

MYSTIC HARBOR MANAGEMENT PLAN

(MYSTIC RIVER - EASTERN SECTOR)

(REVISION 1.0 OF 1995 PLAN)

MAY 2023

MYSTIC HARBOR MANAGEMENT
COMMISSION

TOWN OF STONINGTON,
CONNECTICUT

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I. INTRODUCTION

Effective October 1, 1984, the State of Connecticut enacted pioneering legislation that authorizes municipalities having navigable waters within their boundaries to establish harbor management plans. The Act was drafted in response to increased pressure and competing demands for harbor use and development occurring across the State and region. Although problems and opportunities tend to be harbor-specific, common issues may include overcrowding, encroachments into federal navigation projects (e.g., channels and anchorages), transient boats, boating facilities, preservation of coastal resources and water-dependent facilities, and a need for more local participation in the regulation of harbor uses.

The jurisdictional area of the Mystic Harbor Management Commission is the water area seaward from the Mean High Water (MHW) line on the Stonington shore and otherwise contained within the following bounds: Starting east of Enders Island at N 41°19.37' x W 71°57.42', the southerly boundary is a straight line extending southwesterly from this point and tangent to the northern edge of Ram Island to its intersection with the Groton-Stonington Town Line at longitude W 71°58.79'. Continuing from this intersection in a northerly direction, the westerly boundary follows the Town Line, which becomes serpentine as it approaches the Federal channel, until it intersects the eastern shore of the Mystic River in Old Mystic. The boundary continues southward from this intersection, following the Stonington shore of the Mystic River until it reaches US Route 1 at the bascule bridge. The boundary turns easterly at this point following the southerly edge of Rt 1 until its intersection with Masons Island Road. The boundary continues in a southerly direction from this intersection, following Masons Island Road, until it reaches the center of Riding Way bridge at the entrance to Masons Island. The boundary then continues in a southerly direction, along the eastern edge (longitude W 71°57.63') of the Special Anchorage area to the east of Masons Island. At the southeastern corner (N 41°19.70' x W 71°57.63') of the Special Anchorage area, the boundary continues in a southeasterly direction to the starting point at N 41°19.37' x W 71°57.63'. Note that the Commission's jurisdiction does not include territory landward of MHW.

Conceptually, a harbor management plan may be understood as a “wet side” application of more traditional land use planning theories and techniques. Such a plan becomes, in effect, a blueprint for the use and management of harbor water, including the land under the water, under its jurisdiction. In Connecticut, the need for “wet side” management

became apparent in several municipalities developing municipal coastal programs under the auspices of the state Coastal Management Program. While municipal coastal programs identify harbor issues and put forth recommendations, their primary focus is in “land side”. So, regulatory control mechanisms for coastal management, such as zoning, generally stop at the landward side of the mean high water mark.

The Town of Stonington, acting through its legislative body (the Town Meeting), has taken advantage of the enabling harbor management program by enacting an ordinance on the 17th day of October, 1989. The jurisdictional boundaries of the Mystic Harbor management area were later modified by an amendment to the original ordinance, which was enacted by the Town Meeting in December, 1989. (A copy of the amended ordinance appears in Appendix C to this Plan.) The jurisdictional boundaries of Stonington’s Mystic Harbor Management commission are shown in Figure 1. The waters to the west are subject to the Groton Harbor Plan (Noank sector), which was legally adopted in 1992.

The original Harbor Management Plan for the Mystic River estuary within the Town of Stonington was adopted in 1995 and hereby updated to reflect changes in the Harbor since then, is intended to be executed in accordance with the provisions of the Connecticut Harbor Management Act (Sections 22a-113k through 22a-113t of the Connecticut General Statutes). Once approved by the Department of Energy and Environmental Protection (DEEP) and the Department of Transportation (DOT) and adopted by the legislative body of a municipality, a harbor management plan provides a comprehensive and coordinated approach at the municipal level. Further, by developing such a voluntary harbor management Plan, a municipality is assured that local harbor priorities will be considered in the federal and state permit decision-making process.

II. MYSTIC HARBOR – AN OVERVIEW

From its earliest settlement in the mid-1600’s, Mystic Harbor and its environs have seen development related to the sea. Numerous publications and historical documents have detailed the construction and activities of various ships and boats, including the first American ironclad warship, clipper ships, steamers, and fishing vessels. During the peak shipbuilding years in the mid 1800’s, Mystic produced more ships than any other shipbuilding area of comparable size in America, being second only to Boston in the tonnage produced. Yachts and smaller vessels, as well, have been built in numbers. This

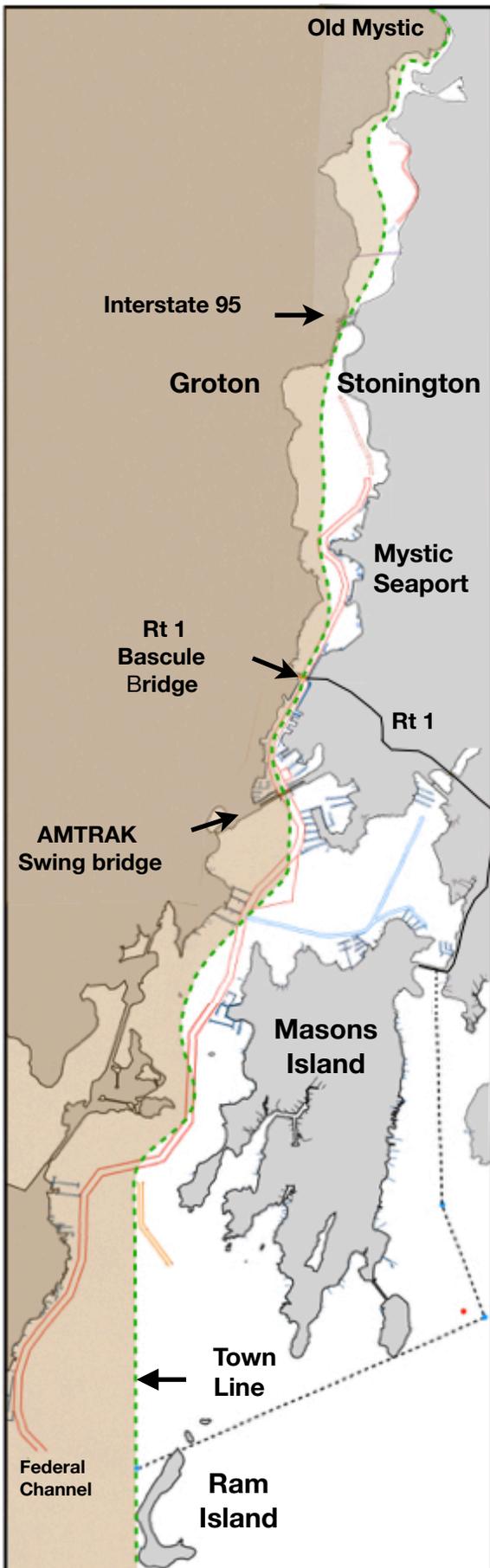


Figure 1. Mystic Harbor Management Jurisdiction

The jurisdictional area of the Mystic Harbor Management Commission is the water area seaward from the Mean High Water (MHW) line on the Stonington shore and otherwise contained within the following bounds: Starting east of Enders Island at $N 41^{\circ}19.37' x W 71^{\circ}57.42'$, the southerly boundary is a straight line extending southwesterly from this point and tangent to the northern edge of Ram Island to its intersection with the Groton-Stonington Town Line at longitude $W 71^{\circ}58.79'$. Continuing from this intersection in a northerly direction, the westerly boundary follows the Town Line, which becomes serpentine as it approaches the Federal channel, until it intersects the eastern shore of the Mystic River in Old Mystic. The boundary continues southward from this intersection, following the Stonington shore of the Mystic River until it reaches US Route 1 at the bascule bridge. The boundary turns easterly at this point following the southerly edge of Rt 1 until its intersection with Masons Island Road. The boundary continues in a southerly direction from this intersection, following Masons Island Road, until it reaches the center of Riding Way bridge at the entrance to Masons Island. The boundary then continues in a southerly direction, along the eastern edge (longitude $W 71^{\circ}57.63'$) of the Special Anchorage area to the east of Masons Island. At the southeastern corner ($N 41^{\circ}19.70' x W 71^{\circ}57.63'$) of the Special Anchorage area, the boundary continues in a southeasterly direction to the starting point at $N 41^{\circ}19.37' x W 71^{\circ}57.63'$. (N.B. this point is where buoy N-6 was located in 1995).

maritime shipbuilding and ship fitting tradition is memorialized at Mystic Seaport Museum, where significant shipbuilding skills are retained and exercised during the restoration of historic vessels, such as the Charles W Morgan and the Mayflower II, and the construction of the Amistad replica. While large ships are no longer built commercially, smaller boats are occasionally built along the shores of Mystic Harbor. The fitting out of both recreational and commercial boats, along with repairs, continues to this day at the numerous commercial docks and marinas along both sides of the Mystic River estuary.

Commercial fishing activities in and out of Mystic Harbor have been notable over much of Mystic's history. Since 1900, however, there has been a steady contraction of commercial fishing activities, which used to include a significant fin fishery and shellfishing, to the present, where the only commercial fishing activities include a near-dormant lobster fishery, growing oyster farming businesses, and fishing charters.

Current development and commercial uses are related more to pleasure craft and tourism. Since 1990 there has been substantial expansion of marina operations and related activities in the Harbor. Tourism-related activities have increased during this period, with the expansion of excursion boat operations and the significant increase in kayak and paddle board rentals in the congested area by the Rt 1 drawbridge. Mystic Seaport Museum, billed as America's premier maritime museum relating to the age of sail, continues to evolve, now hosting traveling exhibitions of international significance, while retaining its position as one of Connecticut's major tourist attractions.

III. EXISTING CONDITIONS

The Mystic River estuary is within a developed area having small businesses, residential neighborhoods, and major tourist attractions (Mystic Seaport Museum and Mystic Aquarium) in the immediate area. Large industrial complexes, naval facilities, academic institutions, large gambling casinos, and additional tourist attractions are found in the surrounding area. The nearby industry and Navy-related activities provide substantial direct and indirect employment for residents of the Mystic River valley. For the sake of discussion, the Mystic Harbor Management Commission's jurisdiction is partitioned into Upper, Mystic Seaport, Bridges, Middle, and Southern sections. Each of these sections has its own unique characteristics related to both upland and water uses.

III A. UPPER SECTION

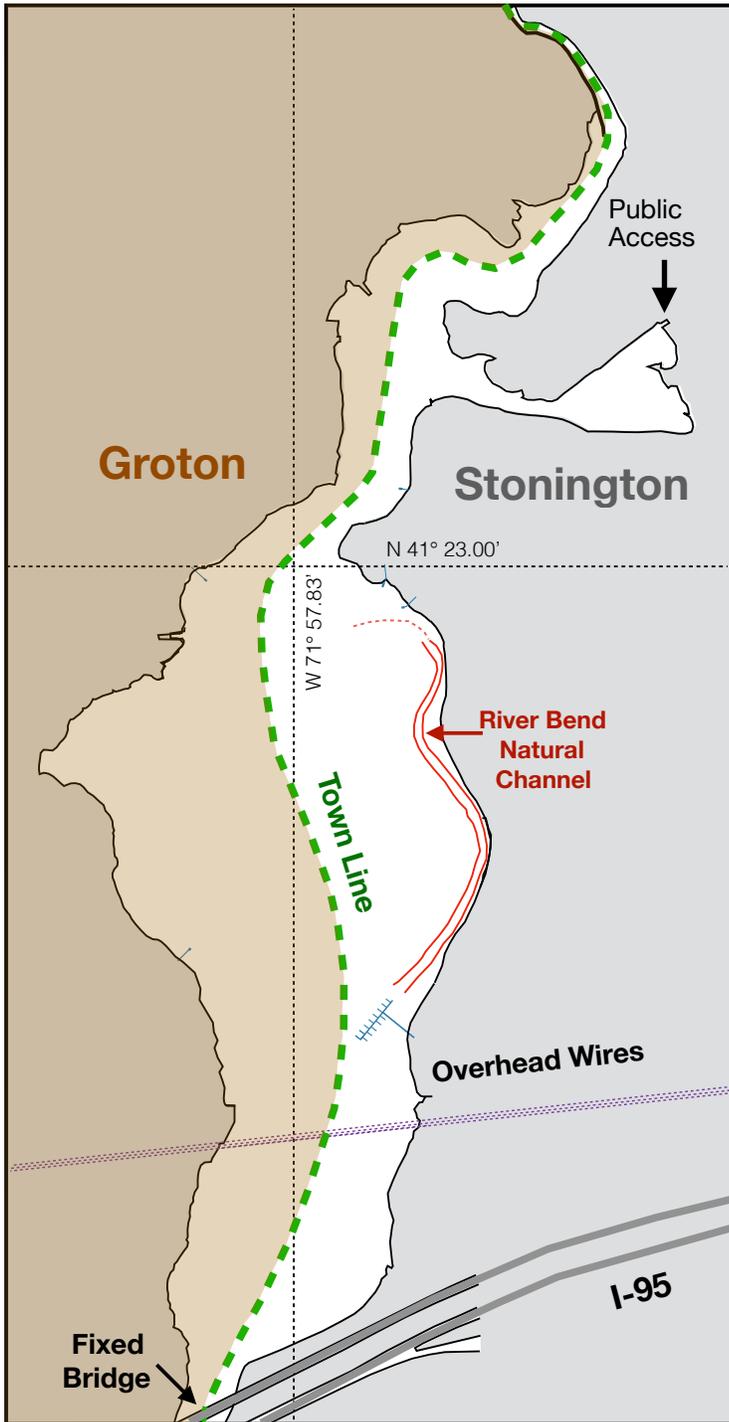


Figure 2. Upper Section of the Mystic Harbor Management Commission Jurisdiction.

This section includes all of the Mystic River north of Interstate 95 that is within the Town of Stonington. A narrow, serpentine, natural channel that hugs the Stonington shore by the Riverbend neighborhood is indicated by the red lines.

The upper reaches of the Mystic River, from the Interstate 95 bridge northward to the end of navigable waters at Old Mystic, and within the Town of Stonington, are designated as the “Upper Section”, as illustrated in figure 2. The land in the Upper Section is mostly in residential use, with limited commercial activity at the Northern end and significant

commercial activity in the immediate vicinity of Exit 90 on Interstate 95. Small docks and limited private moorings are found to a limited extent in the residential areas, along with a larger dock at the Whitehall Landing condominiums.

At the southern end of the upper section, is the I-95 highway bridge, with a clear channel width of 100 ft and a fixed vertical clearance of 25 ft above Mean High Water (MHW). Approximately 1200 ft north of the I-95 bridge are overhead power cables with an authorized clearance of 25 ft above MHW. Water depth is variable, but shallow, averaging perhaps 2 ft at Mean Low Water (MLW). Historically, approximately 3 ft depth is carried north from the I-95 bridge, past the condominium docks and along the Riverbend natural channel that hugs the eastern bank. The Riverbend natural channel is variable in width, as narrow as 25 ft, but typically 35 ft wide and nominally 3 ft deep, based on a 2015 hydrographic survey. This natural channel is not normally marked, and is difficult to navigate without local knowledge. It has been a subject of concern regarding residential dock encroachment. In years past, the Old Mystic Marina, formerly located in the triangular embayment shown in figure 2, marked the natural channel from the Marina south to the southern end of the Elmgrove Cemetery. As of this writing, there are no authorized private markers in the Upper Section.

The Upper Section of the Mystic River estuary is very protected from storms. However, the limited water depth and an unmarked, natural channel that is narrow and sinuous relegate the waters outside the channel primarily to small craft, such as canoes and kayaks, of car top scale. Larger boats as far north as the former marina continue to find their way to and from the southern reaches of the Mystic River, although most of the larger boats (typically less than 30 ft overall) are found in the Riverbend area and at the condominium docks.

III B. MYSTIC SEAPORT SECTION

The water area within the Town of Stonington between the Rt 1 bascule bridge and the I-95 bridge, centered on the Mystic Seaport Museum, is designated as the “Mystic Seaport Section”, as illustrated in figure 3.

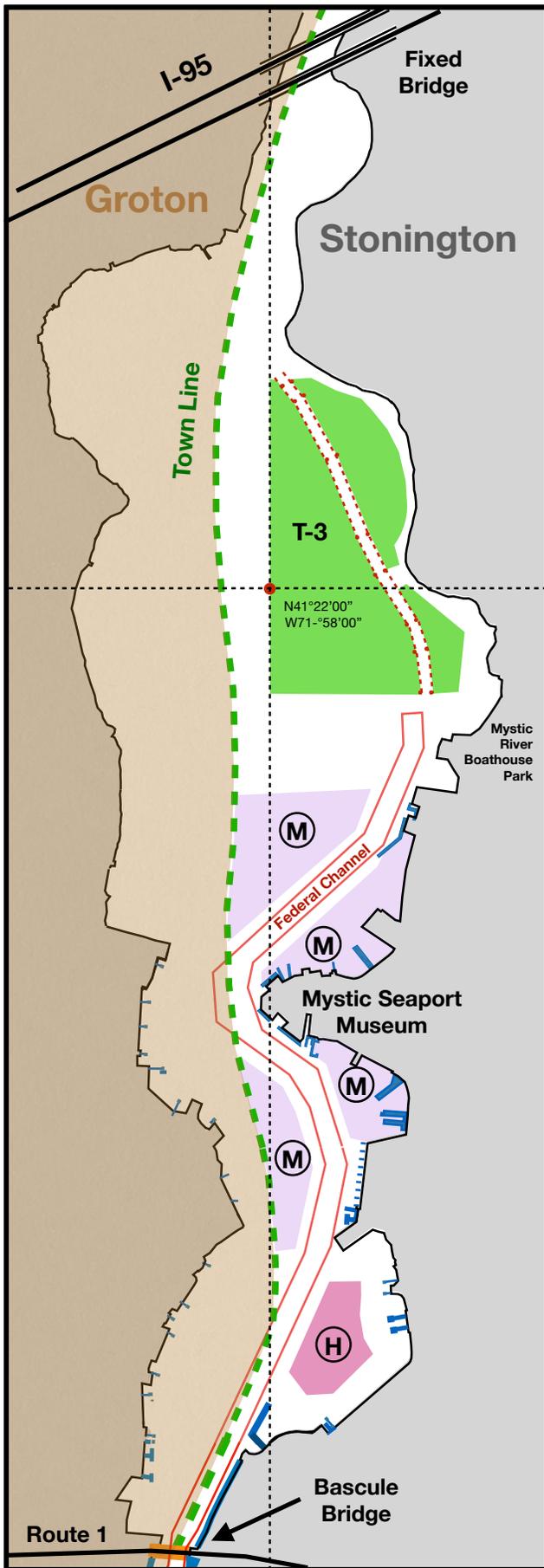


Figure 3. Mystic Seaport section of the Mystic Harbor Management Commission Jurisdiction..

This section includes all of the Mystic River between the Interstate 95 fixed bridge and the Rt 1 bascule bridge that is within the Town of Stonington. This section includes transient anchorage T-3 (green) north of Mystic Seaport, dedicated mooring areas M (purple) for Mystic Seaport, and mooring area H (magenta) in the Bay St area.

The Federal channel, ending just north of Mystic Seaport at green buoy 53, is outlined by solid red lines. Transient anchorage T-3 is split by a natural channel, indicated by dashed red lines.

The Town line is shown by the dashed green line.

The land on the Stonington side of this section is dominated by the Mystic Seaport Museum and the Elm Grove Cemetery, but there is a residential area extending from the southern boundary of the Mystic Seaport Museum, becoming primarily commercial near the Rt 1 bascule bridge.

The Federal Channel in this section, between the Rt 1 bascule bridge and the Mystic River Boathouse Park at the northern end of Mystic Seaport and indicated by solid red lines, was dredged in 2014 to a control depth of 12 ft for a width of 100 ft.

North of the Federal channel is a designated channel extending approximately 1900 ft from the northern end of the Federal channel to halfway along the Elm Grove Cemetery. This designated channel, indicated by a dashed red line, has a nominal minimum depth of 6 ft for a nominal 50 ft width, based on a 2016 hydrographic survey. The Mystic Harbor Management Commission has identified 16 future piling locations to mark this channel, which splits the shallow T-3 transient anchorage, which is indicated by a green field. Note that the T-3 anchorage is very shallow, with depths of less than 2 1/2 ft over much of its extent, although a very limited area may provide for boats drawing 3 to 5 ft. This anchorage calls for due diligence by boaters in sounding the depths and avoiding interference with the designated channel, once it is marked.

The four-part mooring area M, separated from the Federal channel by a 50 ft buffer, provides limited space for Mystic Seaport floating exhibits and livery craft.

Mooring area H is for local recreational boats, with shore access via private property.

The “Mystic Seaport Section” is extensively used by Mystic Seaport for sailing programs, by tour boat operators, by the Stonington High School rowing crew, and by all manner of small vessels, such as paddle boards, kayaks, canoes, and powered craft.

III C. BRIDGES SECTION

The area between the Rt 1 bascule bridge and the AMTRAK swing bridge is designated the “Bridges Section”, as illustrated in Figure 4., which also includes the 2 marinas to the southeast of the AMTRAK bridge for context. The Federal channel, designated by the solid red line, between the bridges was dredged to a control depth of 15 ft in 2014 for a width of 100 ft and includes a 150 ft by 200 ft turning basin dredged to a control depth of

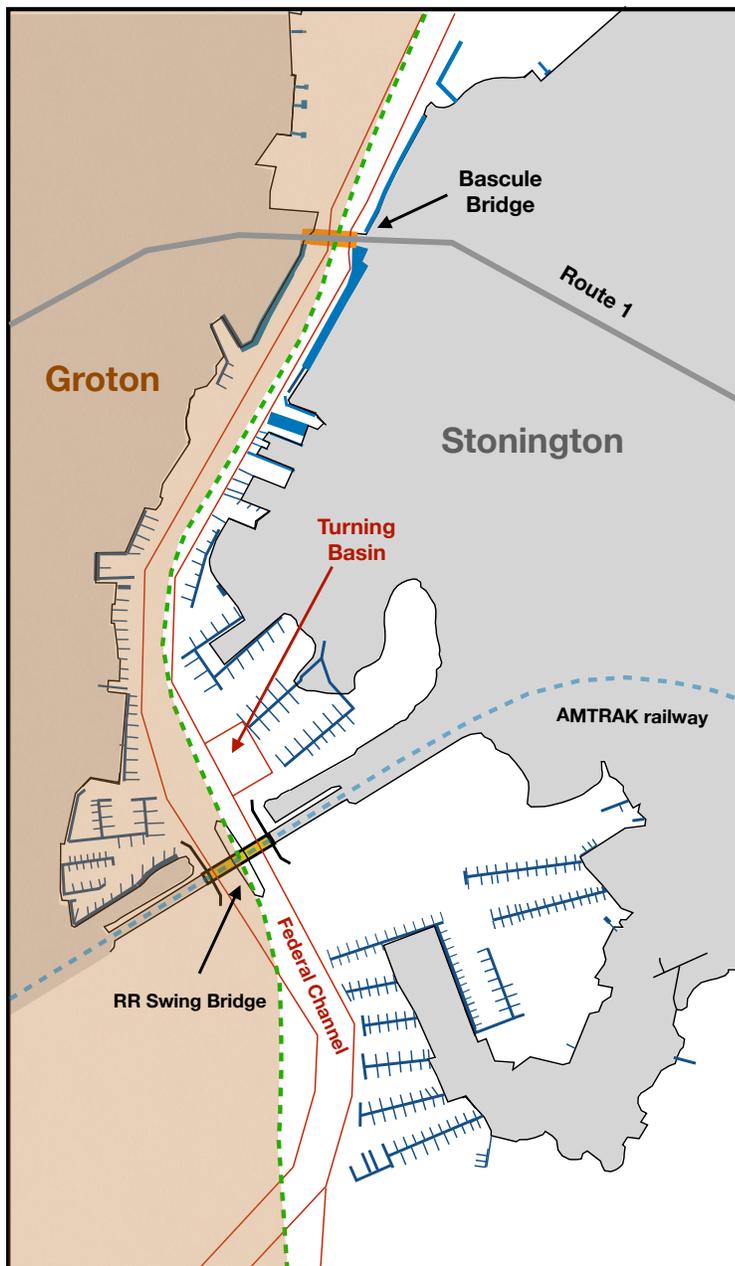


Figure 4. The downtown bridges section of the Mystic Harbor Management Commission Jurisdiction.

This section includes all of the Mystic River between the Rt 1 bascule-style drawbridge and the Amtrak RR swing bridge that is within the Town of Stonington. The area southeast of the Amtrak RR swing bridge is shown to provide additional context. The Federal channel is outlined in red and includes a small turning basin north of the Amtrak bridge. The dashed green line indicates the Town line.

9 ft. The Rt 1 bridge horizontal clearance, however, is 65 ft, whereas the horizontal clearance for each of the two paths for the AMTRAK bridge is 90 ft.

There is a high concentration of commercial boating facilities between the Rt 1 bridge and the AMTRAK bridge. The docks that line both sides of the river define the usable water space, which is not much more than the Federal channel itself, as some of the docks have a zero setback from the channel. The Federal channel widens to 125 ft near the

Amtrak bridge and, along with a small turning basin, provides limited relief for maneuvering while awaiting a bridge opening. The Federal channel south of the AMTRAK bridge remains at a control depth of 15 ft for a width of 125 ft.

The Bridges Section can be very congested, particularly around the time of the Rt 1 bascule bridge openings, with waiting boats maneuvering in close quarters. Added to the congestion are kayaks that are rented to inexperienced operators who often obstruct passage of larger vessels in the narrow Federal channel.

The two bridges operate on different schedules, which are subject to change. Current bridge operations, per Connecticut Department of Transportation, are listed:

“Amtrak railroad bridge, mile 2.4 at Mystic, operates as follows:

From April 1 to October 31, opens on signal.

From November 1 to March 31, opens on signal from 5 a.m. to 9 p.m. From 9 p.m. to 5 a.m., the draw shall open on signal if at least eight hours notice is given.

Commercial vessels will be passed immediately at any time; however, the opening may be delayed up to eight minutes to allow trains to clear the block.

All other vessels will be passed as soon as practicable but no later than 20 minutes after the signal to open is given.”

“U.S. 1 Bridge, mile 2.8, at Mystic, opens on signal except:

From May 1 through October 31, from 7:40 a.m. to 6:40 p.m., the draw need only open hourly at twenty minutes before the hour.

From November 1 through April 30, from 8 p.m. to 4 a.m., the draw will open on signal if at least six-hours notice is given by calling the number posted at the bridge.”

Because the AMTRAK bridge does not operate synchronously with the Rt 1 bridge, there are times when vessels need to hold for extended periods of time, often as much as 20 minutes awaiting the opening of the AMTRAK bridge. The small turning basin north of the AMTRAK bridge comes into play with outbound vessels and the wider channel and open area south of the AMTRAK bridge facilitates a holding pattern for inbound vessels. However, incoming vessels are sometimes blocked from access to the Rt 1 bridge by an AMTRAK bridge closure and then are forced to wait an additional hour for the next RT 1 opening. There does not seem to be an easy solution to coordinating the bridge operations as long as the Rt 1 bridge remains on a fixed schedule. Note: VHF channel 13 is used for communication between boats and bridge operators.

III D. MIDDLE HARBOR SECTION

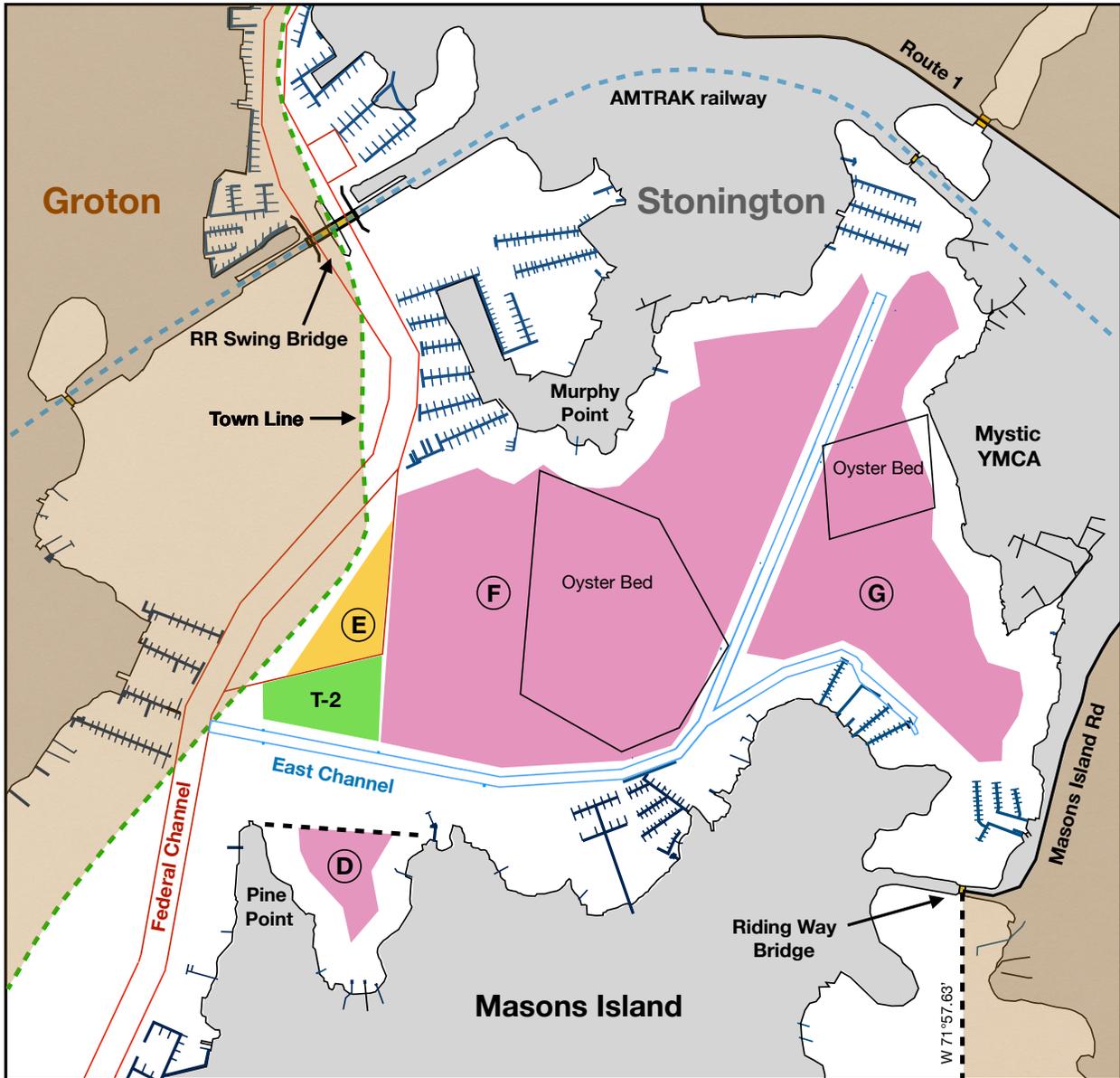


Figure 5. The middle harbor section of the Mystic Harbor Management Commission Jurisdiction.

The middle harbor section of the Mystic Harbor Management Commission jurisdiction is defined as the water area within the Town of Stonington from the railroad bridge south to the Mystic River Marina on the west side of Masons Island and just south of the Riding Way bridge on the east side of Masons Island as shown in Figure 5.

Note that the Commission's jurisdiction south of the Riding Way Bridge extends easterly only to W 71°57.63'.

The main body of water in this section is an embayment approximately one-half mile in diameter located to the east of the channel. Unique facilities in this section include the Mystic (Stonington) Sewage Treatment Plant and the Naik Family YMCA (formerly the Mystic Community Center), with its bathing beach. The remainder of the shoreline in the area includes residential properties and 7 marinas.

The 125 ft wide Federal channel, outlined in red, was dredged to a control depth of 15 ft in 2015. Also included in this section is a triangular area incorporating mooring field E (yellow). The triangular area was dredged to a control depth of 9 ft as part of the federal channel project. Transient anchorage T-2 (green) and three additional mooring areas, D, F, G (magenta) are included in this area. Note that there are State authorized oyster beds in mooring areas F and G that have been inactive or nearly so as of January 2020. Continuation of existing moorings and placement of new moorings in areas F and G are determined by the Harbormaster in coordination with the oyster bed leaseholder.

The East Channel, a 50' wide side channel (outlined in blue), was dredged to a control depth of 6 ft depth at mean low water (MLW) in 2016 and is marked by pilings.

III E. LOWER SECTION

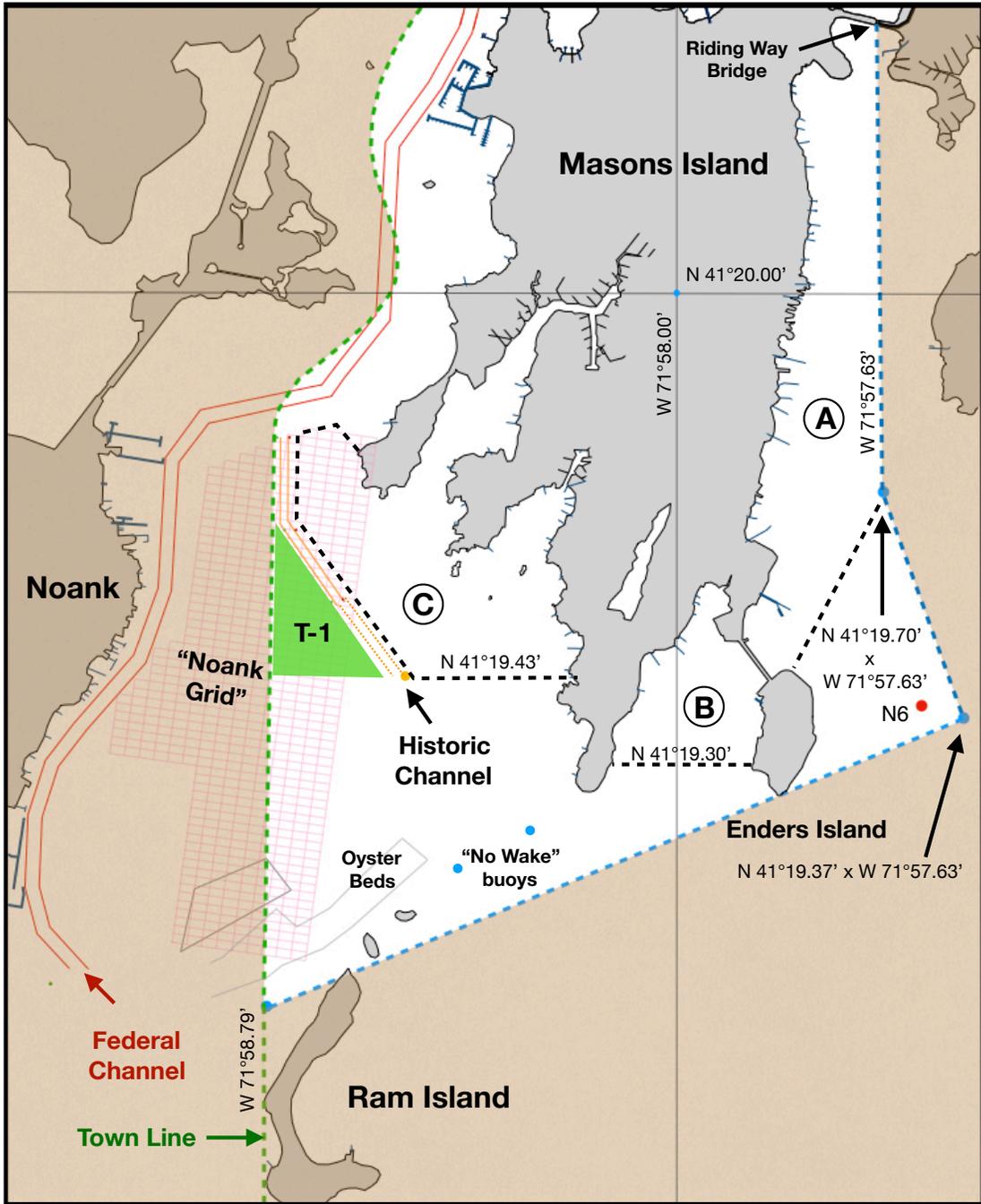


Figure 6. The lower section of the Mystic Harbor Management Commission Jurisdiction. *This section includes all of the Mystic River from the latitude of the Riding Way Bridge south to the northern tip of Ram Island that is East of the Town Line and bounded by the dashed lines shown. The Federal channel is outlined in red. The East Fairway, in orange, is an historic channel now marked by pilings.*

Discussion of Figure 6:

- a. Mooring areas on the east and south sides of Masons Island are designated by letters “A” through “C” and are subject to a 150’ buffer from the shore and docks.*
- b. The eastern boundary of mooring field A extends south from the center of Riding Way bridge to a point at N 41°19.70’x W 71°57.63’ and thence to the southwest, terminating at the northernmost tip of Enders Island.*
- c. Mooring field B is within the embayment to the west of Enders Island, bounded by latitude N41°19.33’ to the south.*
- d. Mooring field C contains the waters on the southwest side of Masons Island contained within a boundary extending NW from Ram Point to within 200’ of the Federal Channel, thence parallel to the Federal Channel to a point 50’ from north piling marking the east side of the Historic Channel. The boundary is then traced southward, parallel to the east side of the Historic Channel, while maintaining a 50’ buffer from the channel, to its intersection with latitude N 41°19.43’. The southern boundary runs along latitude N 41°19.43’, terminating at Masons Island. Mooring Field C includes rocky areas, such as Seal Rocks, and also is limited by the 150 buffer from shore and any docks.*
- e. Area T-1 is bounded on the south by latitude N 41°19.43, on the west by the Town Line (longitude W 71°58.79’), and on the east by a line parallel to the west side of the Historic channel, and observing a 50’ buffer from the Historic Channel.*
- g. Note that there are oyster beds in the southwest corner of the Harbor Commission’s jurisdiction. Note also that the State of Connecticut has placed “Slow/No Wake” buoys, indicated in blue, to discourage speeding in the Mystic River, with the exception of an approximately 1500’ section of the Federal Channel to the east of Six Penny Island that is “bookended” by additional “Slow/No Wake” buoys (not shown in Fig. 6).*

With the exception of Mystic River Marina on the western shore, the Masons Island Yacht Club to the southeast, and Enders Island, the shoreline here is all residential. In 2018 the Harbor Commission installed 3 pairs of pilings to provide more durable marking of the Historic Channel, which is provides for a minimum depth of approximately 4 ft at mean low water (MLW). A fourth pair of pilings was placed by Seal Rocks in 2021 to mark the seaward end of the Historic Channel.

A transient anchorage, designated T-1, extending from the southeastern section of the Historic Channel to the Town Line is planned, subject to the elimination of moored boats in that area through attrition.

The lower section is the most exposed part of the Mystic Harbor Management Commission’s jurisdiction, especially when storm winds are from the southeast and southwest.

IV. COASTAL RESOURCES

Within the provisions of the Coastal Management Act of the State of Connecticut, the term “Coastal Resources” has a very important and special meaning. Under the provisions of section 22a-93 (7), it is generally described as the coastal waters of the State, their natural resources, related marine and wildlife habitat, and adjacent uplands—both developed and undeveloped—that together form an integrated terrestrial and estuarine ecosystem. Within this general description “Coastal Resources” includes specific references to the following resources that are within the jurisdictional boundaries of the Mystic Harbor Management commission and those resources in upland areas adjacent to the jurisdictional area of the Commission:

- “Coastal Bluffs and Escarpments”
- “Modified Coastal Bluffs and Escarpments”
- “Rocky Waterfronts”
- “Beaches and Dunes”
- “Intertidal Flats”

- “Tidal Wetlands”
- “Estuarine Embayments”
- “Coastal Hazard Areas”
- “Developed Waterfront”
- “Islands”
- “Nearshore Waters
- “Shore lands”
- “Shellfish Concentration Areas”

These resources have been mapped by the State of Connecticut for the entire coastal zone within the State. The map for Stonington may be found at Town Hall. These coastal resources within this Commission’s jurisdiction are further identified:

- A. Coastal Bluffs and Escarpments. These resources are limited to the northerly tip and west side of Pine Point, on the northwest corner of Masons Island, There is also a small area of this resource on the northerly side of Masons Island, at or near the present Masons Island Marina.
- B. Modified Coastal Bluffs and Escarpments: These resources are found on the easterly side of Masons Island, which comprise a docking facility for the use of Masons Island residents, that area of Williams point northerly of the Riding Way Bridge to the land of the Naik Family YMCA; that area of Murphy’s Point extending southwesterly from the railroad tracks over Williams Cove; that area of the western side of Masons Island which extends southerly from Pine Point to the beginning of Ram Point (including the present Mystic River Marina); the easterly shoreline of the northern area of Pogy Bay on Masons Island; and the entire shoreline of Enders Island (Bakers Island), with the exception of its northeast quadrant.
- C. Rocky Waterfront: These resources are abundant within the jurisdictional area. They occur along almost the entire east and south shorelines of Masons Island. Smaller areas exist on the northern shore of Masons Island.

- D. Beaches and Dunes: These resources are found on the easterly side of Mystic Harbor, comprising the areas known as Williams Beach at the Naik Family YMCA. Other areas are Penny Island (“No Wake”), located in the Mystic River to the west of Masons Island, and a small area at Ram Point on Masons Island.
- E. Intertidal Flats: These resources are found on the easterly side of Mystic Harbor along the westerly side of Williams Point and extending along the easterly shore of Williams Cove. They are also located along the southerly boundary of Murphy Point and extend southerly across Mystic Harbor north of Masons Island. Other areas include the northerly portion of the eastern shore of Masons Island, the cove situated to the east of Pine Point on the northwest corner of Masons Island, and the areas southerly and easterly of Ram Point on Masons Island.
- F. Tidal Wetlands: These resources occur on Masons Island in the following areas: northerly and southerly of the riding Way Bridge Causeway on the northeast corner of the Island; the area adjacent to a small bay on the southeast corner of the island; the area easterly of the present Masons Island Yacht club; land adjacent to the cove on the southwest corner of Masons Island, including large portions of Ram Point; an area on the western shore of Masons Island, including the area near Clam Point; an area south of the present Masons Island Marina, and an area adjacent to the cove situated to the east of Ram Point on the northwest corner. Other areas include a portion of the western side of Williams Point adjacent to and south of the present Williams Beach, an area to the north of Williams beach, between it and the railroad causeway; portion of Murphy Point; an area on the west bank of the Mystic River adjacent to and northerly of the railroad bridge causeway; an area on the west bank of the Mystic River south of Mystic Seaport; an area adjacent to and just south of Elm Grove Cemetery, including portions of the east bank of the Mystic River adjacent to and along said Cemetery, extending to the I-95 highway; and an area at the northern limit of navigability of the Mystic River, north of the entrance to the triangular embayment at the site of the former Old Mystic Marina (now residential).
- G. Estuarine Embayments: The entire area of the jurisdiction of the Mystic Harbor Management Commission is an estuarine embayment, with the exception of those areas of water easterly of the southern half of Masons Island and those waters southerly of Masons Island.
- H. Coastal Hazard Areas: Large areas of the uplands adjacent to the waters within the jurisdiction of the Mystic Harbor Management Commission have been designated as

Coastal Flood Hazard areas. These areas are shown in panels 5, 12, and 14 of the June 12, 1992 Revision of the Flood Insurance Rate Map for the Town of Stonington. This Map legally designated these areas for purposes of the Federal Flood Insurance Program of the Federal Emergency Management Agency and is on file in the Stonington Town Clerk's Office. Generally speaking, these areas are within the 100 year flood hazard designation rule with regard to the construction of buildings and improvements in this area, as set forth in the zoning, planning, and building ordinances of the Town of Stonington. Areas included within this zone are the shores of Masons Island, the westerly shore of Ram Point, all of Murphy Point, and practically all of the area known as "Downtown Mystic", including Mystic Seaport, and extending along a narrow strip of land on the east bank of the Mystic River to Old Mystic.

- I. Developed Waterfront: This area includes the westerly shoreline of Murphy Point (Safe Harbor Mystic marina), the embayment to the east of Murphy Point (Gwenmor Marina), extending and including the causeway of the railroad bridge; and also includes the easterly bank of the Mystic River from Seaport Marine northerly to Schooner Wharf and the entire shoreline of Mystic Seaport.
- J. Islands: Islands within the jurisdiction of the commission are Masons island (one of the larger islands in Connecticut), Enders Island, which is connected by a causeway to the southeast corner of Masons Island, and Penny Island ("No Wake Island"), situated in the Mystic River south of Mystic River Marina.
- K. Nearshore Waters: The entire area within the jurisdiction of the Commission is designated as "nearshore waters" on the Coastal Area Map.
- L. Shore lands: These are areas adjacent to the waters within the jurisdiction of the Commission that are located within the coastal boundary of the Coastal Flood Hazard Program, but above the 100-year flood line. These areas include the interior of Masons Island and the upland areas on the eastern bank of the Mystic River, extending to Old Mystic.
- M. Shellfish Concentration Areas: Practically all of the area with the jurisdiction of the Mystic Harbor Management Commission provides—or is capable of providing—excellent habitat for shellfish. In particular, all of the waters surrounding Masons Island, including Mystic Harbor to the north, are exceptionally productive. Shellfish found in these areas include hard clams (quahogs (*mercenaria mercenaria*)), soft shell clams ("steamers" (*mya arenaria*)), bay scallops (*argopecten irradians*), oysters

(eastern oysters (*crassostrea virginica*)), blue mussels (*mytilus edulis*), black mussels, razor clams, conch, and whelk. Lobster (*homarus americanus*) is found at the southern end of the commission's jurisdiction.

The Mystic Harbor Management Commission continues to coordinate efforts with the Stonington Shellfish Commission to ensure mutually supportive policies. It is recognized that the Shellfish Commission has more extensive boundaries than does the Mystic Harbor Management Commission, but the Groton-Stonington Town Line (established when the Mystic Harbor Management Commission was created) is common to both Commissions. Water quality is of particular importance to shellfish. The Mystic Harbor Management Commission's policy and plans inherently support the Shellfish Commission's clean water requirements. Appendix B provides a description of the existing shellfish situation and the applicable governing rules. This plan specifically reflects the Shellfish Commission's clean water requirements, in support of recreational shellfishing, for the waters to the east of Masons island.

V. ISSUES

The Mystic Harbor Management Commission has had a monthly meeting schedule since its appointment in 1990. For the first 5 years, the Commission met informally with many persons who were interested in the Harbor Management Plan as it was being initially developed. For the 27 years or so since the Plan was approved, numerous persons have met with the Commission during scheduled meetings to discuss various applications and other issues of interest. These persons have included boaters, private property owners (primarily waterfront), neighbors of waterfront property owners, marina owners, members of the Stonington Shellfish Commission and marine service contractors.

The various Harbormasters have regularly attended the Commission's scheduled meetings, along with a representative of the Harbor Management Commission of the Town of Groton, with a decades-long dialog supporting coordination across the Town line and with the implementation of the Harbormaster's activities. One example of the successful dialog with Groton is the refinement of the Historic Channel to the southwest of Ram Island to reflect a workaround to an isolated hazard ("Alfie's Rock) that was previously not known by the Commission. A hydrographic survey of the Historic

Channel was subsequently performed to verify that the redefined Historic Channel was clear of any other potential hazards.

Furthermore, individual members of the Commission have attended seminars and meetings conducted by the State of Connecticut Department of Energy & Environmental Protection (CT DEEP) and other state and local agencies regarding the issues and problems of harbor management in Connecticut. The Commission has also contributed a member to the Connecticut Harbor Management Association (CHMA).

With the benefit of 27 years of operations under the original Harbor Plan, the Commission has revisited the following issues regarded as being most important to this updated Mystic Harbor Management Plan.

A. **MOORINGS.**

FINDINGS: Mooring space in the Mystic River, from south of the railroad bridge to the Noank anchorage, is at a premium, as evidenced by number of boaters on the waiting list and the number of years it takes to obtain a desirable mooring location. Part of this problem relates to the limited water space capable of handling the deeper draft vessels—primarily sailboats.

There has been some concern about the number of moorings south of latitude N 41°19.43' that occupy water space that was not an authorized mooring field. Some of these moorings were placed before the original Mystic Harbor Management Plan was adopted in 1995. At that time the “Noank Grid”, which had been developed by the Town of Groton, was the primary mooring map for the area south of the Federal Channel and Six Penny Island. The “Noank Grid” extended into what was subsequently determined to be Stonington water space, once the Town boundary was defined. The number of out-of-plan moorings in Stonington waters south of latitude N 41°19.43' had increased since 1995—rather than being eliminated through attrition, as was the intent in the original Mystic Harbor Management Plan. Originally, this water space was planned to be opened for boating activities other than “parking”.

Clearing out moorings in the area between N 41°19.43' and N 41°19.78' took over 20 years and as of January 2020, only the area identified as the “Historic Channel” has been cleared, while the area identified as Transient Anchorage T-1 has never been cleared and therefore has not been used as a transient anchorage,

as specified in the original Plan. The 2020 Harbor Plan reaffirms the intent to clear the T-1 transient anchorage of permanently moored vessels.

To some extent similar concerns have applied to the smaller mooring fields upriver from Noank, particularly the previously unauthorized mooring field in the Federally-maintained former Turning Basin between Nun 30 and Safe Harbor Mystic marina (formerly Brewers marina). Other considerations include the need to regulate mooring sites regarding the local suitability of the water with respect to the use of the adjacent uplands and waterfront. It is a goal of this plan to regulate the location of mooring fields to permit reasonable expansion and also to prevent overcrowding within the designated mooring fields, which can adversely affect the safety of persons and property. Full consideration shall be given to historic factors and the character of the districts, and their particular suitability for particular intensity and form of use, with a view to conserving the value of adjacent buildings and land.

The provision of buffer zones between a mooring field and the adjacent uplands is intended to provide modest protection to the uplands use from potential nuisance, such as noise from mechanical equipment and sailboat rigging and to provide a safety margin for boats along the periphery of the mooring field during storms. The application of a buffer from docks and piers was considered necessary to provide adequate room for navigation and to provide a safety margin for moored and docked vessels alike during storms. The buffer zone in residential areas was determined to be 150 ft., with a relaxation to 100 ft. in commercial areas. The reduced buffer in the commercial areas is based on the higher use density and higher degree of supervision of the waterfront (safety issue) typical of commercial areas.

There has also been some concern that water space within the Mystic Harbor Management Commission's jurisdiction be maintained for active commercial or recreational boating use. The use of vessels, other floating structures, or fixed overwater structures as homes or work/office spaces typically found on land, and not water-dependent, is not considered a legitimate use of Harbor waters.

GOALS. The primary objective of the Commission is to specifically identify mooring areas within its jurisdiction in order to allow for the orderly development and use of said mooring areas. Also, the Commission desires to provide flexibility with regard to recognizing existing moorings and to allow the

deployment of individual moorings to accommodate nearby property owners with riparian rights. Also, the Commission desires to provide adequate buffers between the mooring areas and both Federal and State channels, as well as marked fairways and natural channels. Finally, the Commission wishes to assure that the mooring tackle is adequate to secure all vessels within designated mooring areas and is appropriate for anticipated weather conditions, allowing for modification of “normal” tackle to accommodate severe weather. Note that the Commission does not subscribe to specific tackle guidelines, deferring to the Harbormasters’ judgement in reviewing new mooring applications, as well as annual renewal applications. It is regarded as impractical for the Commission or Harbormasters to guarantee adequacy of mooring tackle, but rather to assure reasonable attention is paid to the type and condition of mooring tackle for the specified vessel.

POLICY AND NEEDED ACTION. In order to implement the goals as set forth above, the Commission has identified the following policies and actions:

1. *Mooring Fields.* Locations of mooring fields are identified in Figures 3, 5, and 6. For convenience to the reader, the mooring fields are also shown in Figures 7, 8, 9, and 10. Areas A through H are designated for recreational vessels, whereas Special Areas M are identified for Mystic Seaport vessels. Mooring areas on the southeast, south, and southwest side of Masons Island, as shown in figure 7, have been redefined from the 1995 Harbor Plan.

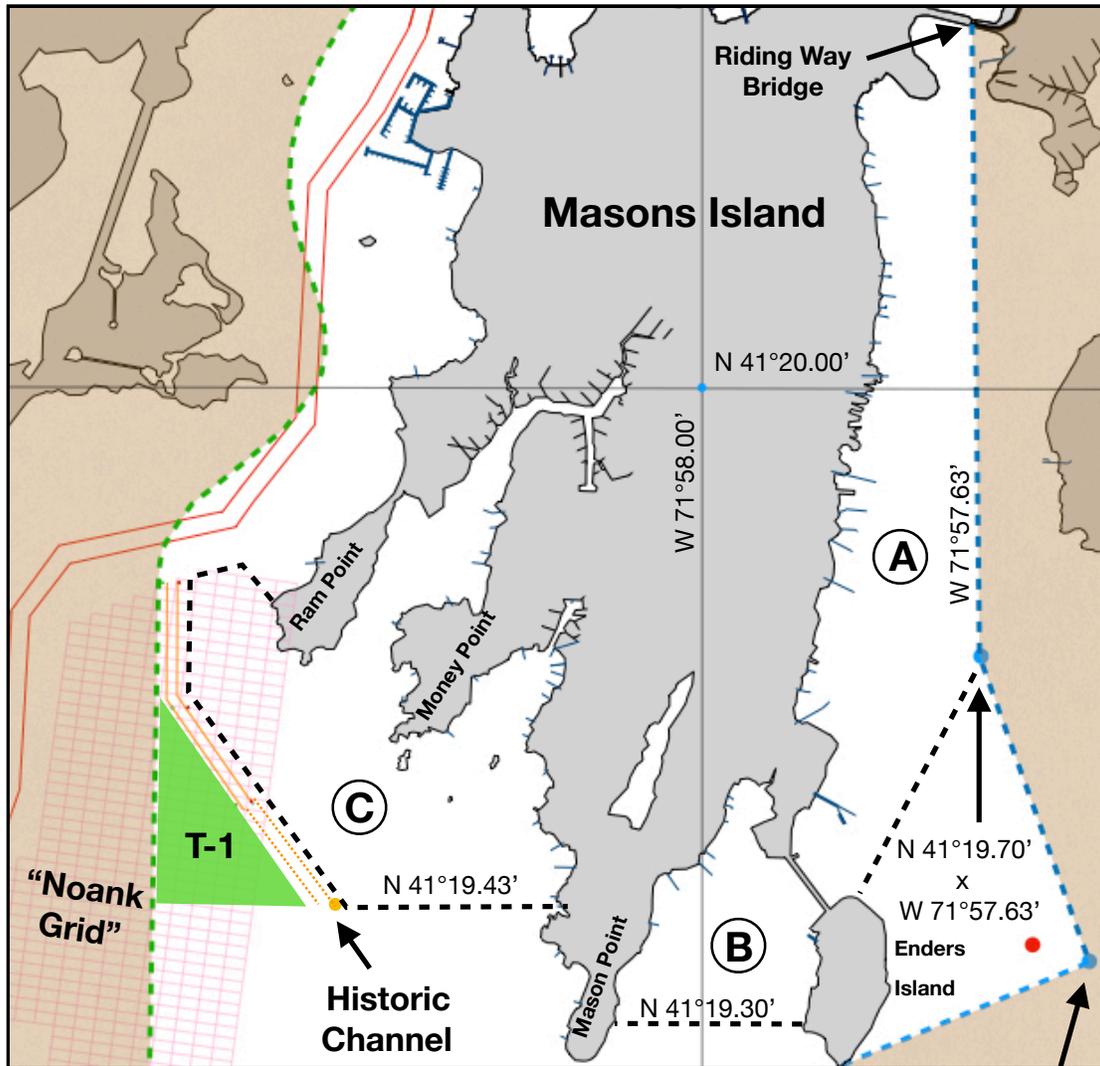


Figure 7. Mooring areas A, B, and C, and Transient anchorage T-1 adjacent to Masons Island

Mooring area A is bounded by Masons Island on the west and longitude W 71°57.63' on the East as far south as latitude N 41°19.70' and then along a line terminating at the northern tip of Enders Island. This mooring field is separated from land and structures by a buffer of 150 ft .

Mooring area B includes the embayment between Mason Point and Enders Island, extending southward to latitude N 41°19.30, and also is separated from land and structures by a buffer of 150 ft.

Mooring area C is bounded by latitude N 41°19.43' to the south and by a line paralleling the indicated "Historic Channel" at a separation of 50 ft, thence running for a length of approximately 200 ft. along a line 200 ft. from

the Federal Channel. This mooring field is also separated from land and any structures by a 150 ft buffer within the embayments known as Mud Cove and Pogy Bay. Note that boats moored in area C are required to remain clear of the 50 ft buffer zone along the “Historic Channel” at all times, requiring appropriate placement of moorings and extent of tackle.

It is generally observed that there are rocky areas along the eastern shore of Masons Island and in extended areas within mooring area C. The area close by Ram Point is notorious for catching boaters unaware of the hazards, although the grounding incidents have been reduced since the “Historic Channel” was clearly marked by 6 pilings placed by the Commission in 2017. Seal Rocks, extending from Money Point, is clearly marked on the navigational charts, but still represents a hazard, as do the rocks in Pogy Bay between Money Point and the land leading to Mason Point. In 2021 the Commission placed 2 more pilings in the vicinity of Seal Rocks to mark safe passage in the extension of the “Historic Channel”. The added pilings also were intended to aid in acquiring the channel when approaching from open water.

Transient Anchorage T-1 is bounded by latitude N 41°19.43’ to the south, by the Town Line to the West, and by a line parallel to and separated by 50 ft. from the “Historic Channel” to the east.

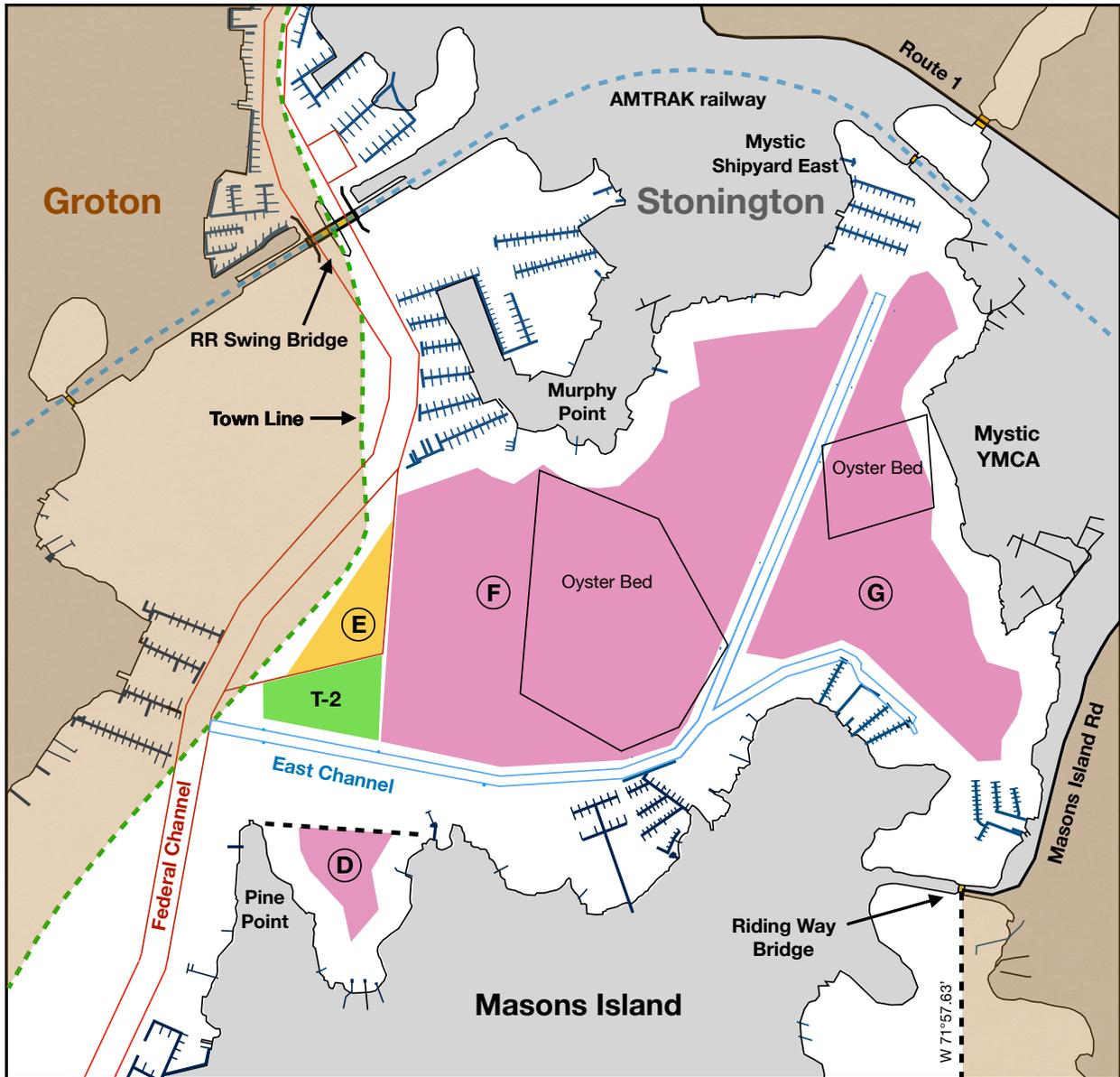


Figure 8. Mooring areas D, E, F, and G and Transient Anchorage T-2, North of Masons Island

Most of the mooring areas on the north side of Masons Island as shown in figure 8, have been substantially redefined from the 1995 Harbor Plan.

Mooring area D, in the embayment to the east of Pine Point, remains unchanged from the 1995 Harbor Plan. It is completely filled with moorings

by the adjacent riparian property owners. The mean low water depth is about 2 ft and there is no public access from shore.

Mooring area E is newly defined in this Harbor Plan. It is constrained to the eastern third of the former Federal turning basin, which was dredged to a control depth of 9 ft in 2015. This is substantially deeper than the other areas shown in Figure 8. The southwest tip of Mooring area E is located at N 41°20.60' x W 71°58.31'; the southeast corner is at N 41°20.61' x W 71°58.18'; and the northern tip is at N 41°20.71' x W 71°58.16'.

Mooring area F extends eastward of mooring area E and transient anchorage T-2, and is otherwise bounded by the 150 ft buffer from the shore along Murphy Point and the 50 buffer from the East Channel, which is shown in blue. Note that there is an oyster bed, leased by the State, within this mooring area. The Harbormaster shall coordinate any mooring placements with the leaseholder to avoid conflicts during periods when the oyster bed is active. Note that most of this mooring area is very shallow, suitable only for shallow draft vessels, with the exception of the area to the north and northwest of Masons Island Marina, containing moorings maintained by the marina.

Mooring area G extends eastward of the channel leading to Mystic Shipyard East and northward of the eastern end of the East Channel, observing the 50 ft buffer from the channel and the 150 ft buffer from the shoreline and any docks to the east. This also is a relatively shallow area, suitable for shallow draft vessels. Mooring area G also contains an oyster bed, so the Harbormaster will need to coordinate any mooring placements with the oyster bed leaseholder to avoid conflicts during periods when the oyster bed is active.

Transient anchorage T-2, shown in figure 8, is very shallow. It is eastward of Nun 30, which marks the Federal channel, and northward of pilings numbered "1" and "3", which mark the northern edge of the East Channel. Vessels in this anchorage are required to maintain a minimum 50 ft separation from both the East Channel and Mooring field E to the north.

Anchoring outside transient anchorages designated in this Plan is prohibited. Note also, that anchoring is prohibited in mooring fields.

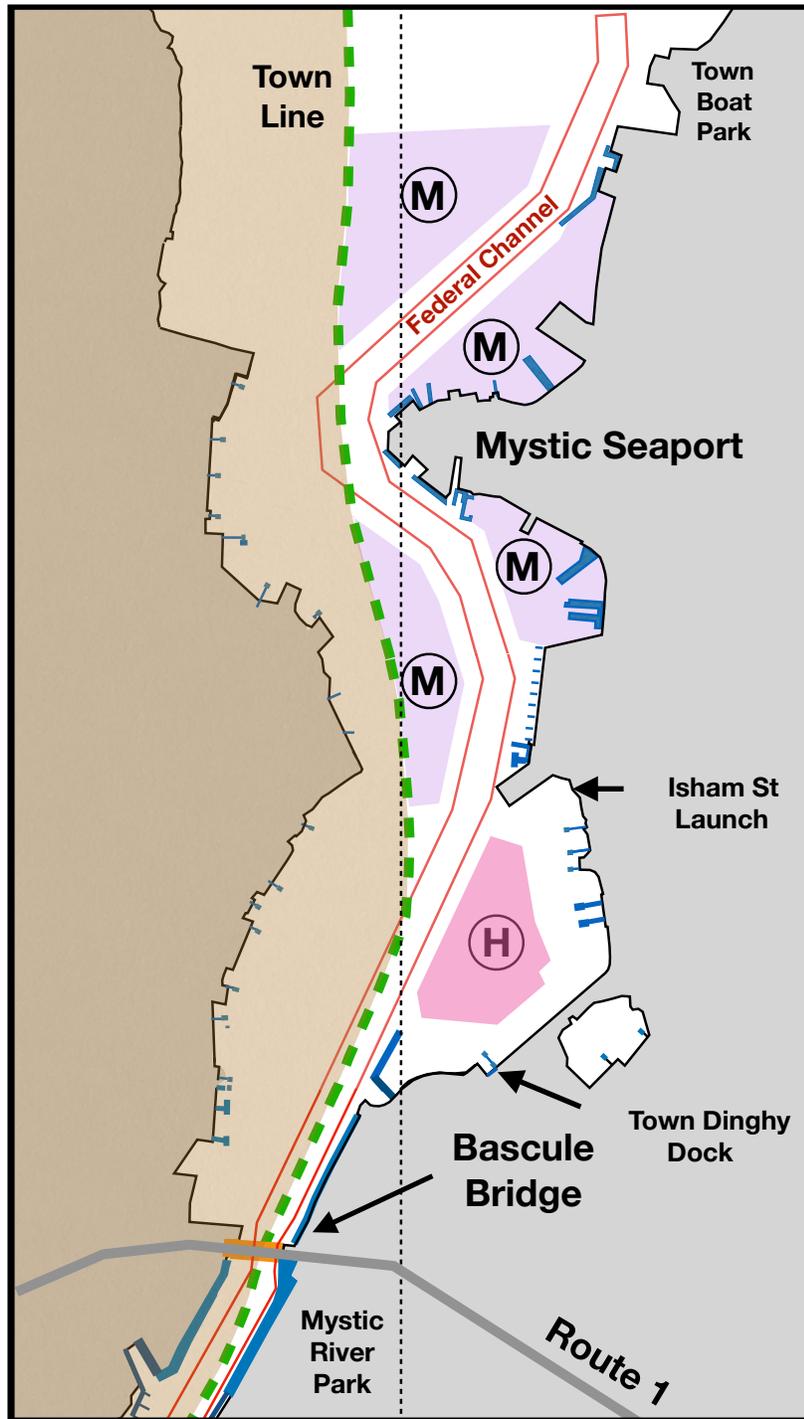


Figure 9. Identification of Mooring areas H and M and public access areas, from the Rt 1 Bascule Bridge to the northern extent of Mystic Seaport.

Mooring areas between the Rt 1 bascule bridge and the northern extent of Mystic Seaport are shown in figure 9 and remain substantially as they were

in the 1995 Harbor Management Plan. Area H is within the embayment south of Mystic Seaport and is separated from the Federal Channel by 50' and is separated from the residential zone, extending from the Holmes St bridge to Isham Street, by a 150' buffer, which also applies to the separation of this mooring field from residential docks. The buffer is reduced to 100' to the north and south of the residential zone.

Mooring areas M are bounded on the east by the shoreline at Mystic Seaport, from the northern boundary of Mystic Seaport, as shown, south to the Seaport's lift dock. These areas are clear of the Federal Channel and set back from the Federal Channel by 50'. The intent of these area is to provide for the Seaport's own traditional vessels that are active floating exhibits, including some which may be in livery service.

Also shown are the area depicted in figure 9 are public access areas, including Mystic River Park with a transient dinghy dock (owned by the Mystic Fire District), a privately owned pier extending northward from the bascule bridge (subject to time restrictions for public access), a Town Dinghy dock (intended for transient use), the Isham Street launch (suitable for "car top" vessels, but excluded from trailered vessels as of 2019), and the Town boat park adjacent to Mystic Seaport. The Mystic River Boathouse Park, ("Town boat park" in Fig. 9 & 10) was under development at the time of this writing, but is intended to support community rowing activities, including the Stonington High School rowing crew, as well as providing a dinghy dock for transient boaters.

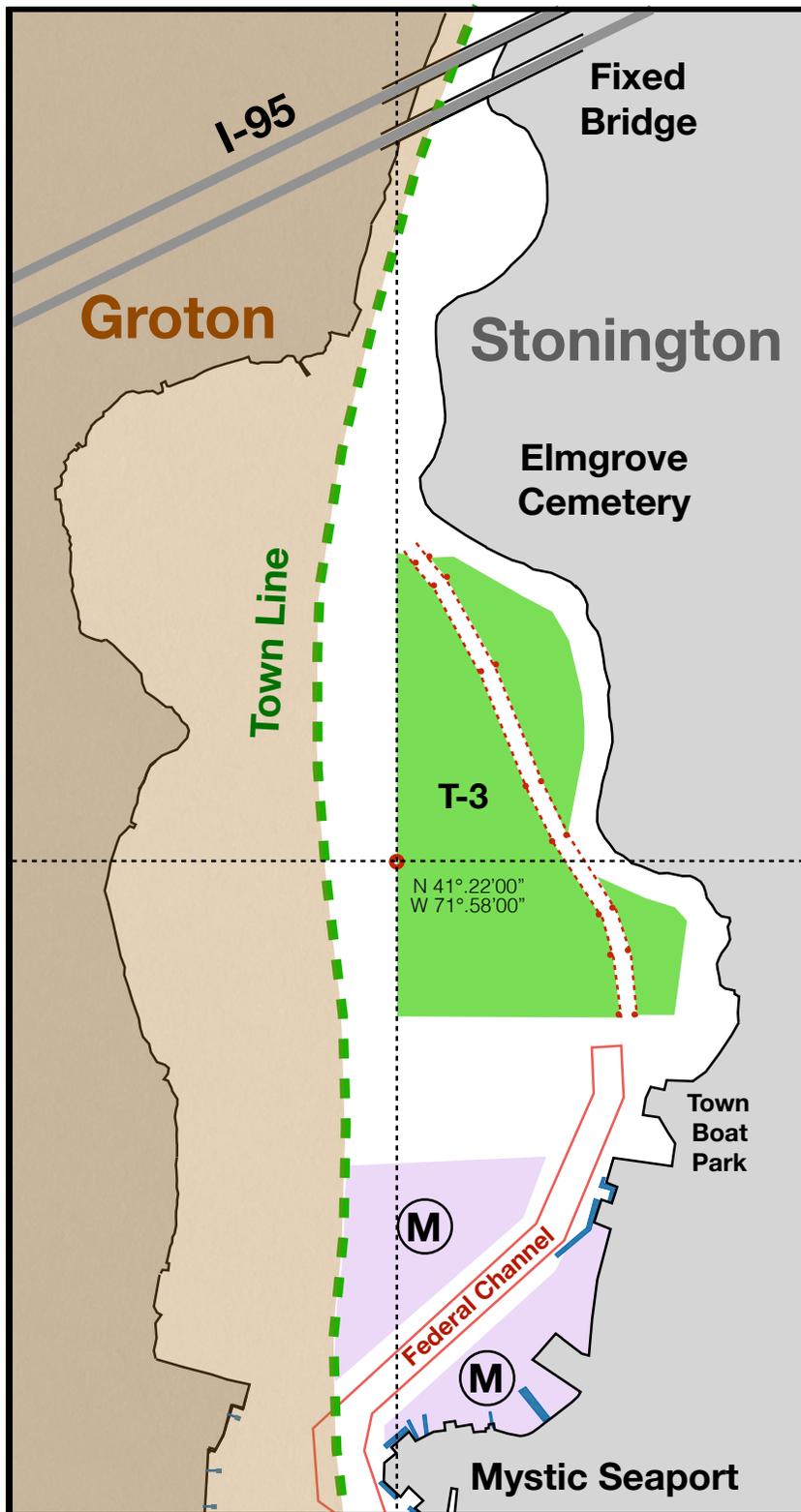


Figure 10. Location of Transient Anchorage T-3.

Figure 10 shows Transient Anchorage area T-3, which is redefined and substantially expanded from the 1995 Harbor Management Plan. This anchorage is very shallow and is split by a natural channel holding depths of 6' or more in several places. The intention of the Commission is to obtain State approval for a series of marker pilings to define the natural channel and keep it clear of anchored vessels to allow for boats transiting to and from the docks to the north. As of this writing, the State approval appears to await the expansion of the State's "Slow-No Wake" zone to encompass the area from the northern end of the Federal Channel to the I-95 bridge. The Commission has prepared an application for 16 pilings, as shown in figure 10, with a phased installation paced by available funding. Not shown here, but located within the upper right of Figure 1, is an additional public access site located in Old Mystic, at the northern end of the embayment located off Rt 27 north of latitude N41° 23.00'. It is identified by a public access sign at the entrance to a right-of-way extending from Rt 27.

2. *Mooring Location.* Individual moorings are to be located within mooring fields defined in this Plan and subject to approval by the Harbormaster. It is intended that existing legal moorings in non-mooring areas be eventually removed by attrition or mutual agreement with the Harbormaster. Existing moorings outside designated mooring fields that are held by landowners with riparian rights or an associated right-of-way will be allowed to be continued, provided they do not cause significant coastal management or navigational concerns, as determined by the Harbormaster.

3. *Mooring Exclusion Areas.* Mooring exclusion areas (channels, fairways, buffer zones, and open recreational waters—see definitions in section VII of the Regulating Ordinances), as identified in the Water Use section of this Plan (pictorially defined in figures 2 through 10) are to be governed by the Harbormaster in accordance with this Plan.

4. *Mooring Allocation.* The mooring allocation policy, developed by the Commission, will be implemented by the Harbormaster. See Section VI. A. 3.

5. *Mooring Tackle Requirements*. Mooring tackle requirements developed by the Commission, if any, will be implemented by the Harbormaster. See Section VI. B. Otherwise, the acceptability of mooring tackle proposed by a mooring owner will be at the discretion of the Harbormaster.

6. *The Use of Vessels or Overwater Structures as Abodes*. The use of vessels or floating homes/offices or overwater structures in Mystic Harbor jurisdictional waters as permanent or long-term (greater than 7 days) abodes is specifically prohibited. Sleeping aboard vessels is allowed as a secondary use to the vessel's principal commercial or recreational use. Temporary exceptions to this regulation for unusual circumstances may be allowed at the discretion of the Harbor Master.

B. WATER QUALITY.

FINDINGS: The Mystic River is believed to have been subjected to pollution since colonial times. In the early 1970's public sewers were mandated for both sides of the village of Mystic. Prior to this, the Mystic River estuary was polluted by untreated domestic sewage outfalls and it is understood that the river was used for dumping of garbage and trash. Well before the 1970's the dumping of garbage and trash was remedied by the provision of municipal garbage and trash pickups.

Upon installation of sanitary sewers, there was a marked improvement in water quality. Nonetheless, water pollution has again been steadily increasing since the 1980's. There appear to be 5 major sources of water pollution in the Mystic River:

1. Stream discharge of non-point sources,
2. Storm runoff,
3. Sewer treatment plant effluent,
4. Boating activity, and
5. Lack of adequate river circulation.

Each of these sources is discussed in Appendix A.

GOAL: The long term goal of the Mystic Harbor Management Commission is to improve water quality in the Mystic Harbor jurisdiction to support all designated uses for class SB waters.

POLICY: The basic policy to improve water quality is to interact with other commissions that impact or are impacted by the use of the Mystic Harbor waters. Examples of such agencies include the water pollution control authorities, fire districts, planning and zoning commissions, enforcement agencies, and shellfish commissions. A specific policy for new and expanding marinas is the requirement for pump-out stations and adequate shoreside rest room facilities. It is also the policy of the Commission to advocate for—and provide limited support for—a regional pump out boat operation.

NEEDED ACTION: A water quality management program should be established as outlined in Appendix A. An ongoing system for water quality monitoring and patrol, plus preparedness for spills, is outlined therein.

Continued support for the No Discharge Zone (NDZ) delineated in the Connecticut General Statutes, Sec. 15-170(f) should be maintained by practical means such as enforcement and use of pump out boat services for local and transient boaters.

C. STRUCTURES.

FINDINGS: Poorly-built or poorly-maintained structures can be a hazard to the property and lives of those in areas affected by wind and water. Improperly-sized or located structures can reduce navigability by interference with passage or by obstruction of sight lines, and may interfere with the historically-established viewscales within the Harbor.

GOALS: All structures within the jurisdiction of the Mystic Harbor Management Commission shall be designed in accordance with all applicable local, state, and federal regulations and shall be consistent with the policies of the Commission.

POLICY AND NEEDED ACTION: The Commission will review all applications for all structures within the Commission’s jurisdiction and provide comments to permitting agencies, including the Town Planning and Zoning Commission, the State Department of Energy and Environmental Protection (DEEP), and the Army

Corps of Engineers (ACE), as appropriate. The review will include consideration of the following:

1. *Use Impact*: Impact on the Harbor for uses other than those proposed in the application will be examined. Excessively long or high docks, for example, might unnecessarily block de facto fairways outside marked channels, infringe upon populated mooring areas, block neighbors' views, or otherwise unreasonably infringe on the public use of the affected water space.

2. *Aesthetic Impact*: The Mystic River and immediate environs are a significant scenic resource and are so recognized at the State and Federal levels. Many of the vistas are not only pleasing to the eye, but are also notable on a cultural basis. Much of the developed area of downtown Mystic, including Mystic Seaport Museum, is within National Register historic districts. Therefore, site planning and design features which limit or avoid negative visual and aesthetic impacts, or which create positive visual and aesthetic impacts on the site and the surrounding area should be incorporated. Blighted or deteriorated conditions should be alleviated where possible. The architecture, size, materials, color, and texture of new structures should be blended with the existing qualities and characteristics of the surrounding man-made and natural environments. Structures that are not traditional in the Harbor area, such as boat lifts and non-water dependent dock features, such as gazebos, are to be limited to areas where they would not conflict with the surrounding environment. Visual access to the water and views from the water should be maintained, improved, or otherwise enhanced.

3. *Suitability of Engineering Design*: Technical features of the proposed structures should be clearly described and must be credible, including reasonable margins for storm and ice conditions. **The scale of a proposed structure should be the minimum necessary to secure a legitimate water-related function.** The burden of proof of the appropriateness of new or unusual construction techniques or materials shall borne by the applicant.

4. *Precedence of Vessel Navigation in Channel Areas*: The term "channel" in this section is construed in the broadest sense to include designated Federal and State Channels, designated fairways, and historic (e.g.,

“natural”) channels. No structures shall be constructed in any channel or within prescribed setbacks from such channels. Where a setback is not prescribed, the default setback is 50 ft. Safe navigation of vessels within and adjacent to channels takes precedence over all other uses of the Harbor.

5. *Pier Construction – Residential Property*: It is recognized by this Commission that the owners of residential waterfront property have riparian rights—that is to wharf out where there is no conflict with the aforementioned policies—but must limit the size of docks to the minimum necessary to gain water access. Gaining water access in shallow water embayments may be achieved by a dock capable of supporting a small boat, such as a dinghy, that could be used to access a larger vessel on a mooring. In this regard, a dock sited in no more than 2.5’ Mean Low Water meets the “minimum necessary” standard when this siting can be achieved with the outboard edge of the dock extending no more than 60’ from Mean High Water at the water’s edge. Where an extremely shallow condition, such as a salt marsh, applies seaward of Mean High Water, the riparian owner may petition for an extended fixed dock, subject to Commission review with respect to the policies in paragraphs 1 through 4 above.

6. *Operational Use*: The use of commercial structures and activities aboard vessels secured to such structures shall be consistent with uses permitted by right under shoreside regulations, including zoning.

D. **PUBLIC ACCESS:**

FINDINGS: There are many areas of the Mystic River where there is public access to the waters within the Commission’s jurisdiction. Also, the Town of Groton has similar facilities which are available for this purpose. Public access is a very important element of this Plan.

The previous (1995) version of the Harbor Plan recommended that certain areas be considered for increased public access from shore. These include Town-owned streets thought to terminate at the harbor’s edge. Also included were other Town-owned waterfront properties, such as the thirty-foot strip along Holmes Street (opposite Forsyth Street) that was considered suitable for a small boat dock for transient boaters wishing to sightsee or shop in downtown Mystic.

The 1995 Harbor Plan identified 4 public access sites on the Stonington side of Mystic Harbor. Three additional sites have been added to the list of facilities for public water access. These sites are described as found at the time of this writing:

- The first site, located at the foot of Isham Street, had been used at least since the mid-70's as a small boat launch. The Town had presumed this site was a Town right-of-way and had posted a sign to that effect identifying parking space for boat trailers at the Fourth District Voting Hall on Broadway. During 2020 the Town blocked this site from trailered boats and removed the sign. However, it appears that this site actually may be owned by Mystic Seaport. In any case, it is actively used to launch "car top" vessels, like kayaks and paddle boards and is presumed to be available to the public for the foreseeable future.

- The second site is a small waterfront parcel adjacent to the former Isham Street boat launch that has been owned by Mystic Seaport. Mystic Seaport had allowed public access for many years. It had been maintained by volunteers and included benches. However, the property was sold to adjacent residents and is currently posted as private property that may not be available to the public.

- The third site, located on Holmes Street, opposite Frazier Street, has been developed by the Town as a Transient Dinghy Dock. It features a park bench at the street end and is popular with visitors and locals alike.

- The fourth site, at the former Cottrell lumber yard in the very heart of Mystic, was acquired by the Mystic Fire District. It has been developed as Mystic River Park and includes public areas comprised of a large lawn, a large fixed pier, and a floating dinghy dock. This park had proven to be very popular, supporting summer concerts, a limited fishing section near the drawbridge, and many dinghies at the floating dock.

- The fifth site, the Mystic River Boathouse Park, is a recent acquisition by the Town of Stonington. It is located immediately to the north of Mystic Seaport. It is currently under development as a facility for housing sculls from the high school rowing team and a local rowing club and is planning a substantial dock structure to accommodate the rowers and the general public. The actual details will be clarified as the funding solidifies. There are major

issues regarding the permitting process, including remediation of a “brown field” associated with historic activity from the former velvet mill across the street.

- The sixth site, the Naik Family YMCA (also known as the Mystic YMCA), is located on land between Masons Island Road and Williams Cove and is a designated public access point including a sandy beach.
- The seventh site is at the former Old Mystic Marina location, suitable for small (e.g., car top size) vessels.

There are 6 identified publicly-owned acres areas on the Groton side of the Mystic River. Three are in Noank, the fourth and fifth are in the downtown area of Mystic, and the sixth is the undeveloped State frontage and dirt ramp off River Road, under the Interstate 1-95 bridge. Groton has a downtown Town dock and ramp off Water Street, opposite Burrows Place. The other downtown Groton access point is a posted, but undeveloped street end on Park Place.

Public access has been obtained at some privately owned sites on Mystic Harbor as a condition for coastal site plan approval for otherwise non-water-dependent uses of waterfront sites. Two of these include the S&P Oyster dock and the contiguous condominium dock on the Stonington side of Mystic, just north of the Rt 1 drawbridge. Several similar accommodations are found on the Groton side of the Mystic River. Public access in these areas is often restricted to daylight hours and requires public behavior that is appropriately respectful of the private uses of these properties, which include condominium residences, a restaurant, and a boutique hotel.

Nearby, to the east, there are 13 public access points in Stonington borough, one access point near the intersection of Cove Road and Rt 1, and a State launch ramp, with parking, at Barn Island. There are additional access points to the west at Noank, Palmer’s Cove and the Bluff Point Coastal Reserve.

GOALS: It is an objective of the Mystic Harbor Management Plan to preserve and improve public access to the waters of the Harbor from the shoreline, consistent with the Connecticut Coastal Management Act and the Stonington Plan of

Development without adversely affecting the residential character of the Mystic area.

POLICY AND NEEDED ACTION:

1. No proposed structures or uses shall restrict existing public access.
2. Development proposals for real property on, in, or contiguous to the harbor will be reviewed for potential impact to existing or proposed public access sites by the Mystic Harbor Management Commission in accordance with Section 22a-113p of the Connecticut Harbor Management Act.
3. Public access sites are defined as those providing access from both land and water. A proper public access site would be consistent with zoning regulations, would have posted rules, and would not result in parking and traffic conflicts when the site is in or adjacent to a residential neighborhood.
4. Allowable water-related uses for public access sites shall be consistent with the character and zoning of the uplands neighborhood.

E. Transient boating Activity and Facilities:

FINDINGS: In addition to the transient anchorages identified in this plan, there are additional areas within the jurisdiction of the Commission for transient boating activities and facilities, but these areas are not presently defined, preserved, or incorporated as part of any overall plan. These facilities are available through privately-owned boatyards, boating facilities, and the facilities of Mystic Seaport Museum. Pump out facilities are available at multiple locations, in addition to a pump out boat that services all of the jurisdiction of the Commission wherein transient boater are likely to be anchored

GOALS: Specially-designated areas should be established within the Mystic Harbor of transient boating activities and facilities, These areas should be easily accessible to visiting boaters and should be situated to allow appropriate shore access.

POLICY AND NEEDED ACTION: Areas for transient anchorage are designated with the prefix “T” in Figures 3, 5, 6, 7, and 10. The 3 areas identified for specific transient use are keyed to the reasonable availability of shore access. The size and location of these areas were chosen to provide equitable

access to shore activities and facilities for transient boaters. The total transient anchorage area is considered larger than historical usage requires, allowing for growth potential. The siting was specifically chosen for maximum convenience, such as availability of launch service or dinghy docks, and proximity to tourist facilities (applicable to area T-3). Vessels must have sufficient holding tank capacity to assure no sewage discharge within the Harbor. Anchoring within the transient anchorages is limited to 7 days during a calendar month or a thirty day period, whichever is more restrictive. See Section VI.A.II.

1. Transient anchorage area “T-1” is located off the southwest side of Masons Island. It abuts the Town Line and is within the “Noank Grid”. It is appropriate for transients who would normally seek shore access at Noank via harbor launch services. A limited number of moorings may be placed within “T-3” under the authority of the Commission, in which case a fee sufficient to cover mooring maintenance and administration may be charged on a per-night basis by a designated agent. The 7 day limit would apply to boats on prospective Town moorings.

2. Transient anchorage area “T-2” is located north of Pine Point on Masons Island and is east of the federal channel, and north of the East Channel. It is bounded on the north by the federally-maintained former turning basin. This is a shallow anchorage with shore access available by arrangement with nearby marinas or via public dinghy docks to the north. Note that the public dinghy docks at Mystic River Park and Holmes Street do not allow overnight tie ups and are limited as to the length of the dinghy (12 ft in the case of the Town-owned Holmes Street dinghy dock.)

3. Transient anchorage “T-3” is to the north of the federal channel, which ends by the northern boundary of Mystic Seaport. Shore access is currently through Mystic Seaport Museum. Mystic Seaport Museum is a private, non-profit institution open to the public, subject to admission fees and museum hours. Permission to land at the Seaport must be arranged through its Dock Office. This anchorage is shallow and is bisected by an unmarked, deeper natural channel, that historically has been a preferred location for anchored transient vessels. The Commission plans to mark the channel in the future, subject to State permit, in order to keep the channel open for transit north and south. Shore access at Mystic River Boathouse Park is anticipated after the Park is constructed.

In addition to the designated transient anchorages, several marinas offer slips and may have moorings available for transient boaters. In particular, the Mystic Seaport Museum docks can accommodate at least 40 transient boats at any one time, subject to reservation.

F. Navigation and Boating Traffic Congestion:

FINDINGS: The facilitation of navigation within the harbor is a major concern. Since the late 1800's the Mystic River has experienced a great deal of boating traffic—both transient and locally generated. However, over the past several decades there has been a continual and substantial growth in the number of structures and moorings in the harbor, with the attendant intensification of use and subsequent reduced navigability within the harbor. To mitigate wakes and improve safety, the State has instituted a “Slow—No Wake” policy over most of the Mystic River from Noank to the northern end of the Federal Channel, as indicated by white marker buoys.

The increase in the number of moorings, docks, finger piers, and boats can be visualized by comparing aerial photographs of Mystic Harbor taken in 1991 (on which the mapping of the 1995 Mystic Harbor Management Plan was based) and current satellite imagery available through Google Maps or Google Earth. It is clear that the available public water area has decreased by virtue of the placement of large numbers of boats at private structures and moorings. In most cases the placement of moorings and structures followed due process and the granting of permits under State and Federal authority.

Intensification has been seen in the following areas:

1. *Marina Expansion.* The number of boats at marinas has increased substantially over the past decade. Not only has the number of slips (and accompanying boats) increased, but the average size of the boats has likewise increased, thus taking up more space and requiring more services and—when underway—increased concern for maneuverability in the Federal channel. Most prominent in this regard is the expansion of marina slips between the bridges.
2. *Increased Number of Boat Moorings:* The number of moored boats has noticeably increased since the beginning of this century, but the growth

in numbers has slowed as the deeper water has filled up with moorings. Waiting lists for moorings have increased as a result. Perhaps a more serious concern is the number and wait times for moorings on the wait list. (Waiting lists for moorings within Stonington Town waters are available to the public at the Stonington Town Hall and on the Town website.) In many cases, additional moorings were placed in areas which were designed not to block or interfere with navigation in marked channels and recognized fairways. On the other hand, many moorings had been placed and maintained since 1980 in areas which hinder, block or otherwise obstruct fairways and passage by boaters. The placement of new moorings and retirement of existing moorings had been done on a one-by-one, piecemeal basis, without any clear, concise, boating traffic system or plan. This loose arrangement persisted after the implementation of the 1995 Mystic Harbor Management Plan until the past decade, when the East Fairway/Historic Channel was finally cleared.

The placement of moorings in the harbor is of concern for assuring availability of water space for uses such as boat training sessions and general navigation by all boaters.

3. *Increase in Small Boat Activities.* In recent years, the Mystic River has seen an evolution in the types of waterborne sporting activities, as well as a substantial increase in traditional boating activities, including—but not limited to—sculling, kayaking, paddle boarding, small outboard-powered craft (especially dinghies), and jet skis. All of these activities need space and cannot be properly or safely conducted in areas of high concentrations of docking facilities or dense mooring areas. Accordingly, these activities have increasingly migrated toward main channel and fairway locations, which has resulted in increase hazard, both to the small craft and to larger vessels navigation in these areas. The institution of a “Slow—No Wake” policy along most of the Mystic River south of Rt 95 has helped, but has not mitigated the increased amount of boat traffic. Of particular concern is the increased use of rental kayaks and paddle boards—often by inexperienced operators—in the congested channel between and near the railroad and highway bridges.

4. *Day Cruising*. Mystic has become a popular locale for day cruise vessels. Mystic offers unique attractions, which include an historic village, a beautiful river and harbor, Mystic Seaport Museum, Mystic Aquarium, varied shopping and sightseeing opportunities, and local casinos. Day cruise activities include schooner trips “Out of Mystic”, harbor tours by Mystic Seaport Museum and private operators, and trips to Mystic by local vessels and others based nearby in Connecticut, Rhode Island and New York. The vessels used in these activities are of various size and — when operating regularly — place added constrictions and hazards on boating traffic in the Mystic River.

It is projected that tourism promotion plus the general desirability of the Mystic River area, as both destination and home port, will continue to result in pressures that may adversely affect those factors which make the river and its environs so attractive in the first place.

GOALS: Mooring areas, docking areas, sight lines, and associated activities should be designed or identified with consideration for safe navigation and reduced boating congestion.

POLICY AND NEEDED ACTION:

1. *Mooring Areas*: Mooring areas have been defined within the jurisdiction of the Commission, as shown in Figures 3, 5,6,7, 8, 9, and 10. No moorings will be allowed to be placed outside of these morning areas except in instances where a mooring permit had been previously granted by the Harbormaster and which had been maintained and used by its owner up to the present time, and which does not constitute a structural hazard for navigation or other water use where it is situated. The Harbormaster shall also have discretion to grant a mooring permit in instances where a mooring is sought outside a designated mooring field by a person having riparian rights in the immediate vicinity of the proposed mooring site, and which does not obstruct or impede navigation or other water use. The location of moorings within the designated mooring areas shall be spaced in a manner which will allow reasonable scope for storm tackle and otherwise allow for ease of low-speed navigation within said mooring areas.

2. *Review of State and Federal Permit Applications:* The Commission may review and make recommendations on all applications to the Department of the Army, Corps of Engineers (ACE), and to the State of Connecticut Department of Energy and Environmental Protection (DEEP) to construct or maintain any structures or to perform any dredging activity within the jurisdiction of the Commission, and in the neighboring waters of the Town of Groton, which might have an impact on activities within the waters of the Town of Stonington. Through its own resources, the Commission has developed a detailed map of the waterways, structures, channels, fairways, and bounds within the Mystic River estuary, based on Google Earth satellite imagery available as of 2021, Army Corps of engineers soundings, National Oceanographic and Atmospheric Administration (NOAA) chart 13214, and Geological Survey maps of Old Mystic and Mystic. It has appeared to the Commission that applications in some instances do not adequately reveal the impact that such projects may have on navigation because the drawings in such applications are often too narrow a context to illustrate broader potential impact. The burden is on reviewing officials to establish a larger context, but this is difficult without the accurate maps that the Commission has developed. However, if the Town's best interests are to be served in the future, this Mystic Harbor Management Plan should continue to be a local guide for administering the remaining, limited water space.

3. *Open Areas:* In establishing mooring areas within the waters of its jurisdiction and prohibiting moorings from being placed outside such areas, the Commission has thus attempted to open up—or keep open—large areas of the waters within its jurisdiction for general navigation and other boating purposes such as sail training and rowing (e.g., crew). These areas include the traditionally open water area between Williams Beach (YMCA) and Murphy Point, the area surrounding Enders Island, the area south of Pogy Bay, the area west of Masons Island from the Mystic River Marina to Ram Point, and some of the Mystic River at the north end of Mystic Seaport Museum. At the same time, adjustments have been made to accommodate evolving boating needs, such as extension of the mooring areas to include all of the east side of Masons Island south of the Masons Island causeway (also known as Riding Way Bridge) and extension of the transient anchorage north of Mystic Seaport, while reserving a north-south lane for crew activity.

Also, since the original Mystic Harbor Plan was instituted, a 75 ft wide fairway (identified as the Historic Channel in fig.7) has been cleared of encroaching moorings to the southwest of Masons Island. The Commission completed marking of this channel in 2021 when the final two pilings (of a total of 8) were placed near Seal Rocks.

- G. **Shellfish**: Conscious of the shellfish resources within its jurisdiction, the Mystic Harbor Management Commission will continue to coordinate with the Stonington Shellfish Commission to ensure mutually-supportive policies. Water quality is of particular importance to shellfish—especially when intended for human consumption. The Mystic Harbor Management Commissions’s policy and plans inherently support the Shellfish commission’s requirements. A general description of the Mystic River shellfish conditions and the applicable rules which have governed, including special designated areas, is included in Appendix B.
- H. **Protection of Coastal Resources**: A detailed description of the coastal resources of the Mystic River, within the jurisdiction of he Commissions is set forth in Section IV of this Plan. It is the policy of this Commission that, in evaluating any proposed activity or in monitoring any on-going activities, the objective and purposes of the Connecticut Coastal Management Act be reviewed and applied, as set forth in Section 22a-92 of the Connecticut General Statutes.
- I. **Fishing**: The Mystic River estuary is extremely prolific with regard to fishery resources. There is an extensive recreational fishery throughout most of the areas of the River for the following edible species: winter flounder (*Pseudopleuronectes americanus*), summer flounder (*Paralichthys dentatus*), striped bass (*Morone saxatilis*), bluefish—both mature and juvenile [“snapper blues”] (*Pomatomus saltatrix*), Blackfish [“tautog”] (*Tautog onitis*), scup [“porgy”] (*Stenotomus chrysops*), weakfish (*Cynoscion regalis*), tomcod (*Microgadus tomcod*), sea run brown trout (*Salmo trutta*), eel (*Anguilla rostrate*), blue crab (*Callinectes sapidus*), and others. There is a lobster fishery in and near the southern area of the jurisdiction of the Commission for both commercial and recreational license holders which has seen a decline beginning around the turn of the century, due to “shell rot”. There are signs this decline may be turning around. There are also many bait species present which are used in the recreational fishery. These include: mummichog (*Fundulus heteroclitus*), striped killifish (*Fundulus majalis*), rock crab (*Cancer irroratus*), green crab (*Carcinus maenas*), and bunker [Atlantic menhaden, [porgy] (*Brevoortia tyrannus*). It is the intent of the Commission to

preserve these fisheries by adopting and implementing the following policies:

- a) Areas of the River where recreational fishing is historically intensive shall be preserved from encroachment by structures and boat moorings.
- b) In desirable fishing areas where boat moorings exist, moorings shall be spaced at distances which allow access to and use by small fishing boats.
- c) The Commission shall take appropriate action within its powers to maintain and improve water quality throughout the Mystic River estuary.
- d) The Commission shall promote increased tidal exchange for artificially constricted coves, when practical and necessary to improve water quality, navigation, or to restore degraded coastal resources.
- e) Conscious of critical habitat species, such as eel grass and ascophyllum, the Commission will strive to preserve existing beds.

J. **Passive Activities**: Passive activities along the shoreline include sightseeing by foot, bicycle, and auto. The Mystic River estuary, particularly between US Rt 1 and Interstate I-95, offers many interesting sights and scenic vistas. This area provides subject matter for countless photographs, sketches, and paintings. The only scenic overlook along Interstate I-95 in Connecticut is—in fact—at the Mystic River.

Many people—residents as well as visitors—take pause and relax by the water’s edge. Whether they are on the drawbridge, along the Holmes Street seawall, in the small park on Bay Street, in Elmgrove cemetery, on private uplands, the Mystic River Park, the Mystic River Boat Park (north of Mystic Seaport Museum), Mystic Seaport Museum itself, or elsewhere, many people seem to draw strength from the serenity of the Mystic River.

Issues include:

- a. Protection of scenic vistas
- b. Regulation of waterside activities consistent with the uplands land use and with proper consideration of the character of the area.

K. **Coordination with The Town of Groton**:

FINDINGS. The entire westerly boundary of the jurisdiction of the Mystic Harbor Management Commission is established at the town line between the Town of Stonington and the Town of Groton. This boundary is approximately 5.5 miles in length, and extends from the western side of Ram Island northerly to Old Mystic, where Whitford Brook widens to form the northern end of the Mystic River.

Although the estuary is situated in two different towns, any general use of it for boating recreational or mooring purposed is likely to impact activities in both towns. For example, a vessel navigating the length of the Mystic River channel from Noank to Mystic Seaport Museum will cross back and forth between the Town of Stonington and the Town of Groton several times. Also, although a large portion of Noank Harbor is located within the Town of Stonington, the moorings in that area were placed—for the most part—in accordance with the “Noank Grid”, which had been established by the Town of Groton before the boundary between the two towns had been defined. Approximately 200 boats which are moored there are serviced by marinas, launch service and dinghy access from the Noank section of the Town of Groton.

GOAL. It is the goal of the Commission to coordinate its activities with those of the Groton Harbor Management Commission to the fullest extent possible. The Mystic Harbor Management Commission, from the time of its establishment, has been in constant contact and communication with the Groton Harbor Management Commission with regard to working out the many issues which, of necessity, concern both Commissions. There has been a continuing, constructive exchange of ideas, concepts, and technical information between the two Commissions, as well as at least two joint meetings of the Commissions.

POLICY, ACCOMPLISHMENTS, AND NEEDED ACTION:

1. Establishment of a legal boundary between the Town of Groton and the Town of Stonington. It came as a great surprise to the Commission at the time of its inception, when it found that the many maps which indicated the boundary line between the two towns throughout the Mystic River estuary were inconsistent and irreconcilable. The Assessors’ offices of both towns were consulted, as well as the Board of Selectmen of the Town of Stonington and the Town council of the Town of Groton. It was determined, in fact, that the boundary between the two towns had never been established with certainty, dating back to the original incorporation of the two communities as Towns of the State of Connecticut.

After careful consideration, the two towns agreed upon a line which was the assumed dividing line between the two towns shown on the US Geological Survey Map of the Mystic Quadrangle, labeled “Mystic, Conn. - NY., - RI., 41071-C8-TF-024, 1984” and on the US Geological Survey Map of the Old Mystic Quadrangle, labeled, “Old Mystic, Conn., 41061-D8-TF-024, 1983”.

The necessary legal steps to accept and ratify the agreed boundary were taken by the Board of Selectmen of the Town of Stonington and by the Town council of the Town of Groton. The conclusive establishment of the boundary between the two towns was due to the cooperative efforts of the Harbor Management Commissions of both towns and was an important and necessary first step to establish a good and effective working relationship between the two Commissions. All maps which are used by this Commission in its work and also the maps used by the Harbor Management Commission of the Town of Groton, adopt and reflect the formally established boundary between the two towns.

2. Mooring Areas: Upon the establishment of the dividing line between the Town of Stonington and the Town of Groton, it was shown that approximately 100 moorings in Noank harbor, which had been established and administered as part of the “Noank Grid” by the Town of Groton, were in fact, in the territorial waters of the Town of Stonington. These moorings were placed and serviced by commercial businesses in the Noank area of the Town of Groton. The Groton Harbor Management Commission had been aware of the ambiguous town line for many years, but considered it was in the public interest to provide *de facto* regulation in the absence of harbor management by the Town of Stonington before 1995. Once the Town Line was established, the Mystic Harbor Management Commission addressed its concern that the Noank mooring area had expanded greatly, to the extent that it had preempted available “open water” areas within Stonington Town waters for other boating and recreational uses. To remediate this situation the Commission adopted the following policies:

- a. **Designated Mooring Areas**: The mooring of vessels in Stonington waters in the Noank area is limited to Mooring area “C” shown in Fig. 7.
- b. **Relocation of Preexisting Moorings**: All moorings in Stonington waters in the Noank area that were placed outside Mooring area “C” should be removed or relocated to Mooring area “C”. To the extent that the moorings to be relocated are served by facilities located in the Village of

Noank, then such mooring should be relocated to Groton waters. The Harbormasters of the Mystic River and Noank Harbor will coordinate with each other to implement this policy. Every effort will be made to ensure that no person will lose an opportunity to maintain an existing mooring within the present “Noank Grid” as a result of this policy.

c. **Mooring Tackle:** The ground tackle requirements, spacing, and inspection of moorings should be established uniformly throughout Noank Harbor and that such requirements should therefore be identical for both towns. Mooring tackle anywhere within the jurisdiction of the Commission, including Noank Harbor, is subject to approval by the Harbormaster in consideration of local conditions.

2. Navigation: Over the years, boating traffic and general water use of the Mystic River has increased dramatically. There is a great need for the Town of Stonington and the Town of Groton to coordinate their Harbor Management Plans in order to facilitate the easy and safe flow of river traffic in both Towns, particularly in the Noank Harbor area. In narrow areas of the river, such as between the railroad bridge and the Rt 1 drawbridge in the center of Mystic, it is the Commission’s intent to prevent further encroachment of moorings and structures. This not only allows room for boats to safely pass one another in this area, but is also allows for turning and holding areas for boats waiting for the bridges to open. To address this issue, the Commission has adopted the following policies:

a. Under no circumstances shall there be any encroachment by structures or vessels secured at docks that would impede navigation within any Federally- or State-designated channel areas.

b. There shall be a minimum setback of 50 ft for structures from federally-designated channel areas and a minimum setback of 25 ft for structures from fairways and natural channels mapped by the Commission in this Plan.

c. Moored or anchored vessels shall be so situated as to remain at least 50 ft from the edge of a federally-designated channel, regardless of the direction of wind or current.

d. Turning basins and holding basins for vessels navigating the River shall be kept free of structures, and where appropriate, moorings.

- e. Mooring areas and structures shall be located in such a manner as to allow clear sight lines with respect to the channel and channel markers for boats navigating the Harbor.

VI. REGULATING ORDINANCES

A. REGULATIONS CONCERNING MOORING AND ANCHORING VESSELS WITHIN THE JURISDICTION OF THE MYSTIC HARBOR MANAGEMENT COMMISSION

Section 1 - Placement of Private and Commercial Moorings:

Placing any mooring in the waters within the jurisdiction of the Mystic Harbor Management Commission without a permit from the designated Harbormaster is prohibited. No moored vessel shall extend beyond the bounds of a designated mooring area, with the exception noted in Section 3(a) below. In no case shall a moored vessel encroach upon a designated channel (including recognized natural channels), fairway, turning basin, or transient anchorage. Moorings that have not been permitted/renewed may be removed by the Harbormaster and the owner thereof shall be notified, if possible, before removal. If not possible, mooring tackle and associated equipment, such as buoys, shall be treated as lost items. Commercial moorings may not be placed without the proper permits from the Department of Energy and Environmental Protection (DEEP) and the US Army Corps of Engineers (USACE).

Section 2 - Mooring Records:

- a. The Harbormaster(s) shall keep a detailed record of each mooring, on a permit form, including:
 - i. The owner's name, home and business address and telephone number(s),
 - ii. Location by latitude and longitude, expressed in degrees and decimal minutes as in this example: N41°19.37'.

- iii. Date mooring was set and date of latest inspection,
 - iv. Name, length, draft, type of vessel, hailing port for documented vessels, and
 - v. CT registration number and documentation number (if any).
- b. All vessels subject to registration under CT statutes shall have current registrations and shall properly display the registration number. Documented vessels requiring CT registration shall properly display the current year sticker and shall properly display vessel name and hailing port.
- c. The Harbormaster(s) shall maintain in a public place, including the Town of Stonington website and at the office of Town Clerk, a waiting list for mooring space and a list for assignment of mooring space. Both lists shall be updated annually.
- d. Applications for all moorings shall be renewed annually.
- e. The annual mooring fee shall be noted on the mooring permit.

Section 3 - Allocation of Moorings:

- a. The Mystic Harbor Management Commission, in coordination with the Harbormaster(s), has established and posted information (i.e., “Frequently Asked Questions”) regarding moorings on the Town of Stonington website. Also on the website is a list of applicants waiting for moorings on a “first come, first served” basis.
- b. As provided in Section 3(a), available mooring sites shall be offered to the most senior (i.e., earliest applicant) on the mooring waiting list, subject to the constraints contained in these rules and regulations. If the available mooring is not suitable to accommodate the senior applicant’s vessel or specific needs, it shall be offered to the next most senior applicant. The first senior applicant shall retain his or her place on the waiting list in this case. The Harbormaster(s) shall continue efforts to provide a suitable mooring for the most senior applicant. If the senior applicant refuses a mooring which is suitable for his or her vessel in the opinion of the Harbormaster, that person shall be moved to the bottom of the waiting list. In order to obtain the most effective utilization of existing mooring space, lists of applicants will be

maintained with reference to the length and draft of their vessels. These lists will be available for public inspection during regular office hours at the office of the Town Clerk. Owners of existing moorings shall be deemed the senior applicants for the nearest available mooring location that is more suitable for the owner's vessel.

c. **Mooring Rights:** Property owners with riparian rights or associated waterfront rights-of-way shall have the right, upon application to the Harbormaster, to a mooring location within close proximity to his or her waterfront access, subject to the Harbormaster's judgement of appropriateness of the requested location. Such judgement shall include consideration of potential negative impacts from the requested location. Moorings that are either inside or outside a designated mooring area, and are inherently associated with property rights, may be "grandfathered", provided that:

- 1) they have been in place prior to the enactment of these regulations,
- 2) they are documented with the Harbormaster, and
- 3) the annual renewal fee is paid.

Property owner moorings are for private use by the permittee and may not be commercialized or rented out.

d. Mooring locations may be transferred within immediate family members: i.e., spouse, parents, children, or siblings.

Section 4 - Original Application for Mooring Permit:

Any interested person, persons, or corporations may apply for a mooring permit by completing in full the application provided by the Harbormaster for that purpose. In the case of a corporation, association, or other group, however organized, disclosure of the principals of the corporation and evidence of corporate organization must be submitted by producing current articles of incorporation, or a similar instrument registered with, approved, and issued by the State of Connecticut.

Section 5 - Mooring Permits Valid for One Year Only:

Mooring permits are valid for a period not to exceed one year, unless renewed as referenced in this ordinance.

Section 6 - Renewal of Mooring Permits:

All mooring permits shall expire on December 31st and should be renewed by January 30th of the following calendar year. A grace period lasting until March 31st is allowed, after which period applications will be treated in the same manner as original applications.

Section 7 - Mooring Registration Fee:

All applications for registration or renewal of registration shall be accompanied by a fee of \$50.00. All such fees shall be non-refundable unless an application is denied or an applicant is placed on a waiting list. All mooring permits shall expire on the 31st day of the December following the date of issuance. Note that the mooring fee is set by the Commission and may be changed without updating this plan.

Section 8 - Mooring Permits are Non-transferable:

Whenever a permittee parts with possession of or transfers the title of interest in the vessel identified in the mooring permit to another person by any arrangement whatsoever, the mooring permit shall expire, except as otherwise provided herein with respect to the original permittee. The new possessor, transferee, or owner shall have no right to use the mooring space covered by the previous owner's mooring permit. The original permittee may, upon written application to, and approval by, the Harbormaster, retain the mooring space assigned under his or her mooring permit, provided that another vessel owned by the permittee is moved onto the mooring within thirty (30) days, unless the period is extended by the Harbormaster because of special circumstances and the permittee continues to pay the required permit fee. If the replacement vessel is significantly smaller, larger, or of different draft of type, the Harbormaster shall have the right to relocate said vessel to another, more suitable mooring.

An exception to this regulation is that a mooring permit may be transferred within the owner's immediate family, as provided in Section 3(d) above.

Section 9 - Mooring Location:

Permits granted for moorings shall be consistent with all provisions of the adopted Water Use Plan. The mooring areas are delineated in Figs. 7, 8, 9, and 10 and shall be a part of this ordinance. These areas identified as “A”, “B”, “C”, “D”, “E”, “D”, “F”, “G”, “H”, and “M”, represent the best mooring opportunities in terms of protection and proximity to the shore. A mooring may be assigned to an applicant by the Harbormaster with due consideration of vessel size, draft, riparian access and any other relevant factors, including impact on coastal resources. Consideration shall be given to expanded spacing of moorings in desirable fishing areas in order to facilitate access by small boats engaged in fishing.

Section 10 - Mooring Placement:

When an applicant has registered for a mooring, the Harbormaster shall assign a place and number for a specific location. The Harbormaster may mark the precise location with a stake or float indicating the registration number. Upon verification of proper location by the Harbormaster, the applicant shall receive a mooring permit in accordance with the requirements of Section 1.

Section 11 - Transient Anchorage:

Space within transient anchorages designated within the Mystic Harbor use plan is available on a first-come, first-served basis. These areas are reserved for the exclusive short-term use by commercial and recreational vessels. Accordingly, the following regulations shall apply to the use and users of designated transient anchorages:

- a. Vessels may remain in the transient anchorage areas for a period not to exceed 7 days in aggregate over a 30 day period starting with the first day of anchorage, with a maximum number of 14 days during the boating season (1 June through 30 September). Exceptions in cases of special circumstances may be made after notification of, and approval by, the Harbormaster. Sufficient holding tank capacity, lock-out of direct black water discharge, and pump out arrangements, subject to verification by the Harbormaster, shall be utilized to assure no sewage discharge into the Mystic River. See Appendix A.

- b. Vessels shall be anchored securely and properly, to the satisfaction of the Harbormaster.
- c. Vessels shall be anchored so as to remain within the designated areas at all times and under all conditions.
- d. Vessels shall not be left unattended by a qualified operator (acceptable to the Harbormaster) for more than a 24 hour period.
- e. No structures or permanent moorings may be placed in the designated transient anchorage areas. This shall not, however, be construed to deny a riparian owner's access to navigable waters.

Section 12 - Anchoring, Mooring, and Docking Sanitation:

The entire Mystic River, including all of the waters under the jurisdiction of the Commission, is a No Discharge Zone, with facilities—both stationary and mobile—to assure reasonable access to approved sewage discharge.

B. MINIMUM MOORING TACKLE SPECIFICATIONS:

Utilization of proper mooring tackle is necessary to secure vessels adequately at their moorings. Storms, wind, waves, tides, currents, and wakes must be considered when selecting appropriate hardware. Therefore, the Mystic Harbor Management Commission has established minimum standards for tackle to secure vessels adequately in the Harbor. These standards are advisory only. The Town of Stonington assumes no liability for personal injury or property damage which may result from the utilization of any tackle which meets or exceeds these standards.

- a. *Standards.* Mooring tackle in the lower area of the Mystic River (including the “Noank Grid” shell meet the minimum standards shown in Table T-1.

MUSHROOM WEIGHT	BOTTOM CHAIN	TOP CHAIN	LARGEST SAILBOAT	LARGEST POWERBOAT	PENNANT DIAMETER
100#	25' x 1/2"	None	15'	15'	1/2"
150#	25' x 1/2"	25' x 3/8"	20'	20'	1/2"
200#	25' x 1/2"	25' x 3/8"	24'	24'	5/8"
300#	25' x 1/2"	25' x 1/2"	28'	28'	3/4"
500#	25' x 3/4"	25' x 1/2"	35'	30'	3/4"
750#	25' x 3/4"	25' x 5/8"	40'	35'	1"
1000#	25' x 3/4"	25' x 5/8"	45'	40'	1 1/4"

Table T-1. Minimum Mooring Tackle Standards for the lower harbor

b. *Length of Pennant:* The maximum length of the pennant shall not exceed two and one-half times the distance from the bow chock to the water plus the distance from the bow chock to the mooring cleat or post.

c. *Type of Pennant:* Pennants are normally 3-strand nylon rope that should be spliced or shackled to the mooring chain. The use of a second pennant is recommended. Wire shall not be used for a pennant, but newer technology may be used, subject to approval of the Harbormaster.

d. *Chafe Protection:* All pennant lines running through a chock or any other object where chafing may occur should have adequate chafe guards. Chocks or posts shall be adequate and properly secured.

e. *Length of Chain:* The minimum length of the chain(s) should be two and one-half times the depth of the water at mean high water. The bottom and top chains should be of equal length.

f. *Scale of Hardware:* All shackles, swivels, and other hardware used in the mooring hookup should be appropriate in size to the chain used.

g. *Seizing of Shackles:* All shackles should be properly seized. Seizing should not promote electrolysis.

h. *Buoy Attachment:* It is recommended that the pennant be spliced or shackled into the bitter end of the top chain below the buoy so the strain is

not carried by the buoy. Buoy specifications should be consistent with Section 15-121-A3 of the Connecticut State Agency Regulations (State Boating Regulation section).

i. *Storm Rigging*: The use of a second pennant and anchor in storm conditions is encouraged where feasible. Mid-chain weights are also encouraged during storm conditions. All such storm gear shall be removed promptly after cessation of storm conditions.

j. *Mooring Anchor Type*: Only mushroom anchors or equivalent (as approved by the Harbormaster) will be acceptable on permanent moorings. Engine blocks are not acceptable.

k. *Minimum Separation of Vessels*: The minimum distance between any two moored vessels should be 1.25 times the total mooring scope, plus the length of the larger vessel.

l. *Winter Mooring Buoys*: Wooden spar buoys (“winter sticks”) or equivalent spar buoys in other materials may only be used in winter and shall attach directly to the mooring chain to ensure vertical extension of at least 18 inches above the water at all times. Spars shall be painted in a high visibility color or white.

m. *Regular Inspection*: Regular inspection of the mooring anchor and tackle is the responsibility of the permittee and shall be certified by the mooring permittee on an annual basis. Moorings may be inspected by the Harbormaster at any time.

NO REPRESENTATION OF ADEQUACY IS MADE BY THIS SECTION OR BY THE HARBORMASTER’S ACCEPTANCE OF PROPOSED TACKLE.

B. ARTICLES:

Section 1. Applicability:

The provision of this ordinance and any rules and regulations adopted pursuant thereto shall be applicable, and shall govern the use of harbor waters and facilities under the jurisdiction of the Mystic Harbor Management Commission as defined in Appendix C and delineated in Figures 1 through 10.

Section 2. Invalidity of Provisions:

Should any provision or provisions of this ordinance be held invalid or inoperative, the remainder shall continue in full force and effect as though such invalid or inoperative provisions had not been determined.

Section 3. Authorities:

The Harbormaster or Deputy Harbormaster (if there is one) shall have the authority to carry out harbor management directives and enforce all provisions of the Harbor Management Plan, including this ordinance. The Harbormaster or Deputy Harbormaster may cite any alleged violators of this ordinance.

The Commission shall review and comment on development proposals affecting Mystic Harbor and may review and make recommendations regarding any and all applications for permits or approvals for all floats, structures, and other marine facilities with the waters under its jurisdiction. All uniformed officers of the Town of Stonington Police Department shall have the authority to enforce provisions of this ordinance.

Section 4. Violations:

Any violation of this ordinance shall be a municipal infraction and is punishable by a fine not to exceed \$100.00 per violation, to be imposed for each violation thereunder as provided under Connecticut General Statutes, Section 7-148. Each day of violation shall be considered a separate offense and subject to separate citations and fine(s). Fines levied under the provision of this ordinance shall be collected and deposited into the Mystic Harbor Management Fund. Nothing in this section shall preclude the imposition of a greater penalty as provide for under Federal statutes or the laws of the State of Connecticut, or for prosecution for violation of any other relevant Federal, State, or local statute, law, or regulation.

Section 5. Mystic Harbor Management Fund:

A Mystic Harbor Management Fund was created in 1995 and is hereby continued to receive and provide moneys for harbor management purposes determined by the Mystic Harbor Management Commission. All revenues

generated by a) mooring permit fees, b) fines levied under the provisions of this ordinance, and c) other fees generated shall be deposited into this Fund in accordance with the provisions of Connecticut General Statute 22a-113s.

Section 6. Liability:

The Town of Stonington, the Mystic Harbor Management Commission, its Commissioners, and Harbormasters shall not, by adoption or administration of these regulations, assume any risks associated with personal injury or damage or loss to property on account of accident, fire, theft, storm, vandalism, or acts of God.

Section 7. Traffic Control Authority and Vessel Speed:

The Harbormaster shall have all authority as provided under the laws of the State of Connecticut with particular reference to Connecticut General Statutes Section 15-154 and Chapter 263 (Connecticut General Statutes Section 15-1 et seq.) and Chapter 268 (Connecticut General Statutes Section 15-121 et seq.). The Harbormaster may control waterborne traffic in any portion of the waters of a harbor or marine facility under his or her jurisdiction by use of authorized State regulatory marker, signals, orders, or direction any time preceding, during, and after any race, regatta, parade, or other special event held in any portion of the waters of a harbor or marine facility or at any time when the Harbormaster deems it necessary in conformity with State and Federal statutes and regulation in the interest of safety of persons and vessels or other property. The operation any vessel within the harbor area shall not exceed posted speed limits or wake limitations as provided for under Connecticut General Statute Section 15-16, CGS Section 15-140, which addresses reckless operation and wakes which endanger persons or property.

Section 8. Obstruction of Channels, Fairways, and Berthing Space:

No vessel shall be moored, anchored, or berthed so as to interfere with the free and unobstructed use of the channels, fairways, or berthing spaces. The placement of fixed fishing gear, such as lobster pots and associated floats, is prohibited in all channels and fairways as delineated in the DEEP regulations (Sec. 26-142a-3a(d).)

Section 9. Swimming:

No vessel may be operated within a designated swimming area, which shall be properly identified using markers, including—but not limited to—floats, in accordance with State Regulations.

Section 10. Traffic Control Authority and Vessel Speed:

Water skiing is prohibited in all designated channels, fairways, turning basins, mooring fields, and anchorages and shall be in conformance with Connecticut General Statutes, section 15-134, and regulations established by the Department of Energy and Environmental Protection under Connecticut General Statutes, Section 15-121.

Section 11. Discharge of Refuse:

It is prohibited to discharge any refuse or waste matter, petroleum product or by-product, paint, varnish, or debris of any kind into harbor waters per Connecticut General Statutes, Section 22a-250.

Section 12. Marine Toilets:

Toilet fixtures on a vessel shall be operated and maintained in accordance with Federal and State law. Federal law (Section 312 of the Clean Water Act) prohibits the discharge of untreated sewage from vessels within three miles of the coastline. The Mystic River is within this zone.

Section 13. Signs: Erection and Maintenance:

The Harbormaster may place and maintain, or caused to be placed and maintained, either on land or water, such signs, notices, signals, buoys, or control devices in accordance with regulations established by the Department of Energy and Environmental Protection (under Connecticut General Statutes, Section 15-121) and in accordance with federal statutes and regulations, in order to carry out the provisions of this ordinance, or to secure public safety and the orderly and efficient use of a harbor or marine facility.

Section 14. Lights and Lighting Devices:

No person shall operate lights or lighting devices on a vessel in the Harbor in such a manner as to constitute an interference to visual navigation. Connecticut General Statutes, Section 15-129a governing lights on vessels applies.

Section 15. Abandoned Vessels:

When a vessel has been abandoned in the harbor, the Harbormaster may take custody and control of such vessel in accordance with Connecticut General Statutes, Section 13-140c, and remove it, store it, or otherwise dispose of it, all at the expense and sole risk of the vessel owner. Reasonable notice of such disposal shall be publicly given. See Connecticut General Statutes, Sections 15-8a and 15-9.

Section 16. Unauthorized Mooring or Berthing:

A person having charge of a vessel shall not make it fast or secure it to any dock, jetty, breakwater, bulkhead, wharf, pier, dock, or mooring without the consent of the owner thereof except in an emergency, in which case such person shall forthwith report the emergency to the owner thereof and the Harbormaster and thereafter act in accordance with the Harbormaster's instructions.

Section 17. Unseaworthy Vessels Prohibited in the Harbor:

An unseaworthy vessel or a vessel in a badly deteriorated condition and which is likely to sink or to damage docks, wharves, floats, or other vessels, or which may become a menace to navigation shall not be permitted in the harbor, except in cases of emergency. The Harbormaster may make the determination of unseaworthiness and may remove such vessel(s) in accordance with Connecticut General Statutes, Sections 15-8, 15-9, and 15-11a.

Section 18. Fees Incidental to Recovery, Movement, and Storage:

Charges may be imposed by the Harbormaster for recovery and movement of vessels whenever a vessel is moved, impounded, or held as a result of violations of this ordinance. Connecticut General Statutes, Sections 15-9, 15-11a, and 15-140c, authorizing recovery of expenses, apply.

Section 19. Noise Abatement:

No persons shall operate, occupy, or leave a vessel in such manner as to constitute an audible nuisance. This prohibition includes—but is not limited to—operating a motor boat without an adequate muffler, as provided under Connecticut General Statutes, Section 15-129.

Section 20. Secure Berthing, Mooring, and Anchoring of Vessels:

All vessels anchored, moored, or berthed within the jurisdiction of the Commission shall be tied, moored, anchored, or otherwise secured with proper care and equipment as required to prevent breakaway or damage to vessels or property. It shall be the responsibility of the owner of the vessel and—where applicable—marine facility operator, to assure that the vessel is properly secured and to provide for periodic inspection, maintenance, and replacement of such equipment at reasonable intervals as determined by the Harbormaster. See Connecticut General Statutes, Section 15-8.

Section 21. Storm Precautions:

Vessel owners should, without penalty, add reasonable scope, weights (e.g., kelleys), or extra anchors in anticipation of storm conditions, providing that there is no interference with neighboring vessel or structures. Prompt return to usual mooring provisions shall be effected within 7 days after such storm.

VII. DEFINITIONS

Anchoring: To secure a vessel temporarily to the bottom of a water body by dropping from a vessel one or more anchors or other ground tackle designed for temporary use.

Berth: Space for a single vessel alongside a pier, finger float, dock, or other structure.

Buffer: An open water area between the shore and a designated mooring area. Similarly, an open water area between an anchorage or mooring field and a channel or fairway.

Channel: A water area officially marked and maintained to permit unobstructed movement of vessels.

Commercial Mooring: A mooring that is rented or leased or otherwise available for rental or lease.

Commercial Vessel: Any vessel used in or otherwise engaged for any type of commercial operation or activity.

Distress: A state of disability or of present or obviously imminent peril which, if unduly prolonged, could endanger life or result in serious property damage.

Emergency: A state of imminent or proximate danger to life or property in which time is of the essence.

Fairway: A locally-designated water area reserved for the unobstructed movement of vessels.

Harbor Management Act: The legislation contained within the state of Connecticut General Statutes, Sections 22a-113k through 22a-113t and as may be amended.

Harbor Management Commission: A local municipal commission established under—and carrying out—the responsibilities authorized by the Connecticut Harbor Management Act.

Harbormaster: An official appointed by the Governor of the State of Connecticut to administer a harbor in accordance with the Connecticut General Statutes.

Liveaboard: A vessel used for extended stays aboard that requires sewage discharge issues to be addressed.

Marine Facility: A public or privately-owned facility within a harbor area affecting the use and operations of vessels located within the harbor.

Moor: To secure a vessel to a mooring.

- Mooring:** A device or system incorporating mooring tackle intended for long term use by which vessels are secured to the bottom of a water body.
- Mooring Buoy:** A floating device designed to mark a mooring in conformance with State of Connecticut boating regulations.
- Mooring Tackle:** The hardware and cordage used to secure a vessel to a mooring.
- Open Area:** Synonymous with open water.
- Open Water:** A water area designated on the Water Use Plan where moorings and structures are restricted in order to preserve the area for navigation, as a natural resource, or for public recreational purposes.
- Public Access:** An area where the public has free access to the water from the land.
- Public Area:** All parts of the harbor except those areas owned privately or under specific government lease to private parties.
- Shore:** The part of the land in immediate contact with a body of water, including the area between high and low water lines.
- “Shall” and “May”:** “Shall” is mandatory: “may” is permissive.
- State:** The State of Connecticut.
- Structure:** A dock, pier, piling, breakwater, groin, seawall, and combinations thereof.
- Transient Anchorage:** An area designated on the Water Use Plan for the exclusive short-term anchoring by commercial and recreational vessels.
- Underway:** The condition of a vessel that is not anchored, moored, made fast to a structure, nor aground.
- Vessel:** Every description of watercraft, other than a seaplane on water, used or capable of being used as a means of transport through the water, as defined in Connecticut General Statutes Section 15-127.

APPENDIX A: WATER QUALITY OF THE MYSTIC RIVER

1. Present Sources of Pollution:

All pollution in the Mystic River appears to be man-made. That is, there are no natural sources, such as mineral deposits or acidic water sources. There is a marked difference in pollution levels in summer due to the increase in human population and the warmer water. The five main sources of pollution are:

- i. Stream discharge,
- ii. Storm runoff,
- iii. Sewer treatment plant effluent,
- iv. Boating activity, and
- v. Poor river circulation.

a. Stream Discharge:

Stream discharge provides the transport of non-point source pollutants into the Mystic River. There are two streams in the Town of Stonington which discharge into the Mystic River: Pequotsepos Brook and Whitford Brook.

Much of Pequotsepos Brook is within a nature preserve, with minimal residential and agricultural activity in its small watershed area. This brook discharges in the northeast corner of the middle area of Mystic Harbor, in proximity to the Naik Family YMCA (formerly known as the Mystic Community Center), with its public bathing beach. Pequotsepos Brook is not considered to have a significant detrimental effect on the water quality in the Harbor, but may, itself, become contaminated due to extensive marine activity at its mouth, defined by a narrow opening in an Amtrak bridge, which is a factor in reduced circulation.

Whitford Brook, with its feeder brooks, forms the headwaters of the Mystic River. Long-term development within the Whitford Brook watershed is a concern for water quality in the Mystic River.

b. Storm Runoff:

Storm runoff from developed areas is considered to be a major source of pollution. Runoff may contain debris and contaminants from streets, open land areas, publicly-used chemicals, air-deposited substances, ice control chemicals, and contaminants washed from vehicles. These pollutants may include heavy metals, pesticides, bacteriological agents, and nutrients that foster algae growth.

A “best practice” suggestion is that at least the first inch of rain on a developed site should be captured and 80% of the suspended solids should be removed prior to discharge of surface water into the harbor. This Commission has reviewed site plans provided by the Town Planning and Zoning Commission to verify that site engineering has taken this into account.

Storm runoff is particularly of concern in the high population density area south of Interstate 95, where significant runoff drains directly into the River.

c. Sewer Treatment Plant Effluent:

The Town of Stonington Mystic Sewer Treatment Plant provides primary and secondary treatment, which allows phosphates and other nutrients to be discharged directly into the Mystic River. The Sewer Plant outfall is near the Federal channel at the railroad bridge, resulting in the effluent being carried up the river on the incoming tide and subsequently down river on the outgoing tide.

Over the years, commercial development in the Mystic-Stonington area—particularly near Exit 90 of Interstate 95—has resulting in seasonal overloads, with periodic release of untreated effluent. Diversion of some of the sewage to the underutilized Stonington Borough Treatment Plant has helped, but the Mystic Plant inexorably approaches capacity, particularly during the summer. Periodic moratoriums on development have helped to minimize the pollution, but there remains a concern about the prospect for further release of untreated sewage, particularly in the vicinity of Williams Beach, a bathing beach at the Naik Family YMCA.

d. Boating Activity:

Boating activity in Mystic Harbor has been increasing over the years. Other than the considerable number of visiting boats, there are approximately 2600 boats, either moored or berthed at docks that are effectively home-ported in Mystic.

One characteristic of heavy boating activity is bottom churning from propeller wash. Sediments from pollutants from past decades are stirred up and can remain in suspension for some time. Soapy rinse water from topside wash downs, the particulates and dissolved release from antifouling paint, discharge of galley dishwater (i.e., “gray water”), engine fluid spills, and the negligent discharge of sewage (i.e., “black water”) all contribute to the degradation of the water quality of the Mystic River. For a number of years now, the availability and popularity of a free sewage pump out service has been of some help in encouraging boaters to properly discharge their “black water” in accordance with the State “No Discharge” mandate. Still, there is concern about the compliance of “live aboard” vessels, which are impractical to monitor.

e. River Circulation:

The Mystic River, despite its name, is actually an estuary, subject to significant tidal action. In this regard, the major flow in the river is caused by a mean rise and fall of 2.3 ft at the mouth of the river. Major constrictions occur at the Route 1 and Railroad bridges, and at the narrow areas on either side of Masons Island. These constrictions result in a percentage of water being shifted back and forth in the river—particularly in the northern two thirds of the river—before pollutants either settle out or find their way to the sea. Eventual flushing occurs due to the mixing at the interface of “captured” and “free” water, helped by the river flow and wind action.

The actual circulation is usually a complex pattern peculiar to a particular estuary. Stratification between fresh and salt water is known to occur in varying degrees. The impact of point discharges, such as the runoff culvert in the Riverbend road area and the Mystic Aquarium filter backwash outfall by Elmgrove Cemetery have not been studied, but are of concern since they are in the upper harbor area that has limited circulation. The Mystic Aquarium had been granted a permit over 50 years ago to discharge filter backwash containing wastes from various sea creatures, including marine mammals. Other stormwater runoff outlets are also of concern but they, too, have not been studied.

2. Description of Present Water Quality:

As of 1995, areas of the Mystic River were designated “Class SB” by the State of Connecticut. Shellfish in SB areas may be transplanted to approved areas for purification prior to human consumption or other legitimate use. This transplanting process may be undertaken only by persons with permits from the Connecticut Department of Agriculture / Aquaculture Division. See the following Appendix B for an update of the shellfish policy.

The salinity in the upper reaches of the harbor varies from 3 to 17 ppt (parts per thousand) going south from the mouth of Whitford Brook to the Elmgrove Cemetery. Tidal range is approximately 1.75 ft in the upper reaches. The tidal range increases to 2.0 ft south of the Elmgrove Cemetery. South of the railroad bridge the tidal range averages over 2.3 ft and the salinity approaches 26 ppt near Six Penny Island. The southern end of the Mystic River is very open and subject to good tidal mixing from the ebb and flow of the waters of Fishers Island Sound. The salinity in this area is approximately 29 ppt. Recreational shellfishing is allowed on the eastern side and to the south and southwest of Masons Island. Recreational shellfishing is subject to permits from the Town of Stonington Shellfish Commission. Maps showing the shellfishing areas are available from the Town Shellfish Commission. These areas have also been incorporated in the maps within this Harbor Management Plan and in the following Appendix B.

APPENDIX B: SHELLFISH IN THE MYSTIC RIVER ESTUARY

Introduction: Coastal Resources—Shellfish Concentration Areas

(Note: The information for this section provided by the Stonington Shellfish Commission, Don Murphy, chairman)

The waters in the jurisdictional area of the Mystic Harbor Management Commission (MHMC) support a rich shellfish population that is an important natural resource. The Stonington Shellfish Commission (SSC), which manages all recreational and commercial shellfishing within town waters, has a vigorous recreational shellfishing program and a small but important aquaculture industry. MHMC's jurisdictional area contains two of Stonington's most popular recreational shellfishing areas and several aquaculture grounds. The recreational areas, which are east of Masons Island, contain populations of hard shell creams (also known as quahogs) and oysters. Seasonally, there is a small population of bay scallops. The aquaculture sites, which are north and west of Masons Island, contain oysters that are actively managed by State of Connecticut and Town of Stonington licensed oyster growers. Throughout MHMC's jurisdictional area there are scattered small populations of blue mussels, razor clams, conch, and whelk.

The MHMC will coordinate efforts with the Stonington Shellfish Commission (SSC) to ensure mutually supportive policies. It is recognized that the Shellfish Commission has more extensive boundaries than does the Mystic Harbor Management Commission, but the Groton-Stonington town line is common to both commissions. Water quality is of particular importance to the shellfish issue. The MHMC's policy and plans inherently support the Shellfish Commission's requirements. The remainder of Appendix B provides a description of the existing shellfish situation and applicable rules which govern.

The five sections of the Mystic River, defined in Section III of the Mystic Harbor Management Plan, have different shellfish growing area classifications and, thus different shellfishing activities. These classifications, which are based on water quality and sanitary shoreline surveys to identify actual and potential pollution sources and their impact upon a growing area, are defined by the National Shellfish Sanitation Program (NSSP), a cooperative program consisting of state,

Food and Drug Administration (FDA), and industry partners who agree to accept and meet specific responsibilities in order to ensure the safety of molluscan shellfish. In the State of Connecticut the NSSP is managed by the Connecticut Department of Agriculture/Bureau of Aquaculture (DA/BA).

The five growing area classifications in MHMC's jurisdiction are shown in Figures B-1 through 5. These figures include all of the Mystic harbor waters (including waters within the Town of Groton) to provide overall context.

APPROVED AREA (A) is a classification used to identify a growing area that is safe for the direct marketing or consumption of shellfish. An area is classified as Approved when a sanitary survey finds that there is no contamination from pathogenic organisms, poisonous or deleterious substances, marine biotoxins, or bacteria concentrations exceeding the bacteriological standards for a growing area in this classification as set forth in the NSSP guidance. The water quality in the growing area shall also meet the bacteriological standards for an Approved classification. The Approved area must be closed to all shellfishing after a 3" rainfall or an upset at the Mystic Water Pollution Control Facility (WPCF). Before the area can be reopened water samples must be taken and analyzed to confirm that the area has returned to Approved conditions. In addition, SSC is required by DA/BA to collect water samples at least five times per year while the area is open to confirm the water quality level. The samples are analyzed for bacteria content. The only Approved areas in the MHMC's area of responsibility are located in the southernmost portion of the harbor. This area contains a 24-acre plot located immediately north of Ram Island that is owned by and oyster company. The 1992 town-line agreement split this area, but by the Groton/Stonington agreement the area is treated as if it were entirely in Stonington. (A) areas are shown in white.



CONDITIONALLY APPROVED AREA (CA) is a classification used to identify a growing area that is safe for the direct marketing or consumption of shellfish when the area is in the open status. The area must meet the criteria for Approved classification when the area is in the open status, but meets the criteria for the

restricted classification in the closed status. An area may be classified as Conditionally Approved when a sanitary survey finds that the area can remain in the open status for a reasonable period of time, and the factors impacting the area are known and predictable.

SSC's recreational shellfishing areas A and B, which are in MHMC's jurisdictional area east of Masons Island (Figure B1-b), meet these criteria. After a significant rainfall (currently 1" or more) or a system upset at the Mystic WPCF, the area must be closed to recreational shellfishing for a minimum of a week. The area may be reopened after water samples taken during the closure show that the water quality has returned to satisfactory levels. In addition, SSC is required by DA/BA to collect water samples each month while it is in open status to confirm the area meets the water quality standard. The samples are analyzed for bacteria content. (CA) areas shown in yellow.



CONDITIONALLY APPROVED SEASONAL AREA (CAS):

In addition to the requirements described above for the CA classification, the area may be opened only within a specified season, usually related to the presence of boats docked and moored in the growing area. In 2019 DA/BA, SSC, and the Town of Groton Shellfish Commission entered into an agreement to manage a CAS for the Lower Mystic Harbor. This agreement allows oyster grown in the waters south of Six Penny Island to be brought directly to market during the winter months (November 1 to April 30). The management plan requires close monitoring of the performance of the Mystic WPCF, monitoring the population of boats on moorings and marinas, and monthly water sampling to confirm the area meets the water quality standard. In addition, the area is closed after a significant rainfall (currently 1.5" or more). Water samples taken during the closure are taken to ensure that the water has returned to the water quality standard. The oysters harvested during the summer must be taken to deeper waters for depuration*.

*Depuration refers to the process of reducing the pathogenic organisms that may be present in shellfish by transferring them to a controlled aquatic environment as a means for treatment. (CAS) areas shown in orange.



RESTRICTED RELAY/DEPURATION (RR) is a classification used to identify a growing area where harvested shellfish is moved to Approved or Conditionally Approved waters for natural cleansing or depuration. An area may be classified as Restricted Relay when a sanitary survey finds a limited degree of pollution and levels of fecal pollution, human pathogens, or poisonous or deleterious substances so that shellfish can be made safe of human consumption by either relaying, depuration or low acid-canned food processing. Shellfish may only be harvested from Restricted areas by special license, and may not be directly harvested for market or consumption. (RR) areas are shown in light green.



CONDITIONALLY RESTRICTED (CRR) is a classification used to identify growing area where a sanitary survey has found that the area meets the criteria for Restricted classification when the area is in the open status but meets the criteria for Prohibited classification when the area is in the closed status. Each Conditionally Restricted growing area must have a written management plan that designates whether harvested shellfish are relayed or depurated. Shellfish may only be harvested from Conditionally Restricted areas by special license, and may not be directly harvested for market or consumption. (CRR) areas shown in dark green.



PROHIBITED (P) is a classification used to identify a growing area where there has been no current sanitary survey or where a sanitary survey has found that the area is adjacent to a sewage treatment plant or other point source outfall with is public health significance; pollution sources may unpredictably contaminate the growing area; the growing area is contaminated with fecal waste so that the shellfish may be vectors for disease microorganisms; and/or that the concentration of bio-toxin is sufficient to cause a public health risk. Shellfish may not be harvested from Prohibited areas except for harvesting seed oysters or deletion of the areas. (P) areas shown in red.



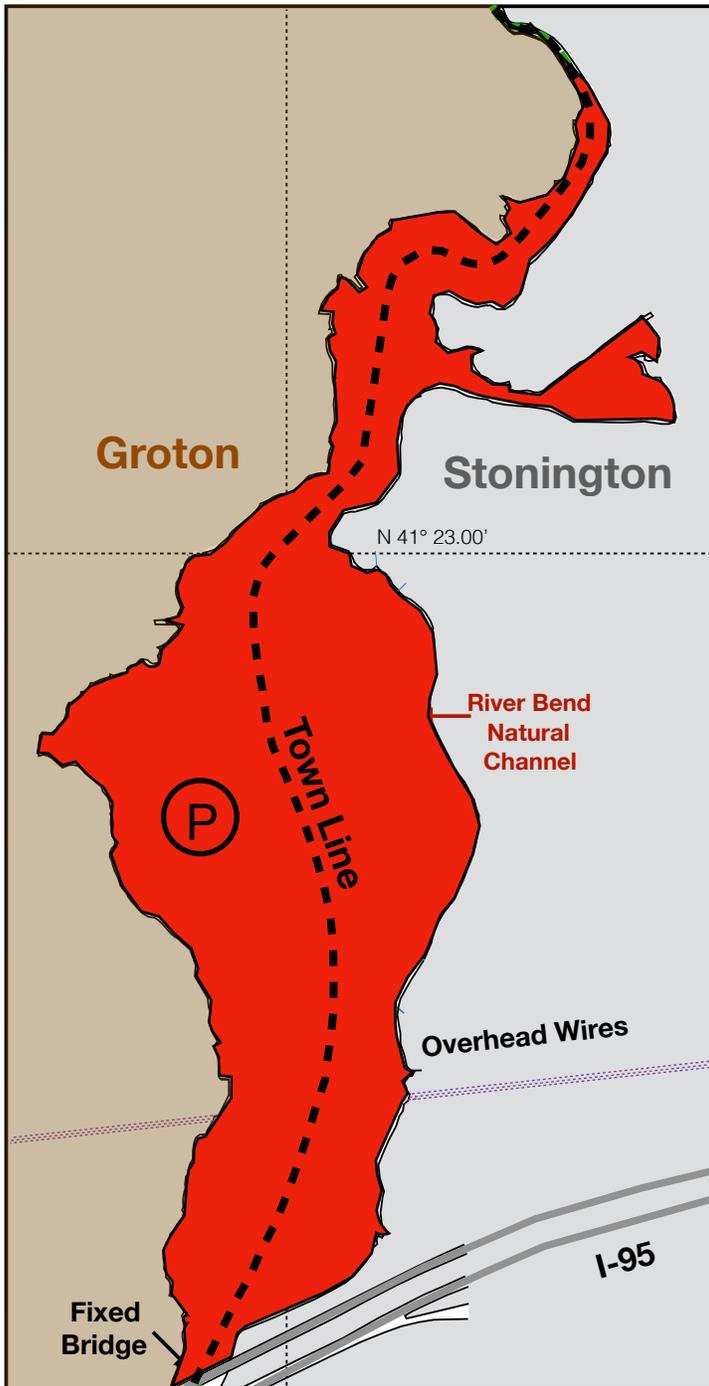


Figure B-1. All of the area of the Mystic River north of Rt 95 is Prohibited (P), as shown in red.



Figure B-2. All of the area of the Mystic River from north of Rt 95 to—and including—the waters between the Rt 1 bridge and the Amtrak bridge is Prohibited (P), as shown in red.



Figure B-3. All of the area of the Mystic River from north of the Rt 1 bridge to south of the Amtrak bridge is Prohibited (P), as shown in red, except for the area in the middle harbor shown in dark green east of the southern tip of Murphy Point, which is Conditionally Restricted Relay (CRR).

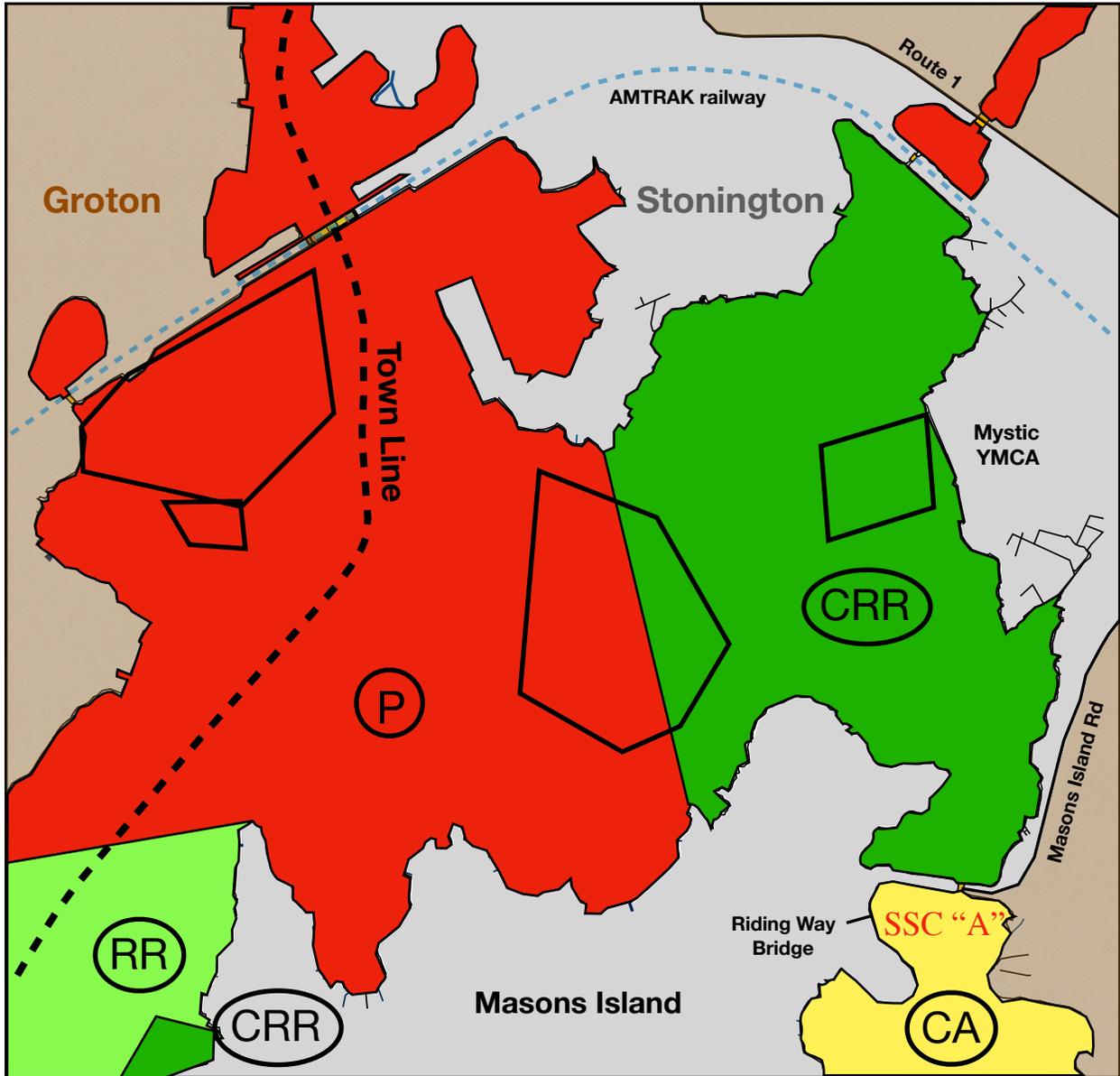


Figure B-4. The area in the middle harbor region of the Mystic River from the Amtrak bridge to the northern end of Masons Island contains a Prohibited area (P) shown in red, Conditionally Restricted Relay areas (CRR) shown in dark green, a Restricted Relay area (RR) shown in light green, and a Conditionally Approved area (CA) shown in yellow. The polygons, outlined in black, are aquaculture areas. Note the SSC-designated area "A" south of Riding Way Bridge.

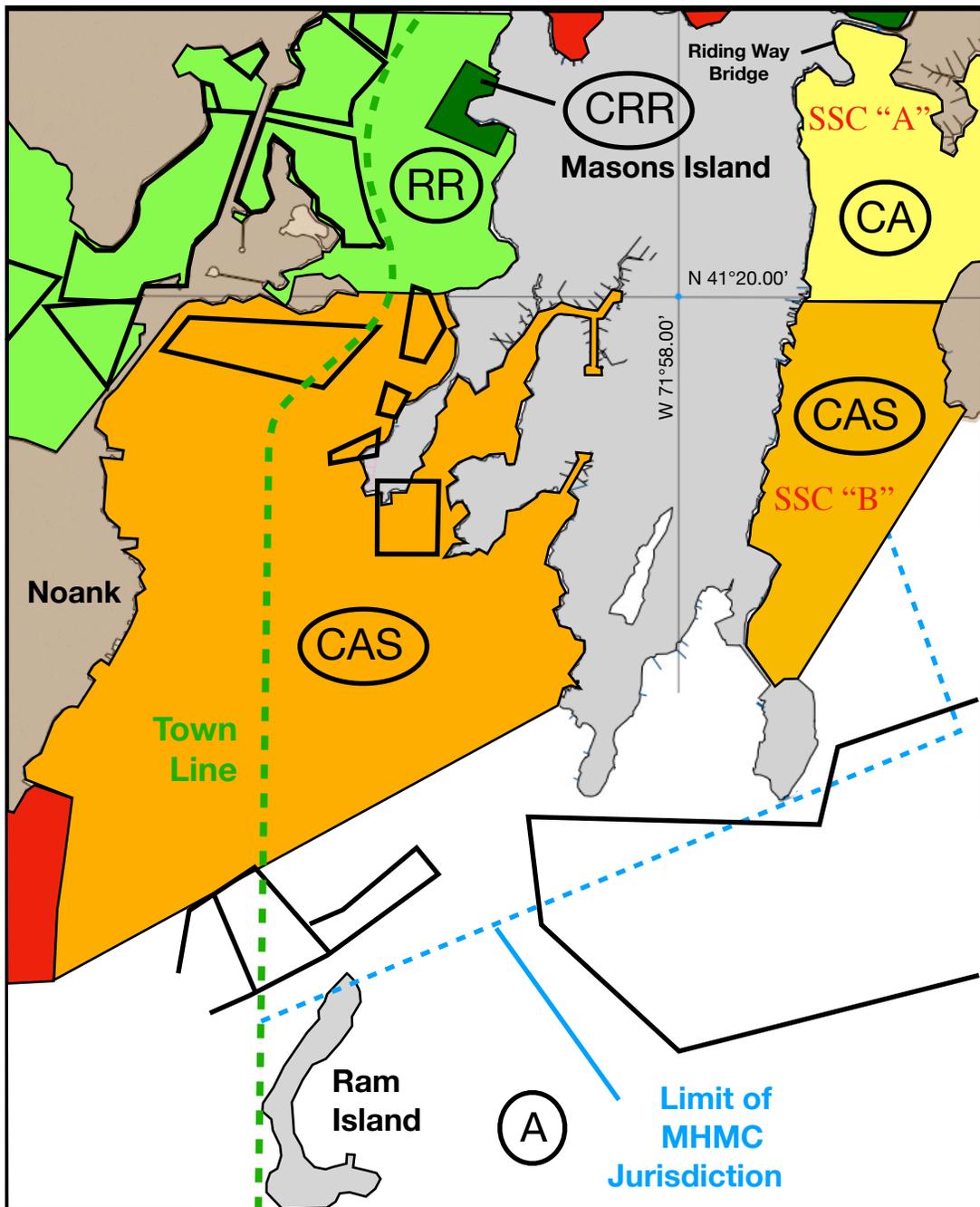


Figure B-5. The area around Masons Island contains all six shellfish categories. Prohibited areas (P) are shown in red, Conditionally Restricted Relay areas (CRR) are shown in dark green, a Restricted Relay area (RR) is shown in light green, a Conditionally Approved area (CA) is shown in yellow, and the Approved area (A) is shown in white. The polygons, outlined in black, are aquaculture areas. Note the SSC's designation of areas "A" & "B" on the east side of Masons Island.

APPENDIX C: ORDINANCE CREATING THE MYSTIC HARBOR MANAGEMENT COMMISSION

WHEREAS, the Town of Stonington wishes to protect its marine resources and sensitive natural resource areas found along and in the Mystic Harbor; to provide greater public opportunities for water-based recreational activities; to maintain and enhance navigational facilities for the benefit of all Mystic Harbor users; to allocate land and water resources in an economically and environmentally sound manner; and

WHEREAS, the Town believes that the most equitable way of balancing competing uses in Mystic Harbor is to develop, adopt, and implement a harbor management plan for Mystic Harbor; and

WHEREAS, a harbor management commission could properly manage and plan for Mystic Harbor;

THEREFORE, BE IT ORDAINED BY THE LEGAL VOTERS OF THE TOWN OF STONINGTON IN LAWFUL MEETING DULY ASSEMBLED: that

Section I. COMMISSION COMPOSITION. There shall be and hereby is created a Mystic Harbor Management Commission to consist of five (5) members and two (2) alternate members, who are voters and residents in the Town of Stonington and who are appointed by majority vote of the Board of Selectmen in conformity with Section 2 of this ordinance.

No person otherwise qualified may be or may remain a member of the Mystic Harbor Management Commission if she or he is or becomes a member of any other Town of Stonington Commission established to regulate harbor management in accordance with section 22a-113k of the Connecticut General Statutes.

In addition the harbor master or deputy harbor master appointed under Title 15 of the Connecticut General Statutes whose jurisdiction is Mystic Harbor, shall be nonvoting ex-officio members.

Section II. COMMISSION MEMBER TENURE. The term of all regular voting members shall run for four (4) years and until their successors shall be appointed, except at the first appointment to the commission one (1) member appointed by the

Board of Selectmen shall hold office for two (2) years, and two (2) members shall hold office for four (4) years and until their successors shall be appointed.

Terms of not more than (2) members shall terminate in any single year. The appointment shall be made within sixty (60) days following the date on which this ordinance shall become effective.

Should any member not complete the term of office for which he or she has been appointed for any reason, the said Board of Selectmen shall appoint a qualified person to fill the member's unexpired term of office. A Commission member can be removed by the Board of Selectmen upon request of the Commission, for failure to attend four (4) consecutive meetings without good reason.

Alternate members shall be appointed for two (2) years except that the initial term of one alternate shall be for one (1) year. Alternate members shall serve in place of absent regular members, if necessary.

The Commission shall elect a chairperson and secretary, the Commission can form subcommittees to address specific duties of the Commission.

Section III. COMMISSION MEMBER COMPENSATION AND EXPENSES.

No member of the Commission shall receive compensation for services but may be reimbursed for any necessary expenses.

Section IV. COMMISSION JURISDICTION. The territorial limits of the waters which shall constitute the jurisdictional limits of the commission, shall include the following:

All the water bounded by a line commencing at the intersection of the Stonington-Groton town line with the southerly boundary of the U.S. Route 1 right-of-way to its intersection with the center line of the Masons Island Road right-of-way; thence turning and running in a southerly direction long the center line of the Masons Island Road right-of-way to the center of the causeway bridge; thence turning and running in a southerly direction in a straight line to the northeasterly corner of the Special Anchorage Area located on the easterly side of Masons Island and shown on N.O. A. A. Chart No. 13214, as in effect on October 31, 1989; thence turning and running in a southerly direction in a straight line along the easterly boundary of the

special anchorage Area to the southeasterly corner of the Special Anchorage Area; thence turning and running in a southeasterly direction in a straight line extending into Fishers Island Sound a total distance of 2,500 feet from the southeasterly corner of the Special Anchorage Area described above, and passing through the position of Buoy No. N-6 southwest of Cormorant Reef and east of Enders Island, as shown on the N.O.A.A Chart No. 13214, described above; thence turning and running in a westerly direction a straight line passing through the most northerly point of Ram Island and continuing to the Stonington-Groton town line; thence turning and running in a northerly direction along the Stonington-Groton town line to the point of beginning; and all navigable water, as the term navigable water is defined in Connecticut General Statutes Section 15-3a, of the Mystic River that are within the municipal limits of the Town of Stonington and north of the Route 1 right-of-way to the headwaters of the Mystic River where U.S. (*ed: actually State*) Route 27 crosses Whitford Brook.

(Note: the jurisdiction of the Mystic Harbor Management Commission extends seaward from the land-sea boundary determined by Mean High Water (MHW) level. The above description shall not be construed to include territory landward of MHW within the Commissions's jurisdiction.)

Section V. COMMISSION POWERS, DUTIES AND RESPONSIBILITIES. The purpose of the Mystic Harbor Management Commission shall be to prepare a harbor management plan for Mystic Harbor in accordance with sections 22a-113m through 22-113o of the Connecticut General Statutes. Upon adoption of the plan, the Commission shall provide for the annual review of the harbor management plan and shall make any additions and/or modifications to the plan that may be deemed appropriate, subject to the process set forth in Sections 22a-113m through 22a-133o of the Connecticut General Statutes or other subsequent harbor management legislation enacted by the General Assembly. In addition the Commission may exercise any of the following powers, duties, and responsibilities:

(a) to recommend ordinances for adoption by the Town of Stonington which implement the harbor management plan and which may specify fines for violation of these ordinances in accordance with section 22a-113m Of the Connecticut General Statutes;

(b) to assist the harbor master or deputy harbormaster, whose jurisdiction is the Mystic Harbor, in the assignment of moorings, the management of moorings and anchorage areas and the collection of mooring fees after a local mooring fee system is established by ordinance;

(c) to prepare an operating budget for the Commission using funds from sources which may include, but are not limited to, local appropriations, mooring fees, violation fines, or a harbor management fund established by town ordinance;

(d) to assist in the coordination of all public and private agencies, commissions, and other organizations which have interest or jurisdiction within the harbor area;

(e) to review and make recommendations on proposed land and water use activities continuous to the waterfront and within the waters delineated in Section IV of this ordinance;

(f) to review for consistency with the harbor management plan any public notice of an application for a local, state, or federal permit for an activity taking place within the commission's jurisdiction as described in Section IV of this ordinance, and to respond in a timely fashion with recommendations to the regulating agencies;

(g) to conduct, or cause to be conducted, studies of the conditions and operations in land adjacent to the waters delineated in Section IV of this ordinance, and;

(h) to request, when appropriate, a general permit from the United States Army Corps of Engineers and/or delegation of state enforcement authority pursuant to Section 22a-2a of the Connecticut General Statutes.

Section VI. REFERRAL OF PROPOSALS SUBMITTED TO OTHER MUNICIPAL AGENCIES. Pursuant to Section 22a-113p of the Connecticut General Statutes, the Commission shall review and make recommendations, consistent with the adopted harbor management plan, on any proposal affecting the real property on, in, or contiguous to the waters delineated in Section IV of this ordinance submitted to any Town of Stonington agency, commission, or authority, including, but not limited to, the Planning and Zoning Commission, the Zoning Board of Appeals, the Water Pollution Control Authority, and the Shellfish

Commission. The Mystic Harbor Management Commission shall be notified in writing of any such proposal at least thirty-five (35) days prior to the commencement of the hearing thereon or, where no hearing is held, at least thirty-five (35) days prior to the taking any final action on the proposal. The respective municipal agency shall send a copy of the application/proposal to the Commission on request.

The primary reviewing agency authorized to act on the proposal shall consider the recommendation of the Commission. A two-thirds vote of all the members of the agency having authority to act on the proposal shall be required to approve a proposal which has not received a favorable recommendation from the Commission, provide that the provisions of this section shall not be deemed to alter the authority of the agency having primary jurisdiction over the proposal to deny, modify, or condition the proposal. Failure of the Commission to submit a recommendation on or before the date of the hearing or action on such a proposal shall be deemed approval.

Section VII. SEVERABILITY. If any provision of this ordinance or the application thereof to any person or circumstance is held invalid for any reason, such invalidity shall not affect the other provisions or any other application of this ordinance which can be given effect without the invalid provisions or application, and to this end, all the provisions of this ordinance are hereby declared to be severable.

Section VIII. FUNDING. Upon passing of this resolution at Town Meeting, the Board of Selectmen be directed to request that the Board of Finance establish a line item of \$100.00 for the purpose of funding the Mystic Harbor Management Commission.

Section IX. EFFECTIVE DATE. This ordinance shall become effective fifteen (15) days after publication in a newspaper having a circulation in the Town of Stonington.

Adopted October 17, 1989

Effective November 12, 1989

Amended Section IV November 20, 1989

Effective December 12, 1989