) open waters adjacent to shorelines that could support water dependent commercial, industrial, and/or high-intensity recreational activities.

CRMC's goal is to maintain a balance among the diverse activities that must coexist in Type 4 waters. The changing characteristics of traditional activities and the development of new water-dependent uses shall, where possible, be accommodated in keeping with

the principle that CRMC shall work to preserve and restore ecological systems.

Section 200.5 Type 5. Commercial and Recreational Harbors

These waters are adjacent to waterfront areas that support a variety of tourist, recreational, and commercial activities. They include all or portions of the following harbor areas in North Kingstown:

1. Wickford Harbor

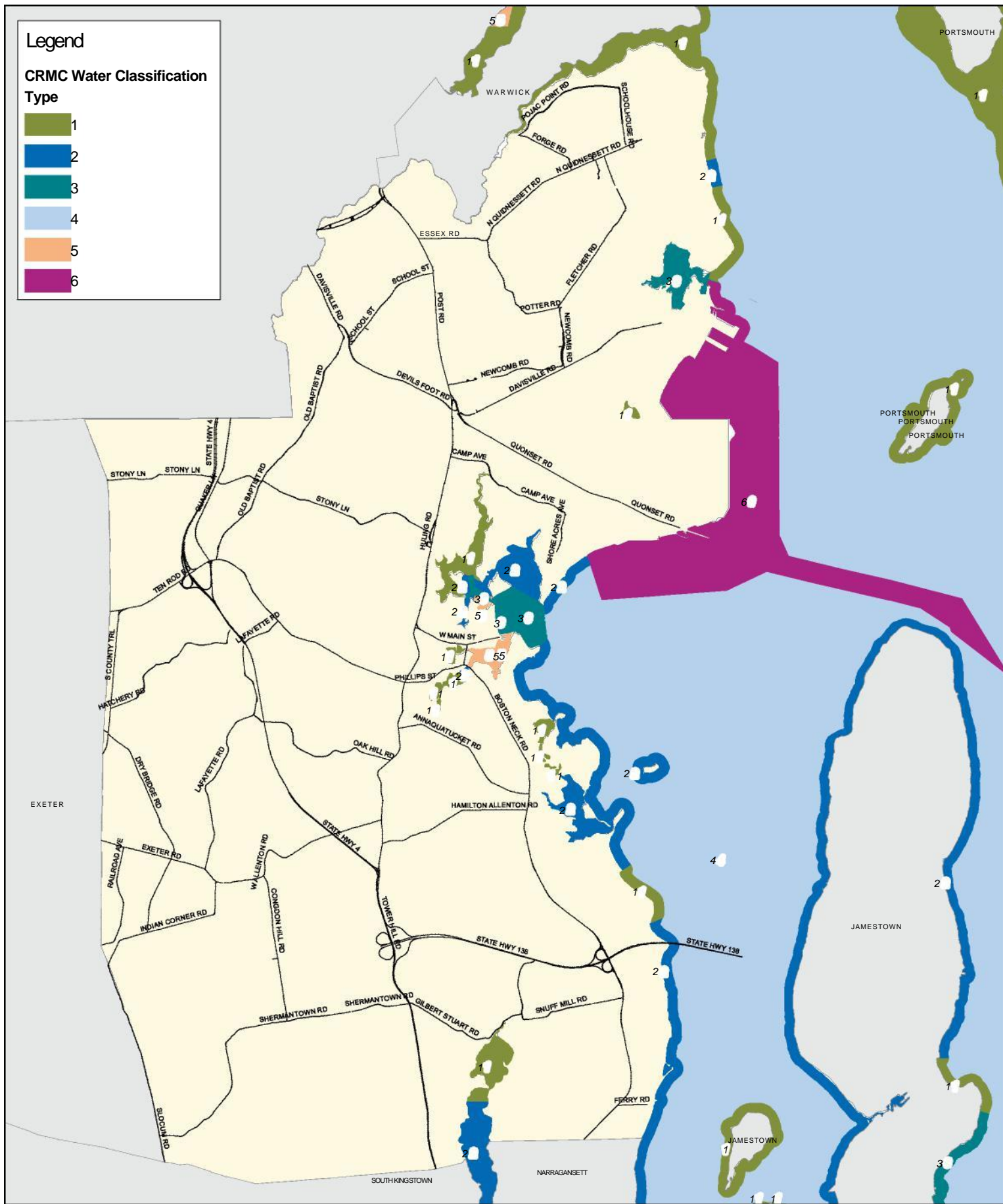
The highest priority uses of Type 5 waters and adjoining land areas within CRMC jurisdiction are (a) berthing, mooring, and servicing of recreational craft, commercial fishing vessels, and ferries; (b) water-dependent and water-enhanced commerce, including businesses catering to tourists; (c) maintenance of navigational channels and berths, removal of obstructions to navigation; and (d) activities that maintain or enhance water quality and scenic qualities, including the preservation of historic features. CRMC shall suitably modify or prohibit activities that significantly detract from or interfere with these priority uses.

Section 200.6 Type 6. Industrial Waterfronts and Commercial Navigation Channels

These water areas are extensively altered in order to accommodate commercial and industrial water-dependent and water-enhanced activities. They include all or portions of the following areas in North Kingstown:

1. Quonset Point and Davisville

Highest priority uses of Type 6 waters and adjacent lands under CRMC jurisdiction are: (a) berthing, loading, and unloading, and servicing of commercial vessels; (b) construction and maintenance of port facilities, navigation channels, and berths; and (c) construction and maintenance of facilities required for the support of commercial shipping and fishing activities.



1:76,188



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3.4.2 MOORINGS, SLIPS AND DOCKS

A. INTRODUCTION

Chapter 7, Public Waters, Harbors and Wharves of the Charter and Revised Ordinances of the Town of North Kingstown, Rhode Island establishes the rules and regulations for the siting of moorings (See Appendix A).

B. RECOMMENDATIONS

1. Examine the feasibility of aligning moorings in existing mooring fields and design and maintain field alignments for maximum utilization.
2. Compare mooring field design with RIDEM density and water quality certification standards.
3. Visitors: Additional space for visitors should be provided. They should be encouraged to anchor in the following areas:
 - a. Sauga Point, east, off Shore Acres - with 10 to 11 feet of water available these waters could provide an excellent safe anchorage for transient boaters.
 - b. Poplar Point, east of the breakwater - Additional anchorage space could be provided off this point where existing water depth is six (6) feet or more.
4. Docks, Pilings, and Other Structures in North Kingstown Waters: In order to maintain safety in Town waters and protect the historical integrity of the Town waterfront the following recommendations are made for the placement of structures in Town waters.
 - a. All docks, pilings, and other structures placed in North Kingstown waters not within the jurisdiction of the Coastal Resources Management Council and placed within the waters of the Town must have all required Federal, State and Town permits for their design and placement. All docks, pilings and other structures within the jurisdiction of the Coastal Resources Management Council and placed within the tidal waters adjacent to the Town must have all required Federal and State permits for their placement.
 - b. The Town of North Kingstown must be notified in a timely manner (two (2) working days notice to the Town Clerk's Office) by the CRMC of all hearings proposed and actual on all applications for docks and other structures to be placed in North Kingstown waters in order that the Town may be adequately represented at such hearings.

C. GOALS AND OBJECTIVES

1. Establish equitable distribution of moorings among all users.
 - a. Set goal of 3:1 ratio of local residents to non-residents.
2. Maximize the use of available mooring areas.
 - a. Establish specifications for moorings to be used in North Kingstown waters (Appendix A)
 - b. Identify the locations of existing mooring fields (Figure 3-2).
 - c. Establish and maintain accurate maps of mooring fields, channels, swim areas and other significant features of Town public waters.
3. Ensure that all moorings in North Kingstown are properly permitted and conform to all minimum requirements.
4. Address riparian mooring privileges.
5. Seek to establish and maintain a fee structure that supports the implementation of the Harbor Management Plan.
 - a. Identify and project costs associated with enforcement, maintenance and capital improvements for the harbor complexes and public waters of North Kingstown.
 - b. Identify and project revenue generation/opportunities through use of harbor facilities.
 - c. Develop a mechanism to raise and manage revenues for the development and maintenance of harbors and waters associated facilities.
6. Establish a fee schedule, with categories for resident, nonresident and commercial moorings.
7. Encourage the further establishment of marine pumpout stations to accommodate moored and docked vessels.
8. Monitor the number and location of boats in mooring fields and marinas.

D. EXISTING CONDITIONS

Wickford Harbor Complex - Records from the Harbor Master indicate that as of January 2021 there were 248 registered moorings, 510 slips and 54 pilings in the Wickford Harbor Complex. Of the 86 moorings subject to the wait list, 69 are resident, 17 non-resident. This makes a ratio of 80% resident to 20% non-resident. New mooring holders taken from the wait list will be adjusted to the required 3:1 ratio. It should be noted that our commercial moorings are providing a valuable service by giving access to the harbor that would not otherwise be available. There were 6 private marina/boatyards in the Wickford Harbor Complex, which provided approximately 510 slip spaces. The Town provides 30 slips at the Town wharf serving primarily commercial fishing vessels.

As of the summer of 2017, all commercial moorings have been removed from the Federal Navigation Project in Mill Cove.

1. **Potowomut (Greene) River** – The Potowomut (Greene) River separates the Town of North Kingstown and the City of Warwick. Within North Kingstown waters there are 8 moorings. The depth of the river is shallow and access is very restricted. The major concern for this area is that of protecting the associated marshes and estuaries by establishing sections along the river as conservation areas.
2. **Mount View** – Bay area in front of the Mount View section of North Kingstown. This sector contains 5 moorings all of which are exposed and in shallow water. Access is restricted and any growth in this sector will be from an increase in small boat owners within the area.
3. **Allen Harbor** – The Town of North Kingstown Marina located on the southeast side of this harbor provides 115 boat slips and 85 moorings. This Town facility is operated under the Quonset/Davisville Recreation Fund. The Allen Harbor Boating Association on the southwest shore of this harbor provides 100 slips for its members. Mill Creek Marine has transient dockage and a marine repair facility. The Coast Guard maintained a berth in this harbor until 1992. The property adjacent to the Town Marina is owned by the University of Rhode Island and maintains the berthing facilities. Little Allen Harbor, an adjacent inlet is owned by the RI Port Authority and is leased to private concerns and operated as a private marina with 52 slips and 4 moorings in Allen Harbor.
4. **Shore Acres** – From the north end of the breakwater to Blue Beach. Local property owners primarily use this area, containing 23 moorings.
5. **Fishing Cove** – Situated off of Calf Neck peninsula. This area contains 32 moorings.
6. **Mill Cove** – Located just south of Mill Creek and east of Rabbit Island. This area contains 65 moorings.

7. **Wickford Cove** – Located. This area contains no moorings, however there were 64 pilings present in October 2007.
8. **Pleasant Street** – The area is located off of Pleasant Street in Wickford. This area contains 51 moorings.
9. **Sauga Point** – This area is located off of Sauga Point. This area contains 56 moorings.
10. **Poplar Point** – This area is located off Poplar Avenue and Steamboat Avenue. This area contains 40 moorings.
11. **Town Beach North** – From the North side of the Town beach to the south side of the Breakwater. This area contains 23 moorings. It has been the long term policy that accessing moorings in this area from the Town Beach is not permitted, due to night time parking restrictions and conflicts with the swimming beach. Access therefore is limited to residents of the area.
12. **Town Beach South** – From Lone Tree Point north to the southern end of the Town Beach. This area contains 8 moorings.
13. **Lone Tree Point** – From Anthony Beach around the Cove and north to Lone Tree Point. Access to this area is limited to the immediate residential area. The area contains 26 moorings.
14. **Hamilton** (including Wild Goose Point) – Rome Point north to Wild Goose Point. This area contains 62 moorings. Parking is limited and access to the area is available only to the local neighborhood.
15. **Plum Point** – From the Jamestown-Verrazano Bridge extending north for approximately 500 yards. This area contains 9 moorings. Access is restricted to the local community. No impact on water use is foreseen.
16. **Plum Beach** – South of the old Jamestown Bridge and just east of the Plum Beach Club. This area contains 30 moorings.
17. **Saunderstown South** – Located near a small break-wall around the Saunderstown Yacht Club, at the end of Ferry Road. This area contains 20 moorings, well spaced along the coast. The moorings do not exceed a reasonable distance from the shoreline. It appears that access to the mooring fields is restricted to property owners in the immediate area. General sea conditions make this an undesirable area for anchoring or overnight stays. This area is inshore of a productive lobster fishery area and should remain as a "local" mooring area in order to prevent a conflict of use.
18. **Saunderstown North** – Starting at the small breakwater just south of the Saunderstown Yacht Club and proceeding north to Casey Point. This area contains 50 moorings, most of which are used for the yacht club's small boat sailing fleet.

Access to this sector is restricted to club members and residents of the immediate area. No public parking is available. Sea conditions are not good for anchoring or overnight stays. The moorings in the sector are compacted, however, this does not seem to be a problem because of the type of vessels in use.

TABLE 3-3
SUMMARY OF NORTH KINGSTOWN MOORING FIELDS
January 2021

The CRMC defines a mooring field as an area containing five or more moorings in close proximity. There are several moorings scattered along the coast in front of owners' property, and not included in the following list.

Mooring Area	Name	Number of Moorings	Number of Boats over 25'	Maximum Moorings	Acres
1	Potowomut	8	4	8	37.5
2	Mount View	5	0	10	13.8
3	Allen Harbor	89	Varies	95	35.3
4	Shore Acres	23	14	45	55.2
5	Fishing Cove	32	9	45	23.6
6	Mill Cove	65	17	96	23.6
7	Wickford Cove	64	Varies	64	
8	Pleasant Street	51	17	69	14.5
9	Sauga Point	56	21	61	27
10	Poplar Point	40	16	43	17.6
11	Town Beach North	23	4	32	22.3
12	Town Beach South	8	5	10	9.1
13	Lone Tree Point	26	6	30	19.8
14	Hamilton (including Wild Goose Point)	62	28	90	90.5
15	Plum Point	9	1	15	18.5
16	Plum Beach	30	6	32	13.8
17	Saunderstown South	20	8	20	15.59
18	Saunderstown North	50	10	50	17.05

Land Use Specialists conducted a mooring perimeter survey in 1995.

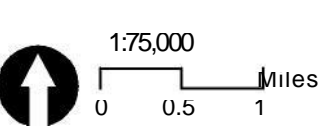
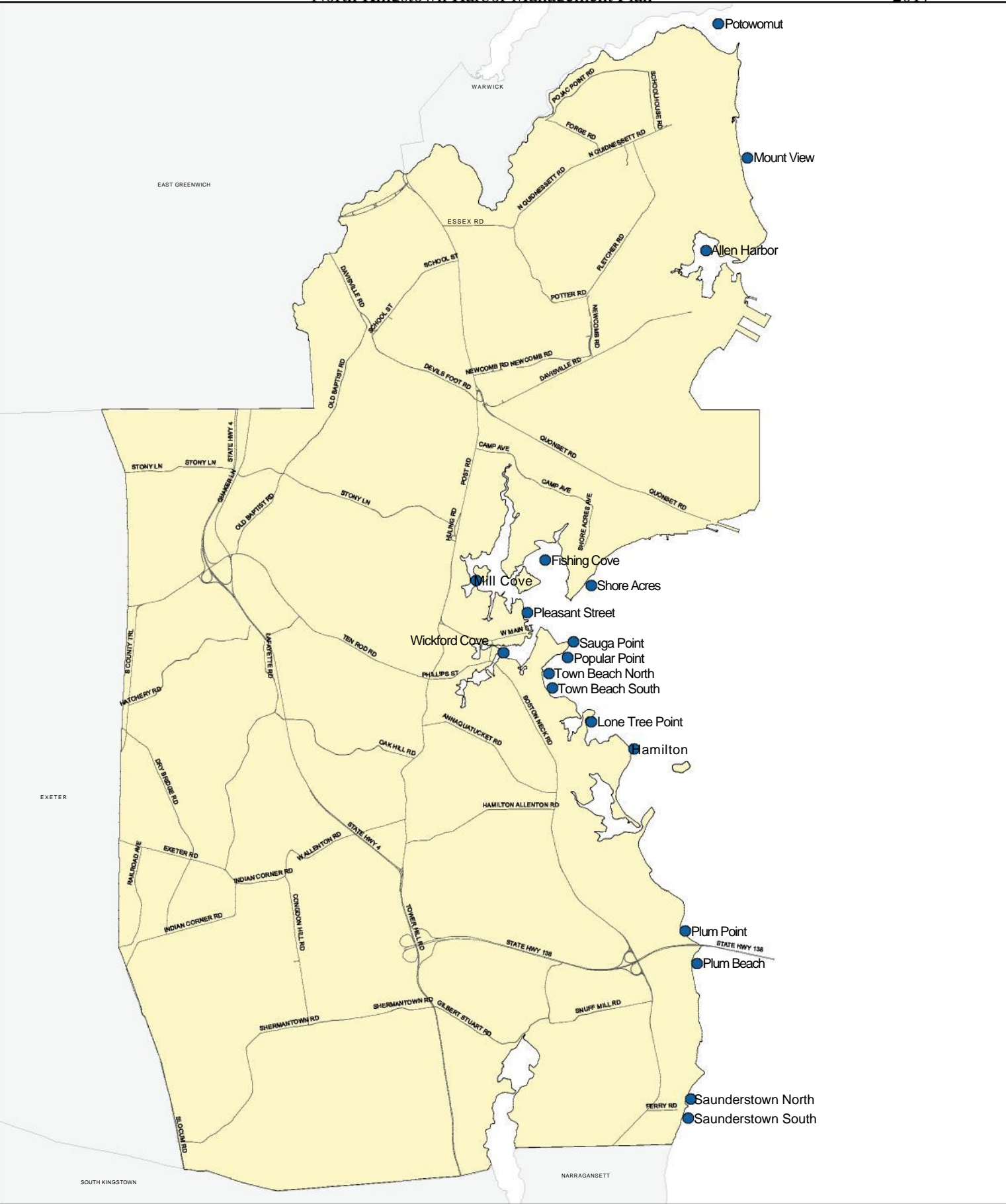
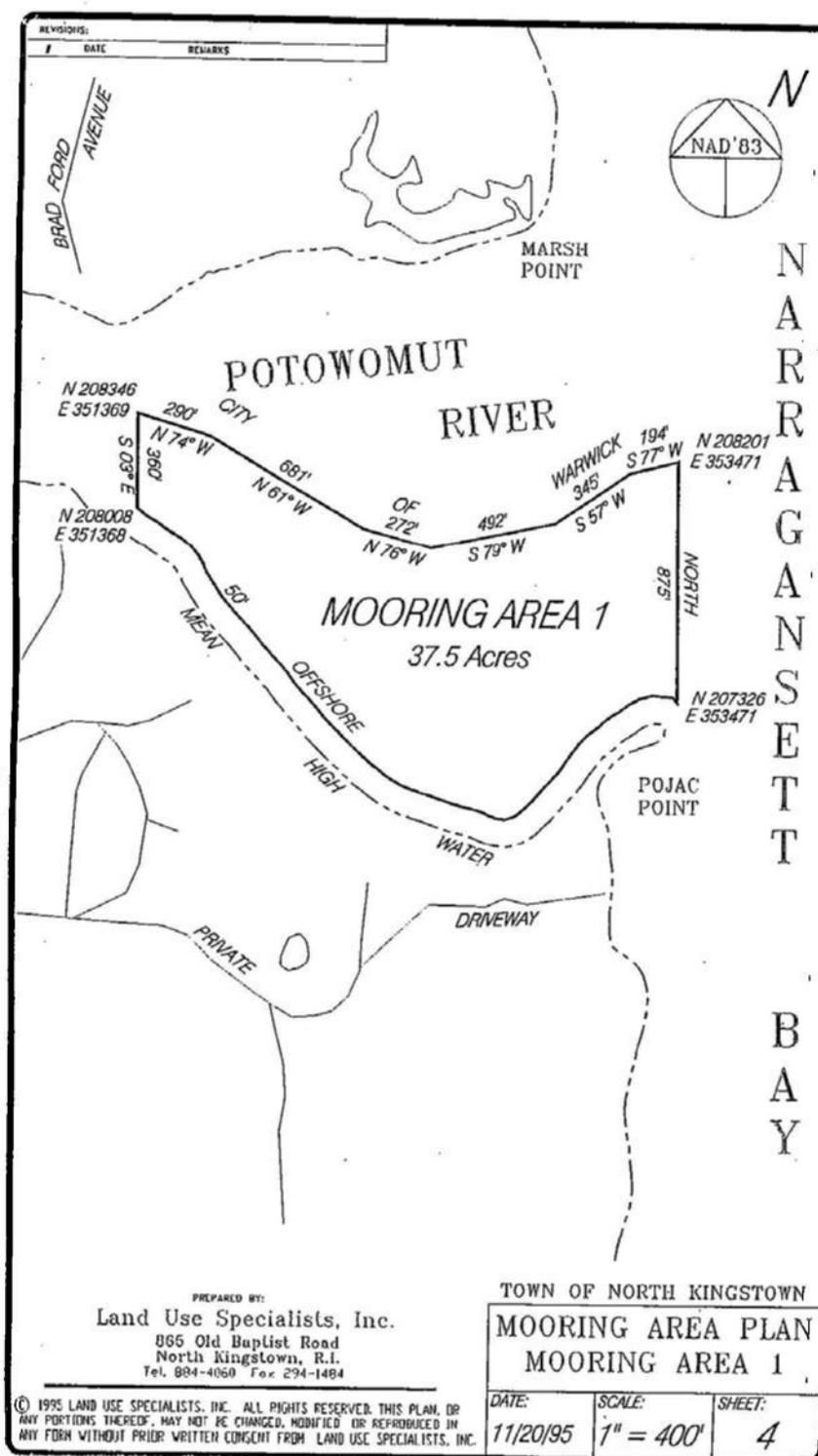
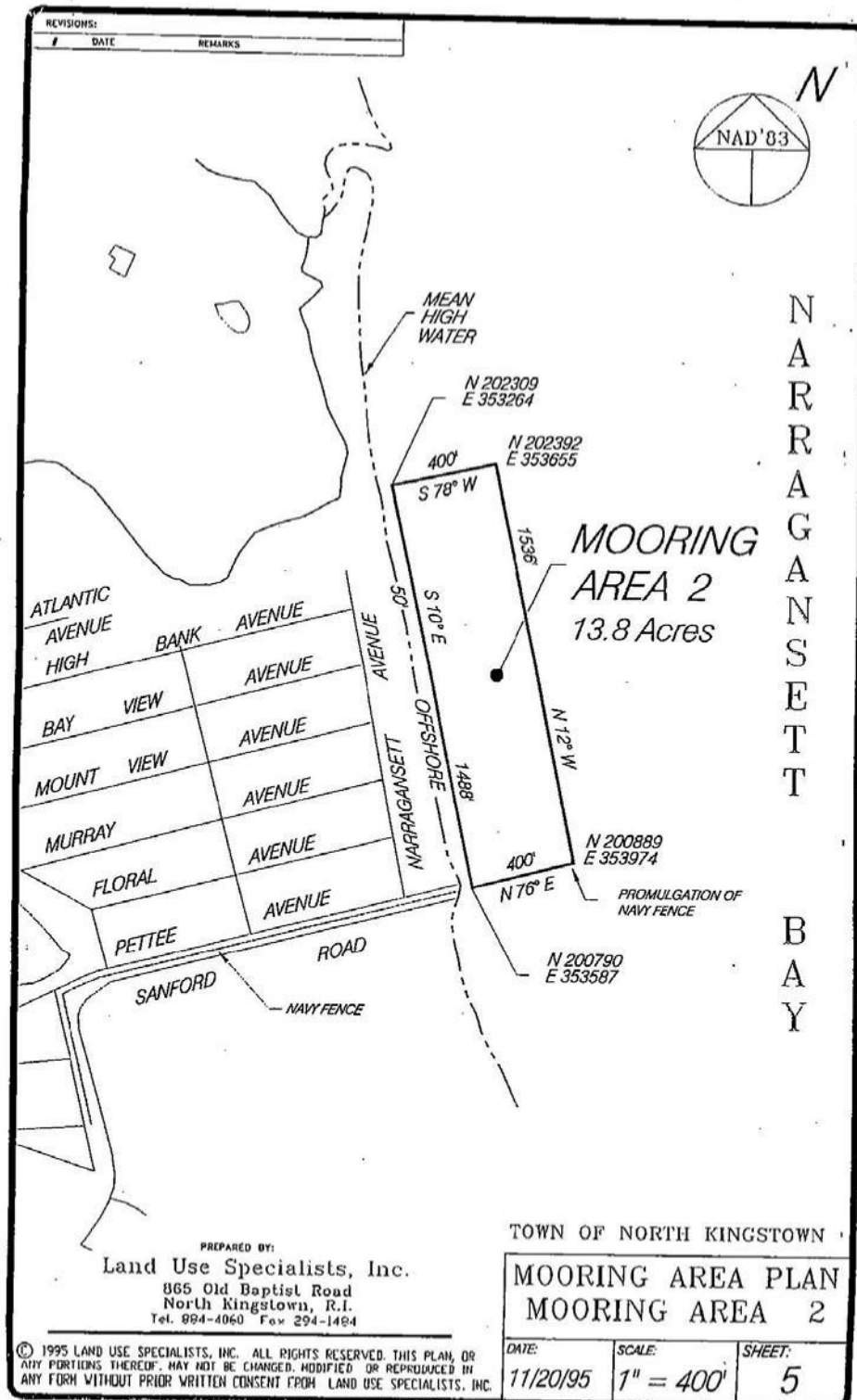
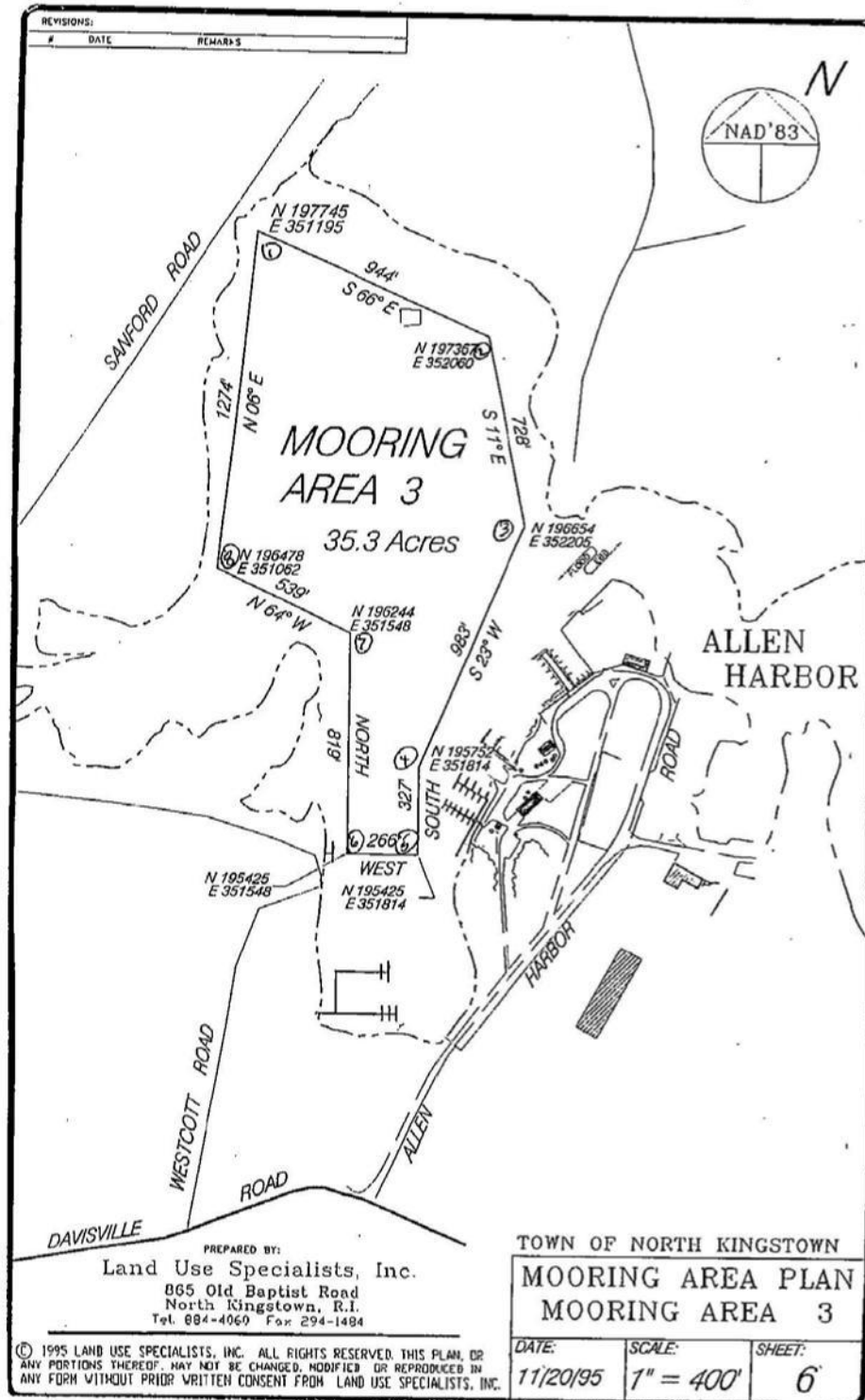
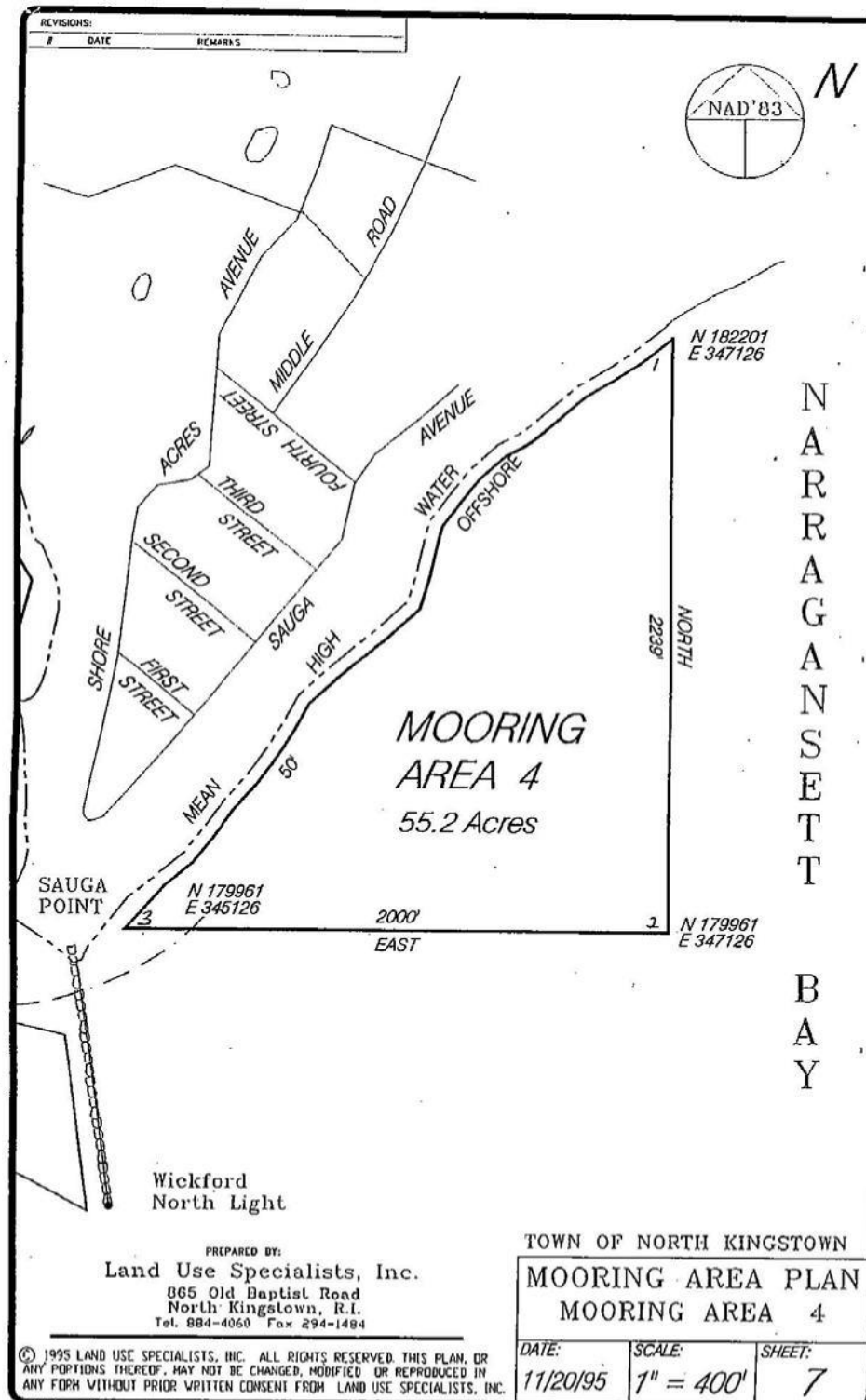


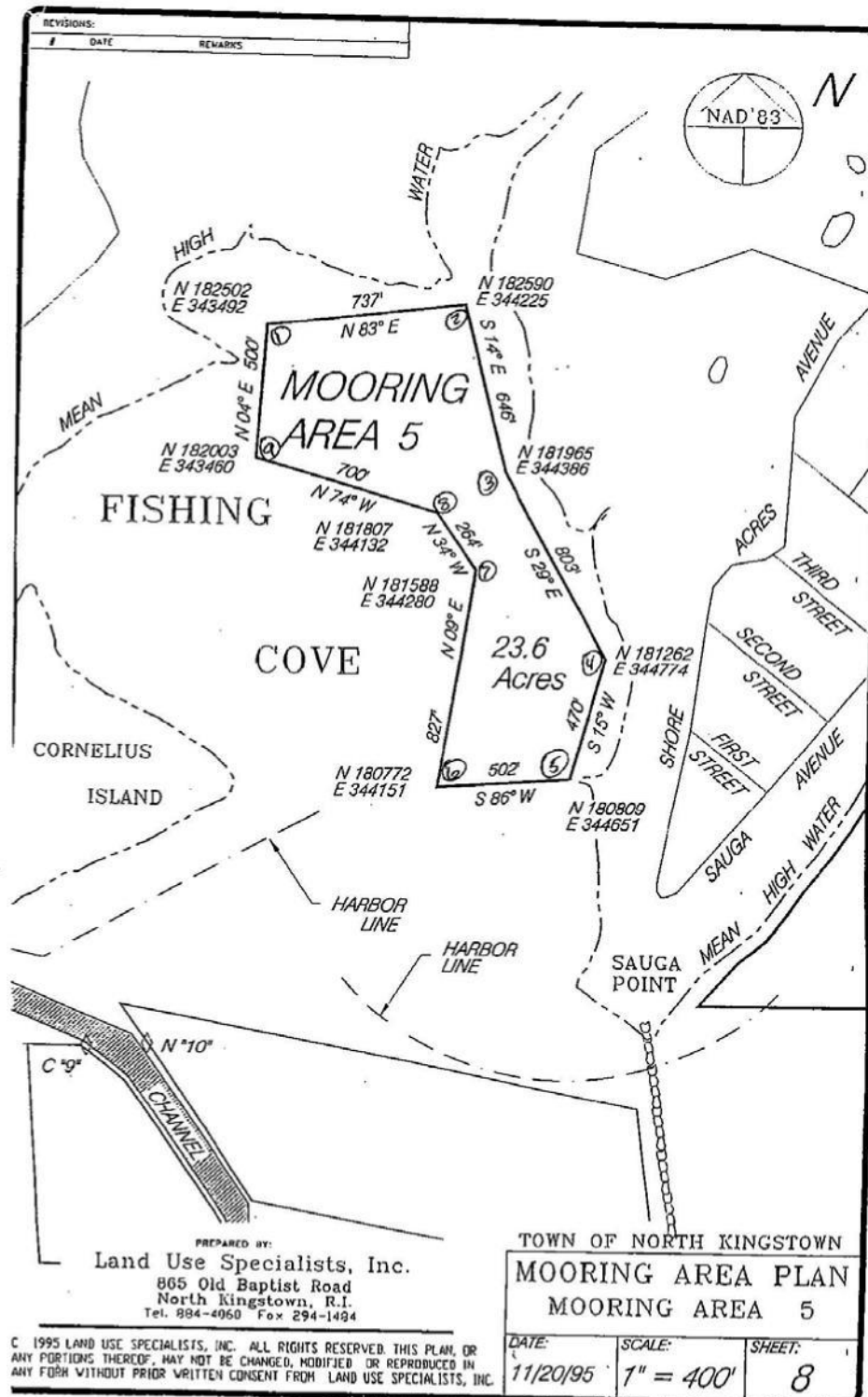
Figure 3-6

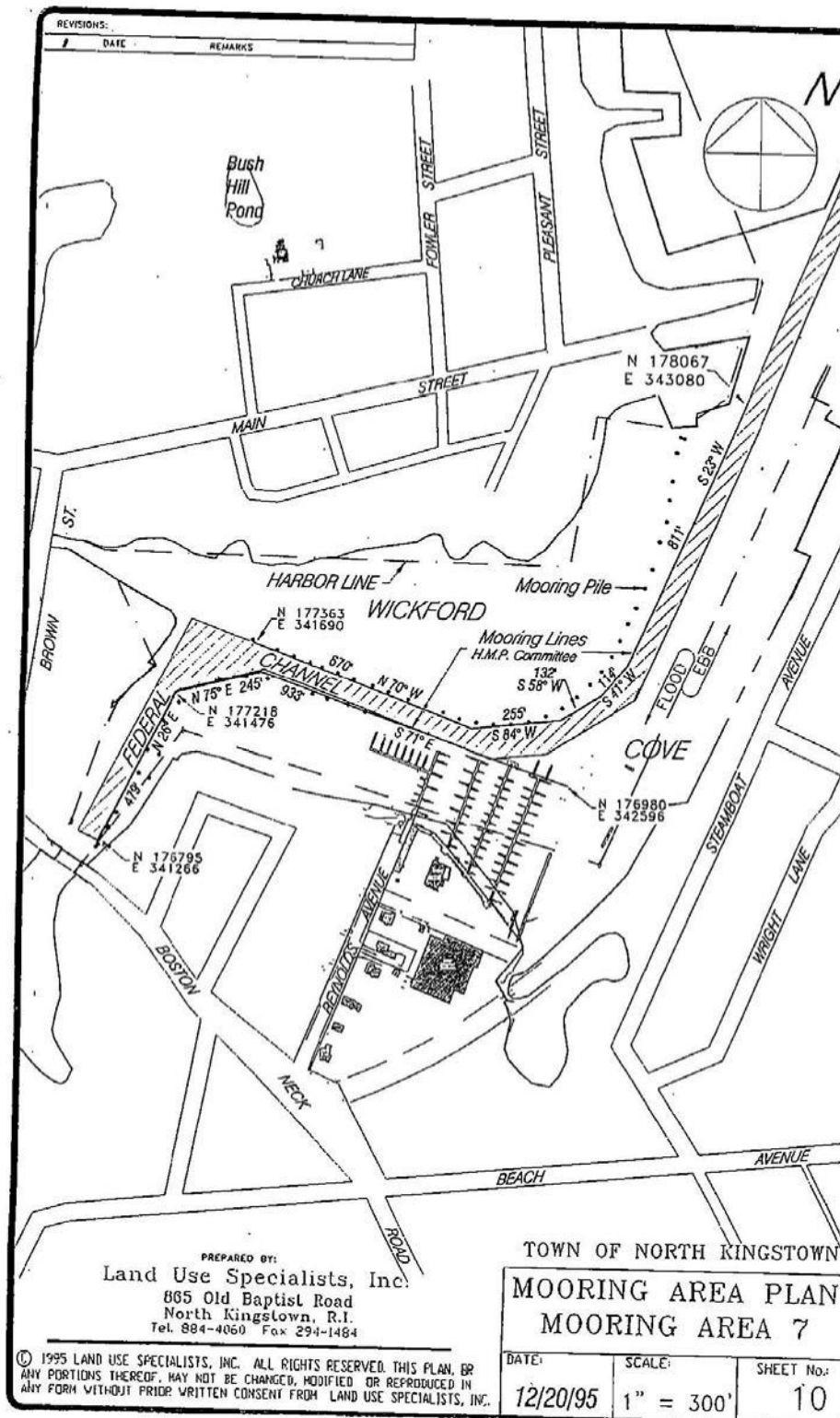


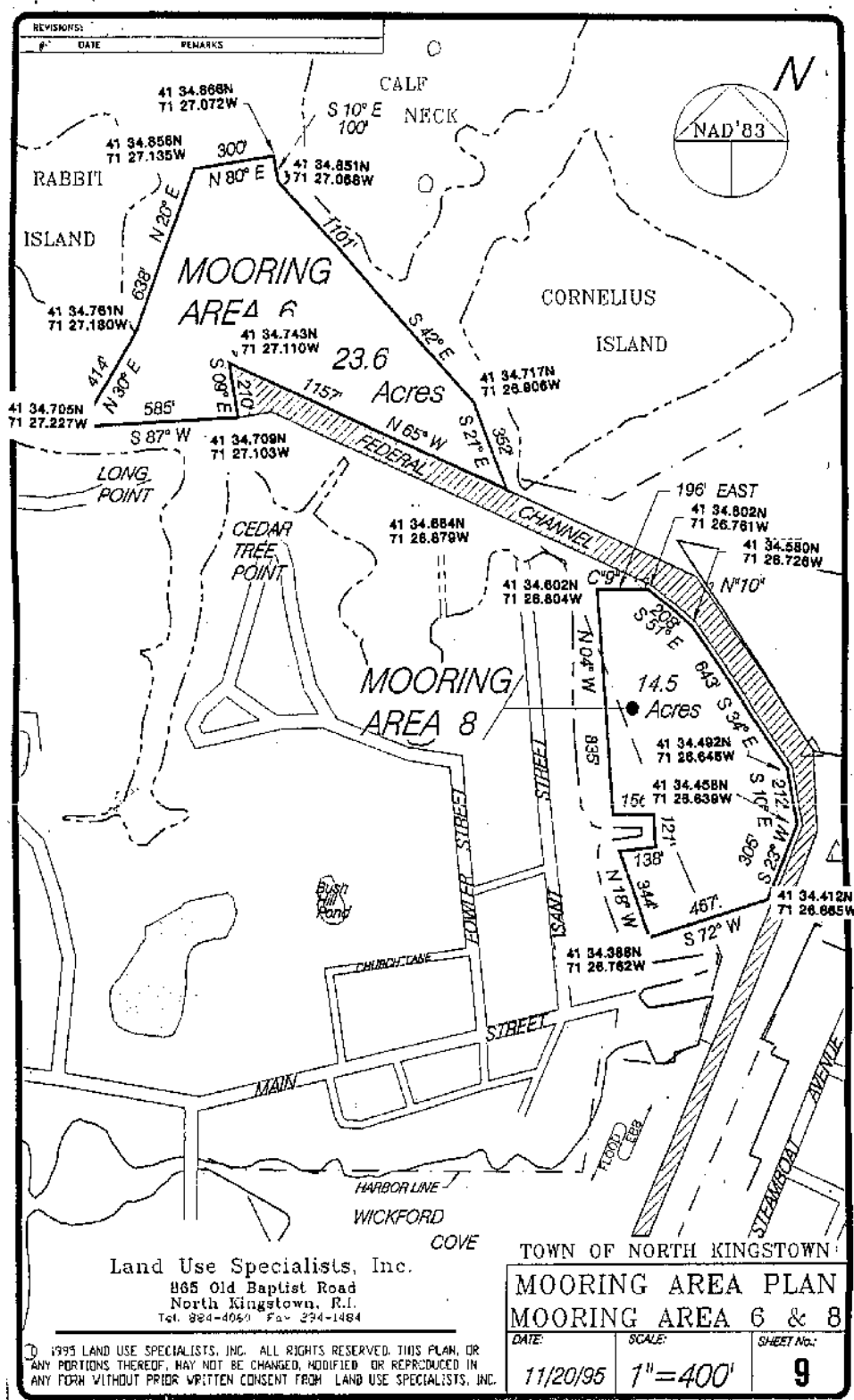


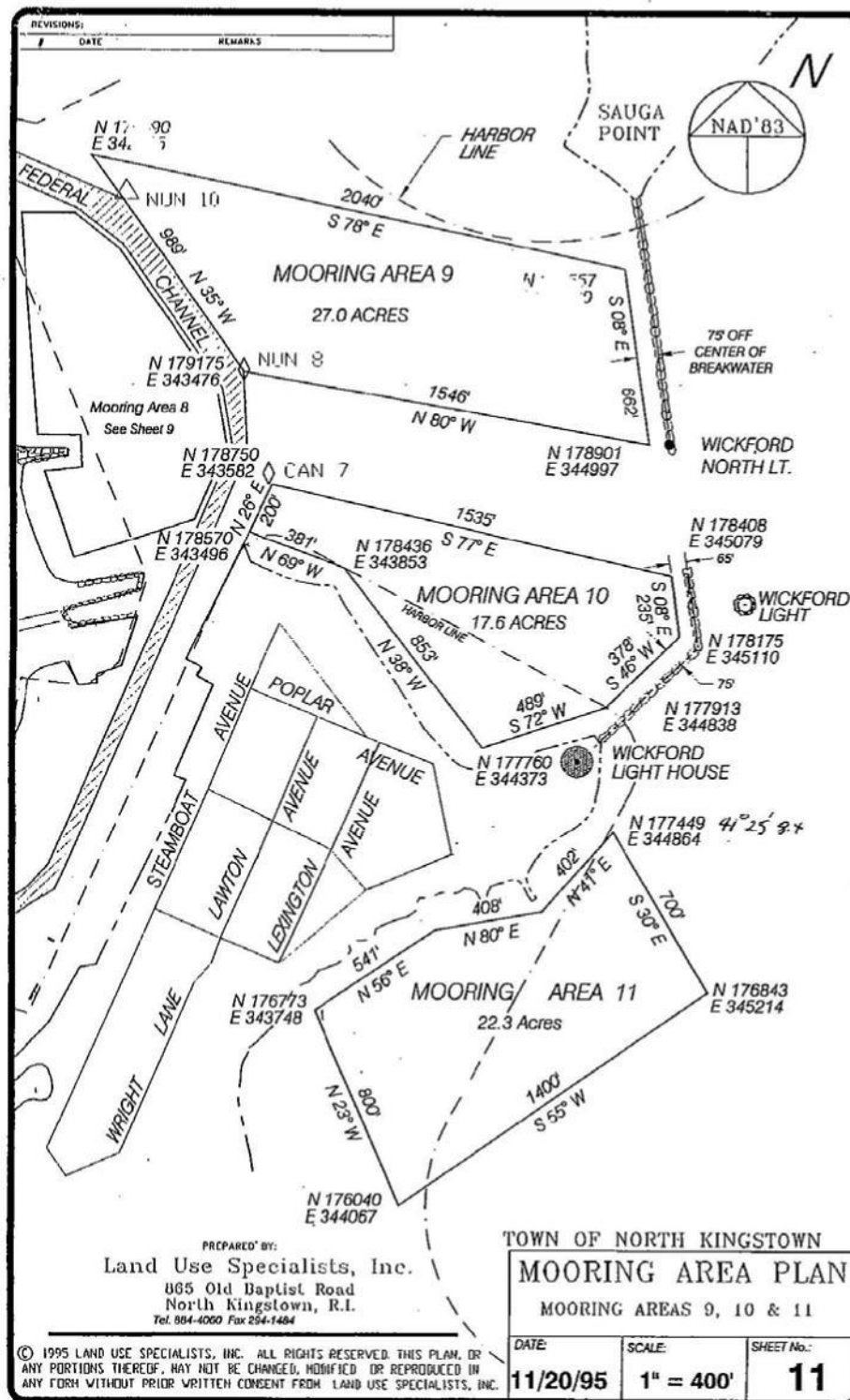


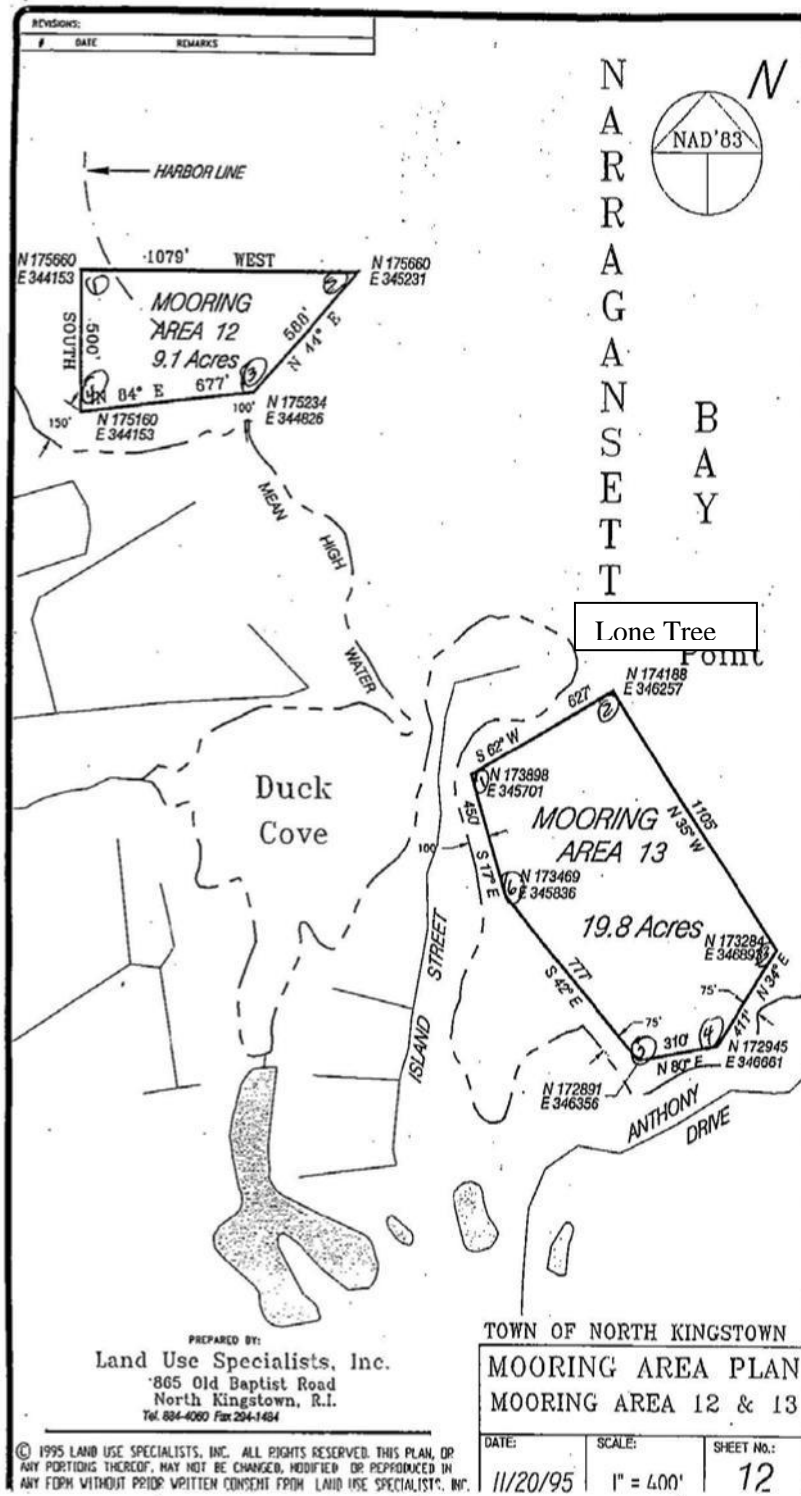


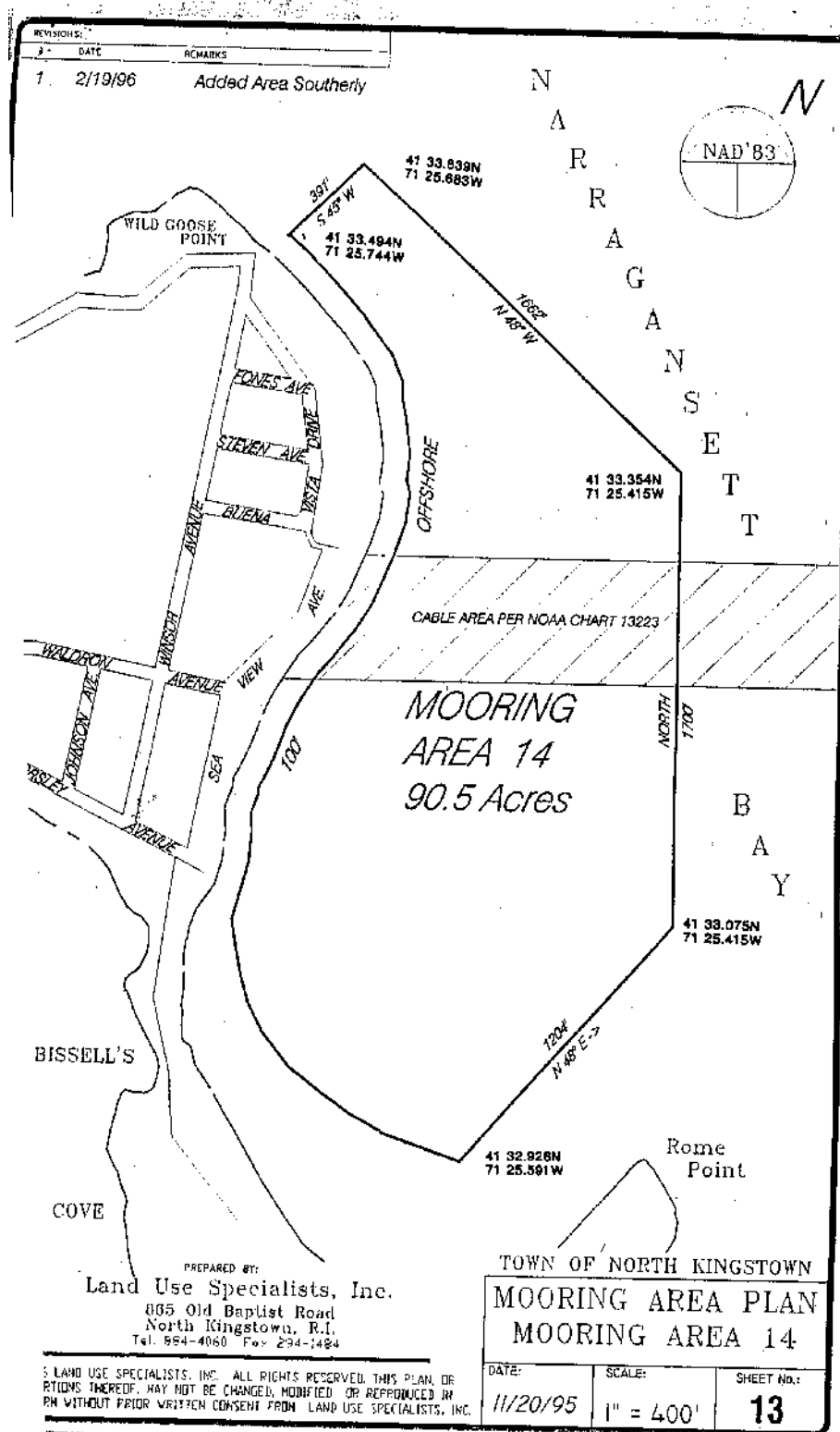




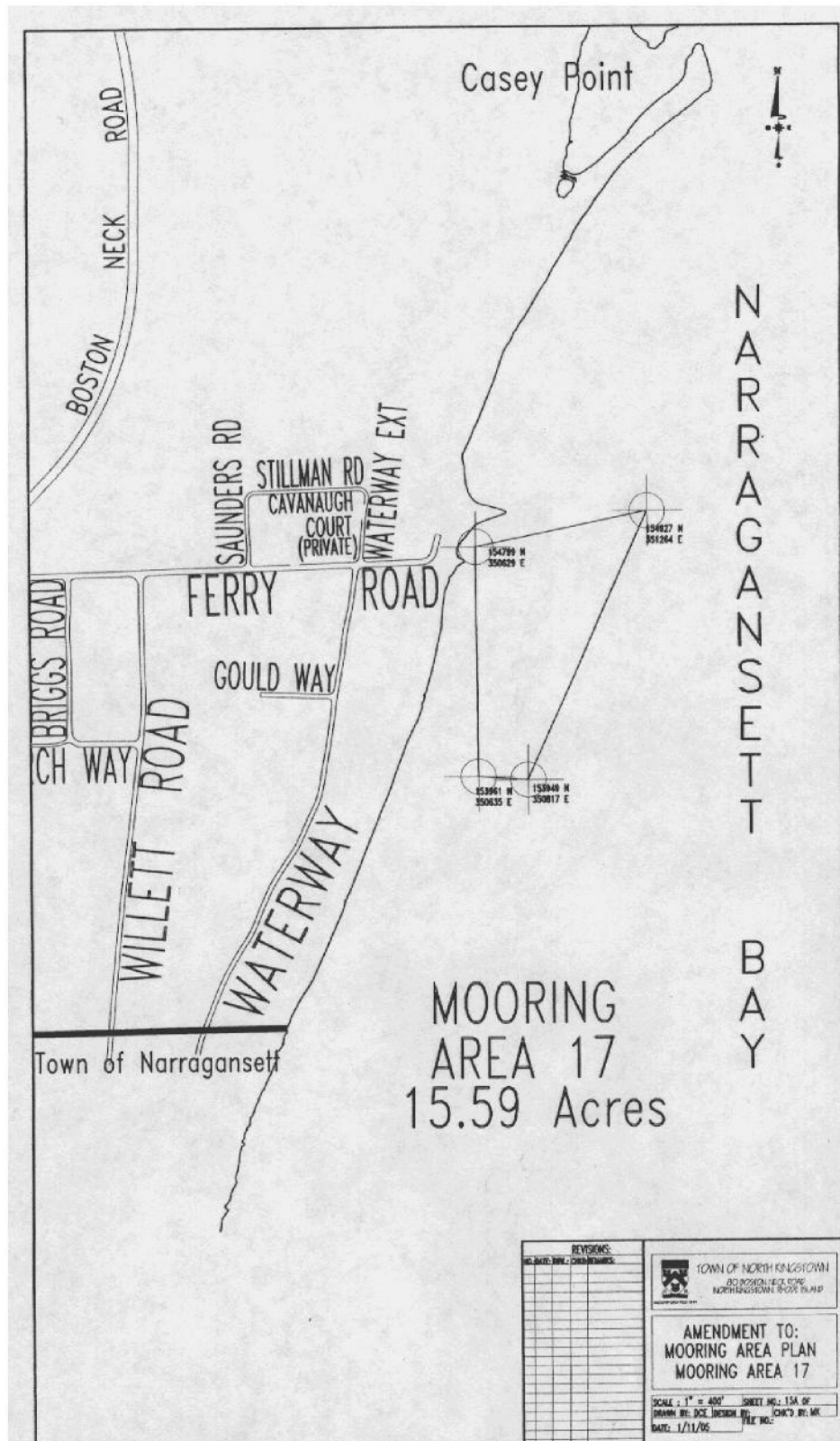














3.4.3 PUBLIC RIGHTS OF WAY

A. SUMMARY OF RECOMMENDATIONS FOR ESTABLISHING RIGHTS-OF-WAY IN NORTH KINGSTOWN

The CRMC has directed North Kingstown and all other coastal towns to prepare a plan for managing their contiguous state owned coastal waters and harbors. Part of this effort must include a plan for identifying, designating and opening rights-of-way (ROWs) to the shore.

North Kingstown is extremely fortunate to have a long coastline, approximately 30 miles in length, as well as many freshwater streams, rivers and ponds. These natural resources should be made available to all residents to use and enjoy while diligent care is taken to protect fragile ecosystems and private property. To assure access traditional and existing rights of way (ROWs) must be located, designated, opened to the public, and maintained on a regular schedule. In preparation of the original Harbor Management Plan (1994), the North Kingstown Rights of Way Subcommittee visited nearly 90 sites identified as ROWs in various reports and on plat maps.

Recommendations

The following recommendations for establishing rights of ways to the shore in North Kingstown were adopted in 1993 by the North Kingstown Harbor Management Plan Steering Committee after a review of the Harbor Management Plan Rights-of-Way Subcommittee report.

1. The Town should seek to discover and designate traditional and existing rights-of-way to the shore in all parts of Town through any legal means available to it. An inventory of all traditional and existing ROW sites should be printed and updated on a regular basis by the Town to identify the proper location of the ROWs and raise awareness of the regulations that must be followed at each site.
2. The Town must determine the legal status of each potential ROW before it can be nominated as a public Right of Way.
3. All Town roads that are platted, accepted and maintained by the Town that extend to, or pass over the mean high water area are Rights of Way to the shore.
4. All designated ROWs should be marked. Usage regulations may also be posted on signs.
5. The Town should develop parking regulations and designate parking areas, as feasible, at the ROWs.
6. The Town should mandate public access in all new waterfront development in all zoning categories and should seek access in established areas. The Town should continue to support CRMC goals to provide public access under Section 1.3.6 of the Red Book.

7. The Town should provide adequate parking in waterfront areas throughout Town.
8. The following ROW sites that are under Town jurisdiction were nominated to CRMC as public ROW:
 - a. Wilson Park Intrepid Boat Ramp nominated by HMC to Town Council and approved by Town Council for nomination to the CRMC in 2004.
 - b. Allen Harbor Complex nominated by HMC to Town Council and approved by Town Council for nomination to CRMC in 2004.
 - c. Town Wharf nominated by HMC to Town Council and approved by Town Council for nomination to the CRMC in 2004.
9. The Town should support efforts to maintain and improve public rights-of-way to the shore. Continued maintenance of CRMC designated rights –of-way and Town rights-of-way is an important element in providing access to the shore.

B. INTRODUCTION - STATUTORY AUTHORITY FOR PUBLIC ACCESS

The citizens of Rhode Island have a long history of visiting the shore for a variety of reasons. The Rhode Island Constitution grants its citizens privileges of the shores. Based on traditional uses of the shore which have been upheld by Rhode Island Court decisions, a 1986 Constitutional amendment defined these privileges as follows: (1) fishing; (2) gathering seaweed; (3) leaving the shore to swim in the sea; and 4) passing along the shore (called lateral access). The above mentioned privileges apply only between the mean high tide line and the sea. Unfortunately, colonial and recent legislators did not foresee the intense population growth that has occurred in the Coastal regions that has led to the increased privatization of the shore and did not guarantee a way to get to the shore (referred to as a perpendicular access). High real estate prices have often restricted the amount of waterfront property that the towns and the State have been able to acquire for public purposes.

The State of Rhode Island has tried to improve Public Access by identifying traditional and existing public rights-of-way to the shore. Since 1971 this responsibility has resided with the Coastal Resources Management Council (CRMC). R.I. General Laws 46-23-6(E) gives CRMC the following charges:

1. The Council shall be responsible for the designation of all public rights-of-way to the tidal water areas of the State and shall carry on a continuing discovery of appropriate public rights-of-way to the tidal water areas of the State.

-
2. The Council shall maintain a complete file of all official documents relating to the legal status of all public rights-of-way to tidal water areas of the State.
 3. The Council shall have the power to designate for acquisition and development and posting and all other functions of any other department for tidal rights-of-way and lands for tidal rights of way, public parking facilities, and other Council related purposes.
 4. In conjunction therewith every State department controlling State-owned land, close to or adjacent to discovered rights of way is authorized to set out the land, or so much thereof, as may be deemed necessary for public parking.
 5. No such use of such land for public parking shall conflict with existing or intended use of the land, and no improvement shall be undertaken by any State agency until detailed plans have been submitted to and approved by the governing body of the local municipality.
 6. In designating rights-of-way, the council shall consider the following matters in making its designation:
 - a. Land evidence records;
 - b. The exercise of domain over the parcel such as maintenance, construction, or upkeep;
 - c. The payment of taxes;
 - d. The creation of a dedication;
 - e. Public use;
 - f. Any other public record or historical evidence such as maps and street indexes;
 - g. Other evidences as set out in #42-35-10.
 7. A determination by the Council that a parcel is a right-of-way shall be determined by substantial evidence.

A 1988 study of Wickford Harbor Management issues describes rights of ways this way: "a public right of way is a pathway that allows for passage to and from the shoreline". These public rights of ways can occur on public or private property since ownership of the land is not an issue. CRMC simply determines whether or not the public has the legal right to use a piece of land to access the water. There have been no subsequent studies of the rights of way in North Kingstown.

The CRMC has directed North Kingstown and all other coastal towns to prepare a plan for managing its contiguous state owned coastal waters and harbors. Part of this effort must include a plan for identifying, designating and opening rights-of-ways to the shore. Several recent reports give excellent reviews of current efforts in Rhode Island to identify and open ROWs. The potential always exists for conflicts between those seeking access to the shore and waterfront property owners. The North Kingstown Harbor Management Commission recommends that the Town maintain and improve access to Town waters for all user groups.

C. TYPES OF ACCESS

1. Private

- a. Deeded access ways, private ROWs
- b. Beach clubs, private beaches
- c. Waterfront businesses such as restaurants, marinas

2. Quasi-Public

- a. Audubon sites
- b. Land trust holdings

3. Public

- a. Examples include: beaches, parks, boat ramps, piers/jetties, walkways/pathways, fishing areas, conservation areas, overlooks.
- b. Two major categories are:
 1. Publicly owned shore front properties, (i.e. lands owned in fee simple title), including shore front parcels owned by the Federal Government, the State or the municipalities.
 2. Public Rights-of-Way, including:
 - Municipal streets (accepted)
 - State Roads
 - Municipal streets (unaccepted)
 - Driftways & platted ROWs
 - Easements set forth by CRMC permits, through long-term public use, or as compensation for filled tidelands or infringement upon tidal water areas.

Generally, there are six legal methods of establishing a public ROW in Rhode Island:

1. Roadways that have been laid out, recorded, opened, and maintained by a city or town council.
2. Highways by grant or use (R.I.G.L. Chapter 24-2)
3. Ways that have been approved by recordation of a subdivision plat.
4. Ways that have been offered to the public by dedication and accepted by public use or by official city or town action (implied dedication).
5. Highways that have been used by the public since time immemorial.
6. Ways that have been obtained by the public's adverse use.

D. REASONS WHY PUBLIC ACCESS IS OFTEN DENIED

Some of the most common reasons people use to attempt to refuse access to the shore are indicated below:

1. Infringement on privacy/privilege;
2. Fear of strangers and resultant security issues in the neighborhoods;
3. Litter, noise, rowdy behavior, vandalism, drinking, drug use;
4. Lack of adequate facilities, sanitary facilities and parking;
5. Damage to environmentally sensitive areas;
6. Potential liability of property owners abutting ROW if a member of the public is injured in the ROW;
7. Increased traffic;
8. Ethnic and cultural prejudice.

These are certainly important concerns to those who live in coastal areas, but they are problems that generally already have remedies in Town ordinances and State laws with enforcement powers residing with the police. Rhode Island has a private property liability law that states that if access is allowed on private property, an injured party is not allowed to sue unless there is negligence on the part of the property owner. The draft legislation dealing with filled tidal lands contains provisions for enhancing public access. It states that no owner of private filled lands shall be liable for any injury to persons or their property while that party is exercising his or her rights to enter and use such land under the public easement.

The North Kingstown Harbor Management Commission recommends that ROWs be established uniformly throughout Town in a fair and equitable manner so that all residents have easy access to shore.

E. RESPONSIBILITIES OF THE PUBLIC USING ROWS

A recent CRMC publication details the rights of citizens to use the shore but also clearly explains that the shore use privileges require responsible actions by the citizens in order that the rights of private property owners and the environment are respected. These responsibilities include the following:

1. Citizens should access and return from the shore only in designated public Rights-of-Way. Trespass is not allowed on private property.
2. Citizens should respect private waterfront property.
3. Citizens should keep the shoreline clean. They need to remove their personal trash and dispose of it properly.
4. Citizens should be aware of sensitive environmental areas and protect the native plants and animals and coastal features.

F. RIGHTS-OF-WAY IN NORTH KINGSTOWN

North Kingstown is extremely fortunate to have a long coastline approximately 30 miles in length as well as many freshwater streams, rivers and ponds. These natural resources should be made available to all residents to use and enjoy while diligent care is taken to protect fragile ecosystems and private property. To assure access, traditional and existing rights-of-way must be located, designated, opened to the public and maintained on a regular schedule.

In preparation of this report the North Kingstown Rights-of-Way Subcommittee visited nearly 90 sites identified as rights-of-way in various reports and plat maps.

Most ROWs which were located were unmarked or poorly marked, overgrown, poorly maintained, hidden or blocked by private owners or posted with NO TRESPASSING or NO PARKING signs. In addition, very few had designated parking areas.

The results of these site visits are tabulated at the end of this report. Information is included for each site detailing its location, adjoining platted lots, ownership (if known), width, access status (paved, pedestrian access, handicap access, vehicle access), description, availability of parking, recommended use, and recommended action for a title search. The ROW Subcommittee made recommendations for each site based on the scale of use it can sustain. Many of the sites are in neighborhoods with limited possibility of parking or additional facilities.

The Harbor Management Commission recommends that all traditional and existing ROWs need to be continued on the inventory even if they cannot all be opened at this time. No legal determination of individual titles has been made by the Town.

1. Roads and Paths to Narragansett Bay

Much of the coastal region of North Kingstown was originally platted for summer homes. To make lots that were not directly on the waterfront more salable, many developers created easements to allow these interior residents access to the shore. Today, many of these homes are year-round residences.

The Harbor Management Commission recommends that the Town Council adopt an ordinance that declares that all (public) roads which are platted, accepted and maintained as Town roads, that physically extend to, or pass over, the mean high water mark and those which are platted to extend to, or pass over the mean high water mark, be declared Town Rights-of-Way. It should not be necessary for the Town to have pavement that ends at the water, only that the platted street extends to the water. In many neighborhoods, these ROW's are not visible. Some platted paths are also valid ROW.

2. Develop a Management and Maintenance Policy for ROWS

An official list of ROWs should be maintained by the Town and updated at regular intervals. The Town will seek opportunities for increasing shore access in established neighborhoods.

3. Develop Public Education and Adopt-A-Spot Programs

The Town should undertake a public education program addressing the value of identifying, designating and opening ROWs.

4. Freshwater Access and Greenbelts

The committee endorses the concept of the development of a connected set of greenbelts in the Town that was proposed in the North Kingstown Comprehensive Plan, 1992. Greenbelts are generous setbacks from fresh water and salt water features which can be used for public recreation, protection of natural resources, connection of wildlife habitats and protection from flooding. Public access will be secured utilizing a variety of methods such as fee-simple acquisition and conservation easements, as well as open space and recreation funds. The committee would like to see additional public access developed along fresh water ponds and rivers. ROWs should be established at appropriate locations with provision for parking where feasible. The committee did not visit all the potential fresh water ROWs but restricted its site visits to rivers that drain, into Narragansett Bay.

5. Access to Filled Lands

Recently a case was decided in the Rhode Island Supreme Court that is likely to have a large impact on public access in the State. In the case of Hall vs. Nascimentio, 1991, the court declared that lands which have historically been filled within Narragansett Bay and other tidal waters remain the property of the State unless they have formally been conveyed by the General Assembly to a private party.

The decision affirms the supremacy of the public trust doctrine that certain rights of the public can never be alienated and has potentially laid the foundation for significant changes in the control and regulation of historically filled shorelines. The State Legislature subsequently passed RIGL 46-23-1 that clarifies this issue.

Since much of North Kingstown from Wickford to Quonset Point is filled land these new regulations will likely affect North Kingstown although the effect is uncertain at this time.

6. Previous Studies

The Wickford Harbor Complex Study prepared in 1988 contained several suggestions for enhancing public access. These are listed below: Utilize existing CRMC designated ROW (Loop Drive #1 and #2 and Phillips Street) to develop a walkway around Wickford Cove;

- a. Develop a walkway around Academy Cove between the Library and Brown Street;
- b. Seek to acquire land on the western side of Mill Cove which is now privately owned and undeveloped for both public access and environmental reasons;

- c. Acquire the rest of Cornelius Island and make it a conservation area or a public park. No subsequent studies have been conducted in terms of how to further enhance public access.

7. Compatibility of the Harbor Plan with the Comprehensive Plan

The Public opinion survey completed for the North Kingstown 2008 Comprehensive Plan found that acquisition of undeveloped waterfront land for open space use was the number one open space priority for the citizens polled.

8. Designation of ROWS

The Town should work cooperatively with CRMC to identify and open ROWs to the shore.

Additional opportunities for public access will be available when the planned Calf Pasture area improvements are completed. This area was conveyed to the Town by the National Park Service on August 14, 2001. Note: The Town received the Allen Harbor Marina on September 11, 1980.

9. Sites Previously Reviewed by CRMC as Potential ROW's

In the 1970's the CRMC investigated 17 sites as potential ROWs. Many were initially declared to be public ROWs. Subsequently many residents of plats with deeded ROW access hired legal counsel and the original CRMC designation was reversed. See Appendix B for more information, available at the Planning Department.

The final CRMC designation is listed below:

Street Designation	R-O-W Designation No.
Cottrell Road	Not Resolved
Plum Beach Road	Insufficient Evidence
Clinton Drive (1)	Insufficient Evidence
Clinton Drive (2)	Insufficient Evidence
Buena Vista Drive	Insufficient Evidence
Buena Vista Drive (2)	Insufficient Evidence
Buena Vista Drive (3)	Insufficient Evidence
Buena Vista Drive (4)	Insufficient Evidence
Buena Vista Drive (5)	Insufficient Evidence
Elgin Avenue	Insufficient Evidence
Concord Avenue	Insufficient Evidence
Poplar Avenue	Insufficient Evidence
Steamboat Avenue	Insufficient Evidence
Philips Street	F-5
Loop Drive	F-6
Loop Drive (2)	F-7
Town Wharf	Approved 2/2021
Allen Harbor Complex	Approved 2/2021
Wilson Park	Approved 2/2021
Duck Cove Road	Insufficient Evidence
Worsley Avenue	Insufficient Evidence
Summary	
Insufficient Evidence	14
Public	3
Approved February 2021	3
Not Resolved	1
Total	21

Descriptions of CRMC Designated Rights-of-Way

Phillips Street (F-5)

Description: Area at end abutting Philips Street provides unofficial parking and access to Loop Drive. Passes through very small, very congested residential neighborhood with poor vehicular circulation.

Loop Drive #1 (F-6)

Description: ROW is overgrown and no longer visible from the street. Ends in Wetland. Passes through very small, very congested residential neighborhood with poor vehicular circulation. Extends west from circular drive at the end of Loop Drive.

Loop Drive #2 (F-7)

Description: A dirt road that extends north from the small circular drive at the south end of Loop Drive to the causeway that crosses Wickford Cove and connects to CRMC ROW: F5. Passes through a small, congested residential neighborhood.

The Quonset Development Corporation (QDC) developed and submitted a Public Access Plan to the CRMC. Several drafts of this plan were reviewed by the North Kingstown Harbor Management Commission and the Town Council and others. The QDC plan was approved by the CRMC on August 12, 2005.

Public Access points and allowed activities are described for the following locations:

- a) Blue Beach
- b) Calf Pasture Point Beach
- c) Compass Rose Beach
- d) Spink's Neck Beach
- e) Allen Madison House
- f) Quonset Air Museum
- g) Seabee Memorial Park
- h) Quonset State Airport
- i) Cross Park Road Conservation Area
- j) Quonset Pier Area
- k) Bike Path
- l) Golf Course
- m) Allen Harbor Marina

The NK Harbor Management Commission endorses the provision of additional public use at the Quonset Business Park as it develops.

All other sites included in the Site Review are recommended to be Town ROWs at this time. After the legal review is completed it may be possible to nominate some of the other Town ROWs for CRMC designation.

10. Visual Access

Another type of access is visual access. Scenic views of the harbors and waterfront areas certainly add to the aesthetic quality of North Kingstown. Important marine vistas should be inventoried and maintained as additional waterfront development occurs. Visual access is an important characteristic of our Town as well as an important asset for attracting tourists.

3.4.4 COMMERCIAL FISHING

A. INTRODUCTION

The Commercial Fishing industry, fin and shellfisheries, is recognized for its importance, historically and economically, to the Town and region. Accordingly, it is an objective of this plan to prevent encroachment on, and impairment of, these resources.

To guide the Harbor Management Commission in accomplishing said objectives, a list of sites, grounds, and issues vital to the interests of the commercial fishing industry of North Kingstown has been consolidated into a series of specific goals and objectives, enumerated as follows:

1. That the Town recognize the economic potential of the commercial fishing fleet which sails from North Kingstown and that the Town take the necessary steps to protect a major economic resource through the improvement of dockage facilities and in the adoption of a long range plan to encourage this activity.
2. That appropriate maintenance and up-keep be performed on all Town-owned or operated docks and wharfs to ensure the safe and efficient use by commercial and pleasure interests. The commercial fishing fleet represents an income-generating element for the Town in terms of revenues collected for dockage and mooring permit fees.

B. DOCKAGE AND MOORINGS FOR COMMERCIAL FISHING VESSELS

To ensure a fair and equitable system for maintenance and occupancy of commercial dock sites held by the Town of North Kingstown the following guidelines are recommended. (See Appendix A):

1. Applications for the waiting list shall be made to the Harbor Division in accordance with sec 7-107. Current lists shall be available in the Police Station, North Kingstown Library, Town Hall, and onlinemooring.com.
2. The waiting list should be divided based on boat length. One list should be for vessels 25' and under, and a second list for vessels over 25'.
3. As sites become available, they should be filled on a "First Come, First Served" basis without regard to the residency of the applicant. (This policy conforms to the requirements set by the Coastal Resources Management Council (CRMC) as detailed in the "State of Rhode Island Coastal Resources Management Plan" 1990).
4. Vacancies at the Town Wharf shall be filled from the waiting list according to the priorities set forth in Sec. 7-22 of the ordinances.
5. Any vessel berthed at Town commercial dock sites not in conformity with Section 7-22, paragraph 3, may be subject to eviction by the Harbormaster.

C. POTENTIAL POLLUTION OF FISHING GROUNDS

There are several sources of potential pollution, which could adversely affect the commercial fishermen operating out of North Kingstown. Specifically, the potential polluters include the expanding industrial activities at Quonset Point Industrial Park and the sewage treatment plant discharging to the bay.

Should pollutants reach the bay in sufficient quantities, the shellfish and other species currently harvested could become either unmarketable, or perceived as dangerous to consume, a major blow would be dealt to the commercial fishermen. The reports of contaminated shellfish from

Rhode Island being sold in New York, several years ago, is a prime example of the damage that can be done to the industry by just such a report. The committee strongly recommends that steps should be taken to document the present condition of the waters and the bay sediments, which are fished in order to establish their current status relative to existing Environmental Protection Agency standards.

D. HISTORY OF COMMERCIAL FISHING IN NORTH KINGSTOWN

Native Americans, the original inhabitants of North Kingstown, depended on the resources of Narragansett Bay for its abundant source of food, as well as, for the shells used as tools and utensils. The Narragansetts utilized not only shore access to the intertidal flats, but canoes, fixed fish traps and nets to harvest a variety of fish, crabs, and shellfish.

The colonial and post-colonial settlers in the North Kingstown area exploited the bountiful resources of the bay for everything from food to fertilizer. Seaweed was gathered at the shore to be spread over farm fields and was tilled into the soil. Fish and shellfish were caught for human consumption as well as livestock feed, and, surprisingly, many hogs were fattened on a diet of lobster and soft shelled clams.

During the 1800's Cornelius Island was the site of a busy menhaden plant. Large amounts of the fish were brought to the site where they were processed to extract fish oil and the by-product of this process sold as fertilizer. According to the protests lodged by local residents, the whole thing was a rather smelly affair. Town records report one resident as describing the smell as "being strong enough to stop his clock."

Between the late 1800's and early 1900's, Rhode Island had a very successful oyster industry operating in the bay. North Kingstown was home to a few "shucking houses", one of which was located at the foot of Pleasant Street. As a result of the destruction caused by the 1938 hurricane and other natural factors, the oyster industry in the bay went into a sharp decline from which it never recovered.

E. THE NORTH KINGSTOWN FISHING FLEET

In 2015 there are more than 50 commercial fishing vessels sailing from North Kingstown ports, which access the waters of Narragansett Bay. A healthy shellfishery supports the majority of these boats and has attracted two shellfish wholesalers to locate in North Kingstown. Lobster landings in the Town have had a cyclical impact. Additionally, there are boats engaged in other in-shore fisheries such as dragging, for finfish and lobster, snailing, and mussel harvesting.

There is also an off-shore freezer boat fleet, located at the Davisville Piers, which consists of two permanent boats and a fluctuating number of temporary boats operating out of this facility.

The commercial fishing fleet that sails from North Kingstown, with the exception of the freezer boats, tends to concentrate its activities in what is referred to as the West Passage of Narragansett Bay with a limited use being made of the East Passage for lobster and dragging.

The fishing grounds extend from the mouth of the West Passage north to a point approximately even with the northern tip of Prudence Island. North Kingstown is in close proximity to clean, highly productive fishing grounds, which is of substantial benefit to the fishing fleet and individual fishermen. The relative closeness of the grounds and the close proximity to support services imparts a direct impact upon the individual profits received by the individual fishermen in terms of shorter transit times.

Currently, North Kingstown supports a growing number of aquaculture projects covering 19 acres in 2017. In addition, there are three upweller operations in North Kingstown for growing shellfish seed for transfer to outside aquaculture lease sites. Existing aquaculture projects are show on Aquaculture Map, page 65.

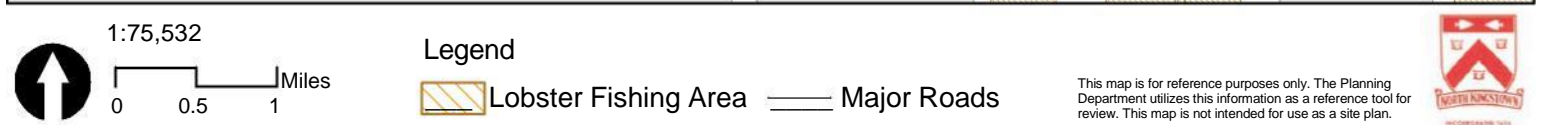
F. ECONOMIC IMPACT UPON TOWN

In the Town of North Kingstown, the economic importance of the commercial fishing fleet to the various local businesses is a major one. The goods and services, which are purchased by the fishermen, include fees to the Town, repair of vessels, the purchase of supplies and equipment, as well as fuel and other services.

Aquaculture Map – Figure 3-7



Lobster Fishing Areas
Created August 29, 2006



G. DOCKAGE

Within the Town of North Kingstown there are a variety of docks and wharfs that are used by the commercial fishing fleet. These facilities include Town-owned dockage, docks controlled by the QDC, and private docks maintained by a variety of entities.

Traditionally, a harmony has existed between the commercial fishermen and the recreational boaters, with many individuals, from both groups, being more than willing to render assistance to fellow watermen when needed.

The rapid growth of the recreational boating fleet has put available berthing space at a premium. The consistent increase in pleasure boats has and will result in the displacement of commercial fishing boats. Such pressure is a serious threat to the survival of North Kingstown's commercial fishing fleet, the wholesalers, and the support industries that service them. The commercial vessels in North Kingstown, though economically pressured by limited and competitive dock space, are currently holding constant levels of dock space due, in part, to the demand for seafood products, and the available resources that they yield.

H. TOWN OWNED FACILITIES

The two clearly defined Town facilities: 1) the Town Dock located at the head of Wickford Cove, off Brown Street, is used exclusively for transient vessels for short-term visits to the Wickford Village, and (2) the Town Wharf at the mouth of Wickford Harbor is located at the eastern end of Main Street. The Town Wharf is currently operating to capacity and docks lobster boats, draggers, and quahog boats. To date, the commercial fishermen who use this facility are concerned with the upkeep and maintenance of the wharf and have provided several recommendations.

I. QUONSET DEVELOPMENT CORPORATION

Dockage available at the Davisville piers is controlled by the Quonset Development Corporation, (www.qounset.com), which sets its own fees and use requirements. Transient deep-draft car carriers and a fleet of offshore fishing vessels operated by Sea Freeze, Inc primarily use these piers. The general size and height above water of these facilities preclude their use by the smaller vessels, which make up the majority of the North Kingstown fishing fleet.

Little Allen Harbor - This small inlet located between Allen Harbor and the Davisville Piers is leased to a private business that operates a marina, providing dockage to pleasure craft and small commercial fishing vessels.

J. PRIVATELY OWNED DOCKAGE FACILITIES

Two privately owned docking facilities exist within the Town, which accommodate commercial fishing interests, Gardner's Wharf, and Wickford Shipyard. Private marinas may also provide seasonal (winter) dockage to commercial fishermen.

K. DOCKAGE CONDITIONS

The Town wharf was constructed by the Rodman Manufacturing Company in 1893 and conveyed to the Town on November 13, 1948. In 1976 the deck and some pilings were replaced, and in 1979 the parking lot was resurfaced as part of a Town-wide pavement program. Maintenance has been conducted on an as-needed basis by the Department of Public Works.

The Navy Seabees constructed the pier at Allen Harbor that is now used by commercial fisherman. This pier was determined to be unsafe by the Army Corps of Engineers and was scheduled for demolition. Through the efforts of the Recreation Department, Commercial Fishermen, and staff of the Rhode Island Congressional Delegation, the Army Corps revised their plans to demolish only portions of the pier. Additional repairs and floating docks have been effectuated through the Allen Harbor Enterprise Fund.

L. USERS OF COMMERCIAL DOCKAGE

In North Kingstown, Town dockage facilities for commercial vessels are a limited commodity, and an issue that arises from time to time is whether or not vessels occupying space designated for commercial fishing vessels are actually being used for commercial fishing. Chapter 7-1 of the North Kingstown Ordinances defines a commercial fishing boat.

Extensive discussion on this issue concluded that enforcement of this regulation to be very difficult as many extenuating circumstances become involved. A consensus was that the Harbor Master would be in the best position to resolve incidents of this type.

3.4.5 WILDLIFE, CONSERVATION AND LAND USE

A. INTRODUCTION

North Kingstown's greatest natural resources may be its shoreline and coastal waters. In 1993 members of the Wildlife and Conservation Subcommittee felt that several areas within the Town had qualities that make them special places. These places should be preserved for use by everyone in the Town. At that time, the Committee recommended maintaining and improving the quality of these resources as important for the future of North Kingstown. This holds true today.

The Town's comprehensive plan includes many goals, policies and actions related to the preservation and enhancement of these natural resource areas. Some of the themes found

throughout the comprehensive plan apply to the conservation areas identified by this plan. Such themes include protecting, preserving, and restoring natural resources including wildlife habitat, water quality, and scenic/forested landscape; increasing public awareness of conservation and sustainability; and enhancing public access to active open space, recreation areas and the waterfront including developing blue trail along the coast for active recreation.

Preserving and protecting the environment and open space was the second most important land use action identified in the 2015 survey administered as part of the comprehensive plan re-write. Protecting farmland was the third most important. Survey participants ranked Town character the number one best thing about North Kingstown. In the final public forum activities for the comprehensive plan re-write, preserving natural resources ranked third among the top ten goals receiving the strongest support and preserving open space for natural resource protection and climate adaptation was fifth among the top ten actions. Enhancing public access is also an important theme found in the comprehensive plan.

The Town also has several regulatory policies that work to protect these natural resources. The Town's policies and regulations regarding development serve to preserve open space and protect natural resources. The Town uses a combination of acquisition, purchase and transfer of development rights, and conservation easements to preserve open space, especially around important water resources. Conservation development is also utilized to preserve meaningful open space. A conservation development is a type of land development project which utilizes prescribed site planning techniques to conserve open land, protect site features and provide flexibility in the siting of structures, services and infrastructure. In a conservation development, a percentage of the buildable land is set aside as open space and buildings and developed areas are concentrated in specific areas on the site. The utilization of low impact development standards to preserve open space, facilitate storm water management, protect surface water and groundwater resources, maintain Town character, and maximize the use and efficiency of existing infrastructure and alternative modes of transportation is also promoted by the comprehensive plan.

The remainder of the Wildlife, Conservation and Land Use chapter consists of the following sections:

- B. Conservation Uses
- C. Sites recommended for designation as conservation areas
- D. Additional areas for special consideration.

B. CONSERVATION USES

The comprehensive plan includes an open space category that fits well with the goals of this plan to conserve and protect open space. Open Space is defined in the comprehensive plan as follows: The Open Space designation identifies public and private land identified for conservation or recreational use. Open Space includes parks, golf courses, beaches, conservation areas, preserves and buffers around wetlands, streams and coastal features. Open Space in North Kingstown includes several large expanses of undeveloped land, such

as, Cocumcussoc State Park, Rome Point and Casey Farm. The Zoning Ordinance also defines open space as all lands which shall be dedicated to open space, recreation or conservation.

In order to make recommendations for the future use of areas covered in the wildlife and conservation portion of the report, the committee relied on personal observation from field trips made for some sites, knowledge of sites from subcommittee members who live near or use the sites, and current land use for the areas. When field trips were made, the subcommittee evaluated land within 200 feet of the shore.

Detailed recommendations are included in the following sections.

C. SITES RECOMMENDED FOR DESIGNATION AS CONSERVATION AREAS

It is recommended that the following areas be classified as conservation, low intensity use. The areas are listed, from north to south, in the order shown on the map (see Figure 3-5 at end of this chapter)

1. Calf Pasture Point Area

The areas recommended for conservation uses include:

- All of Calf Pasture Point, from Mount View to Allen Harbor
- Allen Harbor except for the Town operated marina and the Quonset/Davisville Navy Yacht Club

The entire Allen Harbor Calf Pasture Point area is designated for open space in the comprehensive plan and is zoned Quonset Business Park District. The QBPD designates this area for public land and recreation uses.

Part of this area is wetlands and is important as breeding areas for fish and shore birds. The tidal beach area is very clean, with clear water. The beach was, for a brief period, a Town beach and would provide an excellent area for conservation use. The Town developed a plan for the use of this area. The Allen harbor Calf Pasture Point Master Plan was adopted by the Town Council in 2001. The Town has implemented several of the recommendations included in this plan. The most recent improvements include upgrades to Sanford Road to establish it as a formal bike path connection to the highly utilized Quonset Bike Path. These improvements included paving and striping Sanford Road; addition of bike racks, benches, and dog waste stations along the path; and installation of 2 signs, one that includes a map and amenities of the area and the other is an interpretive sign describing the evolution of the surrounding land area from 1930s to present.

The Town is also working with Save the Bay and the RIDEM Mosquito Abatement Program with a grant from the Coastal Resources Management Council to restore the salt marsh along the eastern shoreline of Calf Pasture Point. This salt marsh, approximately 4 acres in size, is exhibiting signs of degradation in the high marsh. The goal of this salt marsh adaptation project is to facilitate drainage of impounded water from the marsh surface to

restore the health and function of this marsh complex and to enable the upper marsh to remain a productive habitat as sea level rises. By draining the impounded water from the marsh surface, mosquito breeding habitat will be reduced, further subsidence of the marsh will be prevented, and bare areas will be allowed to revegetate and accrete sediments. The project includes digging small creeks and runnels with RIDEM's low ground pressure excavator or by hand in the high marsh area and north of the manmade berm in the *Phragmites* dominated marsh. The creeks will be connected to the existing creek that drains to Narragansett Bay. This work was completed in 2016.

As noted in the Quonset Business Park Master Land Use and Development Plan (QBPLUDP) (2008). Western Allen Harbor contains a tidal creek inlet bordered by a large expanse of salt marsh and tidal mud flats. Calf Pasture Point Beach has several inlets that feed small patches of salt marsh and brackish water.

2. Quonset Business Park Coves, Ponds, and Beaches

The areas recommended for conservation include:

- Fry's Cove
- Davol Pond
- Blue Beach
- Fry's Pond

The most important aspect of these beaches may be their aesthetic value for attracting clean industries into the Quonset Business Park. Having open spaces where employees and visitors can walk is an important part of the work environment. These areas in the Quonset Business Park should be set aside as waterfront areas for the enjoyment of all. It should be noted that some areas at Quonset are contamination sites from former Navy operations. These sites will need to be cleaned up before any access is granted. All of these resources fall within the Quonset Business Park. The QBPLUDP includes their vision for these areas and designates land uses surrounding each of these sites.

Fry's Cove is located at the northern end of airport and includes some conservation and open space areas as identified in the QBPLUDP. The master plan recommends that upland areas of Fry's Cove should be reserved for water-related and water-enhanced uses. Proposed uses should be closely coordinated with CRMC. Thirty-five acres of this area are adjacent to Runway 16/34 and are part of the airport property. Aviation-related uses should be considered in conjunction with RIAC. The protection of Fry's Cove should be a priority as this area of the park develops.

Davol Pond is located at the northern end of the airport runway. Fry's Pond is located north of the Quonset O Club and west of the airport runway adjacent to the North Kingstown Golf Course.

These two ponds drain into Narragansett Bay and are surrounded by phragmites. Davol Pond is surrounded by the airport property. The area around Fry's Pond is identified in the QBPMLUDP for public/recreation, commercial, airport and industrial land uses.

As referenced in the QBPMLUDP, creating public access to the shore within the Park was required by the Coastal Resources Management Council (CRMC). CRMC approved the comprehensive Public Access Plan for the Quonset Business Park in October of 2005. In February of 2007, CRMC granted an assent to develop parking lots, access roads and pathways to service access points at Blue Beach, Calf Pasture Point, Compass Rose Beach, and Spink's Neck Beach.

Also addressed in the QBPMLUDP, additional public access to the shore and open space is identified at Spink's Neck Beach. A proposed conservation area is located south of the Piers and includes Dogpatch Beach. A small stream flows through dense woodland and shrub thickets, offering substantial wildlife cover and is particularly valuable to small mammals and songbirds. Kiefer Park has two natural features that are recommended for conservation in the Public Access Plan: the 700-foot-long Blue Beach and the adjacent 11-acre wetland (QBPMLUDP, 2008).

Blue Beach and Fry's Pond

The two ponds in this area drain into Narragansett Bay and are surrounded by phragmites. The beaches at Fry's Cove and Blue Beach contain large quantities of shellfish. The shellfish larvae are also an important part of the food chain.

3. Mill Creek

The land area recommended for conservation is the west side of the creek, south of the Oakdale plat. This is a residential area accessed off Post Road.

The area was identified by a 1988 study (ref. 2) as an important hatching area for finfish and shellfish, which are a food source for larger animals within the Harbor Complex as well as replenishment for fish and shellfish stocks.

The land along Mill Creek is currently zoned for residential uses. The comprehensive plan also identifies this area for residential use. Some of the land is zoned as cluster open space associated with the Oakdale plat neighborhood. The remaining land is in private ownership and zoned for half-acre to 1 acre lots. It is unlikely that additional development will occur in this area. CRMC has jurisdiction along Mill Creek and provides an additional level of protection.

4. Mill Cove

The areas recommended for conservation uses are:

- Wilson Park Phase II
- Cornelius Island

This cove was identified in a 1988 study as having similar habitat to Mill Creek, with the exception that it is negatively affected by boat traffic and anti-fouling paint.

The Town currently owns the Wilson Park area. Wilson Park is designated by the comprehensive plan as open space and is also zoned for open space, restricting land use activities to open space, conservation or recreational uses. Cornelius Island is currently designated by the comprehensive plan as open space. The property is partially in private and public ownership and zoned for residential purposes. The Town owns half of Cornelius Island. The Town should work with the existing property owners to obtain a conservation easement over the remaining half of the property.

5. Academy Cove (north bank)

The area recommended for conservation uses is the north bank of Academy Cove, the location of the Town Library.

The water in Academy Cove ranges from fresh to saline. The areas of brackish water freeze up only in the coldest winter months, so this area is important for migratory birds. . The lands along the eastern and northeastern corner of the cove are owned by the Town of North Kingstown and zoned for public uses, including the present use as a library. The very northern shoreline is privately owned and zoned for residential uses. Recently, the Town of North Kingstown, in conjunction with the North Kingstown Free Library, utilizing grant funding from the Narragansett Bay Estuary Program and the New England Interstate Water Pollution Control Commission, created a series of rain gardens along the shoreline of Academy Cove, east of the library building. The rain gardens are designed to intercept and treat the roof run off from the library building itself as well as the overland storm water sheet flow from larger scale weather events. The installation of the rain gardens not only provides these storm water benefits but also enhances the aesthetic beauty of the area, making it more attractive to users of the library property. The park-like area includes a crushed shell pathway that leads from the main library walkway down to the rain gardens and the shoreline of this historic cove. There is also signage that details the history of Academy Cove, the importance of protecting this vital ecosystem, and information and ideas regarding the installation of rain gardens in both home and commercial settings.

6. Cold Spring Beach

This area is currently used as the Town Beach. The northern beach area is currently designated by the comprehensive plan as open space and zoned for open space uses. The southern half of the beach is designated and zoned for public/institutional uses. The Town has recently completed a master planning effort for the Town beach area. An action plan was developed to include a series of improvements in an effort to create a campus feeling for the Town beach area.

The actions range from the installation of fitness trails and bike racks to new signage, restroom and concession renovations.

7. The Hummocks and Rome Point

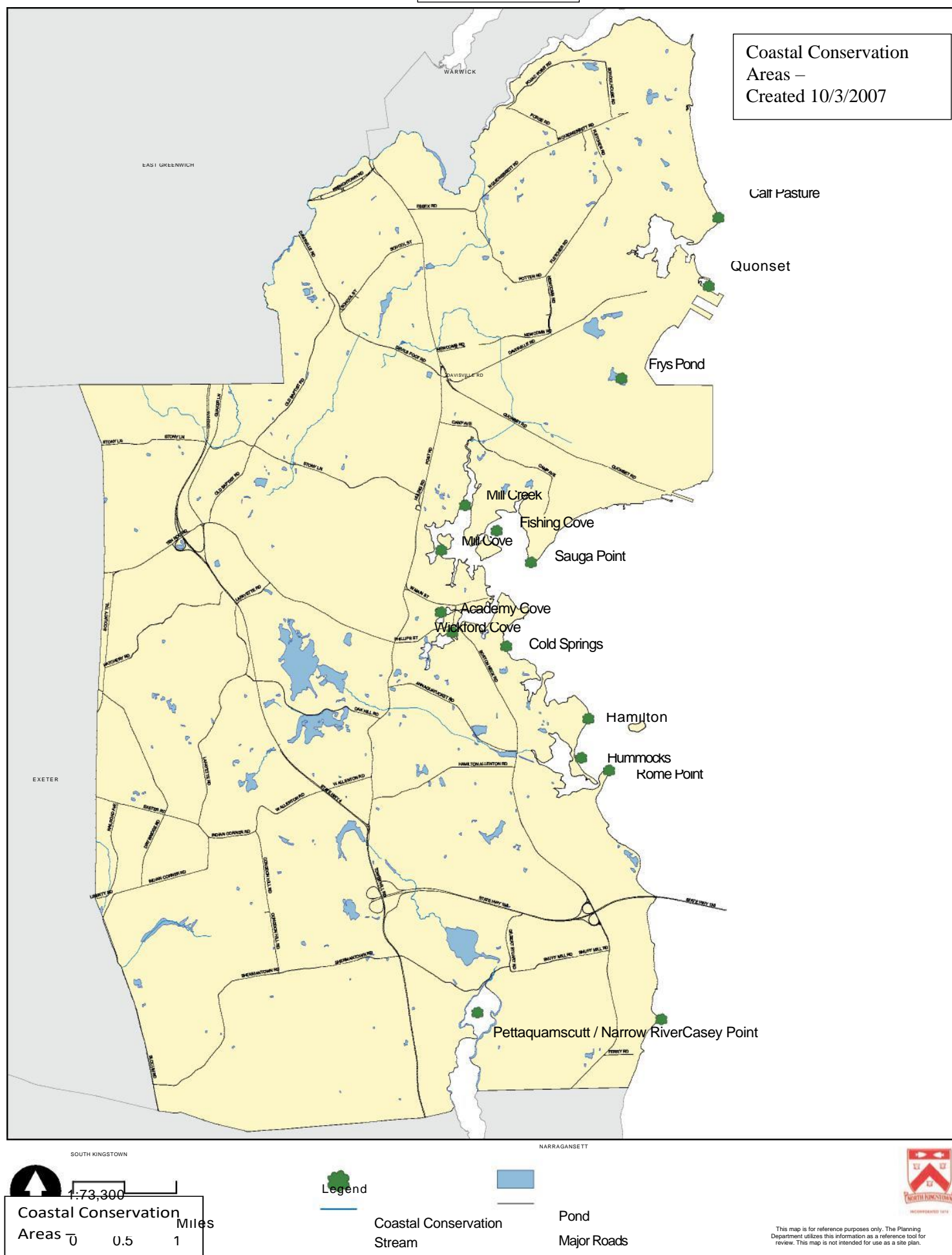
This area includes Hamilton and Bissel Cove areas. The area is a spit of land that can be accessed from the end of Worsley Avenue at low tide. At high tide, the gravel bar that provides access to the area is under water. The area on the west side is a tidal flat that rise up to a woodlands area. On the east side there is a two to three foot drop-off from the wooded area to a sandy/rocky shore. Because of the diverse habitat, this area is important for a variety of birds, from wading birds to songbirds. This area needs to be studied in more detail since it currently includes diverse habitats that although they are not old growth, are reverting to a relatively wild state.

The Rome Point property, now known as the John H. Chafee Nature Preserve, was transferred from Narragansett Electric to the State of Rhode Island. The Town holds a conservation easement over the property. A management plan has also been developed for the property as well. The comprehensive plan designates this area for open spaces uses. The area is also zoned for open space and residential uses. The conservation easement limits and prescribes the uses that can take place on the property. The easement is intended to assure that the property remains in its open, natural, scenic and ecological condition in perpetuity. Public access is allowed throughout the property on established trails.

D. ADDITIONAL AREAS FOR SPECIAL CONSIDERATION

Upper end of Wickford Cove

The land around the upper end of Wickford Cove is zoned residential. Because of the existing homes in this area, it is the Committee's recommendation that this designation be maintained. However, the waters in the area of the old railroad trestle provide important habitat for migrating waterfowl. Warm season prairie grasses in this area are important to wildlife. This area should be closely monitored to ensure that lawn chemical and sewerage pollution are not allowed to adversely affect these waters and that there is no loss of the native grass habitats.



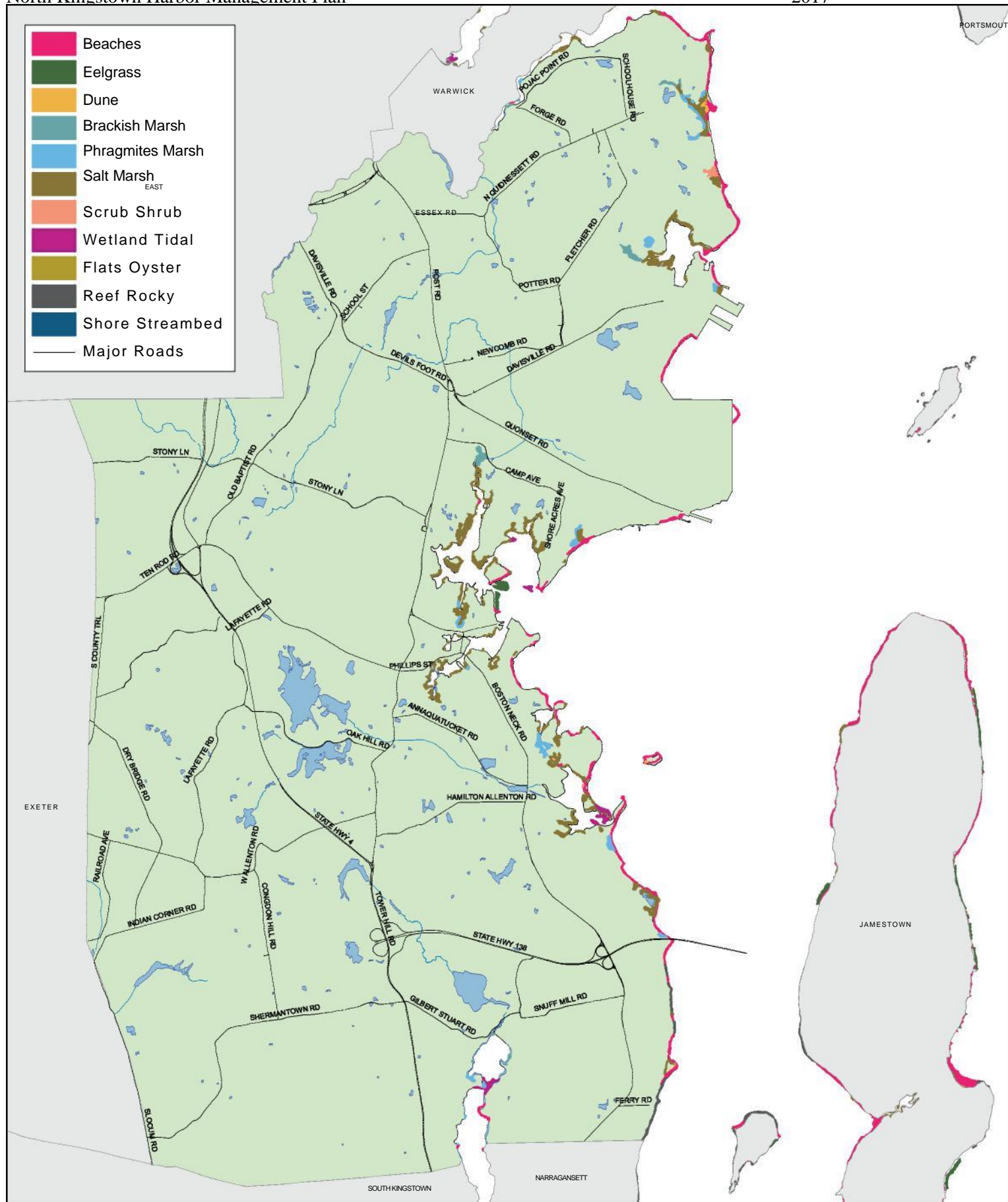
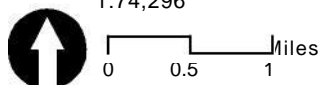


Figure 4-0

1:74,296



3.4.6 RECREATIONAL BOATING, BOATING SAFETY AND NAVIGATION

A. INTRODUCTION

Recreational boaters are the predominant water dependent users of facilities and services in the state owned waters bordering North Kingstown. North Kingstown has approximately 30 miles of coastline on Narragansett Bay, including two protected harbors, one with historic appeal. Wickford Harbor is regarded as a destination harbor by transient vessels and a nice place to live for boating enthusiasts.

This section of the Harbor Management Plan summarizes issues and makes recommendations with regard to Recreational Boating, Boating Safety and Navigation in the public waters of North Kingstown.

The issues raised and recommendations made are based on field observations of the various boating recreation areas, readings of previous studies related to the Town's recreational waters, and discussions among community members who have had recreational boating experience in the Town of North Kingstown's recreational waters.

As a guide to the dissemination of information in this section of the plan, specific geographical areas are identified for recreational boating in North Kingstown waters. In this regard, reference is made to the Harbor Management Sector Map at the end of this chapter (See Figure -4-1).

B. DESCRIPTION OF RECREATIONAL BOATING BY SECTORS

Because of shore and integrated geographical and riparian relationships the sectors were grouped into four categories for study (See Figure 4-1 Sector Map):

Allen Harbor - Sector 4

Wickford Harbor, including its adjacent and interrelated coves Sectors 8, 9, 10, 11, 12, 13

Coastline, related coves and waters Sectors 2, 3, 5, 6, 7, 14, 15, 16, 17, 18, 19, 20, 21, 22

Inland ponds and rivers - Sectors 1, 23

I. Allen Harbor – Sector 4

Deed

The United States Government deeded land and docks at Allen Harbor Marina to the Town of

North Kingstown. Covenants in the deed between the Town and the federal government stipulate that the use of Allen Harbor is restricted to recreational purposes.

Recreational Boating

The North Kingstown Leisure Services Committee advises the Town Council on policies related to the recreational boating facilities at Allen Harbor Marina. The Allen Harbor Boating Association leases property on the southwest side of the harbor from QDC.

Navigation

The Navy dredged the channel to Allen Harbor in the early 1970's and again in the nineties. Over the years the channel has become a navigational hazard due to shoaling. The configuration of the channel is a dog-leg to the north. Anyone unfamiliar with the channel, particularly during low tide, could easily run aground. The last dredging occurred in 2013.

Recommendation

- Designate and mark anchorage areas to allow for a harbor of refuge. To preserve an available area for a sheltered anchorage no moorings shall be placed north the current mooring field (see Mooring Field map).

II. Wickford Harbor Complex including it's adjacent and interrelated coves Sectors 8, 9, 10, 11, 12, 13

Boat Storage

As the Wickford Harbor and coves complex is hard pressed to accommodate additional moorings or dock space for recreational boating, other alternatives should be investigated.

Recommendation

There are storage methods, such as those that utilize racks for smaller boats. It is suggested that the Town and private sector investigate this alternative as a method of accommodating additional vessels.

Destination Harbor

Wickford Harbor is an attractive "port-of- call" for transient recreational boaters. Such visits enhance the economic health of Wickford. In 2004, the Town received a grant for a Welcome Sign and map, which has been installed at the Town Dock near Brown Street. The Town maintains several transient moorings for rent inside the breakwater.

Recommendation

The Town should maintain an on-going public relations program to publicize Wickford as a desirable destination for recreational boaters. Local merchants and the Chamber of Commerce should be encouraged to participate actively in the development and promotion of the program. An information packet developed by this program could include:

- A summary of the Town's Harbor Ordinances to help recreational boaters to comply with them and promote the safe and sanitary use of the harbor's waters (including available "pump-out stations")
- A description of historic Wickford and related buildings, sites and activities.
- Listings of emergency services (police, fire, physicians, hospitals and harbormaster with telephone numbers)
- Listings of commercial services (taxi, boat repair, laundry, hairdressing, etc.)
- Listings of stores (food, clothing, antiques, marine supplies, gifts, etc.)
- Listings of churches with service hours.
- A listing of public events (festivals, exhibits, musicals, celebrations, etc.)

III. Coastline, Related Coves and Waters Sectors 1,2,3,5,6,7,14, through 23

Recreational Boating

There is a need for future expansion of facilities to accommodate additional recreational boaters (both permanent and transient). Because Allen and Wickford Harbors currently have the maximum number of moorings allowed under current regulations, the coastline offers the best opportunity to provide additional moorings in North Kingstown waters. Each sector described below will address issues pertinent to recreational boating. Where significant shallow-water habitat is identified, boating activities should be restricted as necessary to decrease turbidity and physical destruction of the habitat.

1. Sector 1. Potowomut River

The river separates the Town of North Kingstown and the City of Warwick. The river depth near its confluence at Narragansett Bay varies from approximately 3 to 5 feet. As far as can be ascertained the last dredging was done in 1881 and subsequent silting has occurred. Moored vessels in the river are limited to boats having 2 to 3 feet drafts (small center-board sailboats, canoes, row boats, windsurfers, etc.). This sector is somewhat remote with respect to emergency response time. Private property and private roads limit shore access.

Recommendations: Because of the water depth the use of the Potowomut River should be limited to vessels with 2 to 3 foot drafts, small sailboats, canoes, windsurfers, etc.

Moorings should be kept to a minimum to minimize the impact on the sensitive environmental issues of the area.

Dredging for this area is not recommended so as to preserve the river and its environmental quality.

2. Sectors 2 & 3- Mount View and Calf Pasture Point

These are exposed anchorage areas with shallow waters.

Recommendations: Because of the lack of shelter from storms, and because shore access is restricted, mooring growth in the Mount View area should be limited to riparian small boat owners who can oversee their anchorages.

Calf Pasture Point should be deemed a natural open water area due to a sand bar that extends out from the shore.

3. Sector 5 – Quonset Business Park

This sector encompasses the following areas:

- The Davisville coast, which is currently used for industrial purposes, has future plans for expanded industrial development.
- Fry's Cove, is primarily used for recreational boating, transient anchorage, swimming and commercial fishing.
- Quonset Business Park is primarily used for commercial and industrial purposes and for future economic development.

Recommendation: With regard to Davisville and Quonset, the Town should collaborate with the Quonset Development Corporation and other State and local Economic Development entities, as well as, business associations to encourage continued economic development of water dependent activities. Further, Fry's Cove usage should continue as indicated above with no permanent moorings allowed.

4. Sector 6 - Fry's Pond

The RI Coastal Resource Management Plan designates this tidal pond as Type 1 waters.

Recommendation: Fry's Pond is protected as a wetland and conservation area.

5. Sector 7 - Sauga Point (Narragansett Bay Side)

This area is used primarily by local property owners.

6. Sector 14 - Cold Spring

This area is used as a mooring area, a day and overnight anchorage, for water and jet skiing, swimming and other general water dependent uses. Of the entire coastline in Town this sector has the greatest potential for user conflict. Land access to the area can be gained from the Town Beach, with an adjacent parking lot at the Cold Spring Community Center and Beechwood, A Center for Life Enrichment. Only Town residents generally use this beach as parking is restricted to residents.

Recommendation: No change is recommended in the present recreational boating usage.

7. Sector 15 and 16 - Duck Cove and Anthony's Beach

Duck cove is classified by CRMC as Type 1 Waters and as such, recreational boating facilities are prohibited within these tidal waters. Docks that qualify under CRMC's pre-existing Residential Boating Facilities Program may exist.

This area is currently used for shell fishing, fishing, swimming, recreational boating and riparian moorings. The current use pattern should continue however, no docks or non-riparian moorings should be placed in Upper Duck Cove.

Recommendation: These sectors should remain restricted to the immediate residential area.

8. Sectors 17 and 18 - Hamilton and Bissell's Cove

Considered as a contiguous area there is the potential for expansion of recreational boating facilities. The area offers good transient anchorage opportunities.

Recommendation: These sectors should remain restricted to the immediate residential area.

9. Sector 19 - Rome Point to Greene Point

This area is primarily used as a transient anchorage by recreational boaters.

Recommendation: The off-shore area should stay as a transient anchorage, i.e. no moorings allowed.

10. Sector 20 - Plum Point Shores/Plum Beach - Greene Point to Plum Point Beach

There have been a limited number of moorings in the Plum Point area, mainly accessed by the local residential community. The private Plum Point Beach Club is located in this area. Due to the exposed nature of the area to sea conditions this is an unsuitable location for an overnight anchorage. There are moorings offshore of the Plum Beach Club.

Recommendation: No change in current use is recommended.

11. Sector 21 - Packer Rocks, Saunderstown to the Narragansett town line

There are scattered riparian moorings as well as an extended mooring field associated with the Saunderstown Yacht Club located in this area. The waterfront is generally exposed to sea conditions making this an undesirable area for an overnight anchorage. This area is inshore of a productive fishing area. The present moorings at this location are compacted but problems do not seem to exist because of the type of vessels in use.

Recommendation: No change in current use is recommended.

IV. Rivers - Sector 22

1. Sector 22 Narrow River includes Pettaquamscutt and Carr Ponds.

2. Sector 23 includes Belleville Pond and Secret Lake.

- Small recreational boats primarily use these “freshwater” bodies. Town ordinances restrict powered vessels on these water bodies to those propelled by electricity.

Recommendation: No change in present recreational use. Committee recommends limiting electric powerboats to trolling speed.

C. GENERAL RECOMMENDATIONS

Increase Harbor Division Resources

With an increasing number of boats using public waters, there is a commensurate responsibility of the Harbor Division for added surveillance for compliance with Harbor Ordinances and safe boating operations. The Harbormaster has 30 miles of coastline, two harbors (Wickford and Allen), several boat launching ramps, coves, anchorages and mooring fields to supervise.

In addition, the Harbormaster has to be available day and night to respond quickly to emergencies and for night patrols of boat mooring and anchorage areas to prevent criminal activity. Further, time is required for paperwork, reports, record keeping, etc.

Recommendation: The addition of a full-time, year around harbormaster in 2001 has resulted in significant improvements in enforcement, record keeping, continuity, and customer service. The harbormaster should continue to be supported with seasonal assistants and proper equipment.

D. NAVIGATION AND SAFETY

Navigational Hazards - Wickford Breakwaters

The Wickford Harbor and coves complex are protected by two breakwaters that are in disrepair. The breakwater is submerged at extreme high tides and then becomes a hidden navigational safety hazard.

Recommendation: That the Town petition the U.S. Army Corps of Engineers, North Eastern Region, Trapelo Rd., Waltham, Mass. to identify and correct any deficiencies.

Boating Safety

Unsafe boating operations have been observed in the state owned waters bordering North Kingstown.

Recommendation: The Town should encourage safe boating practices by the following means:

- Encourage participation in instructional classes on boating safety offered by the local Power Squadron and the Coast Guard Auxiliary.
- Provide additional posting of the harbor regulations. They should be posted in the same locations as the mooring waiting list, police station, library and Town Hall, as well as at gas docks, private marinas, yacht clubs and the Chamber of Commerce.
- The Harbor Master should enforce speed limits as defined in the ordinance.
- The Harbor Master should cite for violations of the ordinance.

Safety/Moorings - Wickford Harbor

On July 1, 1991 an inspection of the waters of Wickford Harbor was conducted with an eye towards improvement of boat safety, space to accommodate more boats, possible changes in existing moorings, etc. This is the most recent study. The following is a report of their findings with recommendations.

Fishing Cove could be very dangerous for water skiers. In some areas the cove is very shallow, approximately 2 feet. Such conditions invite casualties for the inexperienced who could tumble at high speeds.

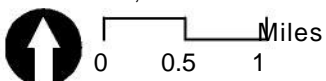
Recommendations - The Harbor Division should have soundings of the cove conducted and follow up with appropriate corrective measures, i.e., danger areas marked, skiing at high tide only, forbid skiing etc. Town liability should be explored.

Many boaters enter and depart Wickford waters at high speeds thus creating dangerous wakes in the vicinity.

Recommendation: Install speed limit buoys very close to breakwater and enforce the regulations. Provide maximum support to the Harbor Master.



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This map is for reference purposes only. The Planning Department utilizes this information as a reference tool for review. This map is not intended for use as a site plan.



4.0 HARBORS AND WATERWAYS - INVENTORY BY SECTORS

To describe the unique features of the state owned harbors and waterways bordering the Town, the shoreline has been divided into the following sectors. A corresponding map of these sectors is included on the previous page. Federal Emergency Management Agency (FEMA) maps can be viewed in the Building Officials office or the Office of Planning and Development.

4.1.0 POTOWOMUT RIVER - Forge Rd - to a line between Marsh Point and Pojac Point) Assessors Plats 168, 169, 170, 172,

RIDEM Water Quality Designation: SA

CRMC Use Type Designation: RI CRMC designates the waters in this sector and the first 500' seaward along the shore as Type 1 waters. Beyond that point the waters are designated as Type 4.

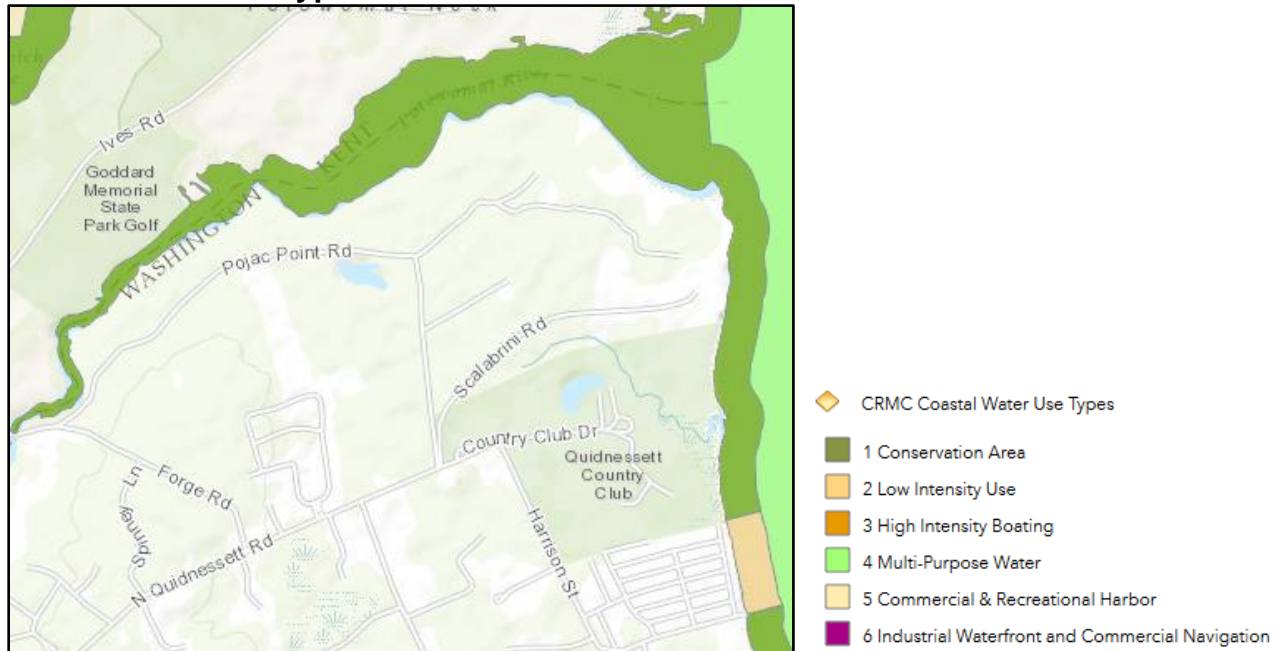
FEMA Flood Zone: 44009C 0014J and 0018J – A and A12 zones, area subject to flooding by the 1% annual chance flood (100 year flood) base flood elevations determined; and VE17 zone, coastal flood zone with velocity hazard (wave action); base flood elevations determined.

NOAA CHART: # 13224



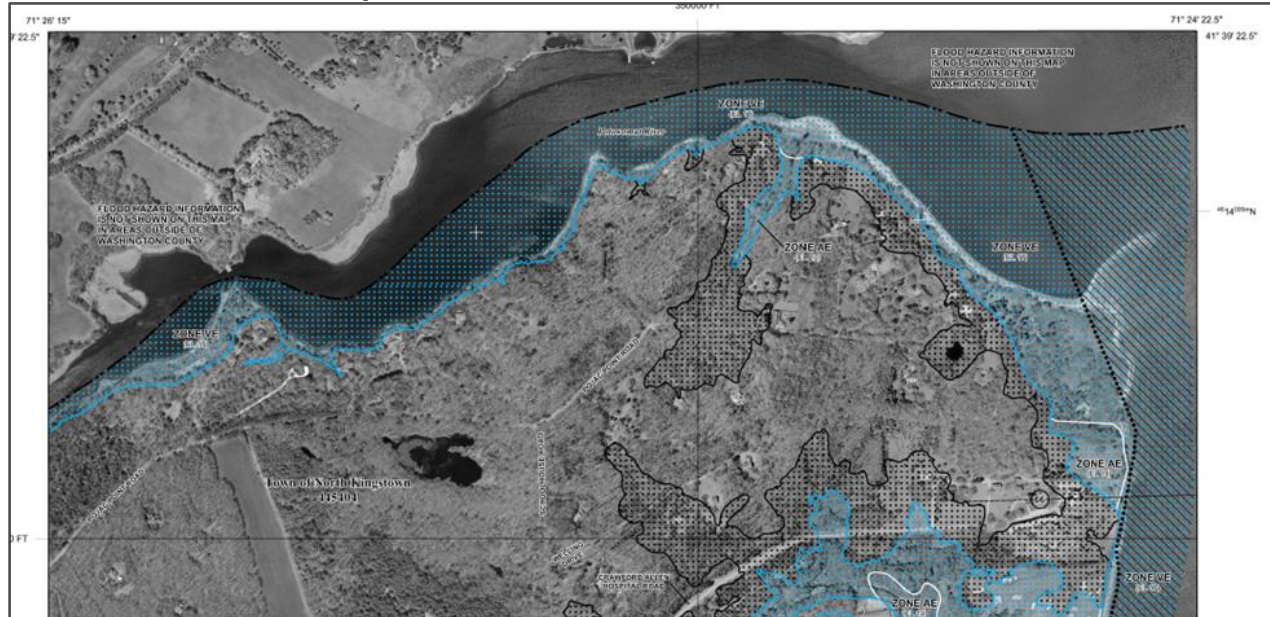
Source: <http://www.charts.noaa.gov/OnLineViewer/>

CRMC Water Use Type



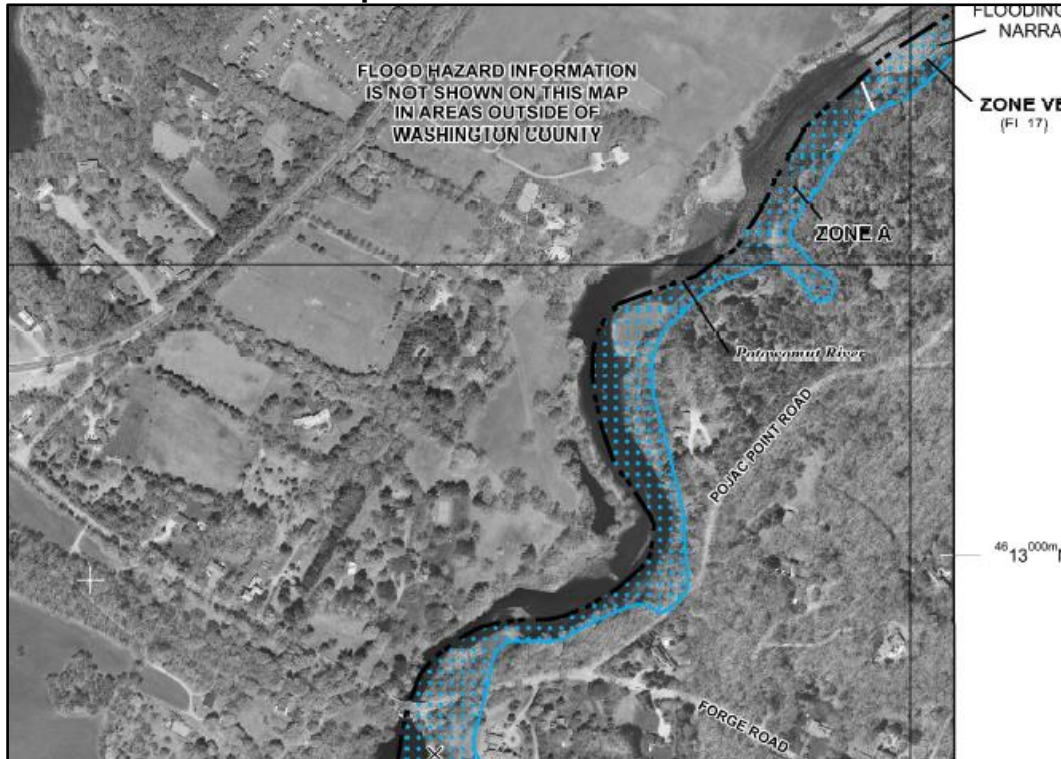
Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 000014J

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 000018J

Land Use: The Potowomut River provides the northern border of the Town, at the centerline of the river, separating North Kingstown and the City of Warwick. This part of North Kingstown is known as Pojac Point, within which there is a 5 acres per dwelling unit zoning requirement. Existing housing density along the river is low in both North Kingstown and Warwick. There are marsh and estuary areas along the river that are pristine and of high wildlife and conservation value.

Waters: Water depths from the Forge Road Bridge to the mouth of the Potowomut River range between 1' to 3'. Due to the depths, vessel access is limited to canoes and other vessels with shallow draft. In 1881 the U.S. Army Corps of Engineers dredged a 115-foot wide by 5-foot deep channel, .5 miles in length from the mouth of this river. It has not been dredged since.

Dredging for this area is not recommended so as to preserve the river and its environmental quality.

Moorings: As of October 2015, 4 riparian moorings were identified in this sector.

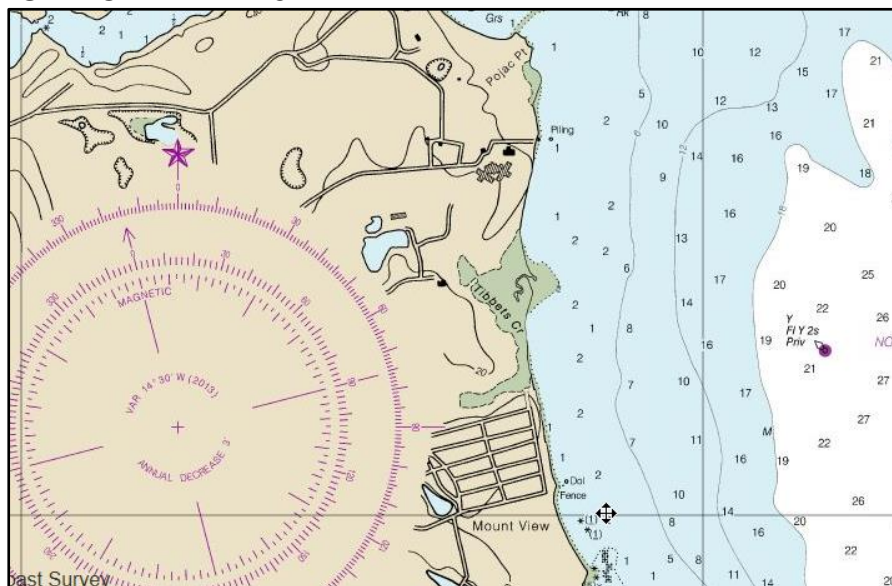
4.2.0 MOUNT VIEW - Pojac Point to Mount View (Pettee Ave.)

Assessors Plats 166, 167, 168

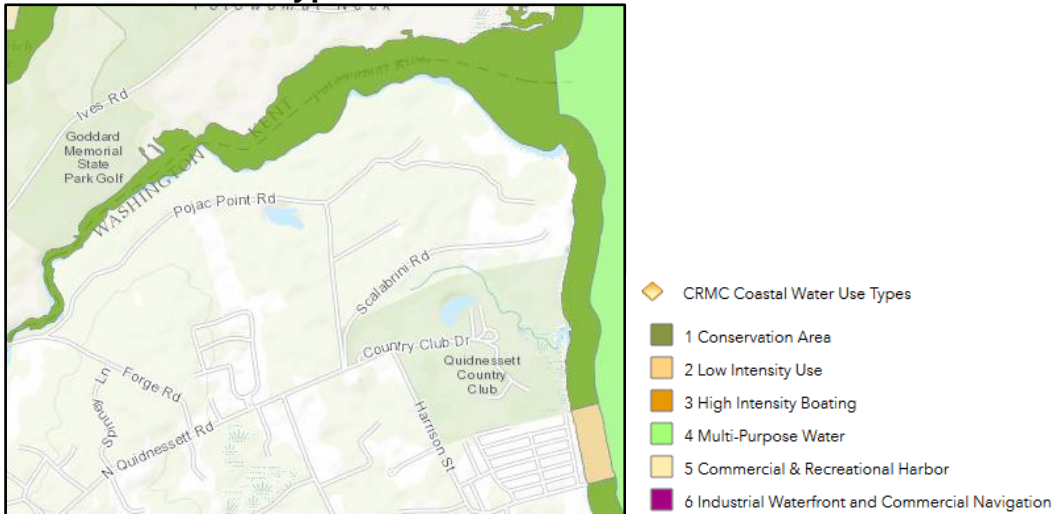
RIDEM Water Quality Designation: Narragansett Bay - SA; Tibbets Creek - A

CRMC Use Type Designation: RI CRMC classifies the first 500' seaward along the shore of this sector as Type 1, with the exception of that area along the Mount View plat, which has been designated as Type 2. Waters beyond the 500' area are designated as Type 4.

FEMA Flood Zone: 44009C 0018J – A13 & AE14 zone, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined; VE17 and VE19 zone, coastal flood zone with velocity hazard (wave action); base flood elevations determined; and Coastal Barrier Resources Systems (CBRS).

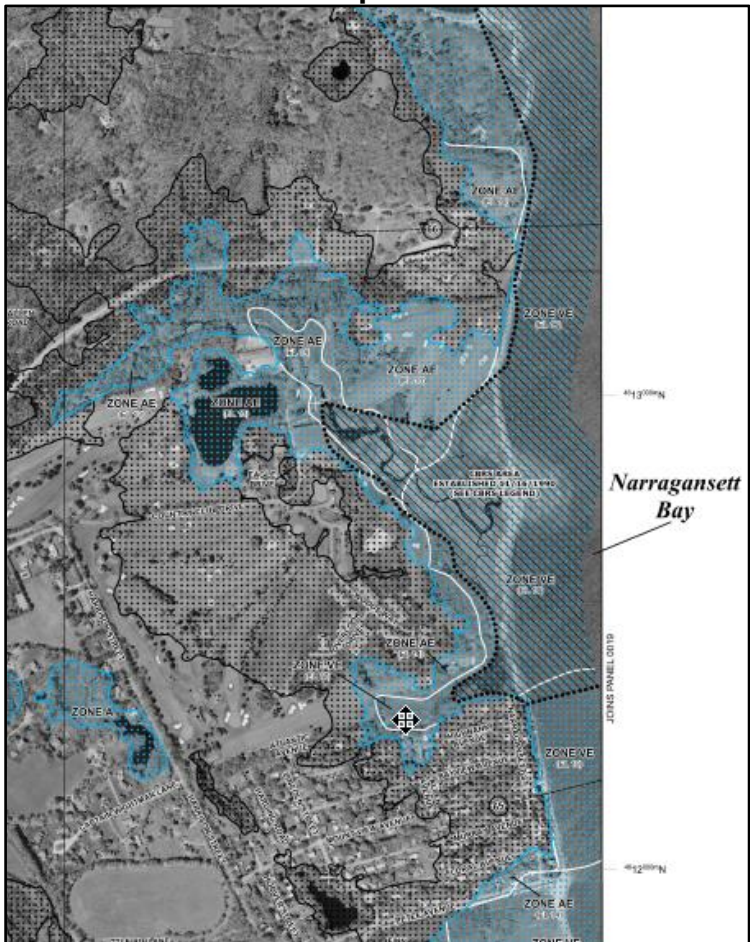
NOAA CHART: # 13224Source: <http://www.charts.noaa.gov/OnLineViewer>

CRMC Water Use Type



Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 000018J

Land Use: The land use in the northern portion of this area is low density, referred to as Pojac Point, within which zoning requires 5 acres per dwelling unit. Three areas of this sector differ in existing and proposed land use.

The first area includes a 70-acre parcel called the Scalabrini Villa of which 20 acres is dedicated to a 120 bed nursing home. The buildings as well as the on-site sewage disposal system (OWTS) are located outside of the CRMC jurisdictional setback of 200 feet.

The second area includes the Quidnessett Country Club and Condominiums, home to an 18-hole golf course as well as forty-six (46) residential units on approximately 202 acres. The golf course and condominiums are located along the waterfront between Pojac Point and the Mount View neighborhood.

The third area of this sector includes the former summer community called the Mount View plat, which has since become used for year-round occupancy. In the 1940's this estimated 75-acre plat was subdivided into 470 lots, on which there are approximately 247 units. Town water and on-site wastewater treatment systems service this subdivision. This is one of the more densely developed coastal neighborhoods in Town.

Waters: Water depths from Pojac Point to the Mt. View neighborhood range from 1 to 2 feet, for a distance of about 700 yards offshore. Beyond 700 yards the drop-off is rapid to a depth of 7' to 9'.

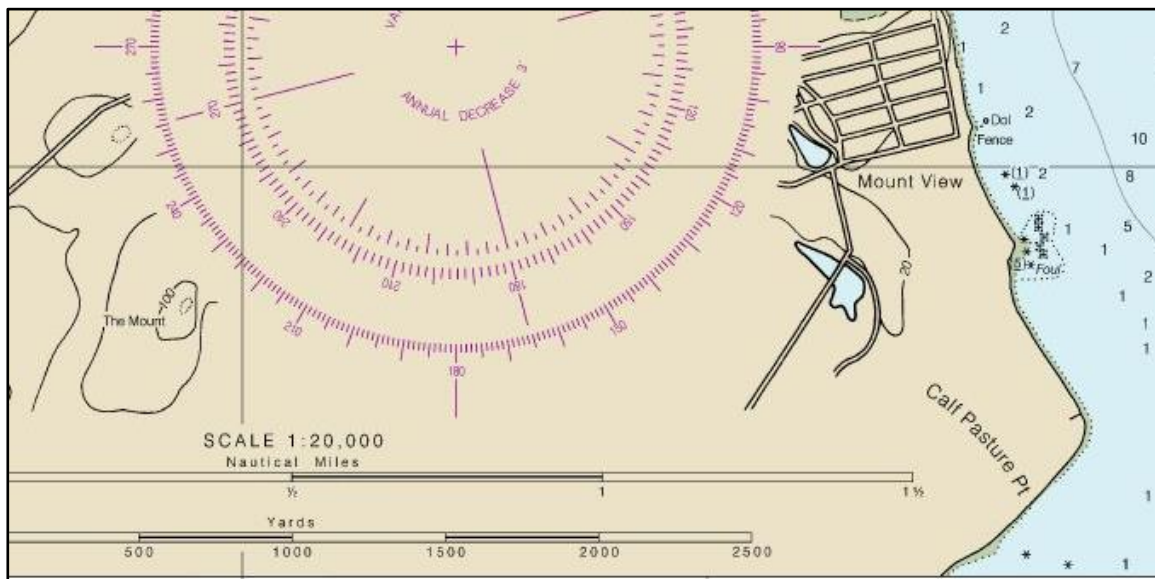
Moorings: In October 2015, there were 4 moorings in this area.

4.3.0 CALF PASTURE - Mount View to Calf Pasture Point. Assessors Plat 195

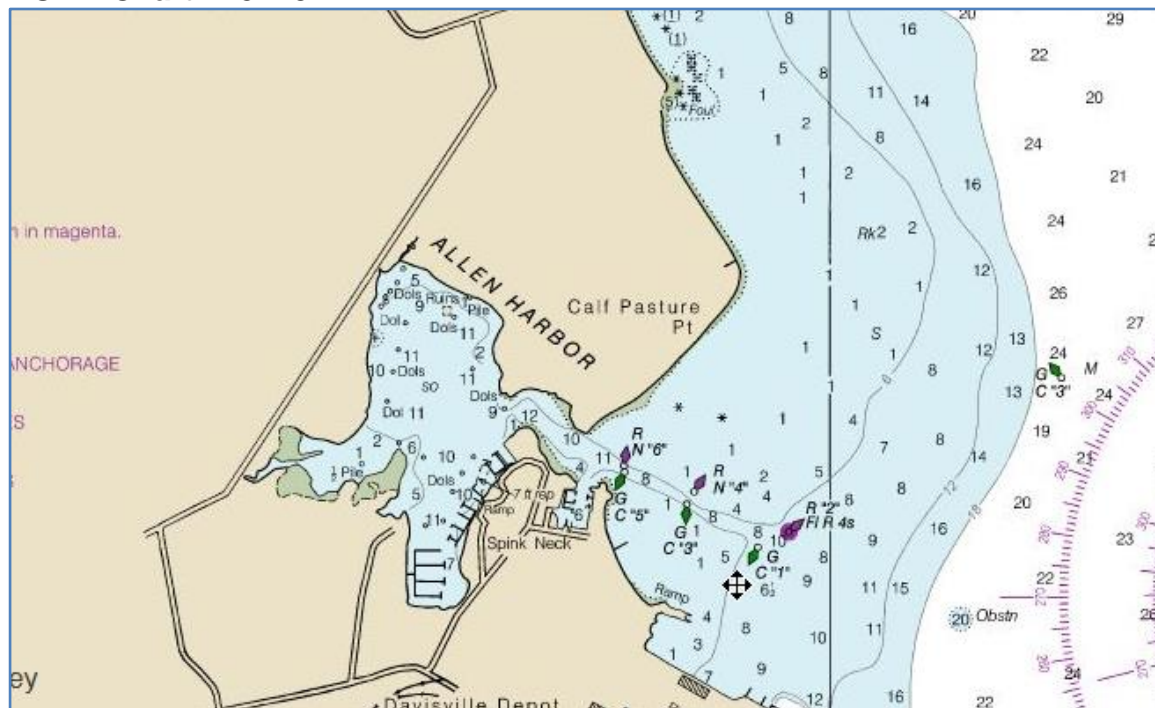
RIDEM Water Quality Designation: SA

CRMC Use Type Designation: RI CRMC designates the first 500' seaward along the shore of this sector as Type 1 waters and Type 4 beyond that point. The portion of this sector that fronts on Allen Harbor is designated as Type 3

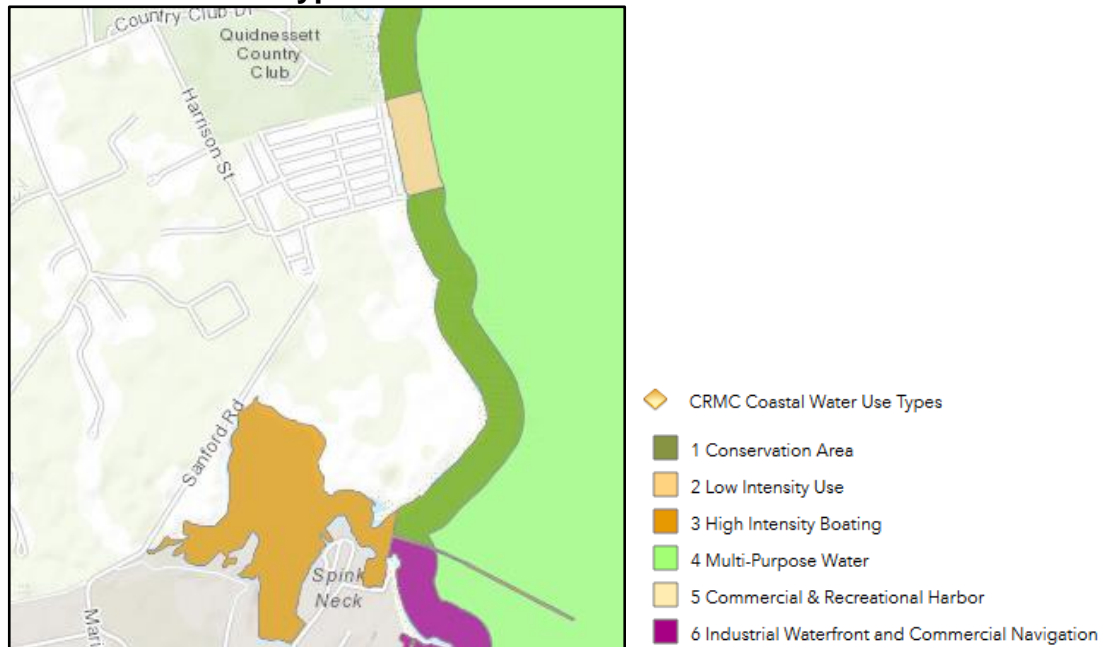
FEMA Flood Zone: 44009C 0018J and 0019J – AE14 zone (inland), area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined; and VE15 zone, coastal flood zone with velocity hazard (wave action); base flood elevations determined.

NOAA CHART: # 13224

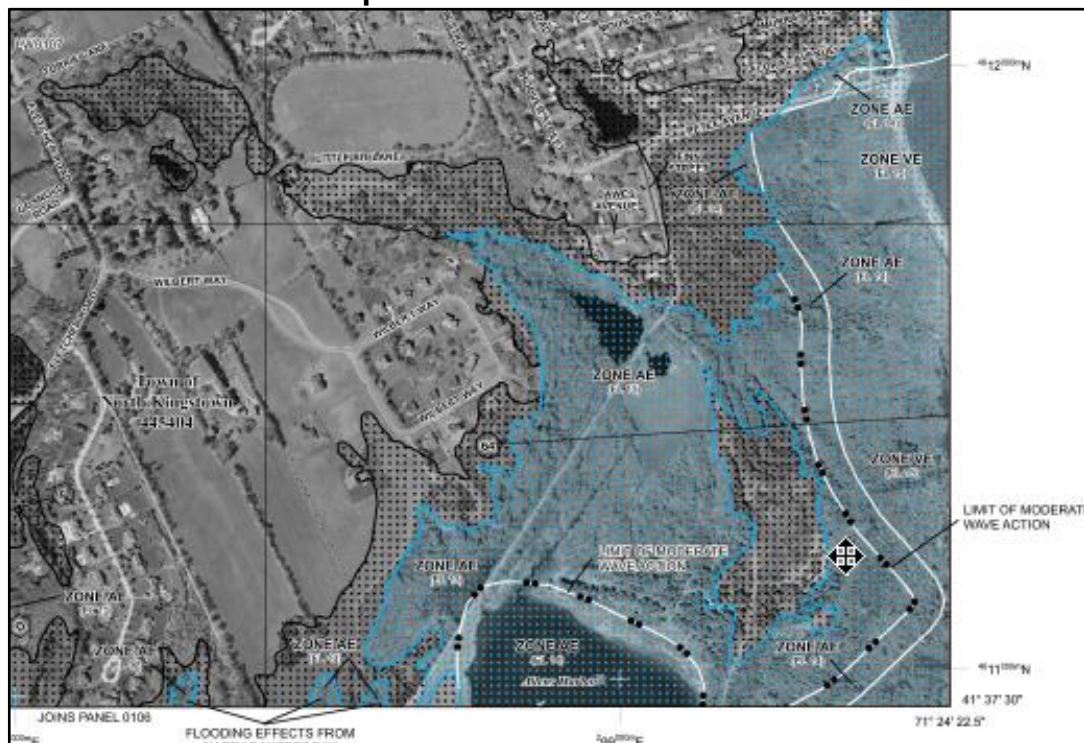
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NOAA Chart #13223

Source: <http://www.charts.noaa.gov/OnLineViewer>

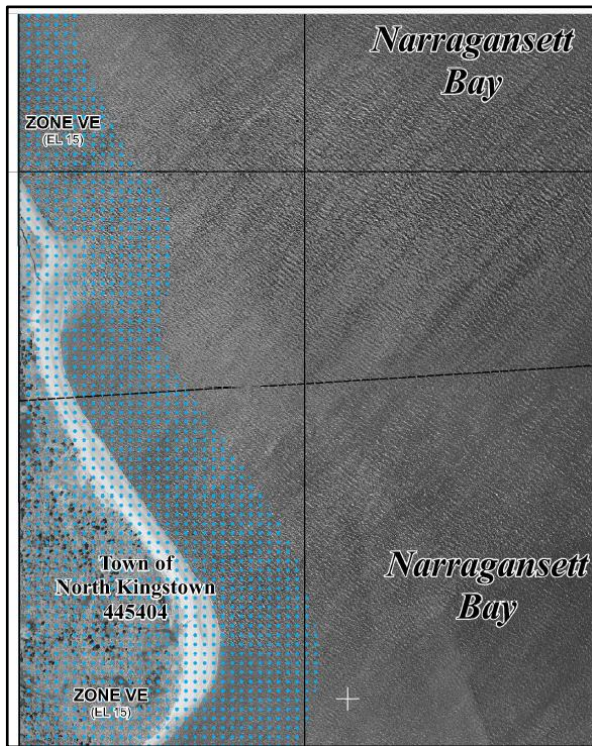
CRMC Water Use Type

Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map

Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 000018J

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 000019J

Land Use: This sector was under the ownership of the United States Navy since 1941 and as such was used as a training area for the "Seabees" Naval Construction Battalion dredging school. As a result of training activities the physical characteristics of the area changed substantially. As an example, the adjacent Allen Harbor, once an open inlet, has as result of dredging and filling, formed the protected Allen Harbor of today. Calf Pasture Point was a primary depository of the dredge materials, which expanded the width of this peninsula and reduced the exposure of this harbor to Narragansett Bay.

A former Naval landfill is also located on this site. Dumping activities no longer take place. During the 1980s and 1990s, the area was investigated for contamination and remediation. A proposed Superfund Remediation plan was issued in 1998 which recommended that the site have a long-term monitoring plan, provide deed restrictions that prohibit the use of ground water, and have 5-year reviews by the Navy, EPA, and RIDEM. The site has over time reverted back to a natural state, thus providing an important wildlife habitat.

Waters: Water depth from Mt. View to Calf Pasture is 1' to 2' out to a distance of approximately 600 to 800 yards. There is some fouling near shore on the northern end. Beyond 800 yards there is a rapid drop-off to 8' to 11'.

Moorings: This sector is currently undeveloped and no moorings are located in this area.

Because this sector fronts on Narragansett Bay, West Passage and is extensively exposed to weather patterns and tidal changes, it may not be considered as a suitable site for mooring fields.

4.4.0 ALLEN HARBOR - Allen Harbor and Little Allen Harbor.

Assessors Plat(s) 193, 194, 195

Those water bodies west of a straight line from Calf Pasture Point to the northeast tip of Little Allen Harbor, also known as Spinks Neck.

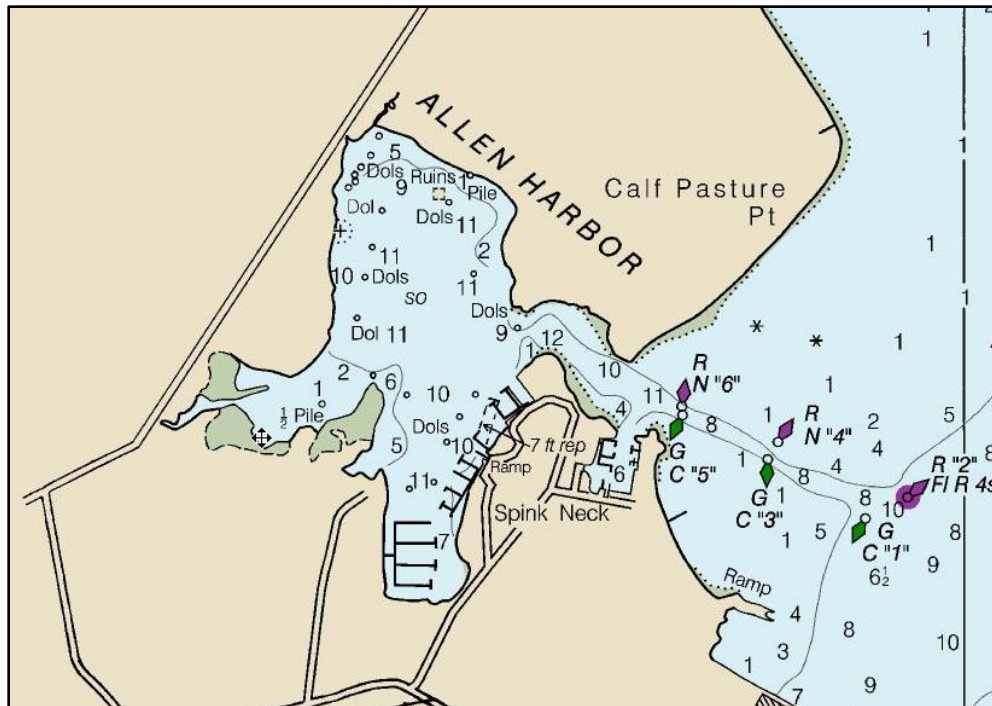
RIDEM Water Quality Designation:

- | | |
|-------|---|
| SA{b} | Allen Harbor waters north of a line extending from the westernmost indentation of the cove which is immediately north of the easternmost curve of Westcott Road to the northernmost point of land on the south side of the mouth of Allen Harbor, North Kingstown. |
| SB | Allen Harbor waters south and east of a line extending from the westernmost indentation of the cove which is immediately north of the easternmost curve of Westcott Road to the northernmost point of land on the south side of the mouth of Allen Harbor, North Kingstown. |

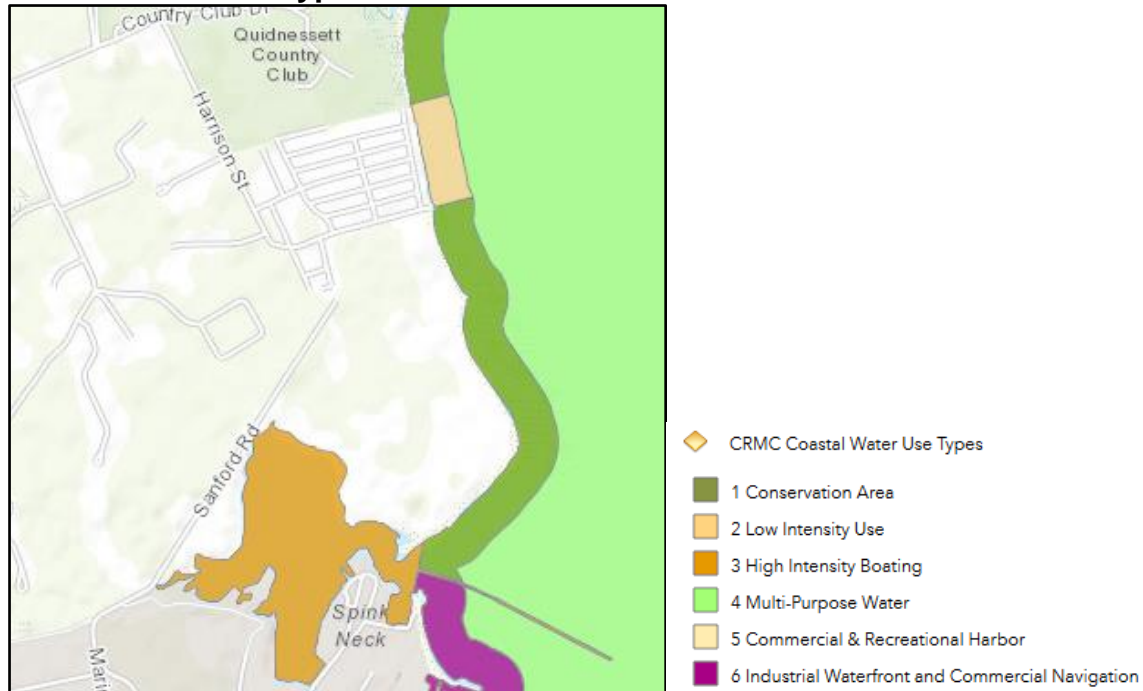
CRMC Use Type Designation: RICRMC designates both harbors of this sector for Type 3 uses. There are several areas in the harbor that have been identified as coastal wetland and are protected under the CRMP 210.3.

It should be noted that initially a contradiction existed between the classifications of these waters by two State agencies, RIDEM and RICRMC. The RIDEM establishes the water quality designation for Rhode Island waters, while the RICRMC establishes the type uses that can be conducted in RI coastal waters. The contradiction is in permitted uses that can be conducted in these water bodies under the designated classifications. The RIDEM Water Quality classification "SA" prohibits boating activities such as moorings and marinas. RICRMC "Type 3" classification allows high intensity recreational uses such as marinas, moorings and public launching ramps. The conflict was resolved with the RIDEM classification of SA{b}, which recognized the pre-existing boating activity. The Town currently operates a marina in Allen Harbor with plans to upgrade and expand the facility.

FEMA Flood Zone: 44009C 0018J and 0106J– AE13 and AE 14 zones, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined; and VE15 zone, coastal flood zone with velocity hazard (wave action); base flood elevations determined.

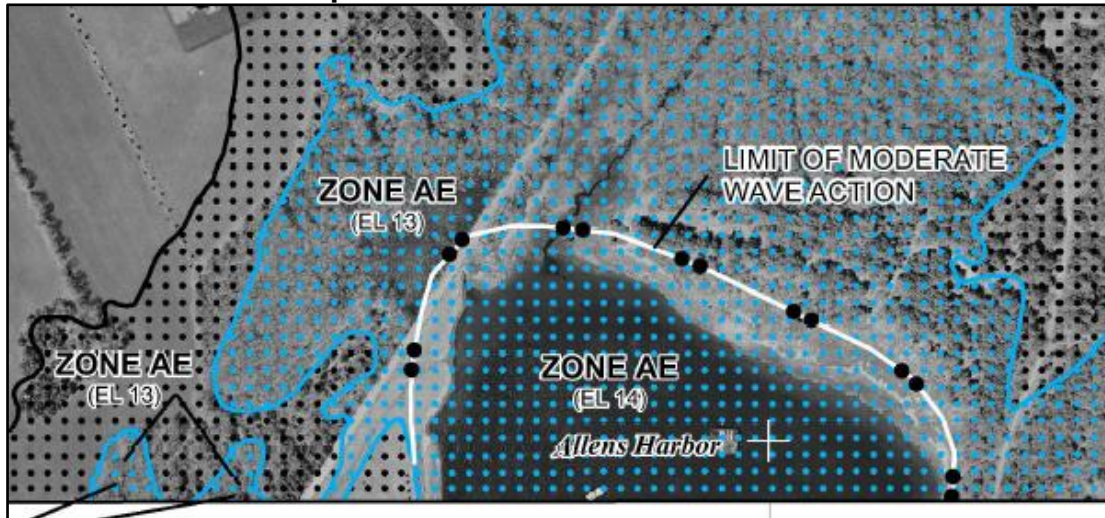
NOAA CHART: # 13223

Source: <http://www.charts.noaa.gov/OnLineViewer>

CRMC Water Use Type

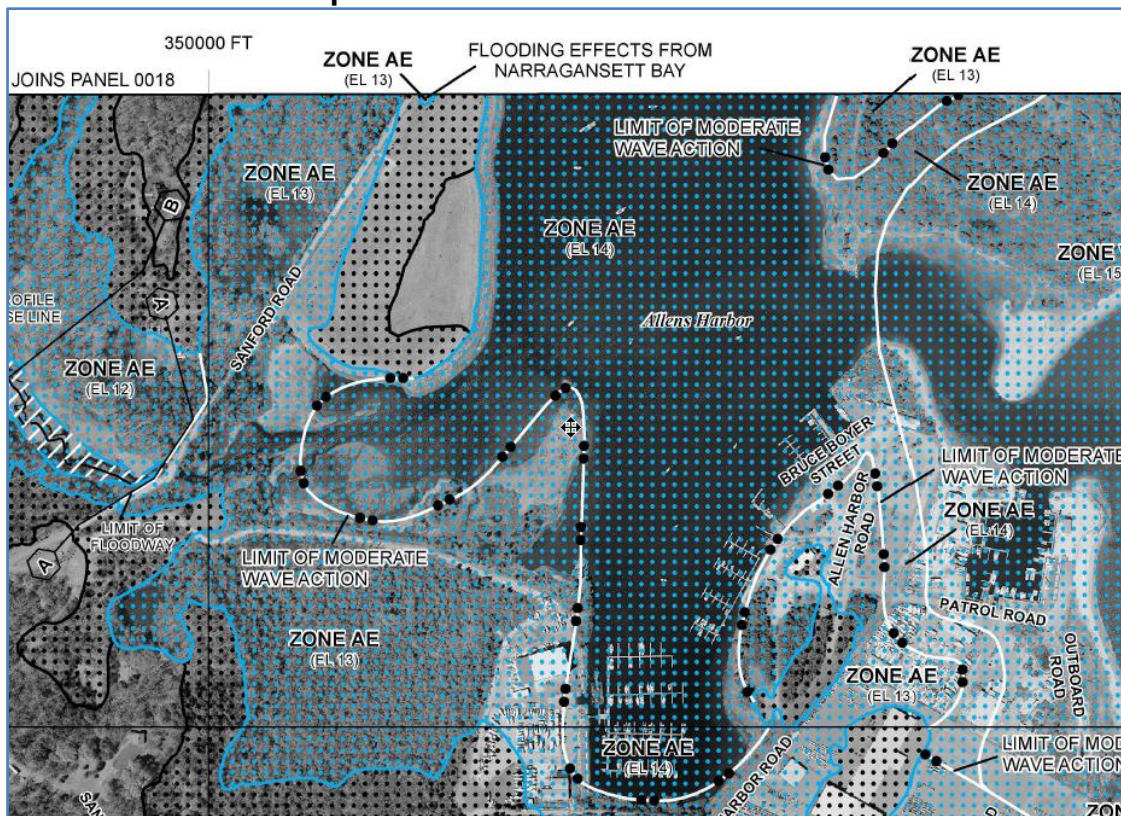
Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Zone Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 000018J

FEMA Flood Zone Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000106J

Land Use: This sector was under the ownership and control of the U.S. Navy from 1941 until 1974. This harbor served as a training ground for dredging techniques for the Seabees, resulting in significant physical alterations to the land and harbor perimeter. As result of the dredge training Allen Harbor has an average depth of 8 feet. With exception of shoaling in the channel this harbor is regarded as an excellent boating resource. The Town of North

Kingstown acquired 14 acres of property along the southeastern shore of the harbor. This property was formerly used by the Navy as their docking and operations area. Currently the Town operates a public marina on this property and provides approximately 100 slips and 80 moorings for recreational boaters.

The Allen Harbor Boating Association maintains a lease from the Navy to use 3.6 acres of land with approximately, 900' of frontage along the southwestern shore of the harbor. Over the years the yacht club has constructed 100 slips with utilities on the northwest side of Allen Harbor. The club also has 5 moorings. Mill Creek Marine has leased 4.5 acres since 2010 with a dry stack boat storage facility built in 2011.

In 1990 the Davisville Navy Construction Battalion Base was decommissioned.

Waters: Allen Harbor has a depth of between 5 and 11 feet, with an average depth of 8'. This harbor is regarded as an excellent boating resource.

Moorings: Currently, the Town operates a public marina with approximately 100 slips and provides 80 moorings in the harbor.

The University of Rhode Island owns a parcel adjacent to the Town and maintains berthing facilities in this harbor.

Little Allen Harbor was acquired by the RI Port Authority from the U.S. Department of Interior in 1980. RI Mooring Services leases all of the frontage around this 2.75-acre harbor. They provide boat storage, repair services, mooring installation, slip rental, shrink wrapping and hull washing among other services.

Waters: The average water depth is 6'.

Moorings: There are no moorings in Little Allen Harbor.

4.5.0 QUONSET/DAVISVILLE - Northern tip of Little Allen Harbor, also known as Spink Neck, to a fence near Shore Acres that separates Federal and private property (includes all of Quonset Point/ Davisville waterfront) Assessors Plat(s) 179, 185-186, 187-189, 192-194.

RIDEM Water Quality Designation: RIDEM classifies the West Passage waters in the vicinity of Piers No. 1 and No. 2 at the Davisville Depot that are south of a line from the northeast corner of Pier No. 2 (the more northerly pier at the Davisville Depot) to Nun Buoy 14, north of a line from the RIDEM range Marker located on the bulkhead approximately 300 feet south of Pier No. 1 (the more southerly pier at the Davisville Depot) to Nun Buoy 12, including all waters between the above described Lines that are west of a line and the extension of a line from the Northeastern end of the bulkhead at Quonset State Airport Through Nun Buoy 16 as SB.

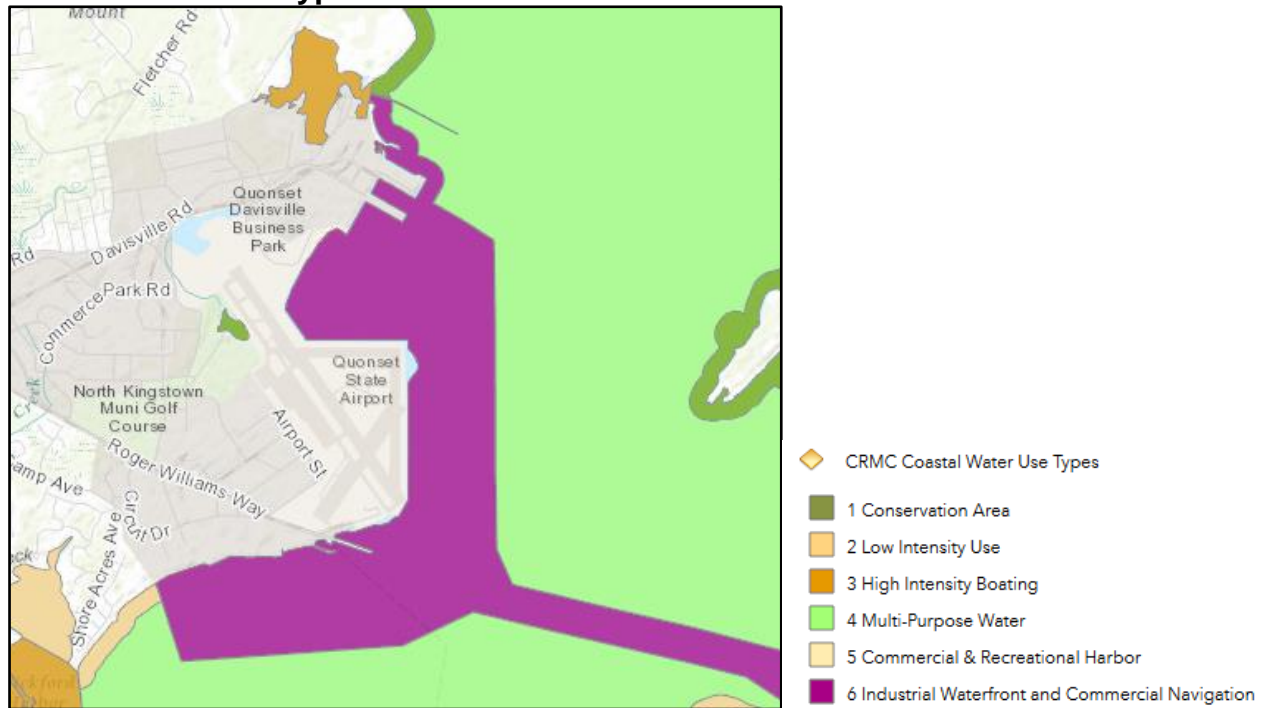
West Passage waters in the vicinity of Quonset Point within 1500 feet of shore from the western end of the carrier pier to a point 1000 feet north of Quonset Point as SB1.

FEMA Flood Zone(s): 44009C 0106J and 0108J– AE12 and AE 13 zones, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined; and VE15 zone, coastal flood zone with velocity hazard (wave action); base flood elevations determined.

[illegible]

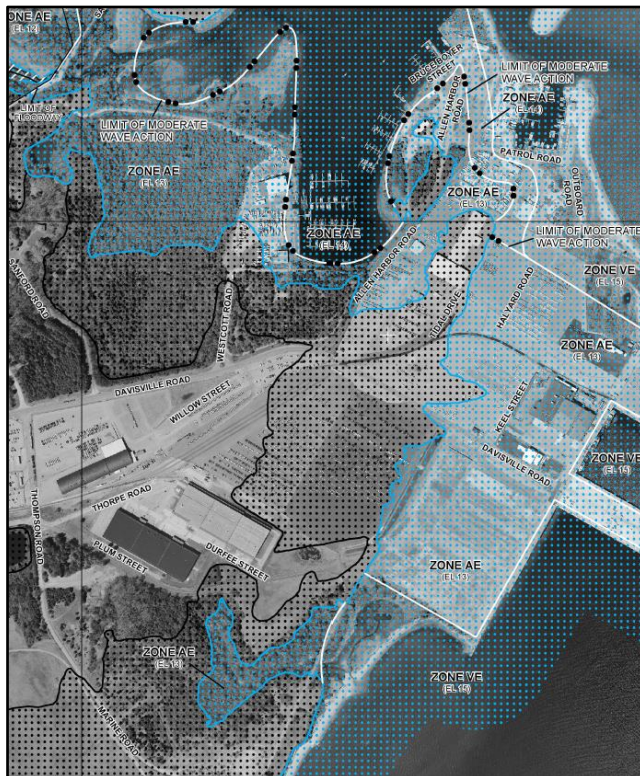
99

CRMC Water Use Type

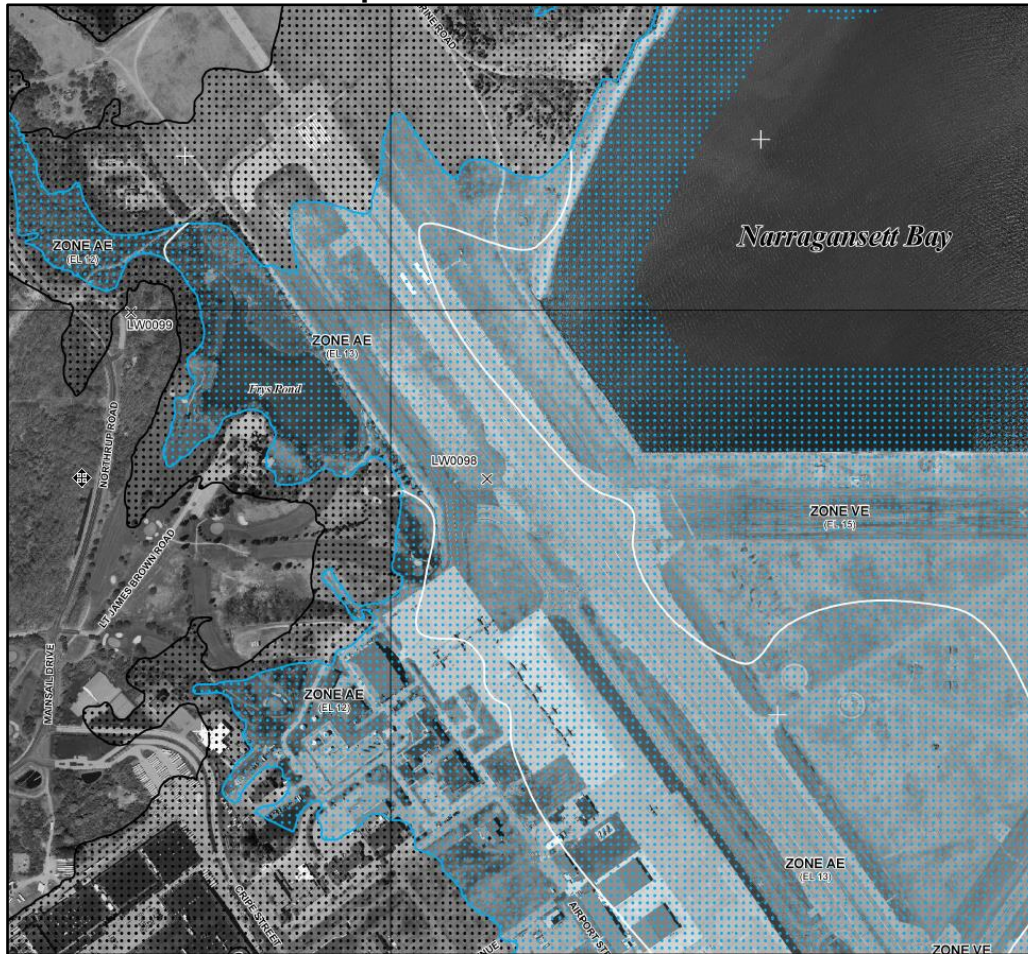


Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

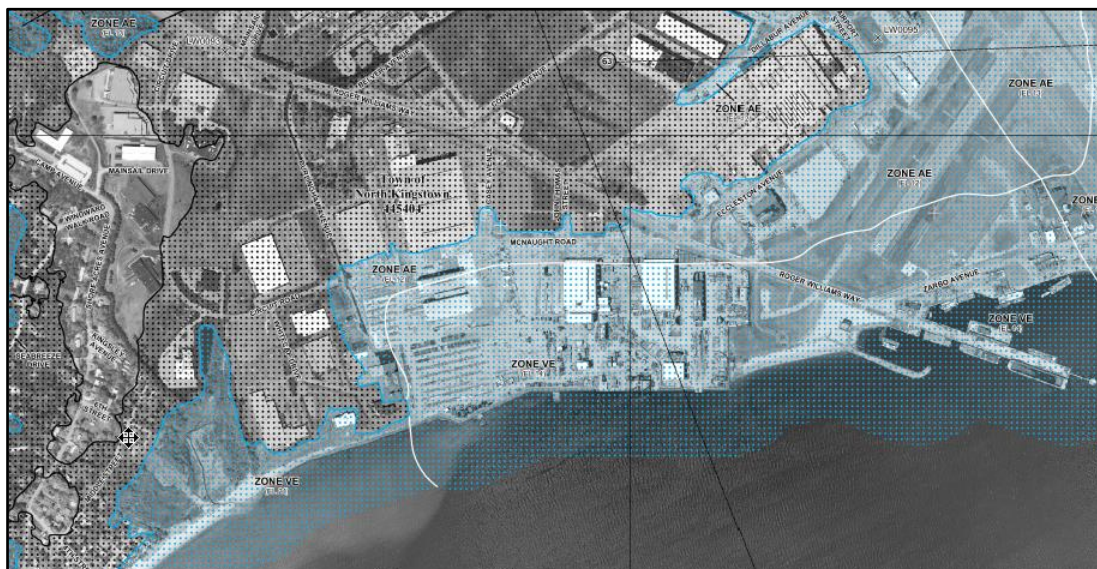
FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000106J

FEMA Flood Hazard Map

Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000106J

FEMA Flood Hazard Map

Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000108J

Land Use: This sector was under the ownership and control of the U.S. Navy from 1941 until 1974. Since 1941 the physical characteristics of the shoreline have changed significantly. Extensive wetland filling has taken place over the years, resulting in several square miles being added to the area.

After 1974, the Rhode Island Port Authority and Department of Transportation acquired most of the available property on the shoreline. The Quonset Development Corporation (QDC) was formed in 2005 as a real estate development and management company responsible for developing and managing the Quonset Business Park in order to attract and retain businesses that provide diversified jobs (<http://www.quonset.com/about-qdc>). Located along the waterfront of this sector are the Davisville Piers #1 and #2, North Atlantic Distribution, Inc. (NORAD), RI Air National Guard, Quonset State Airport, the Carrier Piers, General Dynamics \Electric Boat (a defense contractor that builds submarines) and SENESCO (a builder of double hulled barges). There is the Quonset Wastewater Collection System and Treatment Facility that services the Quonset Business Park. The treatment plant has an out-fall near Sauga Point.

Waters: Water depth varies considerably in this area due to dredging, bulkheads and piers. In the region of Spinks Neck, there is shoaling out for about 200 yards, then depths of 7' to 10'. To the south, there is a dredged channel approaching Davisville, that averages 28' to 30'. Between Davisville and Quonset point, depths range from 6' to 15'. Depths approaching and surrounding the Carrier Pier range from 32' to 35'. Between the Carrier Pier and the limits of the Port, depths range from 8' to 12', with the deeper portions closer to land.

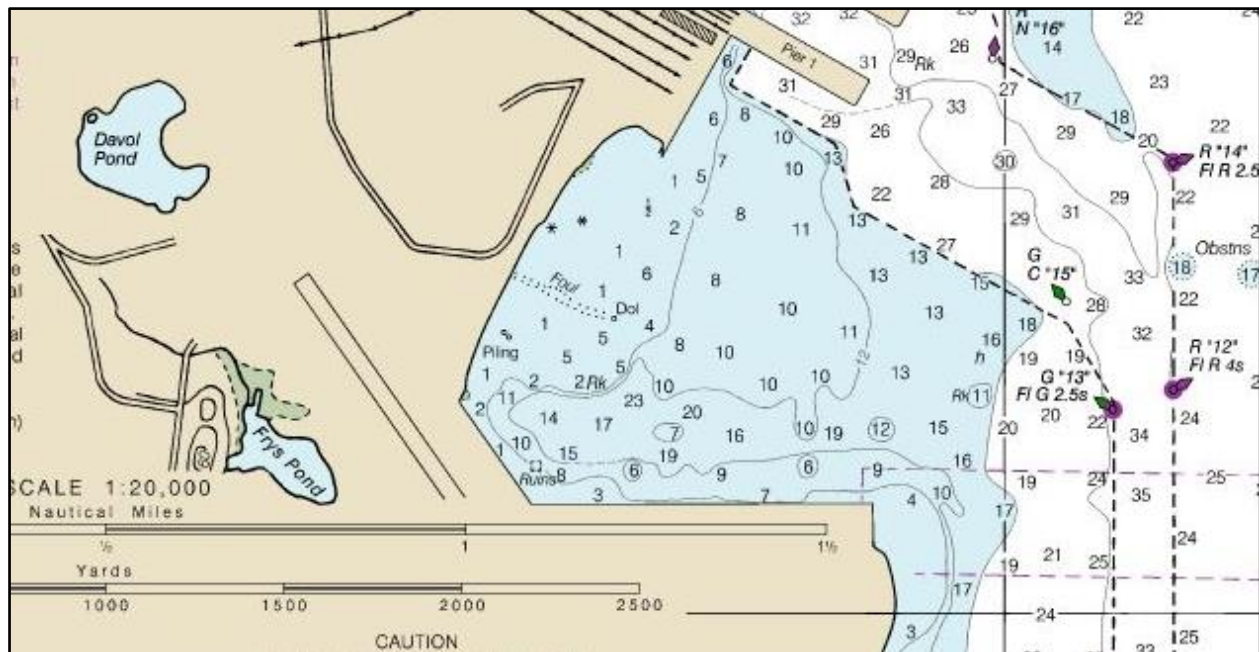
Moorings: No moorings are located in this area.

4.6.0 FRY'S POND - The tidal pond located near the Quonset State Airport's NW runway

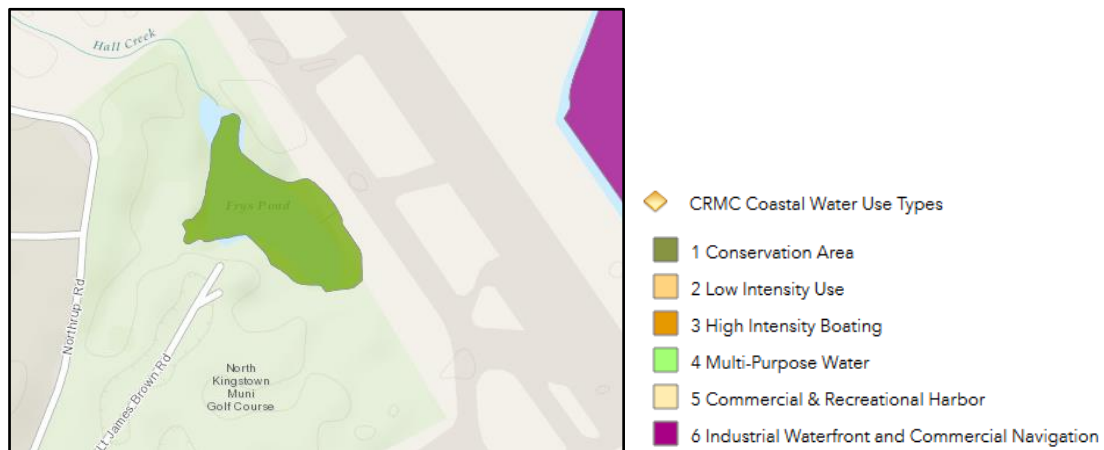
RIDEM Water Quality Designation: A.

CRMC Use Type Designation: Type 1

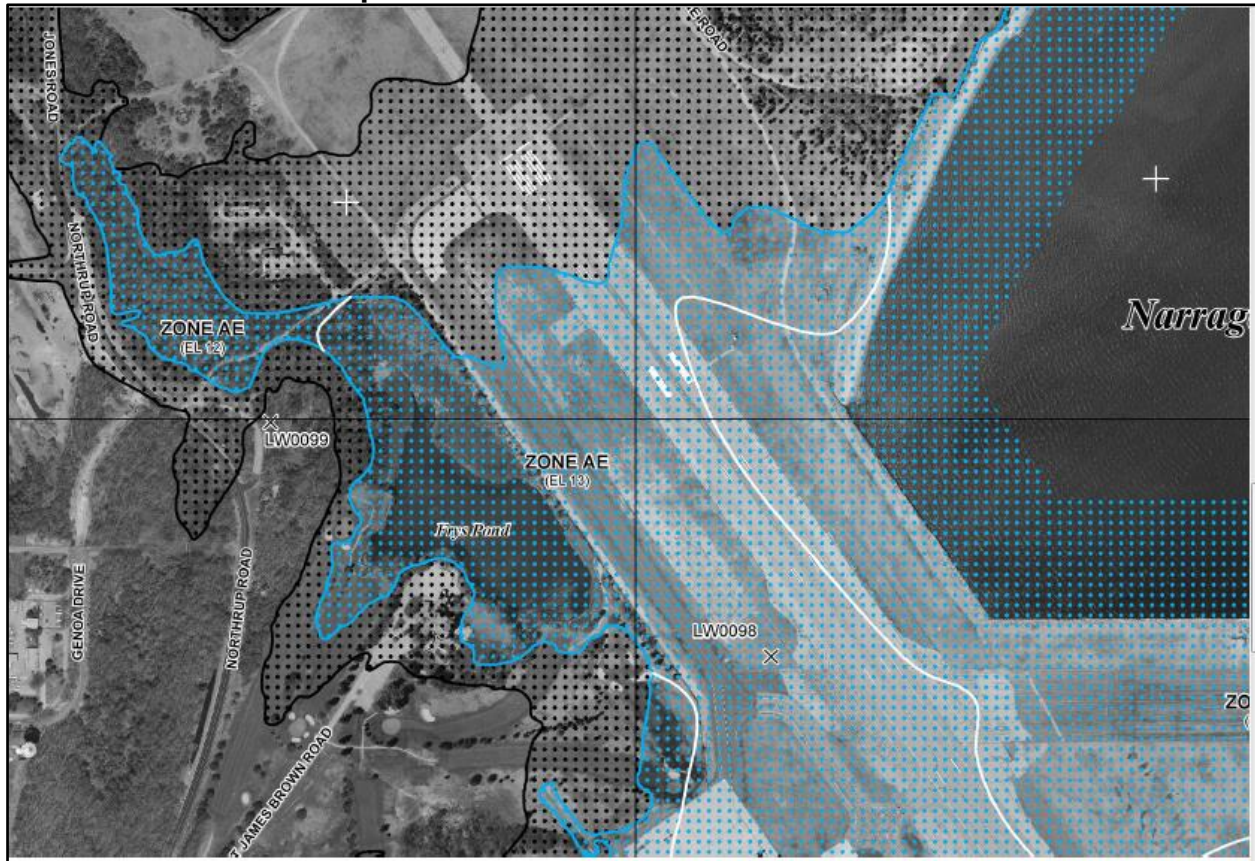
FEMA Flood Zone(s): 44009C 0106J– AE12 and AE 13 zones, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined; and VE15 zone, coastal flood zone with velocity hazard (wave action); base flood elevations determined.

NOAA CHART: # 13223

Source: <http://www.charts.noaa.gov/OnLineViewer>

CRMC Water Use Type

Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map

Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000106J

Land Use: This sector is located within the Quonset Point\ Davisville Industrial Park at the end of the NW airport runway and is also adjacent to the Town Golf course. During the development of this base extensive wetland filling was conducted by the Navy to accommodate the runway. A culvert approximately 1200' long was installed under the runway to maintain the integrity of this tidal pond.

Waters: No official water depth information is available for the pond.

Mooring: No moorings have been placed in Fry's Pond

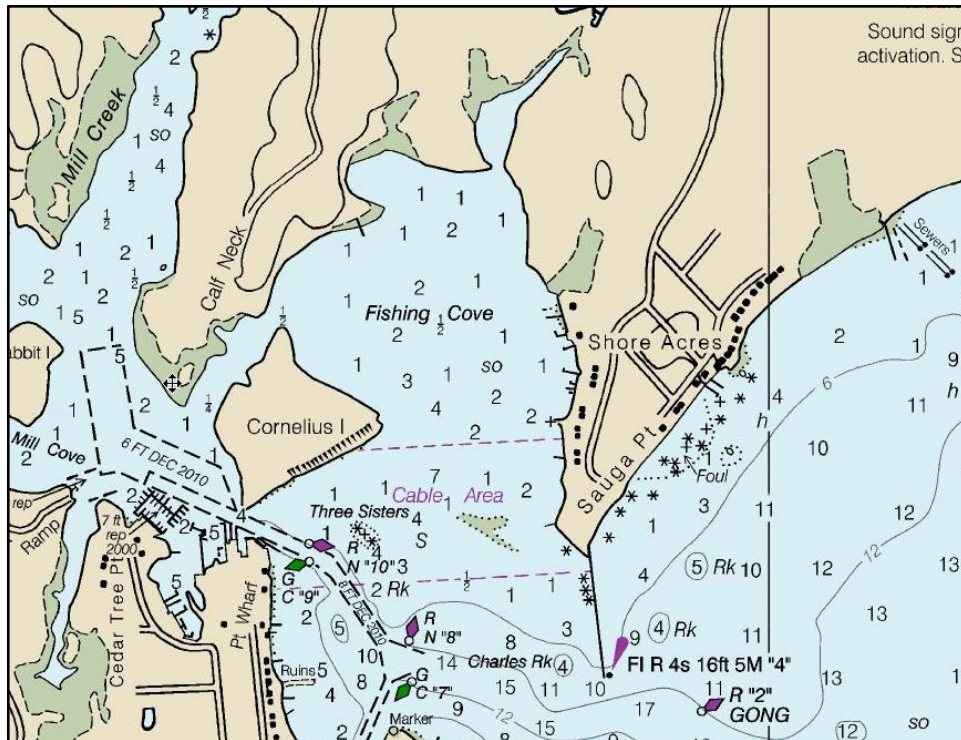
4.7.0 SAUGA POINT - Beginning at a fence near Shore Acres that separates federal and private property to the tip of Sauga Point
Assessors Plat(s) 179, 142, 141

RIDEM Water Quality Designation: SB, SA

CRMC Use Type Designation: Type 2, Type 3

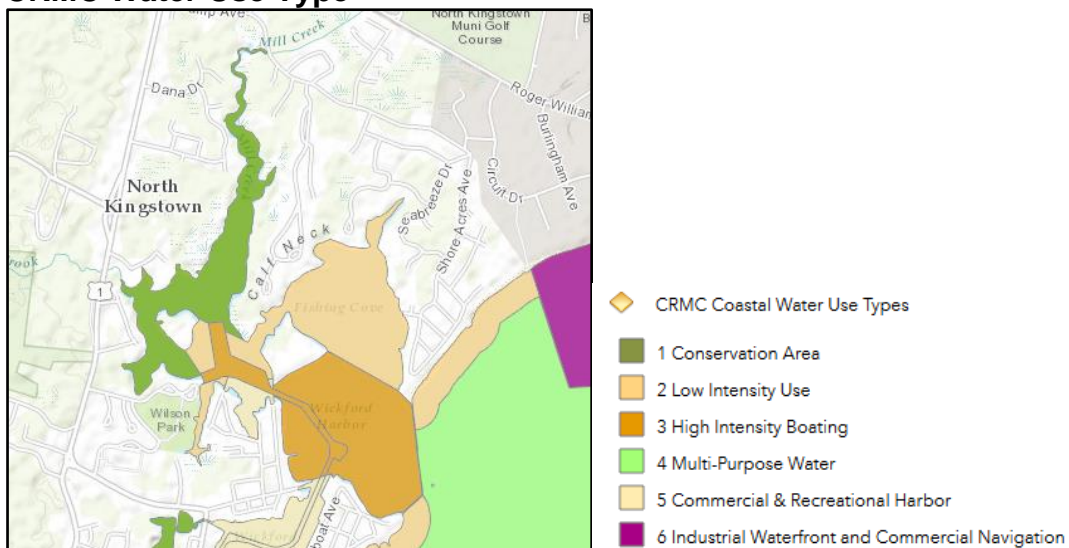
FEMA Flood Zone(s): 44009C 0108J–104J: AE15 zone, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined; and VE17 and VE 21 zones, coastal flood zone with velocity hazard (wave action); base flood elevations determined.

NOAA CHART: # 13223

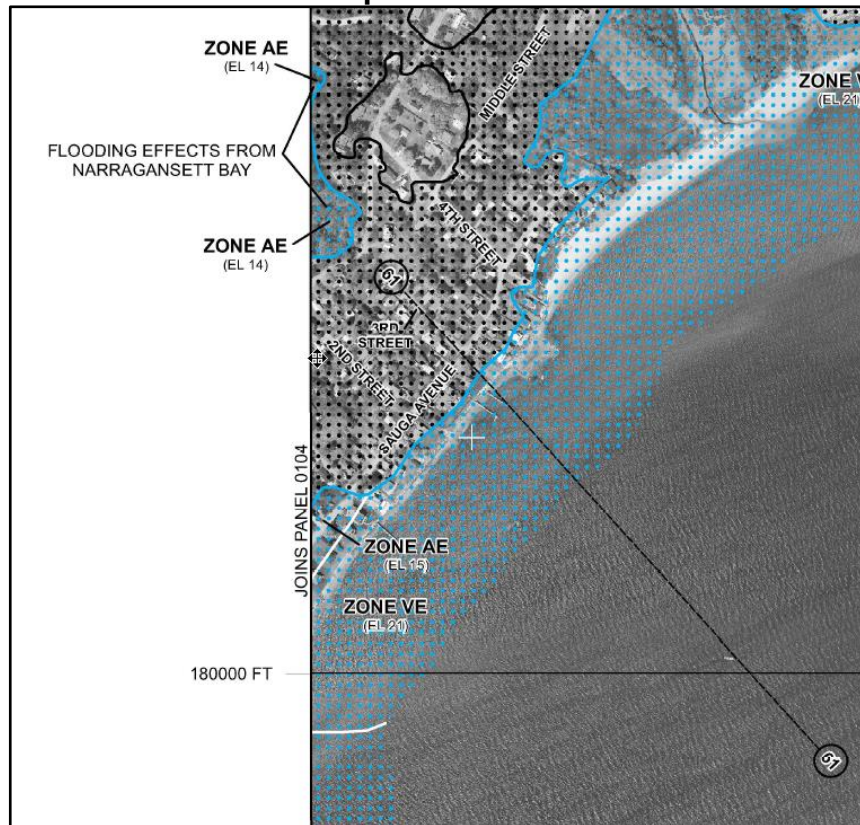


Source: <http://www.charts.noaa.gov/OnLineViewer>

CRMC Water Use Type

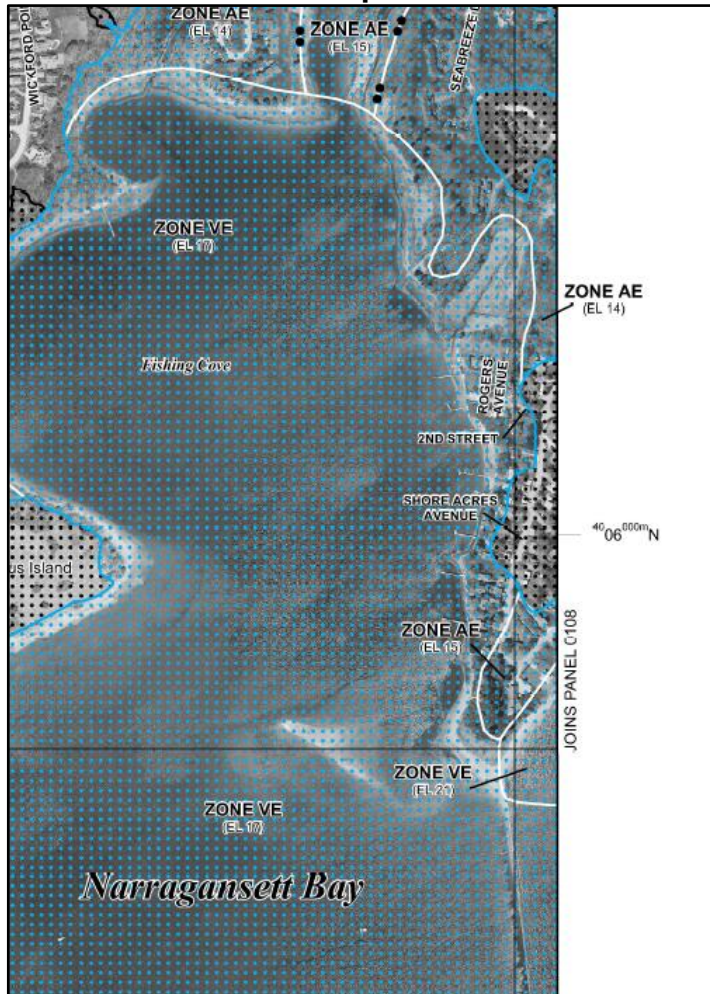


Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map

Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000108J

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000104J

Land Use: Most of the land in this sector was platted in 1910 as Shore Acres. The emphasis of this plat was on seasonal summer residences and has since become occupied year-round. The sector covers about 70 acres on which 220 lots were created. This is one of the more densely developed coastal neighborhoods in Town.

Waters: Water depth is 1 to 2 feet for a distance of 100 to 200 yards offshore. There is a steep drop-off to 10 to 12 feet out to a distance of 500 to 600 yards.

Moorings: During a Harbor Management survey conducted in 2015, 52 moorings were counted at Sauga Point/Shore acres.

WICKFORD HARBOR COMPLEX

The Wickford Harbor Complex consists of 6 sections described as coves, harbors, and estuaries indented into the western shore of Narragansett Bay, West Passage. The Complex is protected by two breakwaters constructed by the U.S. Army Corps of Engineers in 1949. Channels and fairways of the complex have also been dredged by the Army Corps of Engineers, initially in 1900, with maintenance and expansion dredging in 1961. The following describes some of the features for each section of the Wickford Harbor Complex.

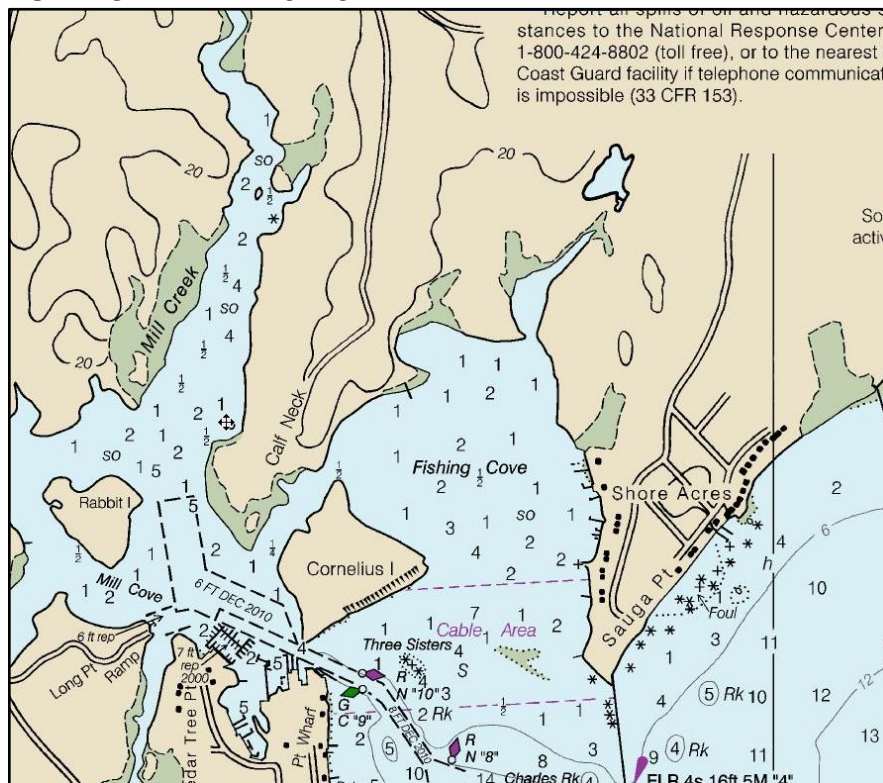
4.8.0 FISHING COVE - A straight line from the base of the breakwater at Sauga Point to the eastern tip of Cornelius Island (CRMC W. Quad. f) Assessors Plat(s) 140,141

RIDEM Water Quality Designation: SA{b}

CRMC Use Type Designation: Type 2, (double check)

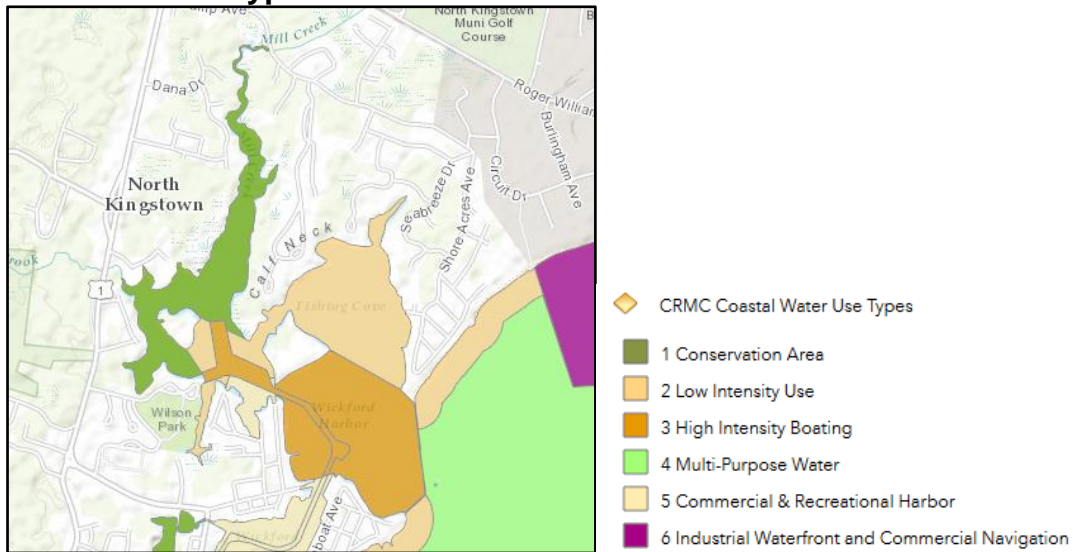
FEMA Flood Zone(s): 44009C 104J: AE14 and AE15 zones, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined; and VE17 zone, coastal flood zone with velocity hazard (wave action); base flood elevations determined.

NOAA CHART: # 13223



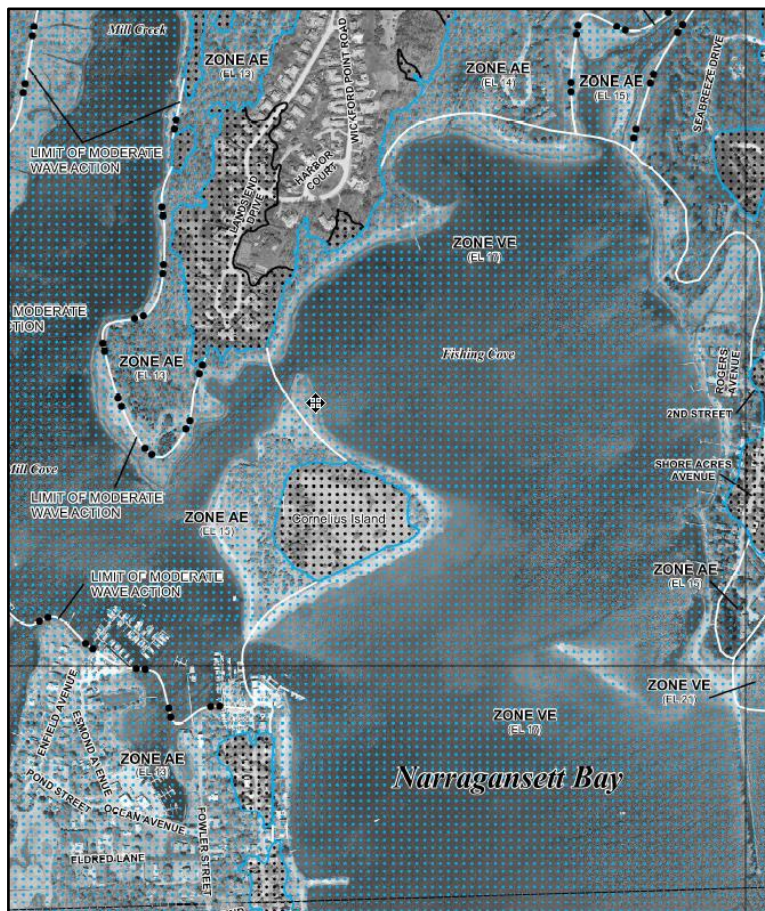
Source: <http://www.charts.noaa.gov/OnLineViewer>

CRMC Water Use Type



Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000104J

Land Use: The land in this sector has been developed for residential purposes. Two examples of housing development patterns are evident, the conventional grid pattern of Shore Acres platted in 1910 and Cedarhurst which clusters units among common open space. Cornelius Island situated off the Calf Neck peninsula is approximately 18.6 acres and currently uninhabited. One half of the Island was a bequest to the Town, the other half to heirs. This island was a depository for much of the material dredged from the channel and Mill Cove.

Waters: Fishing Cove contains about 90 acres of shallow fairway, averaging 1 to 3 feet in depth.

Moorings: The Fishing Cove mooring field contains 26 moorings.

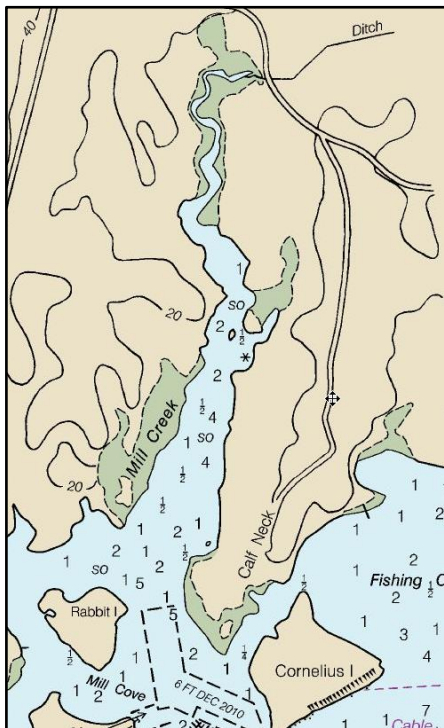
4.9.0 MILL CREEK - That waterway west and north of Mill Cove Assessors plat(s) 139, 140, 107, and 108

RIDEM Water Quality Designation: SB, B


CRMC Use Type Designation: Type 1







FEMA Flood Zone(s): 44009C 104J: AE14 and AE15 zones, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined.

NOAA CHART: # 13223



A map of North Kingstown, Rhode Island, showing the location of Wickford Harbor. The harbor is highlighted in orange. Other labeled areas include Dana Dr, Mill Creek, North Kingstown Muni Golf Course, Roger Williams Bulfinch Ave, Seabreeze Dr, Shore Acres Ave, Wickford Harbor, Fighting Cove, Wilson Park, and Wickford Ave. The map also shows a road labeled '1' and a road labeled 'Dana Dr'.

 CRMC Coastal Water Use Types

-  1 Conservation Area
-  2 Low Intensity Use
-  3 High Intensity Boating
-  4 Multi-Purpose Water
-  5 Commercial & Recreational Harbor
-  6 Industrial Waterfront and Commercial Navigation

[illegible]

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Land Use: The land use along this mile long waterway includes both developed and undeveloped parcels. To date this area has been sparsely developed and is regarded as pristine. Currently, there are two relatively large undeveloped parcels along the creek that if developed could negatively impact the integrity of this pristine area. A 54 acre undeveloped parcel, zoned Neighborhood Residential, is located on the western shore of the creek and is adjacent to the historic Smith's Castle. The other parcel zoned Planned Village Development is known as Calf Neck and is located on the eastern side of the creek. The parcel has now been developed and consists of single family homes.

Waters: Depth ranges from 0.5 feet to 4 feet.

Moorings: No moorings have been located in this waterway.

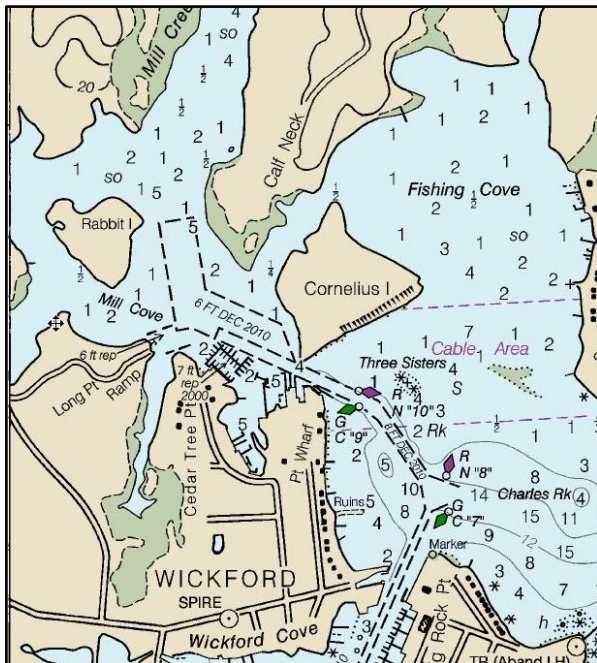
4.10.0 MILL COVE - (1) A straight line from the northeast side of Rabbit Island to the tip of Calf Neck (CRMC W. Quad K); (2.) A straight line from the southern tip of Rabbit Island to the western side of the launching ramp at Long Point (CRMC W. Quad L); (3.) A straight line extension of Pleasant St. (CRMC W. Quad N)

RIDEM Water Quality Designation: SB

CRMC Use Type Designation: Type 1, Type 2, Type 3, and Type 5 in the area of Cedar Tree Point.

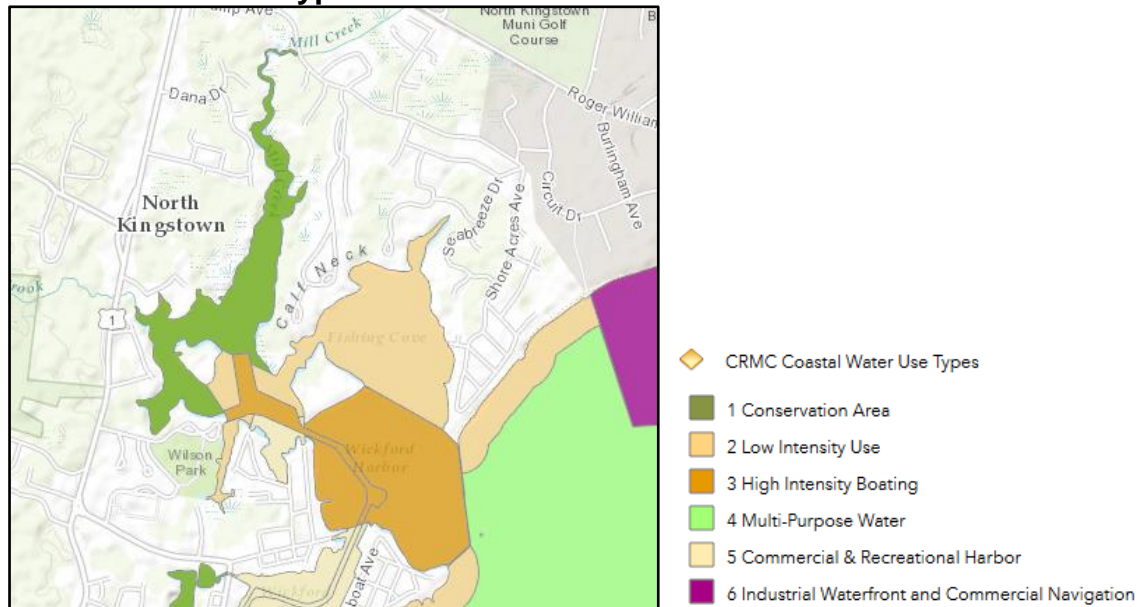
FEMA Flood Zone(s): 44009C 104J: AE13 zone, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined.

NOAA CHART: # 13223



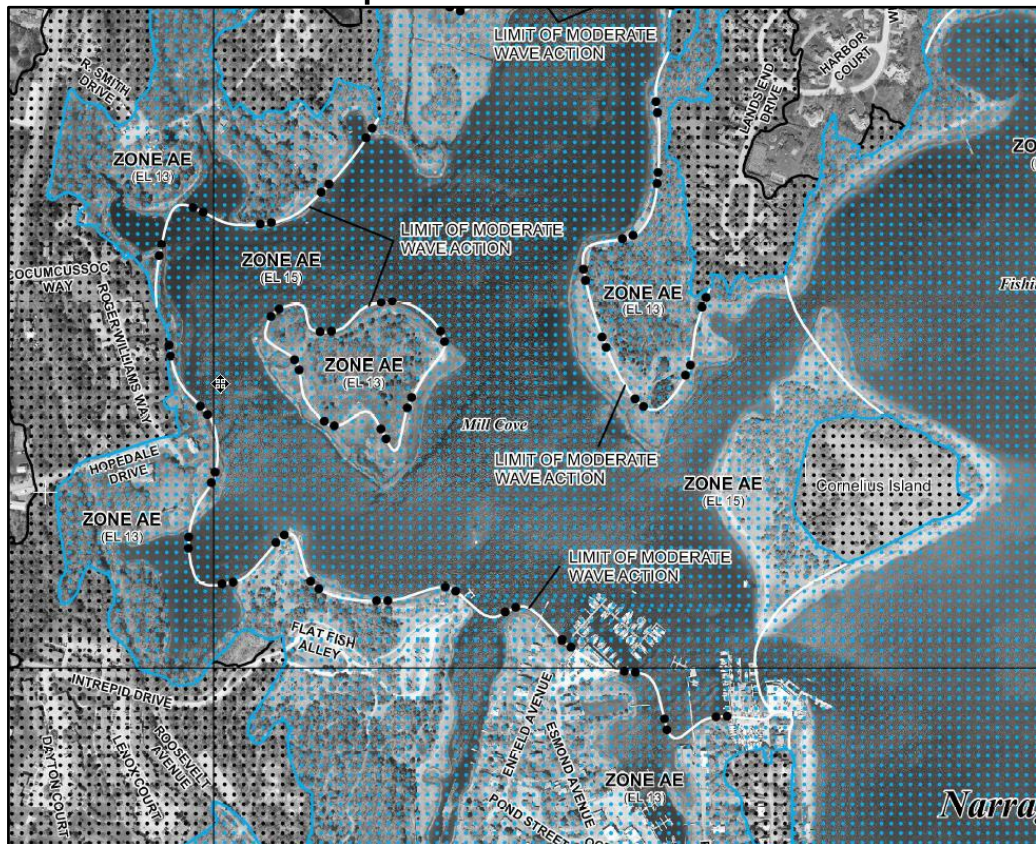
Source: <http://www.charts.noaa.gov/OnLineViewer>

CRMC Water Use Type



Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000104J

Land Use: Traditional land use adjacent to this sector is divided among single family residential and water dependent commercial. Along the southern shore there is a concentration of marinas and docks, namely Wickford Yacht Club, Pleasant Street Wharf, NorthWick Boatyard and Wickford Marina that service commercial, recreational and government vessels. The ten acre Rabbit Island is located near the center of the cove. This island is Town owned and designated as open space.

Waters: In 1963 the Army Corps of Engineering modified the channel by dredging a 10 acre anchorage 6 feet in depth.

Moorings: The Town regulates 86 moorings in this area. In 1963 the Army Corps of Engineering modified the channel by dredging a 10 acre anchorage 6 feet in depth. A Town boat launching ramp is located at Long Point, which can be accessed from Intrepid Drive. There are three commercial marina operations and a yacht club in this sector, who own approximately 150 slips.

4.11.0 WICKFORD HARBOR - (1) A line along the western side of the breakwater from Sauga Point, running across the entrance channel to Wickford Harbor and along the western side of the breakwater from Poplar Point(CRMC W. Quad E). (2) A straight line across the entrance of Wickford Cove from the tip of Big Rock Point to the tip of the northern peninsula at the end of West Main Street also known as Gardner's Wharf(CRMC W. Quad. G). Assessors Plat(s) 117, 91

RIDEM Water Quality Designation: SB.

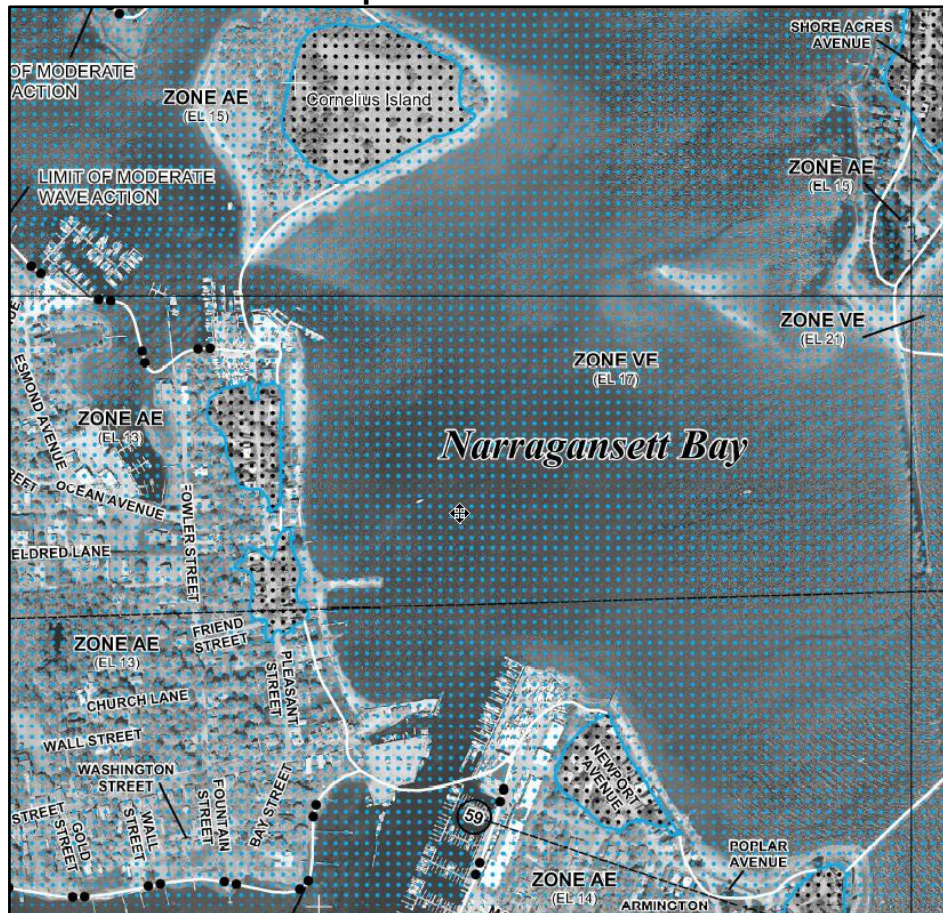
CRMC Use Type Designation: Type 3

FEMA Flood Zone(s): 44009C 104J AE13 zone, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined; VE17 zone, coastal flood zone with velocity hazard (wave action); base flood elevations determined.

[illegible]

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FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000104J

Land Use: The land use along the shores of this harbor has been a mix of high density residential and water dependent commercial development, such as marinas and boat yards. The Wickford Yacht Club, Gardner's Wharf, a portion of the Town Wharf and the Wickford Shipyard account for the water dependent businesses in this sector. This area is serviced by Town water and each unit is serviced by individual septic systems. The Army Corp of Engineers constructed two breakwaters along the eastern face of this harbor in 1962. These structures are at times submerged during storms and high tides.

Waters: A Federal Channel was dredged from the breakwater entrance to the west. Branches of the channel split off to Mill Cove and Wickford Cove. Depths range from 10 feet to 13 feet.

Moorings: The Town regulates 372 moorings in Wickford Harbor each defined in the moorings section of the plan.

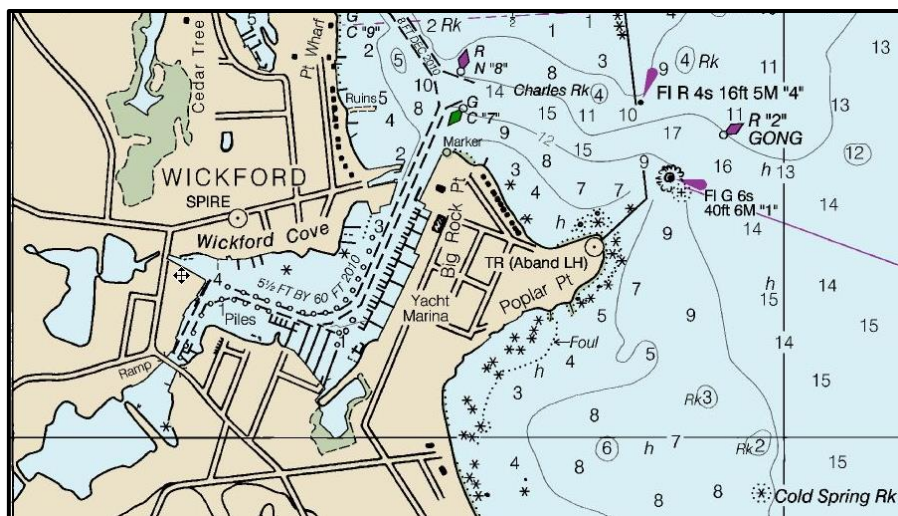
4.12.0 ACADEMY COVE - That waterway west of the bridge on Brown Street.

RIDEM Water Quality Designation: SB

CRMC Use Type Designation: Type 1

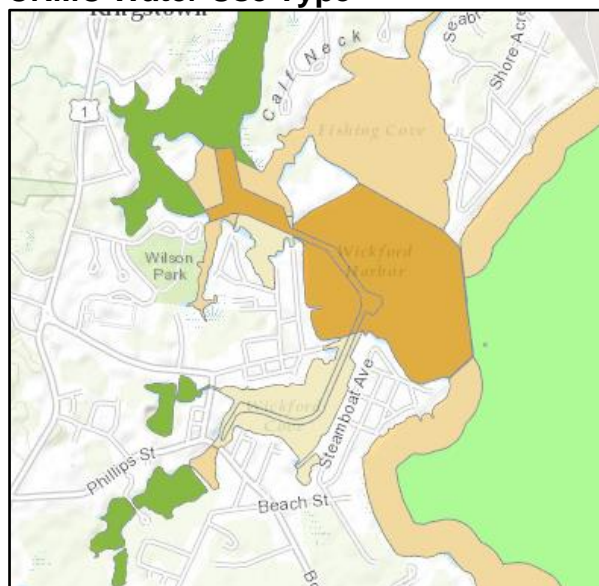
FEMA Flood Zone(s): 44009C 104J: 44009C 104J AE13 zone, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined.

NOAA CHART: # 13223



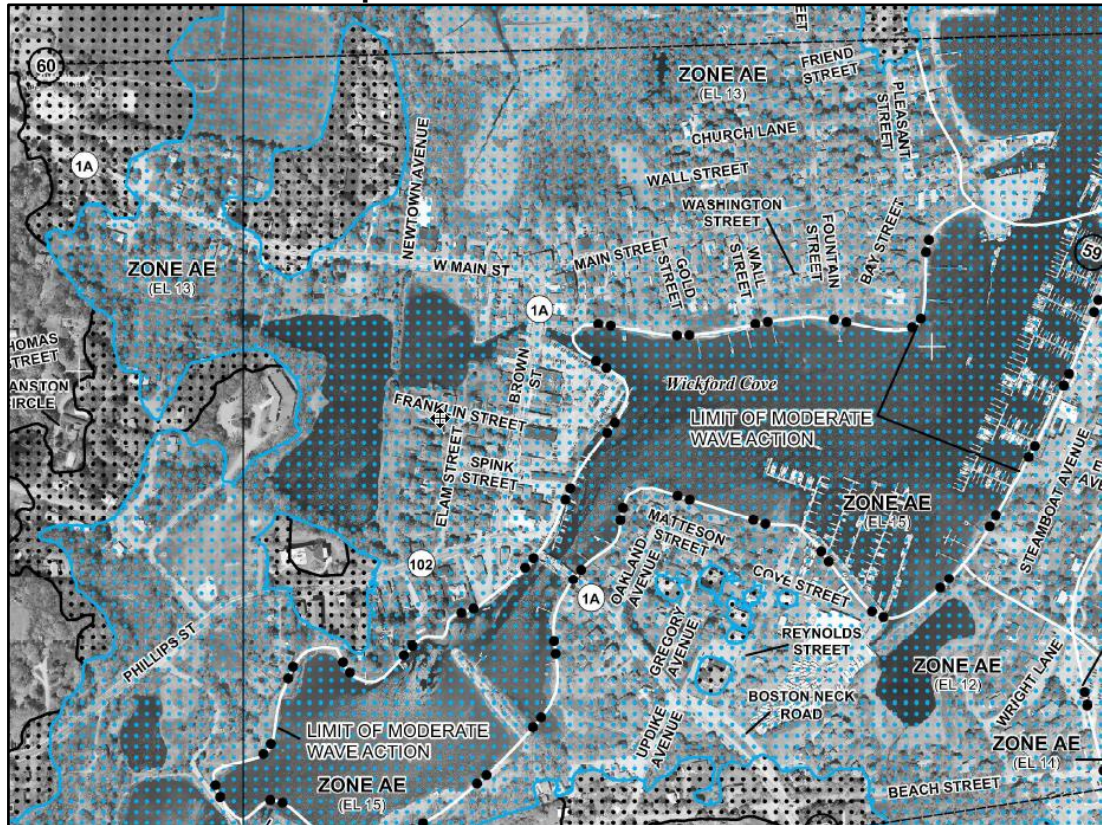
Source: <http://www.charts.noaa.gov/OnLineViewer>

CRMC Water Use Type



Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000104J

Land Use: This small tidal cove is located near the center of the Historic Wickford Village. Residential, Public and Commercial development has been established along the shores of this Cove.

At one time a train trestle that serviced the Sea View Railroad extended through this waterway. Today that filled area provides a pedestrian path from the Public Library on Boone Street to West Main Street. Most of the land on the West side of this Cove is owned by the Town and is used for the Wickford Elementary School and Public Library. Along the eastern side of the Cove is Brown Street where two restaurants, several retail stores and residences have been established. Six lots abut the Cove along West Main Street and are used for commercial and residential purposes. All of the establishments in this sector are serviced by Town water and use on-site wastewater treatment systems. The extension of centralized sewers has been approved for the commercial portion of this sector.

Waters: The Cove is tidal and no recent depth soundings are available. The Cove is useful only for canoes and kayaks.

Moorings: This tidal cove is very shallow and no moorings have been located in this water body.

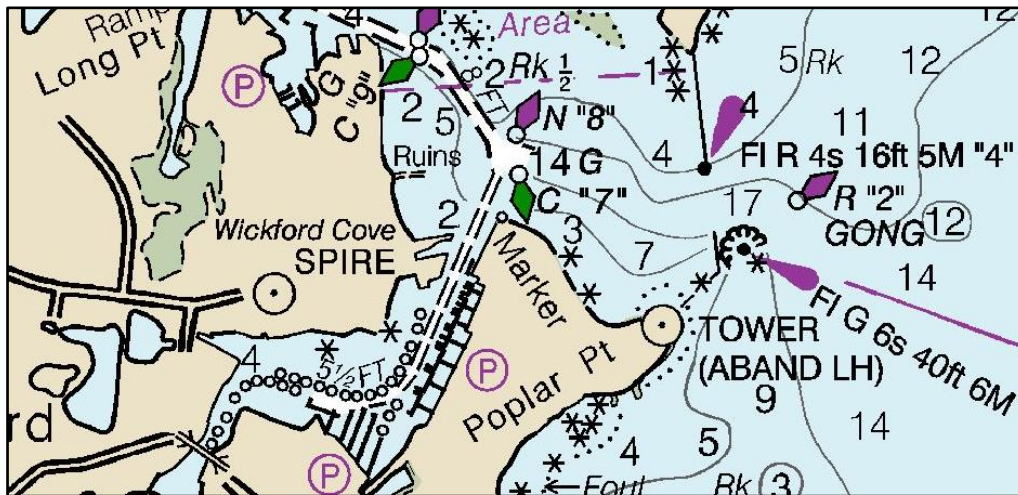
4.13.0 WICKFORD COVE - That waterway southwest of Wickford Harbor except; Academy Cove which is separated by a line along the western side of the bridge on Brown Street (CRMC W. Quad. H).

RIDEM Water Quality Designation: SB

CRMC Use Type Designation: Type 5, Type 2 and Type 1

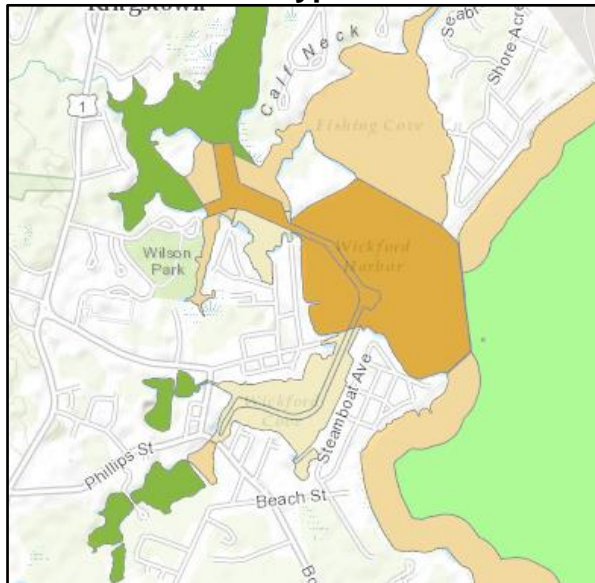
FEMA Flood Zone(s): 44009C 104J AE13 and AE 15 zones, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined.

NOAA CHART: # 13223



Source: <http://www.charts.noaa.gov/OnLineViewer>

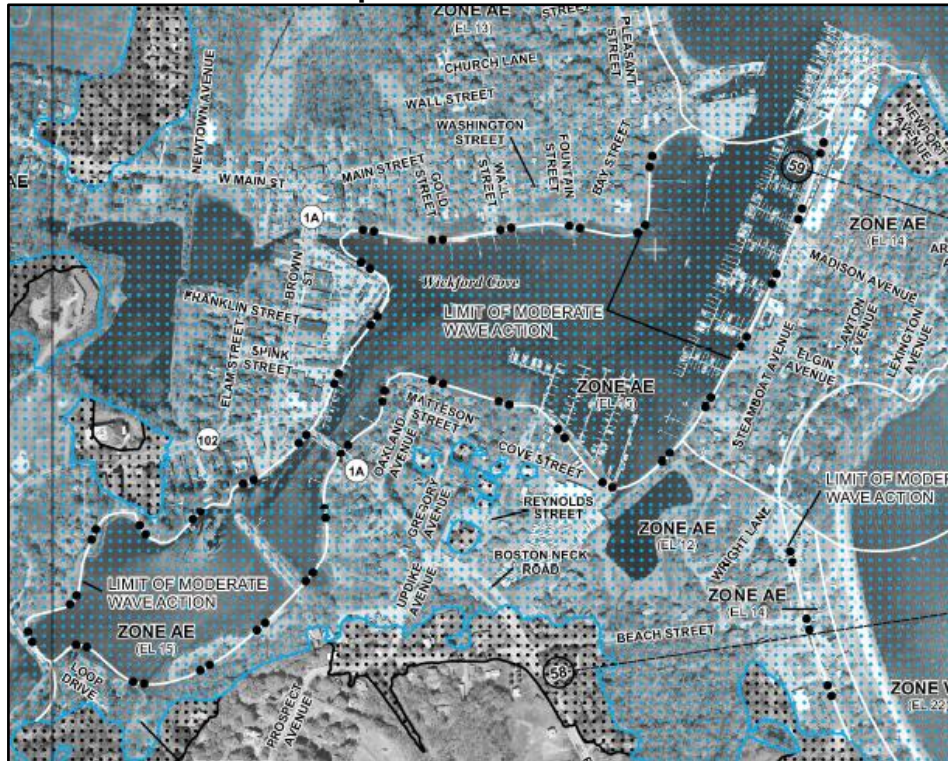
CRMC Water Use Type



- CRMC Coastal Water Use Types
- 1 Conservation Area
 - 2 Low Intensity Use
 - 3 High Intensity Boating
 - 4 Multi-Purpose Water
 - 5 Commercial & Recreational Harbor
 - 6 Industrial Waterfront and Commercial Navigation

Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000104J

Land Use: Traditional land use along the shores of this sector has been residential, waterfront commercial and industrial. This sector is within the Wickford Historic District. There are three marina/ boat yards and the Town's transient dock in this sector. Commercial and housing patterns along the waterfront are more densely settled. Units are serviced by Town water and on-site wastewater treatment systems.

Waters: A federal Channel traverses from the junction with Wickford Harbor to the Hussey Bridge. Depths range from 10 feet to 8 feet.

Moorings: There are no mooring fields in Wickford Cove. There are several riparian moorings. There are 64 pilings that line the channel, and 415 commercial marina slips situated along the southeast shore of the Cove. The Town Wharf, located in the Northwest corner of the Cove contains berthing spaces for approximately 36 commercial vessels.

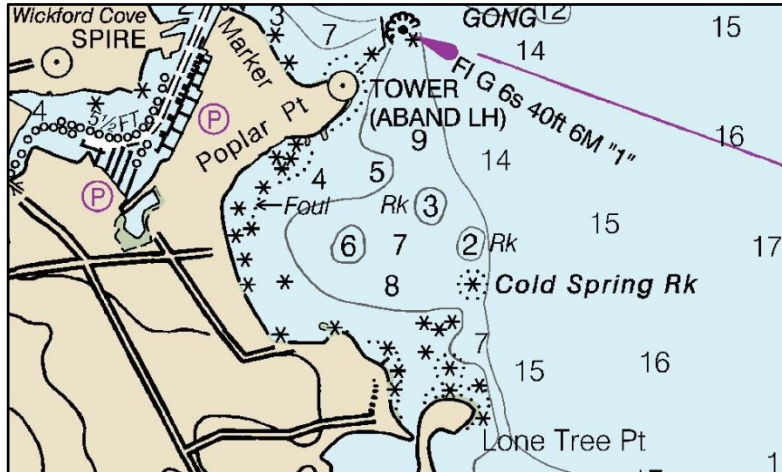
4.14.0 Town Beach (North and South) - Poplar Point to Lone Tree Point - A straight line between Poplar and Lone Tree Points (Contains the Town's Cold Spring Beach. Assessors Plats 90, 91).

RIDEM Water Quality Designation: SA

CRMC Use Type Designation: Type 2

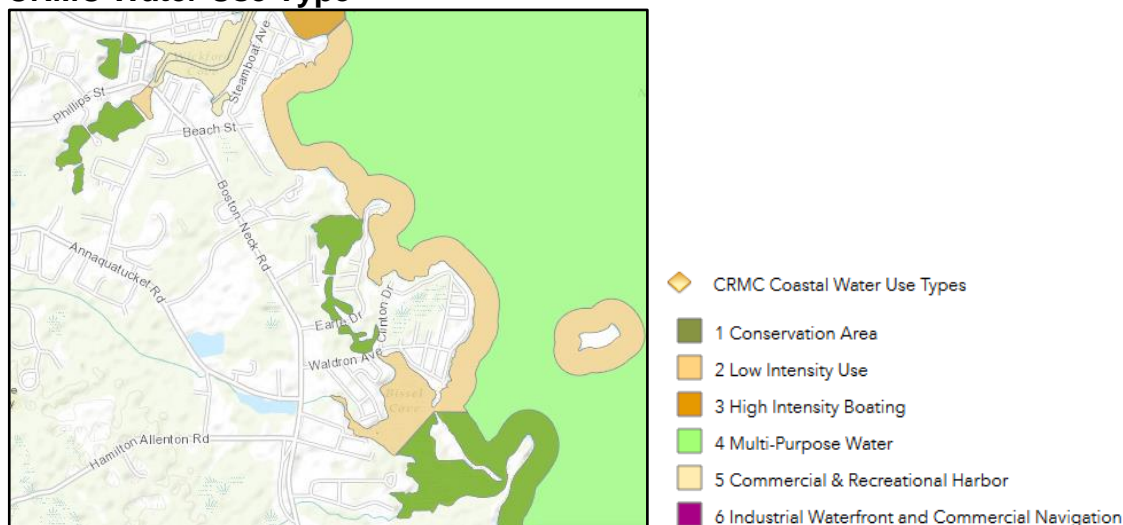
FEMA Flood Zone(s): 44009C 104J AE14 zone, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined; VE16, VE 19 and VE 22 zones, coastal flood zone with velocity hazard (wave action); base flood elevations determined.

NOAA CHART: # 13223



Source: <http://www.charts.noaa.gov/OnLineViewer>

CRMC Water Use Type



Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000104J

Land Use: The property in this sector is used mainly for residential and public purposes. There parcels along the waterfront of this sector are primarily zoned for ½ acre residential lots or public uses. The Town's Cold Spring Beach, Beechwood, A Center for Life Enrichment (senior center) and the Cold Spring Community Center represent approximately 800 feet of waterfront and provide key public access to the waterfront and as well as recreational and social service amenities to the community. The area known as Poplar Point is to the north of the beach and has been densely developed. To the south, an area also referred to as Cold Spring has a similar density.

Waters: Water depth varies from 4 to 8 feet in this area. There are several rock hazards near Cold Spring Rock.

Moorings: As of October 2015 there were 42 moorings in this area.

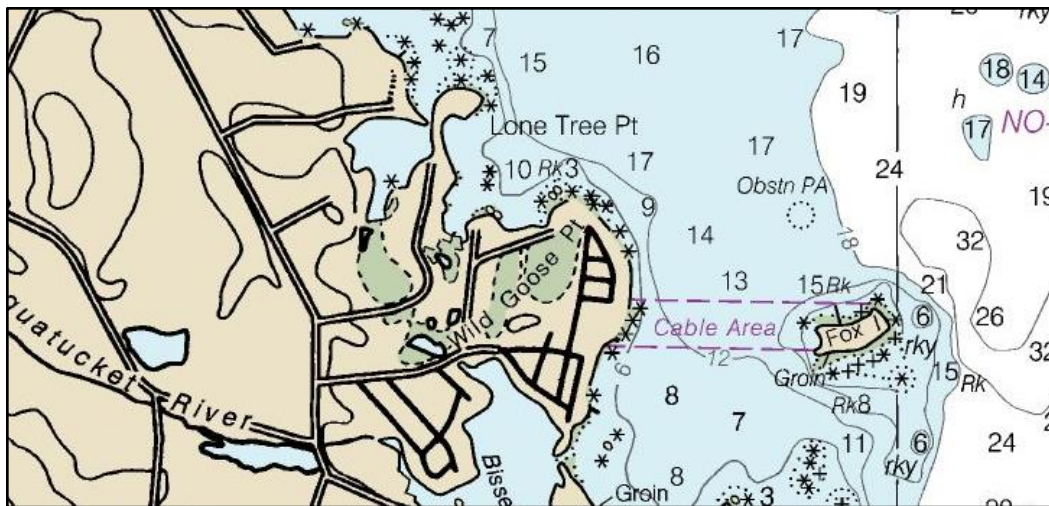
4.15.0 DUCK COVE - That waterway southwest of a straight line across the entrance of Duck Cove at its narrowest point from the northern side of the small peninsula, running generally southeasterly to where it meets the opposite shore on Lone Tree Point (CRMC W. Quad. O). Assessor Plats 26 & 89

RIDEM Water Quality Designation: SA

CRMC Use Type Designation: Type 1

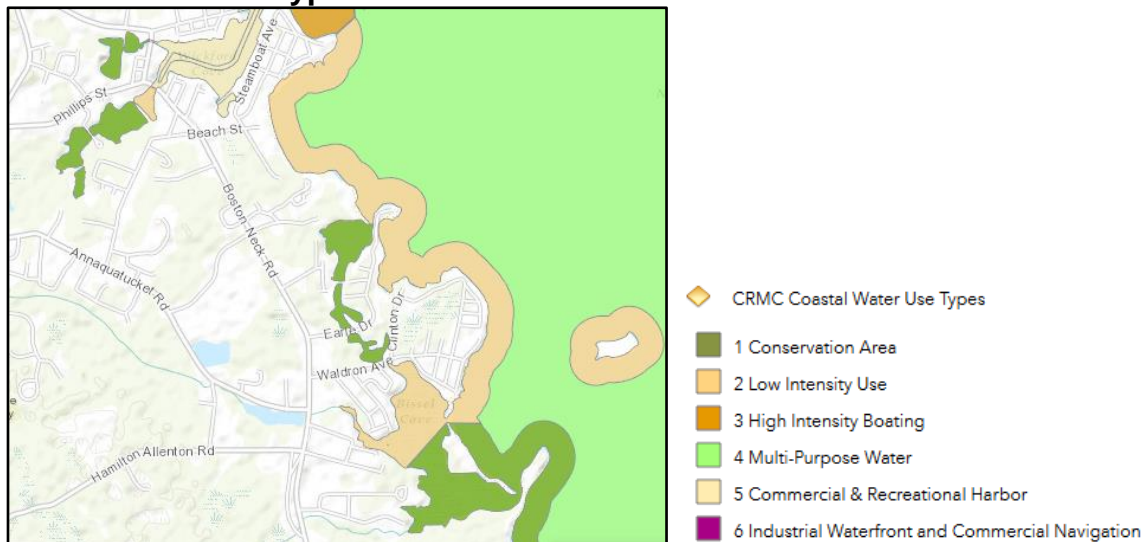
FEMA Flood Zone(s): 44009C 112J AE13 and AE14 zone, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined; VE16, zone, coastal flood zone with velocity hazard (wave action); base flood elevations determined.

NOAA CHART: # 13223



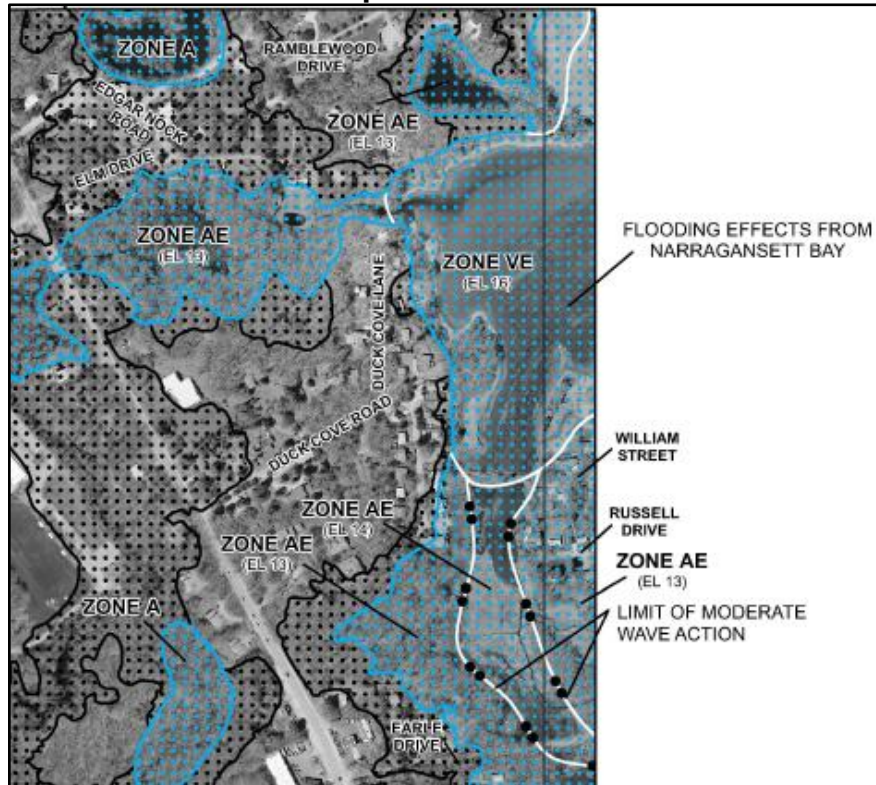
Source: <http://www.charts.noaa.gov/OnLineViewer>

CRMC Water Use Type



Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000112J

Land Use: The land use along this sector is exclusively residential. This is a fairly densely developed area with a mix of single family and multi-family units. This sector is serviced by Town water and each unit is serviced by onsite sewage treatment systems.

Waters: Water depth in this tidal cove is very shallow. Only kayaks and canoes are found here.

Moorings: This inlet was not included in a Harbor Management mooring survey conducted in July of 1991. Further investigation will be required. There are no Town designated mooring fields in this cove.

4.16.0 Lone Tree Point – Anthony’s Beach from Lone Tree Point to Wild Goose Point - That waterway generally east of a straight line from Lone Tree Point to Wild Goose Point.

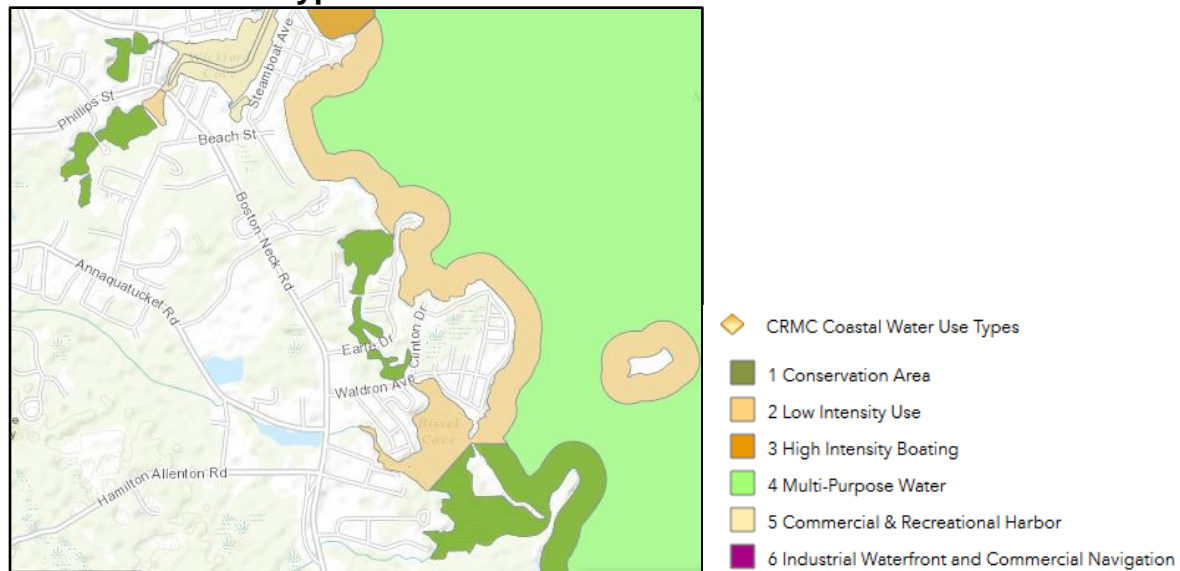
RIDEM Water Quality Designation: SA

CRMC Use Type Designation: Type 2

FEMA Flood Zone(s): 44009C 116J AE13 zone, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined; VE16 and VE19, zones, coastal flood zone with velocity hazard (wave action); base flood elevations determined.

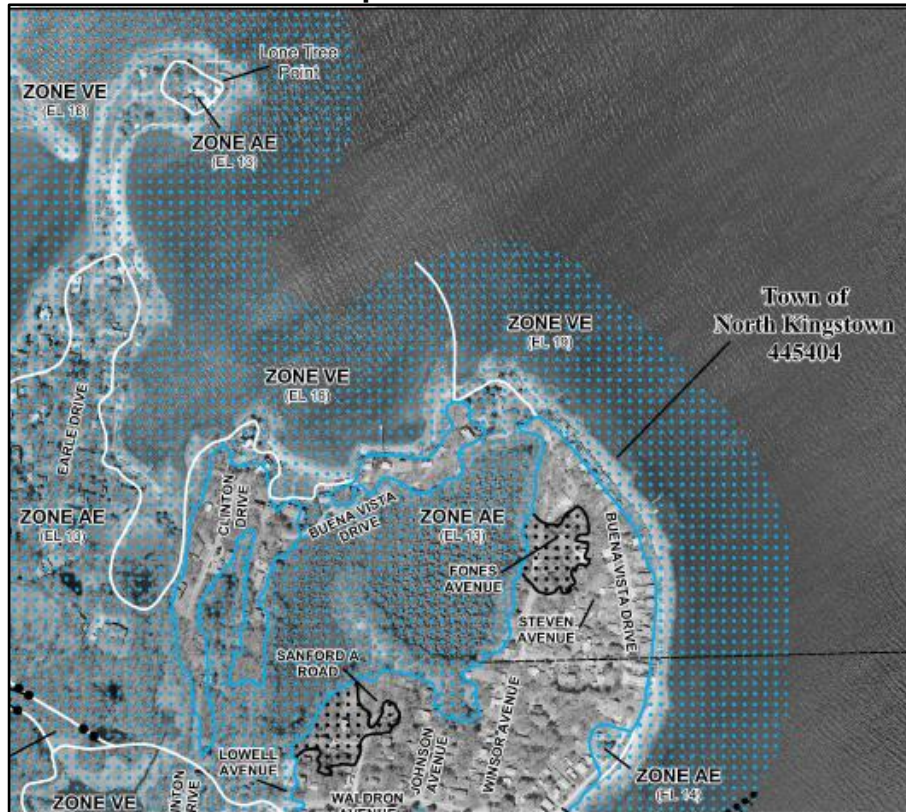
NOAA CHART: # 13223

Source: <http://www.charts.noaa.gov/OnLineViewer>

CRMC Water Use Type

Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000116J

Land Use: The land use along this sector is exclusively residential developed at lower densities. Each unit is serviced by Town water and onsite wastewater treatment systems.

Waters: There is an extensive rocky shore out to as much as 100 yards. There is then a steep drop-off to a consistent 9 feet.

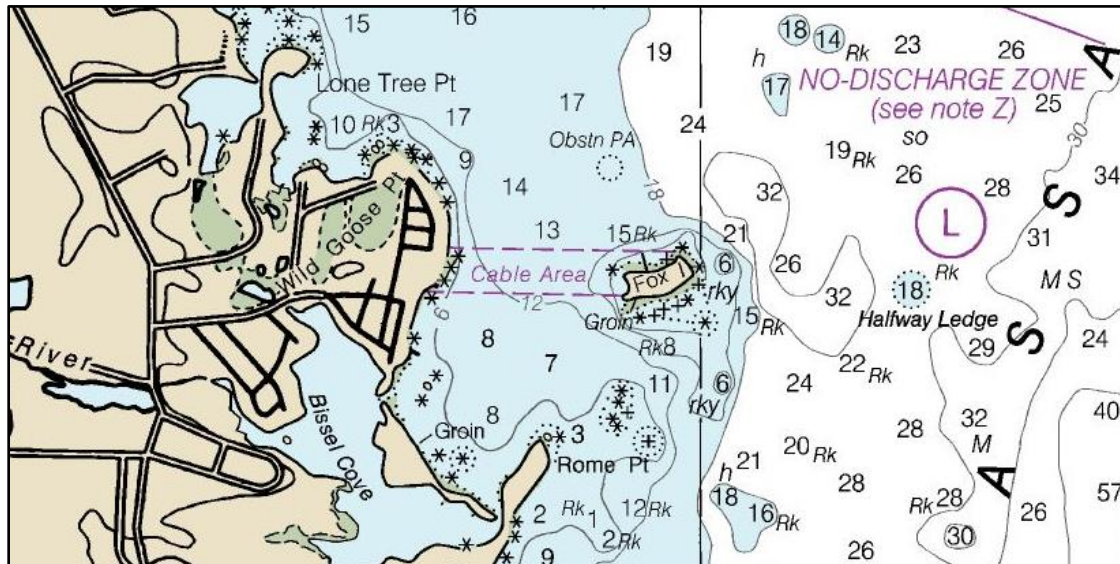
Moorings: In the area between Lone Tree Point and Wild Goose Point, 22 moorings were counted in October 2015.

4.17.0 HAMILTON, INCLUDING WILD GOOSE POINT – That area west of a straight line from Wild goose Point to Rome Point; includes the area called the Hummocks and Fox Island. Assessor Plats 68 and 69

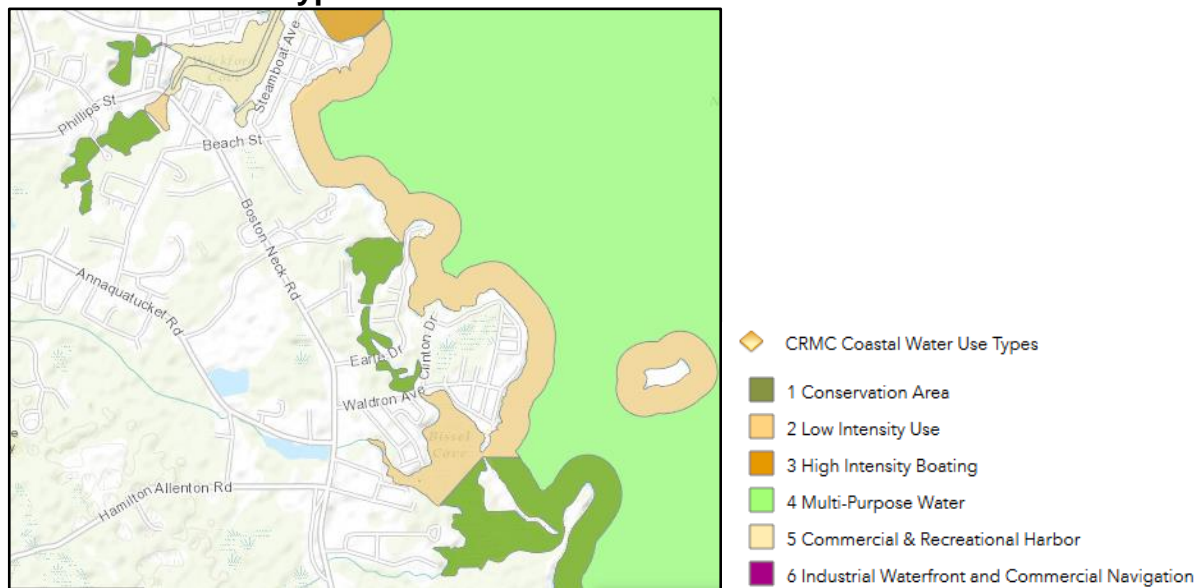
RIDEM Water Quality Designation: SA

CRMC use Type Designation: Type 2

FEMA Flood Zone (s): 44009C 116J AE13 and AE 14 zones, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined; VE19 and VE21, zone, coastal flood zone with velocity hazard (wave action); base flood elevations determined and Coastal Barrier Resources Systems (CBRS).

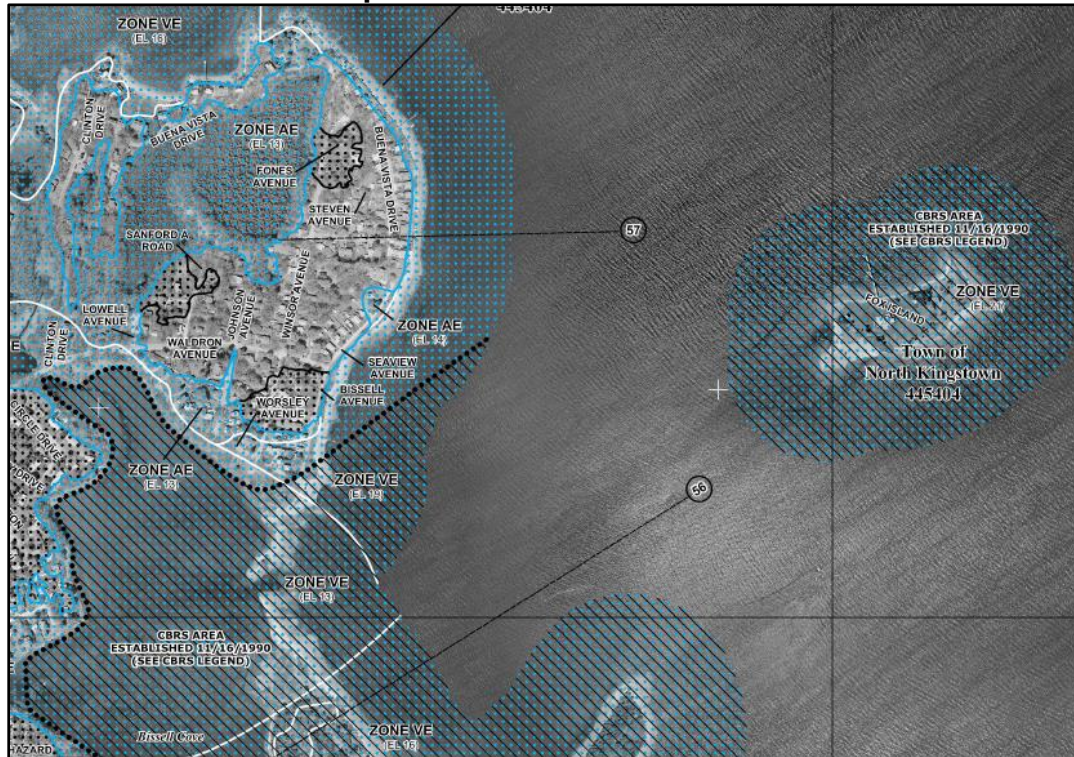
NOAA CHART: # 13223

Source: <http://www.charts.noaa.gov/OnLineViewer>

CRMC Water Use Type

Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000116J

Land use: The land use in this sector is residential. The area is densely developed. Town water and onsite wastewater treatment system service each lot in this sector.

Water: The shore is shallow and rocky out to 100 yards in many places. Then there is a steep drop off to 8 feet.

Moorings: In the Hamilton mooring field, 45 moorings were present in October 2015. A private beach is located at the intersection of Worsley and Sea View Avenues.

4.18.0 BISSEL COVE That waterway west of the Hummocks barrier beach Assessors Plat (s) 31, 45, 68

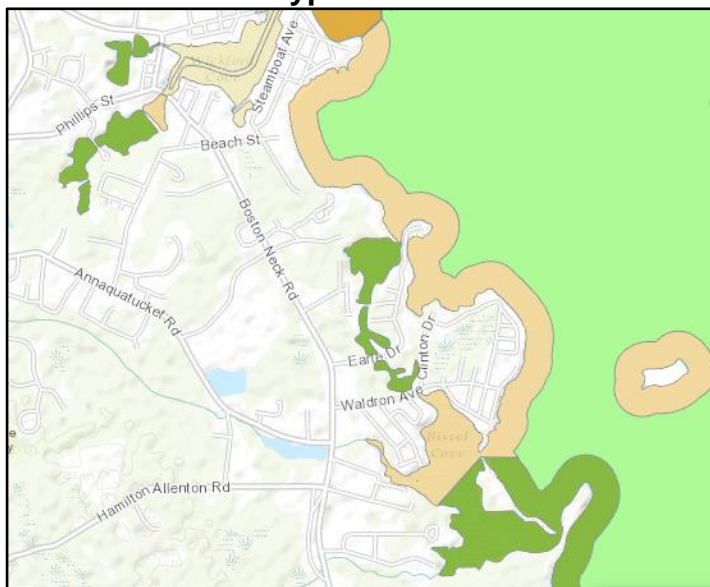
RIDEM Water Quality Designation: SA

CRMC Use Type Designations: Type 2. The Cove is classified by CRMC as a poorly flushed estuary.

FEMA Flood Zone(s): 44009C 116J AE13 zone, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined; VE13 and VE16, zone, coastal flood zone with velocity hazard (wave action); base flood elevations determined. Also a coastal barrier resources systems area.

NOAA CHART: #13223

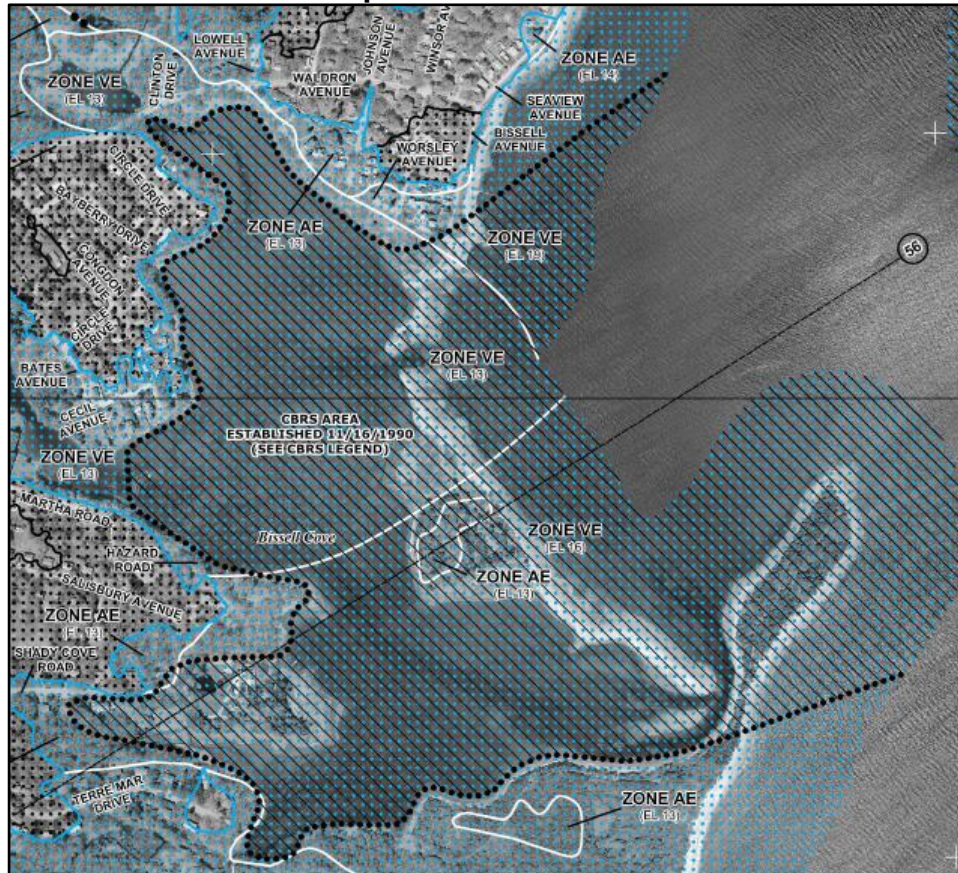
Source: <http://www.charts.noaa.gov/OnLineViewer>

CRMC Water Use Type

- CRMC Coastal Water Use Types
- 1 Conservation Area
 - 2 Low Intensity Use
 - 3 High Intensity Boating
 - 4 Multi-Purpose Water
 - 5 Commercial & Recreational Harbor
 - 6 Industrial Waterfront and Commercial Navigation

Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000116J

Land Use: The land use adjacent to this sector is predominately residential and vacant land. The Annaquatucket River flows to this cove from Secret Lake and Belleville Pond. This estuary has been noted as an important propagation area for anadromous fish and shellfish. The former Hamilton Textile Mill, which was transformed into 67 apartment units, is located on the western shore of this water body and adjacent to the Annaquatucket River. The northern shore of this sector was subdivided into residential lots at higher densities. Town water and onsite wastewater treatment systems service each unit in this sector.

The barrier beach called the Hummocks is also located along this sector. This coastal feature is owned by the RIDEM as a public access point for fishing and other passive recreation activities. The RIDEM and the Town jointly agreed to a management plan to guide the use of the open space area.

Waters: The Cove is entirely tidal and depth at low tide, except in the center, is often less than one foot.

Moorings: There are no moorings in Bissel Cove.

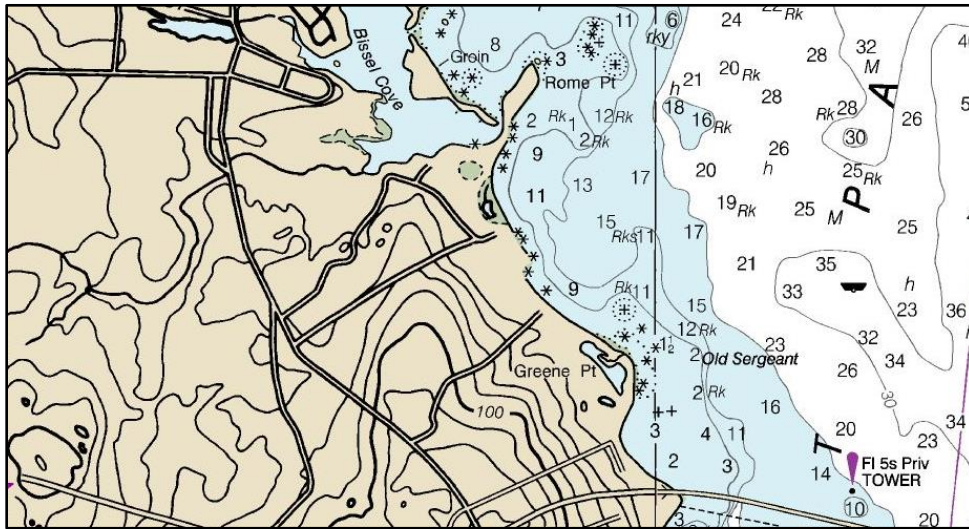
4.19.0 ROME POINT Rome Point to Green Point Assessors Plats 31, 43, 42

RIDEM Water Quality Designation: SA

CRMC Use Type Designation: Type 1.

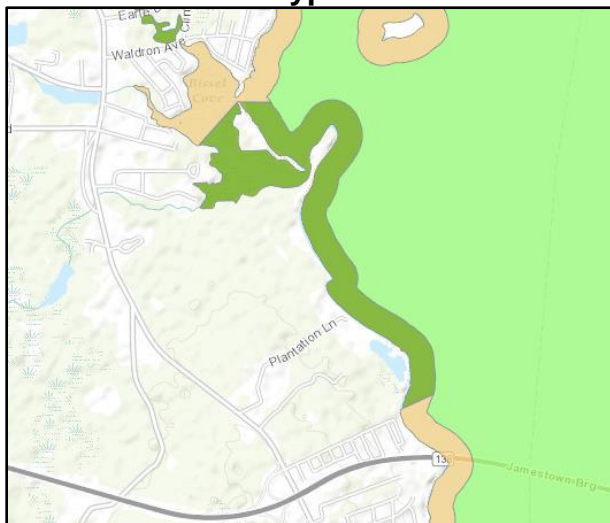
FEMA Flood Zone(s): 44009C 116J AE13 and AE 14 zones, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined; VE15 and VE 16 zones, coastal flood zone with velocity hazard (wave action); base flood elevations determined. A portion is also designated as a coastal barrier resources systems area.

NOAA CHART: #13223



Source: <http://www.charts.noaa.gov/OnLineViewer>

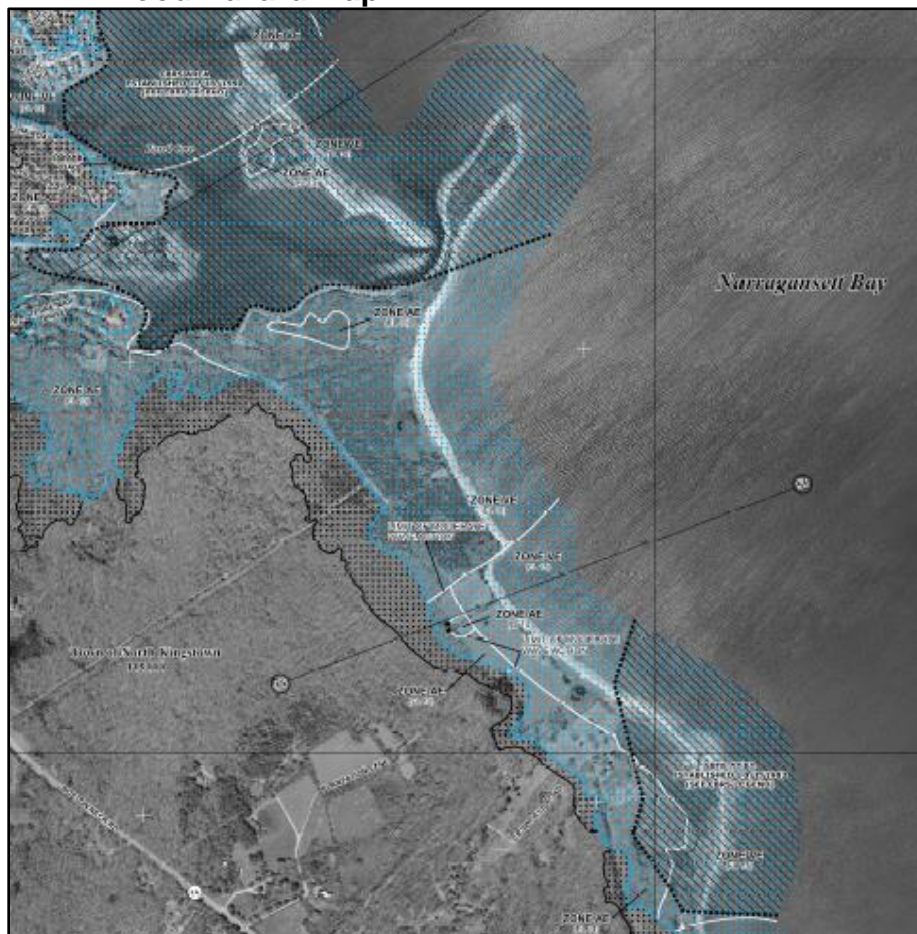
CRMC Water Use Type



- ◇ CRMC Coastal Water Use Types
- 1 Conservation Area
- 2 Low Intensity Use
- 3 High Intensity Boating
- 4 Multi-Purpose Water
- 5 Commercial & Recreational Harbor
- 6 Industrial Waterfront and Commercial Navigation

Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000116J

Land Use: Currently the property along the waterfront of this sector, known as the John H. Chaffee Nature Preserve, provides for passive recreation and is an important wildlife habitat.

Waters: The areas around Rome Point and Greene Point are shallow and very rocky. Water depths range from 1 to 3 feet. From the beach area in between the points, the water drops off rapidly to 9 to 11 feet.

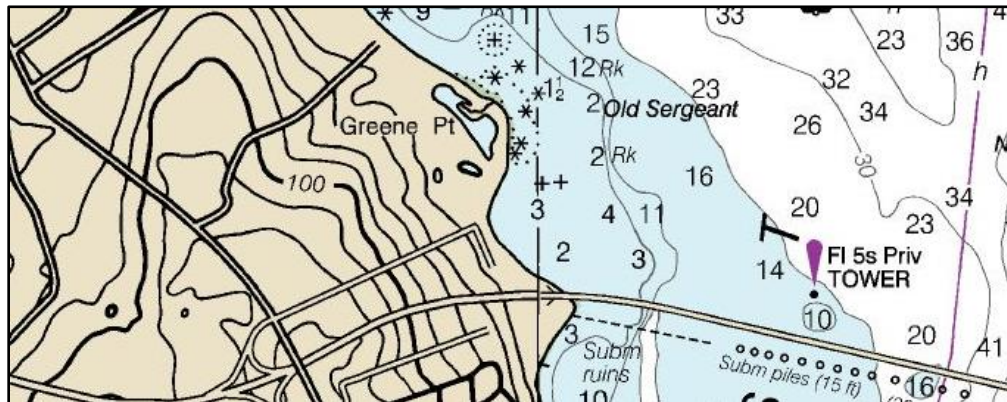
Moorings: During a Harbor Management survey no moorings were identified in this sector. Areas along Rome Point and Green Point have been used as unofficial transient anchorages.

4.20.0 PLUM POINT SHORES Green Point to Plum Beach Point Assessors Plats 41 & 42

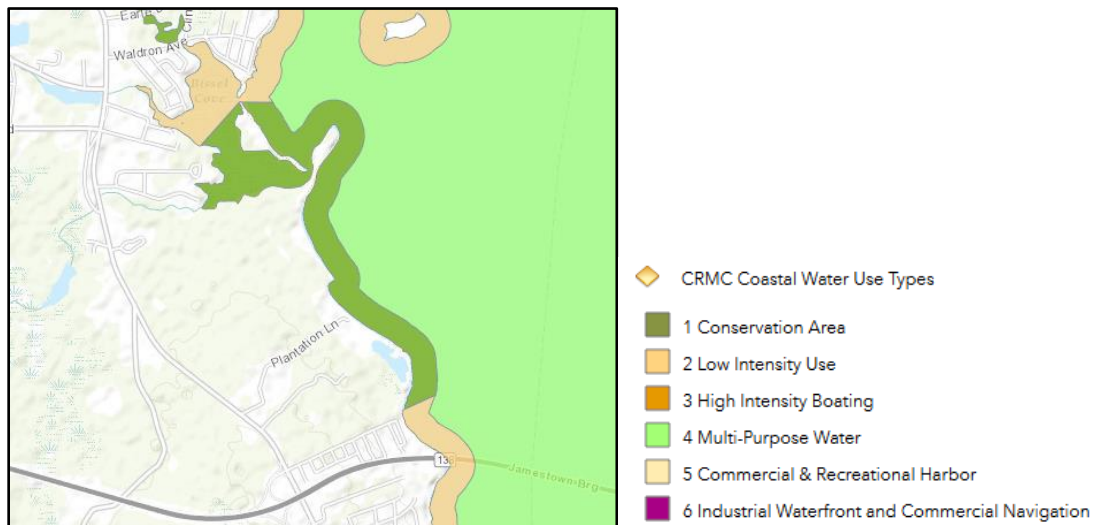
RIDEM Water Quality Designation: SA

CRMC Use Type Designation: Type 2;

FEMA Flood Zone(s): 44009C 116J and 118J - VE17 zones, coastal flood zone with velocity hazard (wave action); base flood elevations determined.

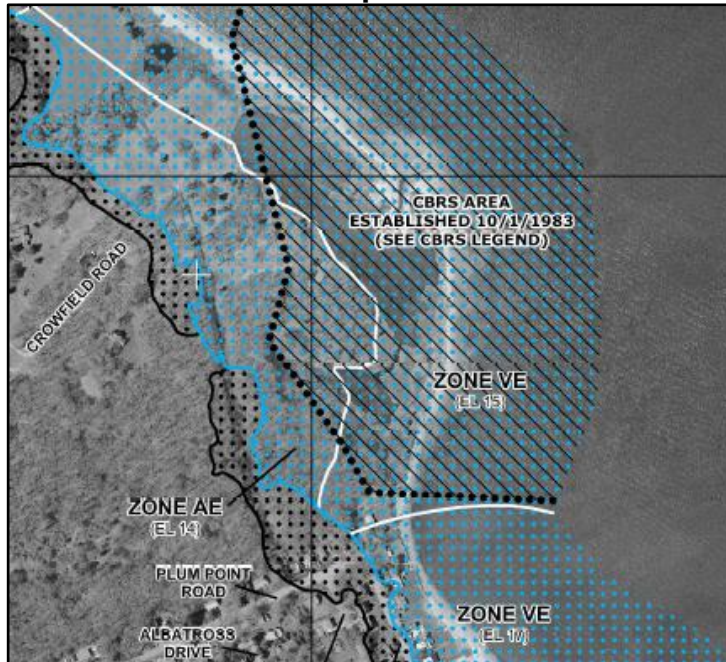
NOAA CHART: # 13223

Source: <http://www.charts.noaa.gov/OnLineViewer>

CRMC Water Use Type

Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000116J

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000118J

Land Use: Currently most of the land along the waterfront of this sector is vacant or has very low density, except the last 1,000 feet of the southern shoreline. A thickly settled plat called Plum Point has been established along the Route 138 corridor to the Jamestown-Verrazzano Bridge and Boston Neck Road. Route 138 and the access road to the Jamestown-Verrazzano Bridge are adjacent to this sector.

Waters: This area is very shallow. Water depths range from 2 to 3 feet out to a distance of 300 to 500 yards.

Moorings: In October 2015, 10 moorings were identified in this sector.

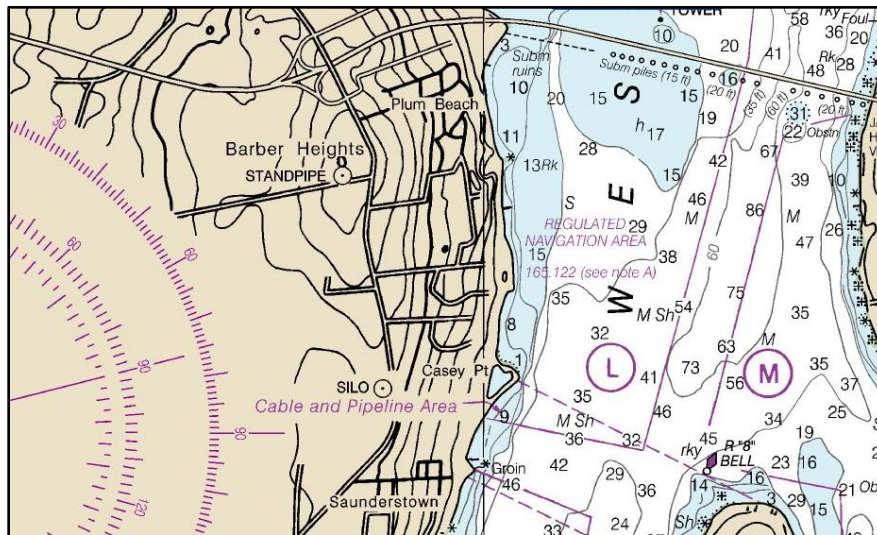
4.21.0 SAUNDERSTOWN (NORTH & SOUTH), PLUM BEACH, south of the Jamestown-Verrazano Bridge to the North Kingstown/ Narragansett Town line.
Assessors Plats 1, 18, 19, 41

RIDEM Water Quality: SA

CRMC Use Type: Type 2

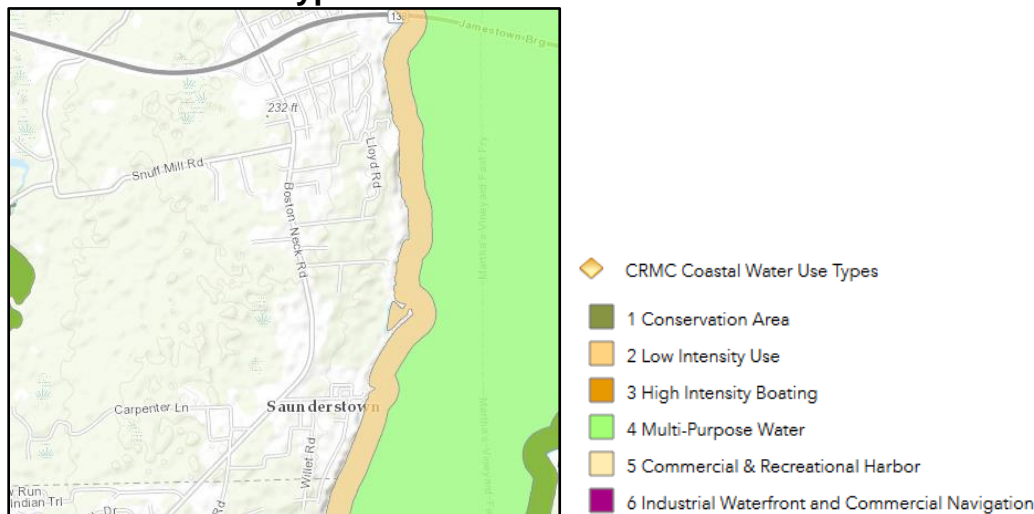
FEMA Flood Zone(s): 44009C 118J - VE16, VE17, VE 19, and VE 22 zones, coastal flood zone with velocity hazard (wave action); base flood elevations determined. A portion is also designated as a coastal barrier resources systems area.

NOAA CHART: #13223



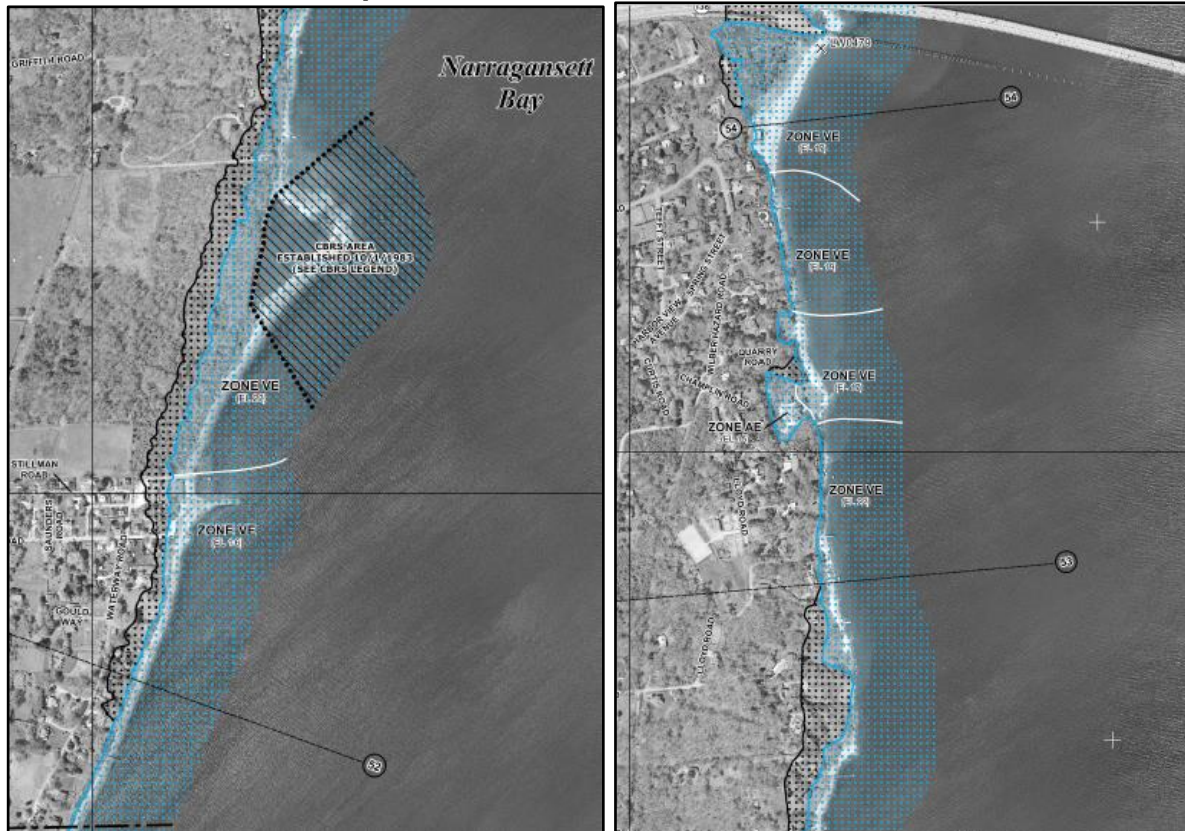
Source: <http://www.charts.noaa.gov/OnLineViewer>

CRMC Water Use Type



Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000118J

Land Use: Development in this sector is primarily low density residential. Public access to the water in this sector is limited to Plum Beach and Ferry Roads. The Plum Beach Club a private bathing and beach organization is located in this sector. Along the mid-section of this sector from Griffith to Ferry roads, there is approximately 2,000 feet of vacant shoreline that is zoned Open Space/Public Land.

Most of these shoreline parcels are part of the historic Casey Farm (owned by the Society for the Preservation of New England Antiquities) intended as preservation land for agricultural, conservation and public purposes. The remaining parcels have been developed with residential homes.

Waters: The water drops off rapidly directly from the beach. Depths range from 10 to 16 feet out to 400 yards from shore.

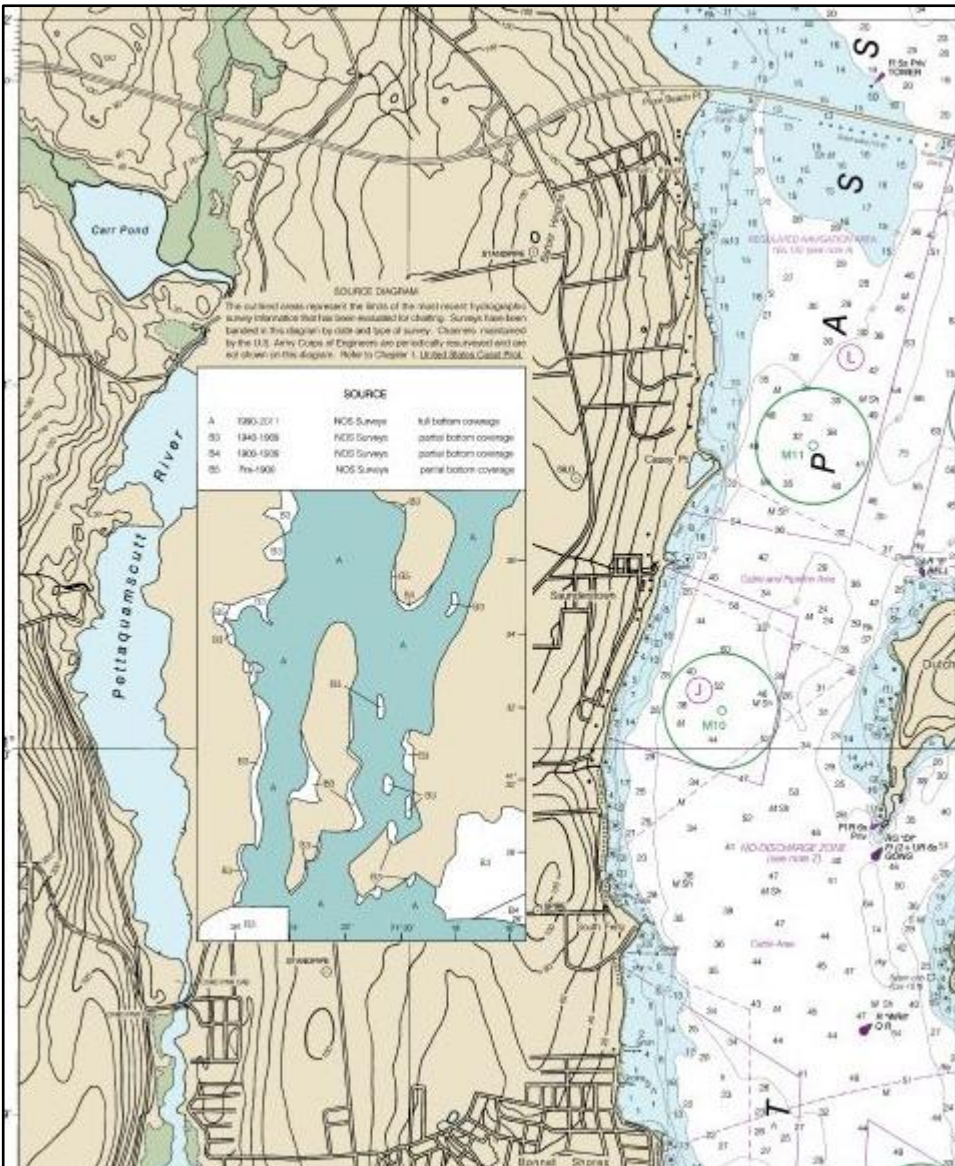
Moorings: There are 28 moorings in vicinity of the Plum Beach Club; 50 moorings for the Saunderstown Yacht Club (Saunderstown North) and 18 private and riparian moorings to the south, to the North Kingstown town line.

4.22.0 PETTAQUAMSCUTT/NARROW RIVER This sector, also known as the Narrow River, is protected under a Special Area Management Plan. This watershed extends from Silver Spring Lake, south to the town boundary, through the towns of Narragansett and South Kingstown to the Narragansett Bay. This environmentally sensitive watershed was placed under the jurisdiction of the Rhode Island Coastal Resource management Council in 1986.

RIDEM Water Quality: The waters from Silver Spring Lake to the Mattatuxett River are designated as Type B; from Pausacaco (Carr) Pond to Gilbert Stuart Stream as Type A; and from the top of Upper Pond through the town line; and to the Narrows in Narragansett as SA waters.

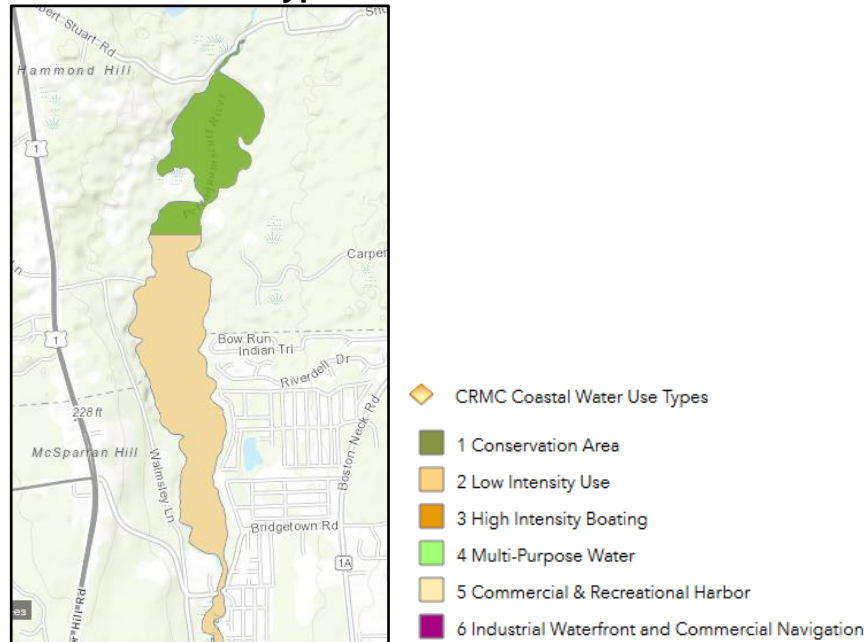
CRMC Use Type: Type 1 from Gilbert Stuart Stream south to the southern boundary of land designated as Open Space/Public Land and owned by Casey Farm; and Type 2 from that point south to the town line.

FEMA Flood Zones: 44009C 111H and 114J - The waters from Silver Spring Lake to the Mattatuxett River are designated as A and AE; from the Mattatuxett River through Pausacaco (Carr) Pond are AE; from the top of Upper Pond through the town line are AE10, area subject to flooding by the 1% annual chance flood (100 year flood), base flood elevations determined.

NOAA CHART: # 13223

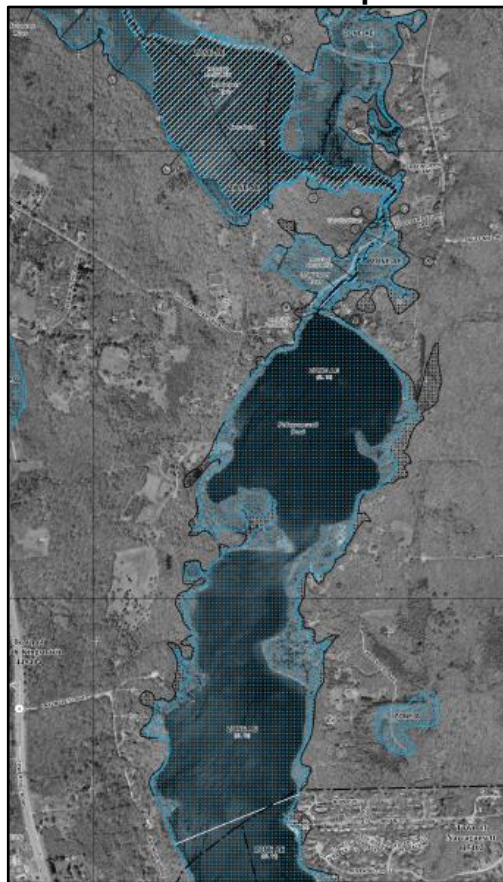
Source: <http://www.charts.noaa.gov/OnLineViewer>

CRMC Water Use Type



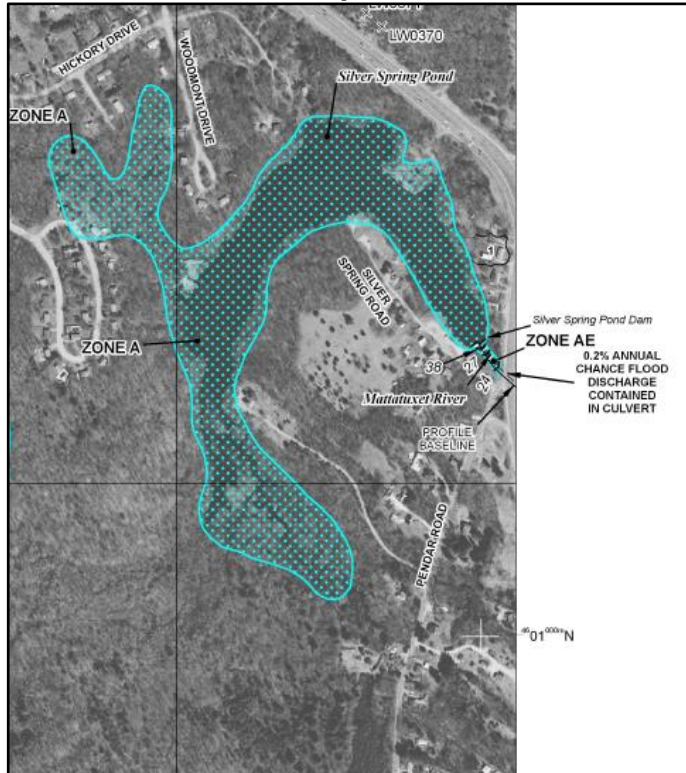
Source: <http://ridemgis.maps.arcgis.com/apps/webappviewer/>

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000118J

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000111J

Land Use: The land along the eastern side of the Narrow River remains largely vacant with the exception of residential lots located in the southernmost portion accessed off of Carpenter Lane. The western side of the river has some residential development off of River Road in the south and off of Gilbert Stuart Road in the northern segment. The central portion is largely vacant. Most of the property in this area is privately held with large lots averaging several acres. The portion of this sector from Silver Spring Lake to Carr pond is within the Pettaquamscutt Groundwater Reservoir and Recharge Districts and where three of the Town's wells are located. Properties within these districts are subject to the Town's Groundwater Protection Ordinances requiring two acres per unit. The entire sector is subject to the Narrow River Special Area Management Plan. Public access to this river is limited.

Moorings: There are no moorings in the North Kingstown section of the Narrow River. The water depths become increasingly shallow (3-5 feet) in the northern section of the river, with the exceptions of sections of the upper and lower ponds where depths plunge to 50 feet. The Town's five acre, undeveloped parcel off of Walmsley Lane provides the only Town public access to this river on the western side. An adjacent landowner granted the University of Rhode Island the use of portion of land for a boathouse for the crew team, otherwise boating is limited primarily to river front landowners. The Nature Conservancy owns a few parcels along the northernmost portion of the river on the eastern side. They have established a parking area off of Boston Neck Road to allow some public access to the river.

4.23.0 BELLVILLE POND/SECRET LAKE These are two water bodies centrally located in Town, off Oak Hill Road.

DEM Water Quality: RIDEM classifies the waters in this sector as B

CRMC Use Type: These water bodies are not coastal therefore not classified by RICRMC. Belleville Pond and Secret Lake are within the Annaquatucket Groundwater Aquifer.

FEMA Flood Zone(s): 44009C 111H and 103H. Secret Lake is designated as an A zone, no base flood elevations determined, Belleville Pond is designated as an AE zone, base flood elevations determined.

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000103H

FEMA Flood Hazard Map



Source: National Flood Insurance Program: Flood Insurance Rate Map # 44009C 0000111H

Land Use: To protect the integrity of the water quality North Kingstown has acquired several hundred acres of the vacant property abutting these water bodies. Adjacent to Belleville Pond the Town has developed its 350 acre holding as a natural resource center for active and passive recreational activities (Ryan Park).

In 1991 the North Kingstown Town Council amended Town Ordinance, Chapter 7 “Harbors and Wharves” to include these water bodies under Town jurisdiction so as to protect the water quality. With an analogous intent the Town Council also amended the ordinance to prohibit the use of fuel-powered motorboats on these water bodies.

TOWN OF NORTH KINGSTOWN

STORM PREPAREDNESS PLAN

FOR WICKFORD HARBOR, ALLEN HARBOR, AND ALL STATE WATERS BORDERING NORTH KINGSTOWN

This Harbor Storm Preparedness Plan has been written in conformance with the guidance detailed in Guidelines for The Development of Municipal Harbor Management Plans, State of Rhode Island, Coastal Resources Management Council.

Recreational Waters Summary

Town waters are popular for residents and non-residents, as well as transient boaters. Area consists of two major harbors (Allen Harbor and Wickford Harbor), and approximately 30 miles of east-facing coastline from Saunderstown to Potowomut River.

Authority

The primary authority for carrying out the responsibilities detailed in this plan is vested in the Harbormaster who will work in cooperation with the Chief of Police and Emergency Management Director (Town Manager). The Town has a separate Hazard Mitigation Plan which will include many of the issues outlined here.

Goals of the Harbor Division Storm Plan

To prevent the loss of life and property by:

- Properly preparing harbor and shoreline areas for storm events;
- Having a completed and enforceable response and recovery plan;
- Working in cooperation with harbor and shoreline users to ensure that a coordinated approach is applied to hazard mitigation;
- Integrating harbor hazard mitigation activities with other, ongoing, local hazard mitigation programs; and
- Identifying and completing long-term actions to redirect, interact with, or avoid the hazard.

Although this plan strives to eliminate all damage from natural disaster, providing that level of protection is clearly impossible. Therefore, the plan seeks to provide the greatest degree of protection from storm events.

Boating Density

There are approximately 790 registered moorings and 737 permanent slips in North Kingstown as of October 2007.

Location	Moorings	Slips	Pilings
Allen Harbor	85	215	0
Little Allen Harbor	0	52	0
Wickford Harbor	260	510	59
West Passage	323	0	0
Total	668	737	59

Risk Assessment Table

Threat	Marine interest	Effect	Result -1	Result -2
Flood/surge	Boaters on moorings and docks	Decreased scope	Dragging	Threaten shoreline homes and businesses
	Marina facility	Flooded facility Docks topping piles	Floating debris Spills of hazardous material Freed docks and boats	Threaten surrounding
	Private residences	Flooded property Docks topping piles	Freed docks and boats	
Wind	Boaters on moorings	Windage	Dragging or pennant structural damage	

Strategies for Preparedness, Response and Recovery

Town of North Kingstown - The Harbormaster Division, in conjunction with the United States Coast Guard, will coordinate all harbor activities related to preparation, response and recovery. This will be done in coordination with the emergency management officer and other department heads.

Preparedness - The Town of North Kingstown, through its Harbormaster Division, in conjunction with the United States Coast Guard, will activate the following preparedness, response and recovery plan 72 hours prior to a severe storm event or as necessary for unpredictable events.

LEVEL 3 72 HOURS PRIOR TO STORM

1. If hurricane, begin tracking and monitoring hourly weather reports.
2. Manage harbor traffic as it increases during marina/boater preparation activities.
3. Ensure all patrol vessel fuel tanks are full and reserve batteries are charged.
4. Inventory and update first aid equipment and other on board emergency tools.
5. Maintain radio watch.
6. Alert local port community, encouraging boat owners to seek safe refuge, remove boats from water, or take action to minimize damaging effects.
7. Alert local marina, marine interests, and holders of mooring permits, to impending emergency.
8. Keep U.S. Coast Guard Marine Safety Office (MSO), Providence apprised of hazardous conditions in harbors.

LEVEL 2 48 HOURS PRIOR TO STORM

1. Continue to perform activities in level 3 as required.
2. Contact those Town mooring holders who are not complying with their preparedness plan. Plans are prepared by mooring holders in accordance with the guidelines provided herein and submitted with mooring applications to the Harbor Division.
3. Finalize emergency work schedule with Assistant Harbormasters.
4. Confirm arrangements to have Harbormaster vessel(s) hauled and stored.
5. Prepare Town properties, with Department of Public Works, including:
 - securing all items such as trash bins, benches, etc. that are located in shoreline areas
 - completing necessary precautions for harbormaster dock area.

-
6. Establish liaison with police, public works departments and Emergency Management Director.
 7. Alert maritime community to unsafe conditions in the harbor as needed via VHF radio and Harbor Division vessels.
 8. Communicate with Allen Harbor Marina crew regarding specific needs they may have.
 9. Curtail regular business activities.
 10. Begin regular patrols of Wickford Harbor to ensure that necessary individual precautions are being taken.
 11. Advise MSO Providence of the status of emergency preparedness in progress.
 12. Alert local harbor community to any impending closure of anchorages or waterways.
 13. Encourage local marinas to suspend fueling operations and to secure fueling piers sufficiently to minimize pollution threat.

LEVEL 1**24 HOURS PRIOR TO STORM**

1. Continue to perform pertinent level 2 activities.
2. Undertake final patrol of the harbor:
3. Log information on transient boats.
4. Arrange for safe haven for all transient boaters in need of shelter. Coordinate with Police Department. Harbor Division will NOT assist during the storm event.
5. Fuel Harbormaster vessel(s)
6. Haul and store Harbormaster vessels – NO LATER THAN 12 HOURS BEFORE STORM!!!!
7. Complete shoreline survey and final harbor check from shore.
8. Alert harbor community and MSO to any unsafe conditions in harbor.

Response

The Harbor Division will NOT respond to on-water emergencies during the storm event. All requests for assistance during the storm will be forwarded to Coast Guard Station Castle Hill. This policy will remain in force unless revoked by the Emergency Management Director (Town Manager).

The Harbormaster will remain on-site in the police department or other established command center to address any harbor-related issue. All vessels will be launched to allow the Harbormaster to begin operations immediately at the conclusion of the storm.

Recovery

Immediately after the event has terminated, the Town has three recovery priorities:

- | | |
|-------------|---|
| Priority 1. | Reestablish the Harbors Division as an operational unit in order to facilitate the second and third priorities. |
| Priority 2. | Take the necessary immediate action to minimize additional risk to life and property. |
| Priority 3. | Reopen the harbor for recovery activity. |

To achieve these priorities, the Harbormaster will take the following sequential actions:

IMMEDIATE FOR 24 HOURS AFTER STORM

1. Assess readiness of the Harbor Division; correct deficiencies, reestablish radio communications.
2. Complete rapid appraisal of damage.
3. Provide damage assessment information to Town's public information center and to MSO Providence.
4. Be aware that the Harbor Division is not in the business of marine salvage. Harbormaster and assistants will not tow, remove vessels from the beach, or otherwise provide salvage services except in extreme and unusual circumstances.
5. Institute security watches as necessary.
6. Alert maritime community to unsafe conditions in the harbor.
7. Track beginning time and resource allocation of Harbors Division for possible state and federal reimbursement.

MID-TERM 1 TO 14 DAYS AFTER STORM

1. Complete comprehensive inventory of damage using photographs and video if possible.
2. Notify appropriate parties regarding damage (i.e., mooring holders).
3. Provide list of identified and unidentified boats to MSO Providence and DEM Enforcement.
4. Contact local harbor and shoreline users to assess their situation and identify requests for assistance.

5. Provide MSO Providence with a daily harbor status.
6. Begin to remove large pieces of floating debris from the harbor and bring to designated shorefront collection area.
7. Assist Town and state agencies with damage assessments and emergency permitting process.

LONG-TERM**14 TO 90 DAYS AFTER STORM**

1. Analyze effects of storm on the harbor. Complete summary report for the Town Manager within 30 days of storm event.
2. Review mitigation list and select actions that could be implemented during the recovery phase.
3. Conduct an evaluation meeting for harbor and shoreline users to identify problems not properly addressed by this plan.
4. Complete a survey of boat damage.
5. Update hazard mitigation plan and identify new mitigation opportunities.
6. Assist in emergency situations as appropriate.
7. Transfer collected harbor debris from collection site to Town disposal area.

HARBOR AND SHORELINE USERS**Marinas**

All marinas located in North Kingstown Waters must submit a Storm Plan to address issues of community safety. A suggested plan is included here. Individual marinas are encouraged to expand upon this plan as it relates to their specific situations.

(Please see suggested Marina Storm Plan at end of this document)

Boaters

Boat owners who hold a Town mooring permit must submit an individual preparedness plan. This will be accomplished by attachment of a preparedness plan to the annual mooring renewal forms. For a mooring permit to be approved, an individual preparedness plan must be attached to the mooring application. Boaters will be expected to comply, to the best of their ability, with the plan they have prepared. The boat owner should advise the Harbormaster of any significant changes to the plan made during the boating season.

Boat owners are encouraged not to stay aboard during major storm events. The Town's standard operating procedure is NOT to respond to on-the-water requests for assistance during a major storm event. Such requests for assistance will be forwarded to U.S. Coast Guard Station Castle Hill.

(Please see suggested Individual Storm Plan at end of this document)

Transients

Vessels not usually moored in the harbor but seeking safe refuge will be allowed to moor in the federal anchorage areas. Transient vessels will not be allowed to tie to a mooring unless authorized by the Harbormaster. Transient vessels seeking shelter will provide the harbormaster with:

- name of owner and captain, if different
- home port
- registration/documentation numbers
- length, draft, and type (power/sail)

-
- * number of persons aboard
 - * address and phone where owner can be contacted

Transients will be given a high priority for personal safety during the storm event. Transportation to and from Town designated shelters will be arranged as necessary.

Commercial Vessels and Ferries

As deemed necessary by the harbormaster, local commercial vessels and ferries will submit individual plans to the harbormaster prepared in accordance with their appropriate company guidelines.

Storm Preparedness Plan

Marina Storm Plan

Name of Marina: _____

1. GENERAL INFORMATION

Primary contact

Name _____

Telephone _____

Cell Phone _____

Secondary Contact

Name _____

Telephone _____

Cell Phone _____

VHF channel

2. PREPARATION AND RECOVERY ACTIVITIES

Preparation:

Phase Three (Alert)

72- 48 Hours Prior to Hurricane's ETA

- Notify all personnel that the facility is on a hurricane alert. All personnel will commence preparations for putting the Severe Weather Preparedness Plan in action.
- Begin facility protection preparations by policing all yard, marina, and dock areas to stow away or secure loose equipment and items. Store in covered or sheltered areas.
- Secure all flammable and hazardous materials, such as waste oil receptacle.
- Commence plans for securing remaining in-water vessels. Ensure that all vessel removal operations are well underway. The facility has established a list of vessels to be hauled from the water and secured. Those vessels that remain in the water will be secured with extra lines and fenders.
- Top off vehicles with fuel as necessary, in preparation for the securing of all fueling operations and equipment. (We expect that loss of electrical power during a hurricane

may disrupt fuel supplies after the storm)

- Check and secure any loose siding or roofing on work sheds and business buildings.
- Take down large signs, antennas, or other removable items subject to wind damage.
- Commence facility protection precautions. Install storm shutters or protect windows with masking tape to reduce the possibility of flying glass.
- Check First Aid and other emergency supplies and restock.
- Monitor storm's progress and maintain contact with Harbormaster

Phase Two (Watch)

48 - 24 Hours Prior to ETA

- Notify all personnel that facility is on hurricane watch.
- Continue to monitor storm's progress and maintain contact with the Harbormaster.
- Complete securing operations in lowland locations. All dock structures, field buildings: and offices will be secured.
- Assess all electrical supplies to areas that may become flooded. Plan for shut-off at final evacuation.
- Secure all fuel supply tanks and lines at the shoreside installation.
- Disconnect and protect all electric motors, pumps, and like equipment at or below ground level, or place in a safe location.
- Secure waterside sewage pump-outs. Turn off sewage grinder pump breakers at last call to evacuate marina.
- Turn off fresh water supplied from municipal or other water lines at the meter.
- Check that all emergency supplies are readily available, such as first aid kits, fire protection equipment, sufficient stores of provisions, including bottled fresh water, fuel for emergency generators, battery-powered lighting, flashlights or lanterns, battery-powered radios, VHF units.
- Notify Harbormaster of any transient boaters requiring shelter during the storm event.

Phase One (Warning)

24 Hours Prior to ETA

In these hours prior to the projected arrival of the hurricane, the "hurricane warning" advisory will have been issued and it is highly likely that the hurricane will make landfall or pass near the marina

facility. Continue or complete the following activities:

- Notify all personnel that the facility is on hurricane warning.
- Continue to monitor storm's progress.
- With all vessel protection and securing operations completed, make a final check of doubled mooring lines, tied off with sufficient slack, and fender boards and/or other protective equipment in place.
- Secure as necessary any remaining operational facility buildings.
- Secure power to marina, if evacuated.
- Release employees who are not manning facilities during the storm with sufficient time to seek safe location prior to the storm. Give instructions for reporting back to work after the storm at that time.
- Notify Harbormaster of any transient boaters requiring shelter during the storm event.

Recovery

The following will be considered when returning to the area:

- We understand that extensive damage may have been caused by the hurricane. While checking the condition of the marina facility is main concern, there may be limitations to access to the facility or at the facility itself. An inspection of the facility will be made as soon as practicable to determine conditions, damages, and security of premises.
- Post storm security will be provided as a priority to protect against vandalism.

Personnel returning to the facility and beginning the preliminary damage assessment are to be aware of the following:

- Wear boots and use extreme caution.
- Be aware of possible downed electrical wires, which should be considered "hot" and avoided until the power company or facility electrical maintenance personnel services the wires.
- Check facility fueling docks and tanks for leaking gasoline or diesel fuel, where applicable. File a report with your local harbormaster if a leak is found.
- Do not start electrical equipment that has been submerged in water until it has been checked and repaired as necessary.
- Report immediately, broken sewer or water mains to the harbormaster.
- Check building, shop, and dock electrical wiring completely prior to turning on the main power switch.

Individual Storm Preparedness Plan

Name: _____

Mooring #: _____

Federal and State regulations require that mooring permit holders submit a "Storm Plan" to the Town along with their annual mooring permit application. We have listed several of the most commonly accepted steps to take prior to a storm event. When a hurricane warning is issued, you will be expected to prepare your vessel, to the best of your ability, to minimize loss to your property and property of others.-

Not all dangerous storms are hurricanes. It is important to be "storm ready" throughout all the season.

Recommended Safety Precautions

- Double your lines and make sure chafe gear is in place where lines pass through fairleads and chocks, or over the side of the vessel. Chafing is the most common reason boats come loose in a storm.
- Put ample fendering on both sides of your boat.
- Reduce windage by removing sail covers and sails, especially roller furling sails. Also remove the boom, dodgers and awnings and any other items on deck that could come loose. If you cannot remove them, it is imperative that they be as tightly secured as possible. Secure all loose material below deck.
- Make sure all ports are secured and that all funnels are removed and capped
- Tightly secure the helm amidships.
- Remove all electronics and ship's documents to shore.
- Remove any protruding objects such as anchors in bow rollers that could catch on another vessel.
- Shut off fuel and water systems and close all seacocks.

Do NOT attempt to ride out a storm on board. The Harbor Division will not respond for service during the storm. All calls will be referred to the US CG.

Additional plans or
comments:

Please submit the name of an alternate captain who can be reached in your absence:

Alternate Captain Name: _____

Telephone: _____

I have read the above safety recommendations. I agree to prepare my vessel in advance of a storm, to the best of my ability, to minimize risk to my own vessel and to the property of others.

Signed: _____ Date: _____

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