

MYSTIC HARBOR MANAGEMENT PLAN

(MYSTIC RIVER-EASTERN SECTOR)

MAY 1995

MYSTIC HARBOR MANAGEMENT COMMISSION
TOWN OF STONINGTON, CONNECTICUT

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I. INTRODUCTION	1
II. MYSTIC HARBOR--AN OVERVIEW	.2
III. EXISTING CONDITIONS	.2
A. Upper Section	.3
B. Mid-Upper Section	.3
C. Mid-Lower Section	.4
D. Lower Section...	.5
IV COASTAL RESOURCES	.6
A. Coastal Bluffs and Escarpments	.6
B. Modified Coastal Bluffs and Escarpments	.6
C. Rocky Waterfront.	.7
D. Beaches and Dunes	.7
E. Intertidal Flats	.7
F. Tidal Wetlands	.7
G. Estuarine Embayments	.8
H. Coastal Hazard Areas	.8
I. Developed Waterfront	.8
J. Islands	.8
K. Nearshore Waters	.8
L. Shorelands	.8
M. Shellfish Concentration Areas	.9
V ISSUES.	.10
A. Moorings	10
B. Water Quality	12
C. Structures	.13
D. Public Access	.14
E. Transient Boating Activity and Facilities	.16
F. Navigation and Boating Traffic Congestion....	17
G. Shellfish	.20
H. Protection of Coastal Resources.....	.21
I. Fishing	.21
J. Passive Activities	.22
K. Coordination with the Town of Groton	.22
VI. REGULATING ORDINANCES	.26
A. REGULATIONS CONCERNING MOORING AND ANCHORING VESSELS	.26
Section 1 - Placement of Private and Commercial Moorings	.26
Section 2 - Mooring Records	.26
Section 3 - Allocation of Moorings	.27
Section 4. Original Application for Mooring Permit	.28
Section 5. Mooring Permits Valid for One Year Only	.28
Section 6. Renewal of Mooring Permit.	.28
Section 7 Mooring Registration Fee	.28
Section 8. Mooring Permits are Non-transferable.....	.28
Section 9 Mooring Location	.29
Section 10. Mooring Placement.....	.29
Section 11. Transient Anchorage.....	.30
Section 12. Anchoring, mooring, and Docking Sanitation	.30
B. MINIMUM MOORING TACKLE SPECIFICATIONS.....	.31
C. ARTICLES	.33
1 ARTICLE I --GENERAL PROVISIONS.....	.33
Section 1. Applicability	.33
Section 2. Invalidity of Provisions.....	.33

Section 3. Authorities	.33
Section 4. Violations.	.34
Section 5. Harbor Management Fund	.34
2. ARTICLE II. HARBOR REGULATIONS	.34
Section 6. Liability	.34
Section 7. Traffic Control Authority and Vessel Speed	.35
Section 8. Obstruction of Channels, Fairways, and Berthing Space.	.35
Section 9. Swimming35
Section 10. Water-skiing.....	.35
Section 11. Discharge of Refuse	.36
Section 12. Marine Toilets.....	.36
Section 13. Signs, Erection and Maintenance	.36
Section 14. Lights and Lighting Devices	.36
Section 15. Abandoned Vessels	.36
Section 16. Unauthorized Mooring or Berthing	.37
Section 17. Unseaworthy Vessels Prohibited in Harbor	.37
Section 18. Fees Incidental to Recovery, Movement and Storage	.37
Section 19. Noise Abatement	.37
3. ARTICLE III--REGULATIONS CONCERNING SECURING OF VESSELS	.38
Section 20. Secure Berthing, Mooring and Anchoring of Vessels	.38
Section 21. Storm Precautions	.38
D. DEFINITIONS	.38
Appendix A. WATER QUALITY OF THE MYSTIC RIVER..	41
1. PRESENT SOURCES OF POLLUTION	41
2. DESCRIPTION OF PRESENT WATER QUALITY	44
3. WATER QUALITY MANAGEMENT PROGRAM.	46
Appendix B. SHELLFISH IN THE MYSTIC RIVER ESTUARY	49
1. EXISTING SHELLFISH SITUATION	49
2. PROPOSED UPGRADED AREAS	.51
Appendix C	
ORDINANCE CREATING THE MYSTIC HARBOR MANAGEMENT COMMISSION	.53

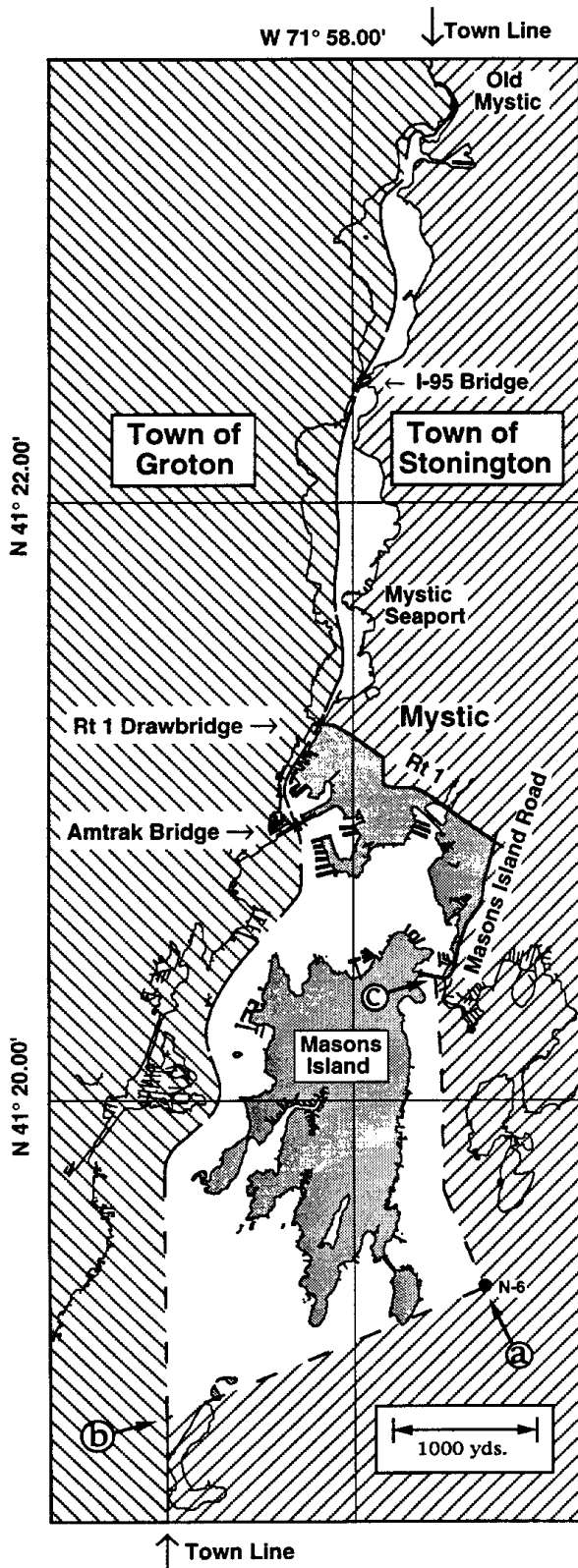


Figure 1 Mystic Harbor Management Jurisdiction.

The jurisdictional area of the Mystic Harbor Management Commission is the water area seaward from the Mean High Water (MHW) and otherwise contained within the following bounds: Starting at buoy "N-6" east of Enders Island, the southerly boundary is a straight line extending from "N-6", (a), tangent to the northern edge of Ram Island, (b), to its intersection with the Groton-Stonington Town Line. Continuing from this intersection in a northerly direction, the westerly boundary follows the Town Line until it intersects the eastern shore of the Mystic River in Old Mystic. The boundary continues southward from this intersection, following the shore of the Mystic River until it reaches US Route 1 at the drawbridge. The boundary turns easterly at this point, following the southern edge of Rt 1 until its intersection with Masons Island Road. The boundary continues in a southerly direction from this intersection, following the Masons Island road until it reaches the center of the Riding Way bridge, (c). The boundary then continues in a southerly direction, along the eastern edge of the Special Anchorage area to the east of Masons Island. At the southeastern corner of the Special Anchorage area, the boundary continues in a southeasterly direction to buoy, "N-6", the starting point.

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 pressures and competing demands for harbor use and development occurring across the state and the region. Although problems and opportunities tend to be harbor-specific, common issues may include overcrowding, encroachments into federal navigation projects (e.g., channels and anchorage), 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 jurisdiction of the Mystic Harbor Management Commission extends seaward from the land-sea boundary determined by Mean High Water (MHW) level. The Commission's jurisdiction shall 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 lands and 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 "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.) Included in the ordinance is a legal description of the jurisdictional boundaries of the Mystic Harbor Management Commission. 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 Harbor Management Plan for the Mystic River estuary within the Town of Stonington is intended to be adopted 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 Environmental Protection (DEP) 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 to harbor management at the municipal level. Further, by developing such a voluntary harbor management plan, a municipality is assured that local goals and objectives will be incorporated in the federal and states 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 maritime shipbuilding and shipfitting tradition is memorialized at Mystic Seaport. While ships are no longer built, boats are occasionally built along the shores of Mystic Harbor. The fitting out of both recreational and commercial fishing boats, along with repairs, continues to this day at the numerous commercial docks and marinas along both sides of the Mystic River

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, when the only commercial fishing activities in the harbor are lobstering, limited oystering, and fishing charters.

Current development and commercial uses are related more to pleasure craft and tourism. Recently, there has been a substantial expansion of marina operations and related activities, including dockominiums, in Mystic Harbor. Tourism-related activities are also notable in the Harbor. Mystic Seaport, America's premier maritime museum relating to the age of sail, is located in the central portion of the Mystic River and is one of Connecticut's major tourist attractions.

III. EXISTING CONDITIONS

The Mystic River is a developed area with small businesses, residential activity, and major tourist activities (Mystic Aquarium and Mystic Seaport) in the immediate area. Large industrial complexes, naval facilities, academic institutions, a large gambling casino, and additional tourist attractions are

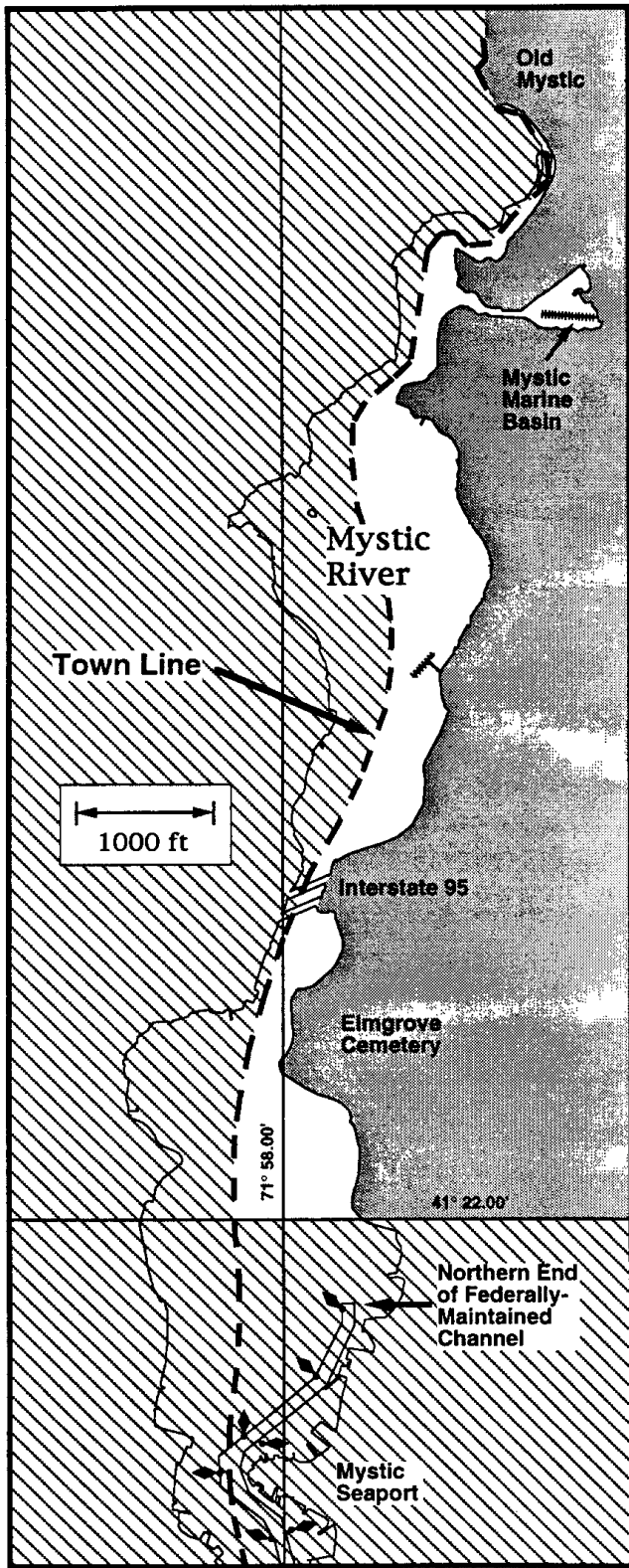


Figure 2. Upper Section of the Mystic Harbor Management Jurisdiction. The Upper Section is essentially all of the Mystic River north of $41^{\circ} 22.00'$ that is within the Town of Stonington.

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 Commissions jurisdictional area is divided into four sections: Upper, Mid-Upper, Mid-Lower, and Lower. Each of these sections has its own unique characteristics related to both upland and water uses.

A. Upper Section

The upper reaches of the Mystic River, from the southern end of Elm Grove Cemetery northward to the end of navigable waters at Old Mystic, are designated as the "Upper Section," as illustrated in Fig. 2. The shores of the upper section are mostly residential, with a small manufacturing plant, Sirtex, and a marina, Mystic Marine Basin, at the northern end. Small docks and scattered private moorings are found to a limited extent in the residential areas.

Toward the southern end of this section is the I-95 highway bridge, with a clear channel of 100 ft width and a fixed vertical clearance of 25 ft above Mean High Water. Approximately 400 yd to the North of the I-95 bridge is an overhead power cable with an authorized clearance of 25 ft. The channel going north from the power cable is about 3 ft deep, serpentine, and near River Bend Rd, hugs the eastern bank. The channel going south from the bridge is about 5 ft deep, increasing to about 8 ft deep south of Elm Grove Cemetery, just before the Federally maintained channel begins. There are numerous day beacons marking the channel in the upper section. These day beacons are maintained on a seasonal basis by the Mystic Marine Basin in Old Mystic.

The upper section of the Mystic River is very protected from storms. However, the channel is narrow and sinuous and the water is very shallow. This results in limited use outside the channel, except for small craft, such as canoes and other small craft of cartop scale. Larger power boats are berthed at the marina in season, with additional boats finding their way to the marina at season's end for dry winter storage.

B. Mid-Upper Section

The mid-upper section of the Mystic River includes the village of Mystic and is the area between Elm Grove Cemetery and the railroad bridge, as shown in Fig. 3. The northern boundary of the mid-upper section is defined as an east-west line at latitude N 41° 22.00'. Just south of this line is Mystic Seaport. South of Mystic Seaport is a residential section, which progressively becomes commercial near the Route 1 bascule bridge. Most of the channel in this

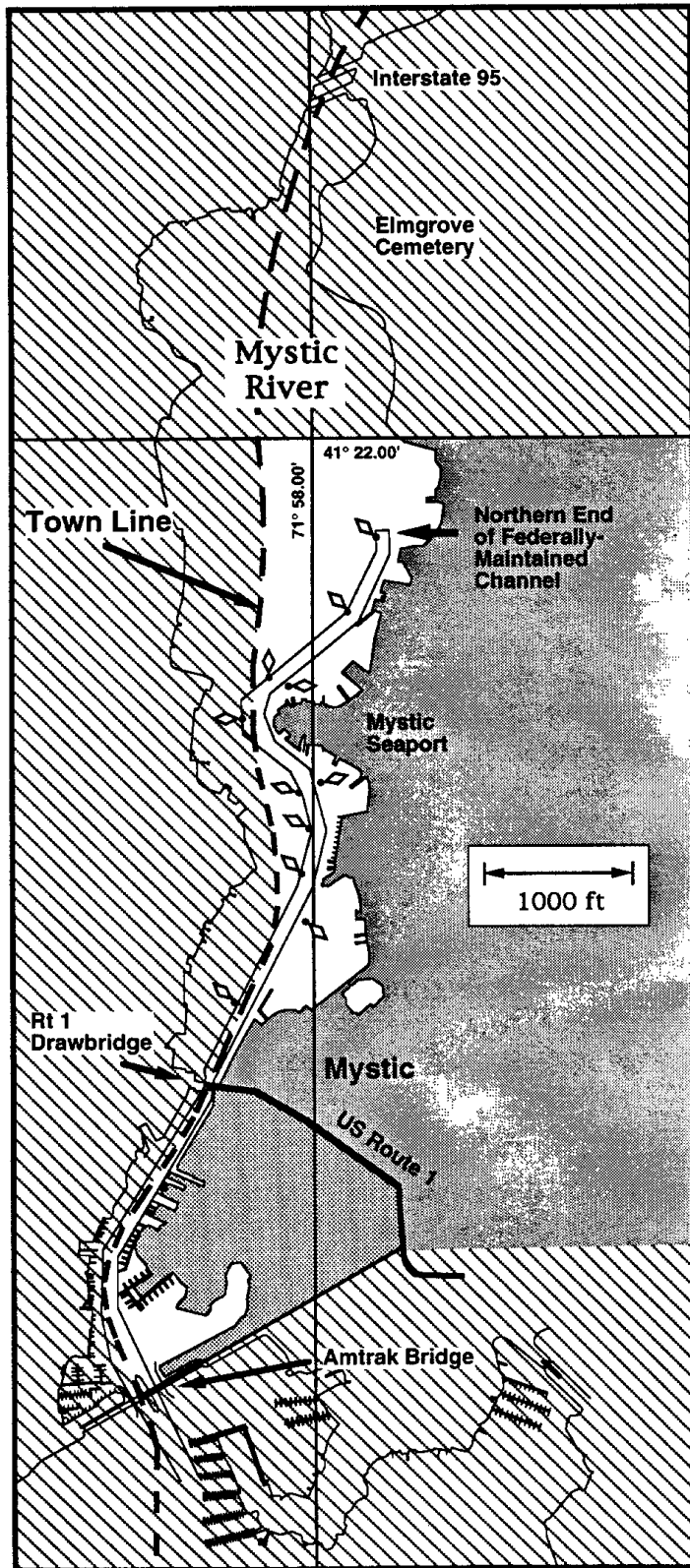


Figure 3. Mid-Upper Section of the Mystic Harbor Management Jurisdiction.

The Mid-Upper Section is essentially all of the Mystic River between 41° 22.00' and the Amtrak bridge that is within the Town of Stonington.

section has a dredged depth of 12 ft for a width of 100 ft. and is marked by Coast Guard-maintained buoys. The limited space for non-commercial moorings near the dredged channel is currently occupied by recreational boats, as well as by Mystic Seaport floating exhibits and livery craft. Various Mystic Seaport programs, including sail training, harbor tours, and exhibitions, use all the river in this section.

There is a high concentration of commercial boating facilities between the Rt. 1 drawbridge and the railroad drawbridge. The designated channel in this area is 100 ft wide, but the usable width of the river is 150 ft on average. Docks on both sides define the available width in this area. Most of the channel is 16 ft deep here. The Route 1 bascule-type drawbridge, which is reported to be one of the oldest bridges of this type in the country, has an opening 65 ft wide. The Amtrak railroad swing bridge creates two openings 65 ft wide each. Between bridges, boating can become very congested, particularly as boats circle while waiting for one of the bridges to open.

During the boating season, the Route 1 drawbridge is normally available for an opening only at 15 minutes past the hour during the day. Between 7:15 P.M. and 7:15 A.M. openings of the Route 1 drawbridge are available on call. Commercial traffic can call for an opening at any time. The Amtrak railroad bridge, on the other hand, normally closes 10 minutes ahead of a train and can stay closed for extended periods of 20 minutes or more when trains are closely-spaced. The lack of synchronization between the bridges can lead to delays of more than an hour, particularly for northbound traffic that is held past the Route 1 opening by the railroad bridge. During delays, boats are forced to circle and dodge each other in the channel. Many a skipper has run aground outside the channel during such times. A recently-dredged turning basin north of the Amtrak bridge is a help, but the mariner is advised to mind the channel south of the Amtrak bridge and north of the Route 1 bridge when circling.

The mid-upper section is very protected from storms. The area between the bridges is a harbor of refuge favored by local boat owners during severe storms. Much of the Stonington fishing fleet, as well as other commercial boats (e.g., lobster boats) typically raft up in this area to wait out hurricanes. At such times, lines are stretched from shore to shore, making the river impassable once the fleet has secured itself for the storm.

C. Mid-Lower Section

The mid-lower section of the Mystic River is defined as the area from the railroad bridge south to the constricted areas of the river on both sides of Masons Island, as shown in Fig. 4. The constriction on the western side of Masons Island is at latitude N 41° 21.00', referring to the area between the

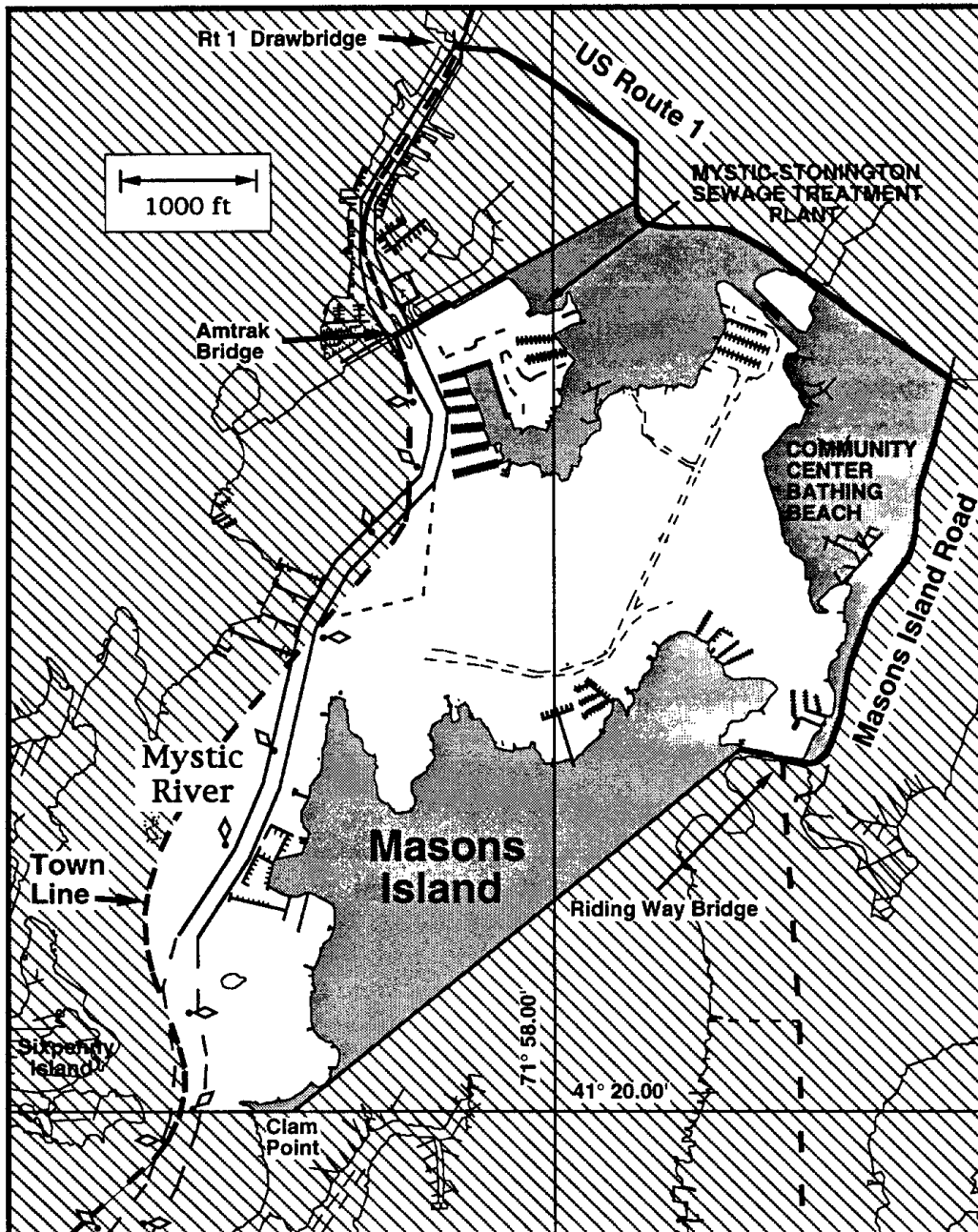


Figure 4. Mid-Lower Section of the Mystic Harbor Management Jurisdiction.

Starting at the Amtrak bridge, the boundary of the Mid-Lower Section is projected northeasterly to Route 1 and then follows Route 1 to Masons Island Road. It then follows Masons Island Road down to and across Riding Way Bridge, where it turns southwesterly to intersect N 41° 20.00' just east of Clam Point on Masons Island. The boundary then proceeds westerly along N 41° 20.00' until it intersects the town line and then proceeds northerly along the town line to the starting point at the Amtrak bridge.

eastern tip of Six Penny Island and the area known as Clam Point on Masons Island. To the east, the constriction is at Riding Way Bridge, which connects Masons Island to the mainland.

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 Mystic Community Center, with its bathing beach. The remainder of the shoreline is occupied by 7 marinas and residential property

The main north-south channel in this section has a depth of approximately 14 ft and is found on the western side of the harbor. Adjacent to the channel is a turning basin which was dredged by the Federal government in 1956. Close to the south shore of Mystic Harbor is a channel with approximately 4 ft depth. Toward the eastern side of the harbor, running north-south, is a privately-marked channel, which is maintained by a recently expanded marina. Except for a few private moorings and docks in the vicinity of residential uplands, the majority of moorings and docks are part of large commercial operations.

The center of this section is very shallow, particularly toward the north, with about 1 ft depth in places. Vessels moored in the deeper area are fairly well-protected. Tidal flow is very restricted, which results in soft mud and eelgrass over much of the bottom.

D Lower Section

The lower section of the Commission's jurisdiction includes the waters east, south, and southwest of Masons Island, as shown in Fig. 5 on the western side is the main channel, with a minimum depth of 13 feet. Most of the channel is under the jurisdiction of the Groton Harbor Management Commission. The jurisdiction of this Commission includes approximately half of the bay or cove between Masons Island and Noank. Not included is Ram Island to the south in Fishers Island Sound. On the east side of Masons Island, jurisdiction is again approximately half of the bay between Masons Island and Dodge and Andrews Islands.

The shoreline within this section is all on Masons Island. It is all residential, except for the Masons Island Yacht Club, located on the southeast corner of the Island. The water here has sufficient depth to accommodate most small craft. There are also three federally-designated mooring areas shown on USC&GS chart 358. They have approximate water depths of 5 ft.

The lower section is the area within the Mystic Harbor Management jurisdiction that is most exposed to storms, particularly from either the southeast or the southwest. Storm waves can build due to the fetch in Fishers

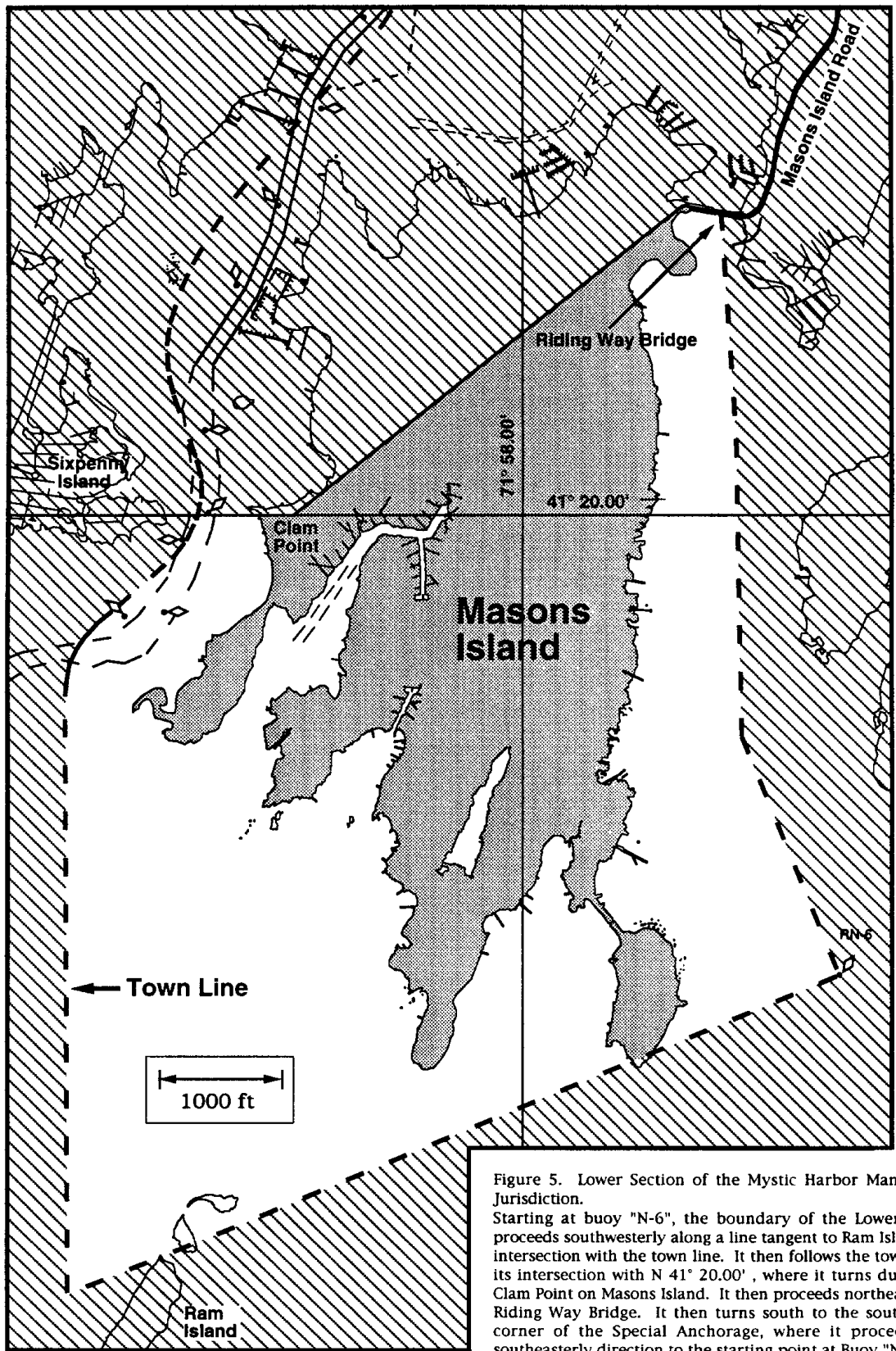


Figure 5. Lower Section of the Mystic Harbor Management Jurisdiction. Starting at buoy "N-6", the boundary of the Lower Section proceeds southwesterly along a line tangent to Ram Island, to its intersection with the town line. It then follows the town line to its intersection with N 41° 20.00' , where it turns due East to Clam Point on Masons Island. It then proceeds northeasterly to Riding Way Bridge. It then turns south to the southeastern corner of the Special Anchorage, where it proceeds in a southeasterly direction to the starting point at Buoy "N-6"

Island Sound. The distance through the Sound is approximately 3 miles to the waters of either Block Island Sound or Long Island Sound. There is good tidal flow in the lower section of the river

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 shore lands--both developed and undeveloped--that together form an integrated terrestrial and estuarine ecosystem. Within this general description, it includes specific references to the following resources within the jurisdictional boundaries of the Mystic Harbor Management Commission (including 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",
- "Shorelands", and
- "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 Mystic Community Center; 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 area known as "Williams Beach". 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 to and including shallow areas of Mystic Harbor north of Masons Island. Other areas include the northerly portion of the easterly 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 large portion 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 westerly 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, portions 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 the present Mystic Seaport; an area adjacent to and just south of the present Elm Grove Cemetery, including portions of the east bank of the Mystic River, adjacent to and along said cemetery, extending to Interstate I-95; and an area adjacent to the Mystic River

in Old Mystic, which area is situated to the north of the water entranceway to the present marina at Old Mystic.

G. Estuarine Embayments: The entire area of the jurisdiction of the Mystic Harbor Management Commission is an estuarine embayment, with the exception of these 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 June 12, 1992 Revision of the Flood Insurance Rate Map for the Town of Stonington. This Map legally designates 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", the area extending north from "Downtown Mystic", including Mystic Seaport, and extending along the small 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 (Brewers Yacht Yard), 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 the now Seaport Marine boatyard northerly to the Mystic Clipper docking area, it also includes 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 situated off the southeast corner of Masons island, and Penny Island, situated in the Mystic River to the west of Masons Island.

K. Nearshore Waters: The entire area within the jurisdiction of the Commission is designated as "nearshore waters" under the provisions of the Coastal Area Map.

L. Shorelands. These are areas within the jurisdiction of the Commission which are located within the coastal boundary area under the provisions of the Coastal Flood Hazard Program and are located above the 100-year flood

line. These areas include the central areas of Masons Island, and the upland areas on the easterly bank of the Mystic River extending to Old Mystic.

M. Shellfish Concentration Areas: Practically all of the area within the jurisdiction of the Mystic Harbor Management Commission provides or is capable of providing excellent habitat for shellfish. In particular, Mystic Harbor, and the waters east, northeast, west, and south of Masons Island are exceptionally productive. These shellfish include hard clams (quahogs) [*Mercenaria mercenaria*], soft shell clams (steamers) [*Mya arenaria*], bay scallops [*Argopecten irradians*], oysters (eastern oyster) [*Crassostrea virginica*], blue mussels [*Mytilus edulis*], black mussels, razor clams, conch, and whelk. Lobster [*Homarus americanus*] is found at the southern end of the Harbor.

The Mystic Harbor Management Commission will 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 newly agreed Groton-Stonington town line is common to both Commissions. Water quality is of particular importance to the shellfish issue. The Mystic Harbor Management Commission's policy and plans inherently support the Shellfish Commission's requirements. Appendix B provides a description of the existing shellfish situation and the applicable rules which govern. This plan specifically reflects the Shellfish Commission's requirements for the eastern side of Masons Island.

V. ISSUES

The Commission has met at least monthly since its appointment in 1990. During that time, it has met informally with many persons who were interested in the evolving Harbor Management Plan. These persons have included marina owners, members of the Stonington Shellfish Commission, Mystic River Harbormasters, and members of the Harbor Management Commission of the Town of Groton. Written materials, maps, aerial photographs and the like have been acquired and reviewed by the Commission. A well-attended public meeting was held with regard to the Commission's activities on May 18, 1990, at which time many persons voiced their concerns and opinions regarding the evolving Harbor Management Plan. Also, individual members of the Commission have attended seminars conducted by the State of Connecticut, Department of Environmental Protection, and other state and local agencies regarding the issues and problems of harbor management in Connecticut.

After carefully reviewing the information--including substantial public input--before it, the Commission has identified the following issues as being the most important with regard to the preparation and adoption of a Management Plan.

A. Moorings.

FINDINGS: There has been a visible increase in the number of moorings and in the extent of mooring fields, particularly at the mouth of the Mystic River. Following a hurricane in 1985 that devastated the pleasure boat fleet at the mouth of the Mystic River, a mooring grid was established off Noank to assure more appropriate spacing between boats. Along with the grid appeared mooring tackle guidelines, which have been implemented under the supervision of the Noank Harbormaster.

As the Noank grid was implemented, a substantial number of moorings appeared in Stonington waters off Masons Island that were previously in use as de facto fairways for many of the large number of pleasure boats entering and leaving the Mystic River. There was some concern that this expanded mooring field has encroached on traditional fairways at the expense of navigability, safety for recreational boating, and scenic vistas.

To some extent, similar concerns apply to the smaller mooring fields upriver from Noank. 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 in order to prevent overcrowding, which can adversely affect the safety of person and property. Full consideration shall be

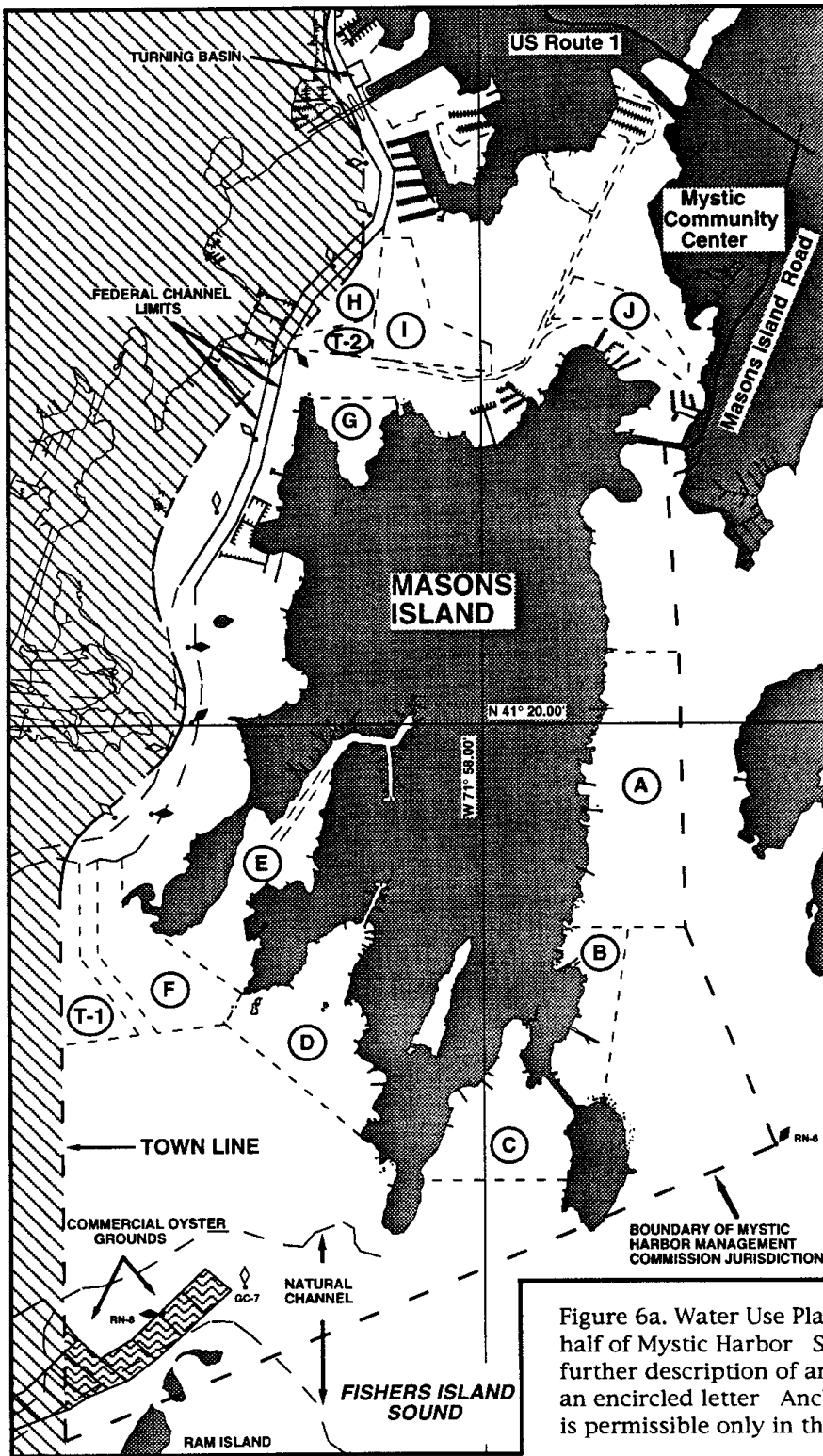


Figure 6a. Water Use Plan for the lower half of Mystic Harbor. See Fig. 7 for further description of areas designated by an encircled letter. Anchoring or mooring is permissible only in these areas.

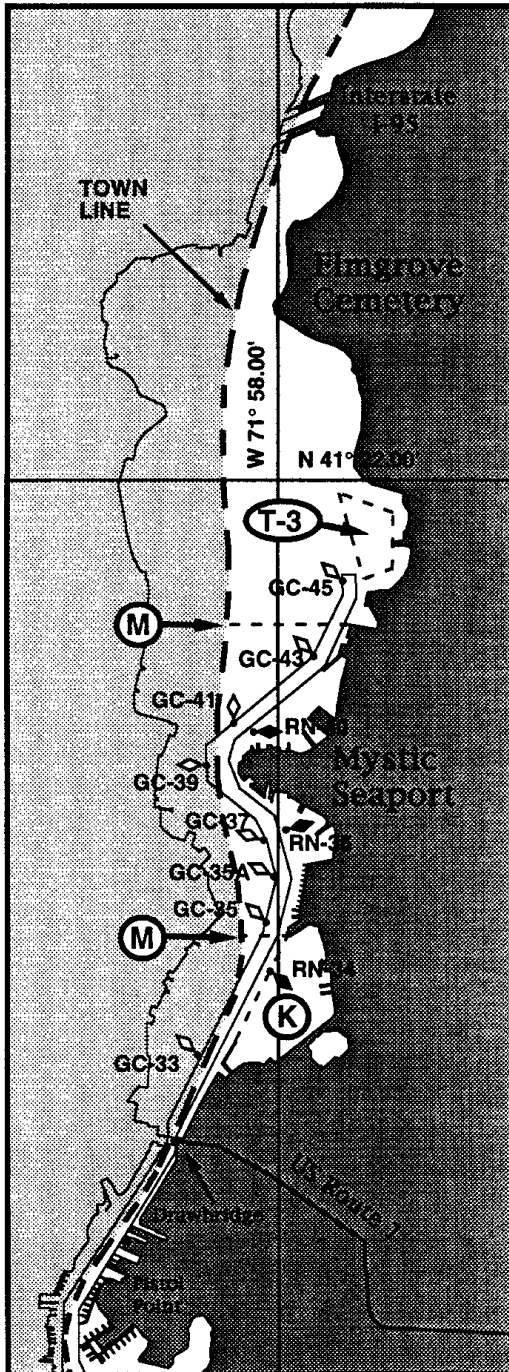
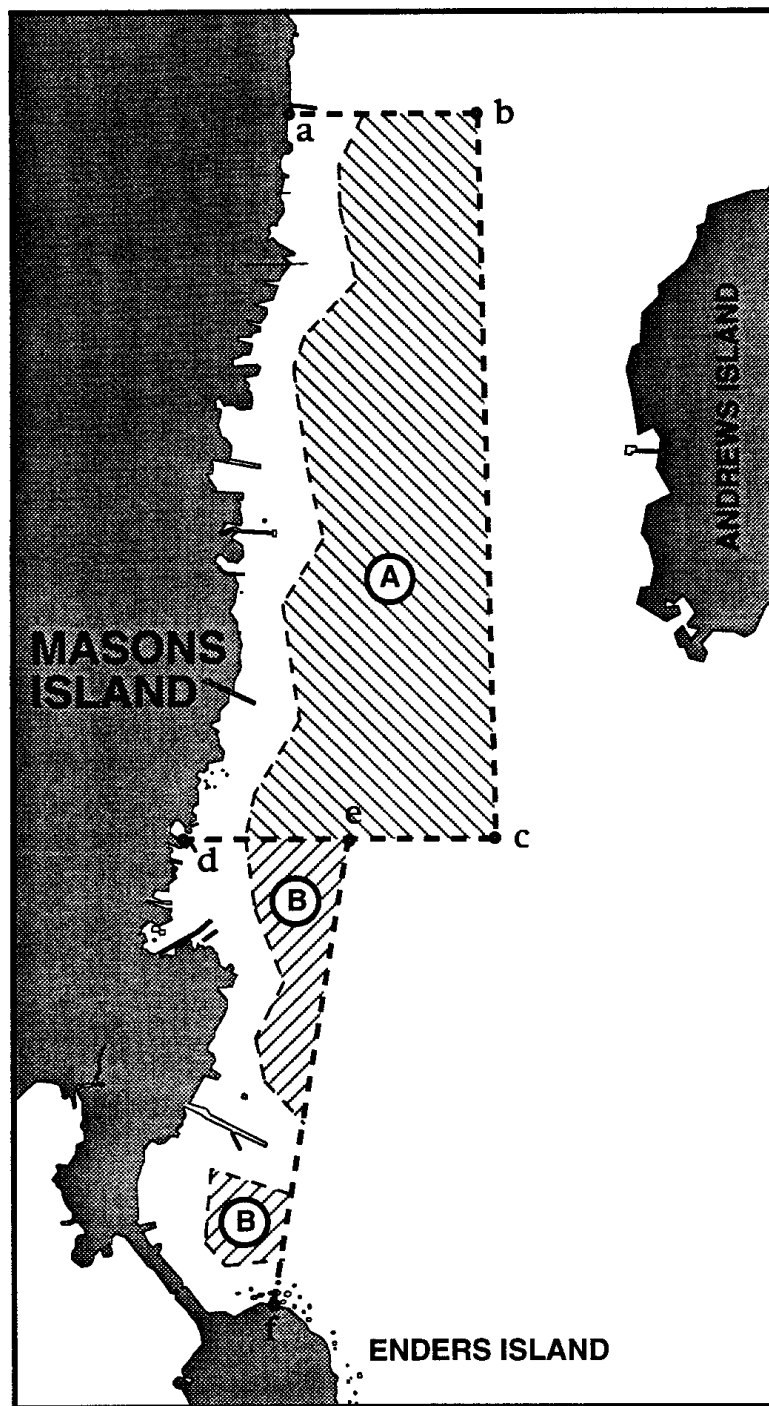


Figure 6b. Water Use Plan for mid upper region of Mystic Harbor. See Fig. 7 for description of areas designated by encircled letters. Anchoring or mooring is not permissible outside these areas. The area between the northern and southern bounds (indicated by "M") of contiguous, waterfront Mystic Seaport property is reserved for Mystic Seaport-owned vessels, which may only be moored in this area.



- a = N 41° 20.11'
W 71° 57.76'
- b = N 41° 20.11'
W 71° 57.61'
- c = N 41° 19.70'
W 71° 57.61'
- d = N 41° 19.70'
W 71° 57.84'
- e = N 41° 19.70'
W 71° 57.72'
- f = N 41° 19.43'
W 71° 57.77'

Figure 7a. Mooring Areas "A" & "B" are adjacent to the eastern shore of Masons Island. Area "A" is bounded by line **abcd** and the shoreline between **a** and **d**. Area "B" is bounded by the line **def** and the shoreline between **d** and **f**. The clear (non-shaded) zone represents a 150 ft buffer from the shoreline and fixed structures.

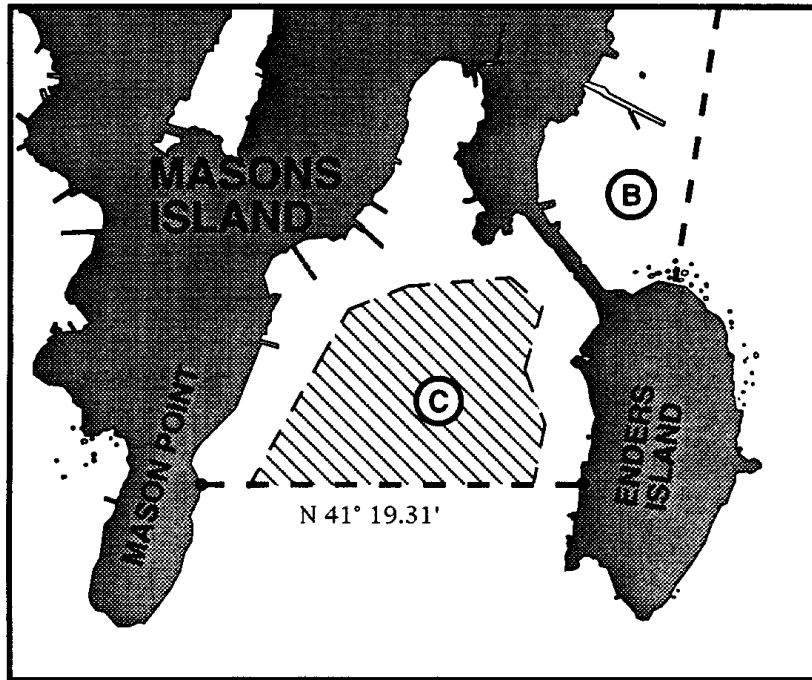
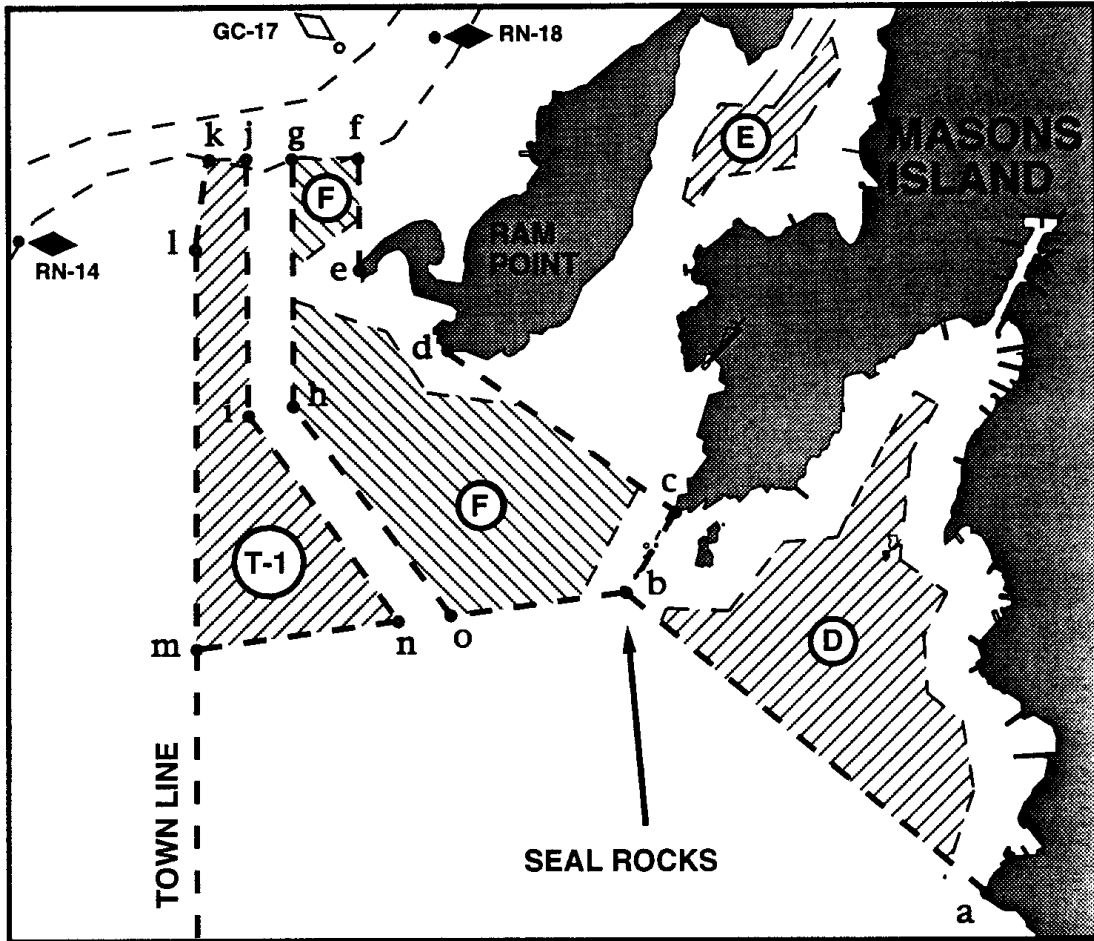
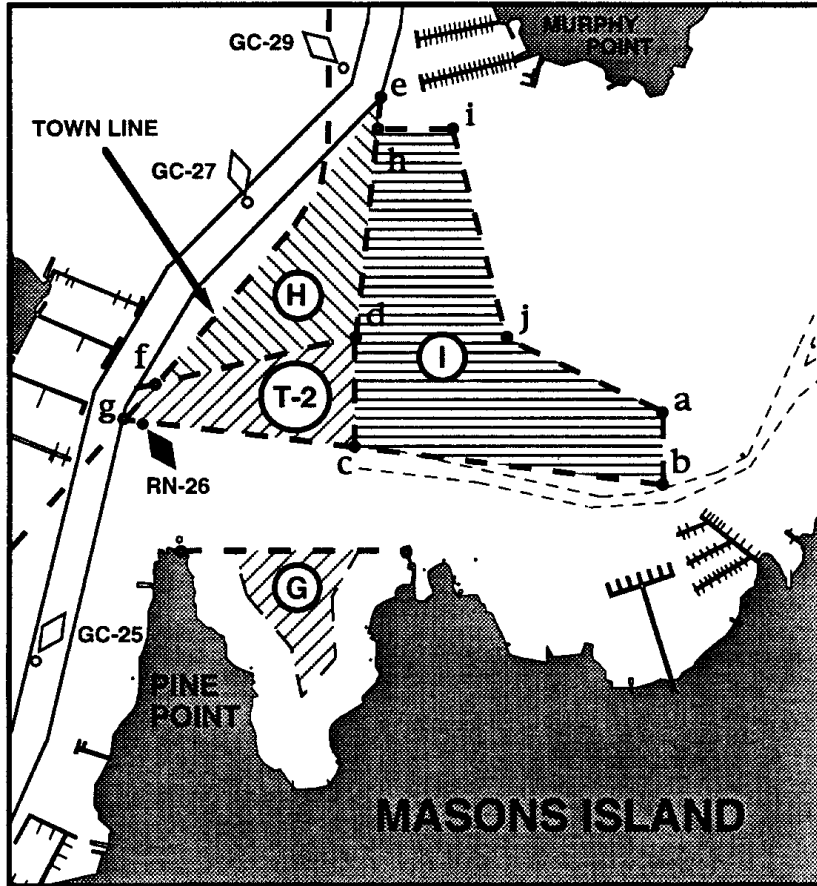


Figure 7b. Mooring Area "C" is within the embayment between Mason Point and Enders Island. The southern bound is N 41° 19.31'. The clear (non-shaded) zone represents a 150 ft buffer from the shoreline and fixed structures. Mooring Area "B", which is shown for reference, is defined in Figure 7a.



a = N 41°19.38' W 71° 58.24'	b = N 41°19.56' W 71°58.50'	c = N 41°19.60' W 71°58.47'	d = N 41°19.69' W 71°58.64'	e = N 41°19 74' W 71°58.70'
f = N 41°19.80' W 71° 58.70'	g = N 41°19.80' W 71°58.75'	h = N 41°19.66' W 71°58.75'	i = N 41°19.52' W 71°58.78'	j = N 41°19.80' W 71°58.78'
k = N 41°19.80' W 71°58.81'	l = N 41°19 75' W 71°58.82'	m = N 41°19.52' W 71°58.82'	n = N 41°19.54' W 71°58.67'	o = N 41°19.54' W 71°58.63'

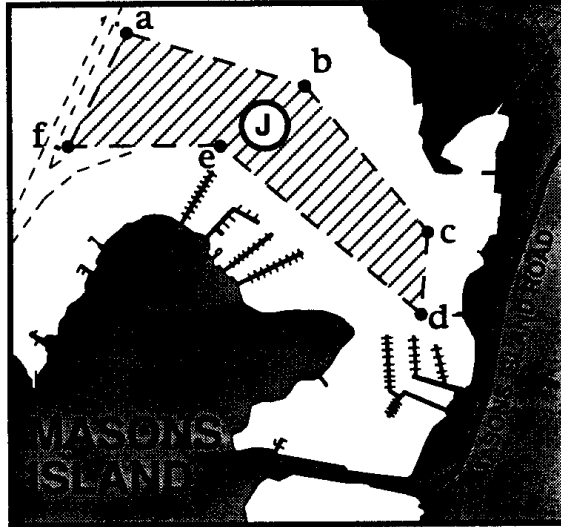
Figure 7c. Mooring area "D" is bounded by Masons Island and the line abc. Mooring area "E" is bounded by Masons Island as shown. Mooring area "F" is bounded by the line bcdefghob. The clear (non-shaded) zones within these areas represent a 150 ft buffer from the shore and from the line of Seal Rocks. Transient Anchorage area "T-1" is bounded by the line ijklmni. The 150 ft wide fairway separating areas "T-1" and "F" is intended to facilitate the movement of shallow draft vessels in and out of the eastern approach to the Mystic River.



a = N 41°20.57' b = N 41°20.53' c = N 41°20.55' d = N 41°20.61' e = N 41°20.74'
 W 71° 57 98' W 71°57 98' W 71°58.21' W 71°58.21' W 71°58.19'

 f = N 41°20.58' g = N 41°20.56' h = N 41°20.72' i = N 41°20.72' j = N 41°20.61'
 W 71° 58.36' W 71°58.38' W 71°58.19' W 71°58.14' W 71°58.10'

Figure 7d. Mooring areas to the northwest of Masons Island. Mooring area "G" is within the embayment adjacent to Pine Point. The northern boundary of mooring area "G" is the line extending due East from the tip of Pine Point to the private dock indicated. Area "H" is a federally-dredged turning basin which is bounded by the line **defd**. Mooring area "I" is adjacent to the natural channel north of Masons Island and is bounded by the line **abc dhija**. The northern boundary of mooring area "I" is separated from the existing marina docks by a buffer of 150' (vs. 100'), in consideration of the intensity of local of boating activity. Transient anchorage area "T-2" is bounded by the line **cd fgc**. Mooring area "G" is separated from the adjacent shoreline by a 150 ft buffer (non-shaded area)



$a = N 41^{\circ} 20.67'$	$b = N 41^{\circ} 20.64'$	$c = N 41^{\circ} 20.55'$
$W 71^{\circ} 57.82'$	$W 71^{\circ} 57.68'$	$W 71^{\circ} 57.60'$
$d = N 41^{\circ} 20.51'$	$e = N 41^{\circ} 20.61'$	$f = N 41^{\circ} 20.61'$
$W 71^{\circ} 57.60'$	$W 71^{\circ} 57.75'$	$W 71^{\circ} 57.86'$

Figure 7e. Mooring area "J" is northeast of Masons Island and is bounded by the line abcdefa. The southern bound (line def) is the northern edge of a 100' wide fairway. The western bound (line fa) runs along a privately maintained, dredged channel. The northern bound is intended to allow small boat activity, such as sailing, to proceed unimpeded to the north of this mooring area. The clear area to the east represents a 150' buffer from the residential shoreline.

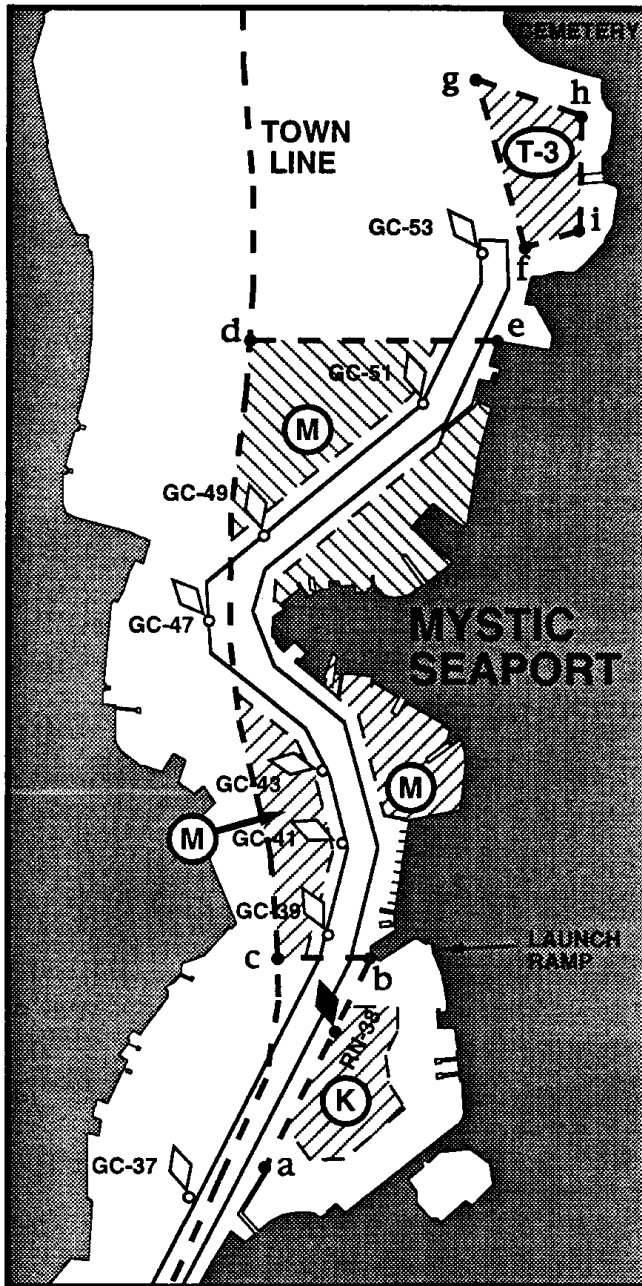


Figure 7f. Mooring areas to the north of US Route 1 Mooring area "K" is within the embayment south of Mystic Seaport and east of the line ab (which is set back 50' from the federal channel.) The clear (non-shaded) zone in area "K" represents a 150' buffer from the residential shoreline and fixed structures. The clear area to the north in area "K" facilitates access to the launch ramp and to the Seaport's lift dock. Mooring area "M", which is bounded by the Seaport's contiguous shoreline and the line bcde, is reserved for Mystic Seaport's own traditional vessels that are active floating exhibits, including some which may be in livery service. A 50' setback from the federal channel is shown. Transient anchorage area "T-3" is bounded by the line fghif and is adjacent to the privately-marked channel to Old Mystic

$a = N 41^{\circ} 21.38'$ $b = N 41^{\circ} 21.50'$ $c = N 41^{\circ} 21.50'$ $d = N 41^{\circ} 21.84'$ $e = N 41^{\circ} 21.84'$
 $W 71^{\circ} 58.06'$ $W 71^{\circ} 57.99'$ $W 71^{\circ} 58.05'$ $W 71^{\circ} 58.07'$ $W 71^{\circ} 57.99'$

$f = N 41^{\circ} 21.89'$ $g = N 41^{\circ} 21.98'$ $h = N 41^{\circ} 21.96'$ $i = N 41^{\circ} 21.90'$
 $W 71^{\circ} 57.87'$ $W 71^{\circ} 57.91'$ $W 71^{\circ} 57.83'$ $W 71^{\circ} 57.83'$

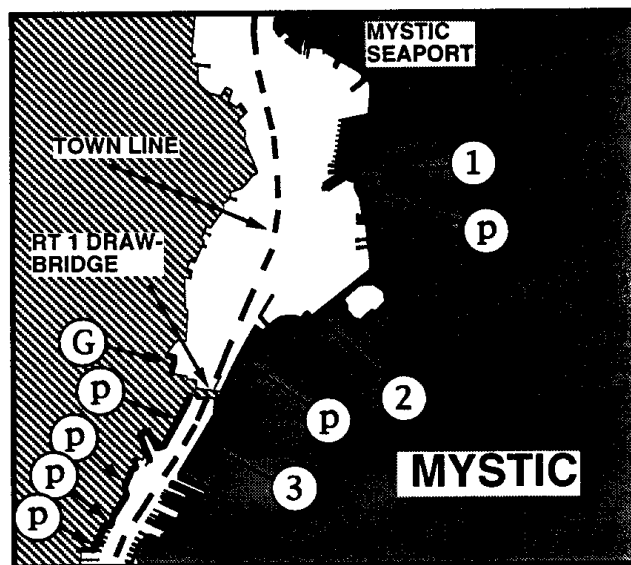


Figure 7 g. Coastal access points in the downtown Mystic area. Publicly-owned areas in the Town of Stonington are labeled "1"- "3". "1" is the Isham Street launch ramp. "2" is the Holmes Street access. "3" is the Cottrell park area. Public access is allowed at the private properties indicated by "p". The Town of Groton owns the pumping station indicated by "G". Note that the privately-owned areas are subject to restrictions, such as non-availability after dark, and require that public behavior is appropriately respectful of the private use.

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 nuisances, such as noise from mechanical equipment and 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.

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. Also, the Commission desires to provide adequate buffers between the mooring areas, the waterfront, and channels and fairways. Finally, the Commission wishes to assure that the mooring tackle is adequate to secure all vessels within designated mooring areas and is appropriate for any anticipated weather condition.

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 and uses of mooring fields are identified as Areas A through J on the Water Use Plan, which is shown as Figs. 6a & 6b. Further details of the mooring fields are shown in Figs 7a-f. Where appropriate, 100 ft. and 150 ft. buffer zones have been established between the mooring areas and adjacent shorelines and fixed structures. These buffer zones are established based upon the present configuration of the shoreline, shoreside uses, navigation, and existing structures. In the event that the shoreline should change, or in the event that new structures are proposed within the present buffer areas, it is the policy of the Commission to make appropriate revisions in the boundaries of the mooring areas to accommodate any approved change in the shoreline, and any approval for construction of new structures or extension of existing structures.

2. *Mooring Location.* The locations of individual moorings are to be determined 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 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.

3. *Mooring Exclusion Areas.* Mooring exclusion areas (fairways, buffer zones and open recreational waters--see definitions in Section D of the Regulating Ordinances), as identified on the Water Use Plan, are to be governed by the Harbormaster.

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 for the lower section of the river, will be implemented by the Harbormaster. See Section VI. B.

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 estuary was polluted by untreated domestic sewage outfalls. 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:

- stream discharge of non-point sources,
- storm runoff,
- sewer treatment plant effluent,
- boating activity, and
- lack of river circulation.

Each of these sources is discussed in Appendix A.

GOAL: A goal of the Harbor Management Commission is to improve water quality in the Mystic River 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 River. Examples of such agencies include the water pollution control authorities, fire

districts, planning and zoning commissions, enforcement agencies, shellfish commissions, etc. A specific policy for new and expanding marinas is the requirement for pump-out stations and adequate shoreside rest room facilities.

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

Immediate action is required to obtain recognition by the US Environmental Protection Agency (EPA) of the No Discharge Zone delineated in the Connecticut General Statutes, Sec. 15-170(f)

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. Poorly-sited structures can reduce navigability, by obstruction to either passage or to sight lines used in navigation.

GOALS All structures within the jurisdiction of the Mystic Harbor Management Commission shall be designed and built in accordance with all applicable local, state and federal regulations. Construction shall not begin until appropriate permits are obtained.

POLICY AND NEEDED ACTION. The Commission will review all applications for all structures and provide comments to permitting agencies, including the Town Planning and Zoning Commission, the State Department of Environmental Protection, and the Army Corps of Engineers. The review will include consideration of the following:

- 1 *Use Impact:* Impact on use of the harbor for uses other than those proposed in the application. Excessively long docks, for example, might unnecessarily block fairways outside marked channels, or infringe upon mooring areas or other reasonable uses of the water by the public.

- 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, 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 on the surrounding area should be incorporated. Blighted or deteriorated conditions should be alleviated. 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. Visual access to the water should be maintained, improved, or 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 the proposed facility should be the minimum necessary to secure a legitimate water-related function. The burden of proof for new or unusual construction techniques or materials shall be with the applicant.

4. *Precedence of Vessel Navigation in Channel Areas* No structures shall be constructed in any channel or within prescribed setbacks from channels. 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 have a right to wharf out where there is no conflict with the aforementioned standards.

6. *Pier Construction -- Siting:* The location of docks should not interfere with neighboring landowner's riparian lines

7. *Operational Use:* The use of commercial structures and activities aboard vessels shall be consistent with shoreside regulations.

D Public Access:

FINDING. 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.

GOALS. It is the objective of the Mystic Harbor Management Plan to provide, 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 by the Harbor Management Commission in accordance with Section 22a-113p of the Harbor Management Act for potential impact to existing or proposed public access sites.
- 3 Adequate parking facilities and access from both land and water are required.

It is recommended that certain areas be considered for increased public access from shore. These include ends of Town-owned streets that terminate at the harbor's edge. Other Town-owned property, such as the thirty-foot strip along Holmes Street (opposite Forsyth Street) may be suitable for a small boat landing for transient boaters wishing to sightsee or shop in downtown Mystic.

Allowable water-related uses for public access sites shall be consistent with the character and zoning of the uplands neighborhood. Unless specifically developed for such purpose, such public access sites shall not be considered appropriate for parking or storage of private property, such as vehicles or trailers.

There are 4 public access sites on the Stonington side of Mystic Harbor:

- The first site is a posted Town right-of-way at the foot of Isham Street which is used as a boat launch. The Town of Stonington has identified parking space for boat trailers at the Fourth District Voting Hall on Broadway.
- The second site is a small waterfront park on Bay Street, adjacent to the Isham Street boat launch, on property owned by Mystic Seaport. Mystic Seaport, a private, non-profit institution, presently allows public access to this property. It contains a bench and some plantings and is frequently used by visitors.
- A third site is a narrow water frontage along Holmes Street, between Frazer and Forsyth Streets. This site contains ruined stone piers that once supported a tiny town jail. It would be an ideal site for a dinghy dock to serve visiting boaters.
- The fourth public access site, the former Cottrell lumber yard on Cottrell Street, was acquired by the Mystic Fire District and is scheduled

to be developed as a waterfront park. This site will provide a major improvement in public access in the very heart of downtown Mystic.

These 4 sites are identified in Figure 7g. Mystic Community Center is identified in the upper right section of Figure 6a.

Another site is the Mystic Community Center, a non-profit entity that has waterfront on Williams Cove. The Center provides access to the water by means of some of its many programs. Specific waterfront programs include small boat activities and swimming, which are conducted along approximately 500 feet of shoreline.

There are 5 publicly-owned access areas on the Groton side of the Mystic River. Three are in Noank, the fourth is the Town dock and ramp off Burrows Street in the village of Mystic, and fifth is the undeveloped frontage and ramp off River Road, under the Interstate I-95 bridge.

Public access has been obtained at some privately-owned sites as a condition of coastal site plan approval for otherwise non-water-dependent uses of waterfront sites. Two of these areas are in Mystic-Stonington and several are in Mystic-Groton, as shown in Figure 7g. Public access in these areas is often restricted to daylight hours and requires public behavior that is appropriately respectful of the private use.

Nearby, to the east, there are 13 public access points in Stonington Borough, one access point near the CL&P building on Rte 1, and a State launching 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.

E. Transient Boating Activity and Facilities:

FINDINGS. Although there are existing areas within the jurisdiction of the Commission for transient boating activities and facilities, these areas are not presently defined, preserved, or incorporated as part of any overall plan. The present facilities are available through privately owned boatyards and boating facilities and the facilities of the Mystic Seaport.

GOALS. Specially-designated areas should be established within the Mystic Harbor for 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 on the "Water Use Plan", Figures 6a & 6b. 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 current usage requires, allowing for growth potential. The siting was specifically chosen for maximum convenience, such as availability of launch service (not applicable to area "T-3") and proximity to tourist facilities (applicable to area "T-3"). Vessels should have sufficient holding tank capacity to assure no sewage discharge within the Harbor (See Appendix A.)

1 The first and largest transient anchorage area, designated "T-1", is located off the southwest side of Masons Island. It abuts the Town Line and is adjacent to the "Noank Grid". It is appropriate for transients who would normally seek shore access at Noank via commercial harbor launch service. A limited number of moorings may be placed 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.

2. The second transient anchorage area, designated "T-2" is adjacent to the federally-dredged area north of Pine Point on Masons Island. This is a small area with shore access available by arrangement with nearby marinas

3 The third area, designated "T-3", is at the north end of the federally-maintained channel in the Mystic River and is primarily reserved as an overflow anchorage for shoal draft boats coming to Mystic Seaport, which shall be the designated shore access point. Mystic Seaport, a private, non-profit institution, charges admission to its grounds and is open to the public, subject to regular museum hours, which change on a seasonal basis. Permission to land must be arranged through the Seaport Dock Office.

In addition to the transient anchorage areas, many marinas offer docking facilities for transient vessels. In particular, Mystic Seaport can accommodate at least 40 transient vessels at any one time.

F Navigation and Boating Traffic Congestion:

FINDING: The facilitation of navigation within the harbor is a major concern. Since early this century, the river has always had a great deal of boating traffic, both transient and locally-generated. However, over the past two decades there has been a substantial growth in the number of structures and moorings in the waters of the Mystic River--with the attendant intensification of use --which has reduced navigability within the harbor. In

addition, U.S. Army Corps of Engineers Public Notice 1994-01067N dated November 2, 1994, indicates a plan for work southeast of the Mystic Route 1 drawbridge. This plan proposes deauthorization of a portion of the Federal navigation channel by congressional action.

The increase in the number of moorings, docks, finger piers, and boats can be visualized from aerial photographs of Mystic Harbor taken in 1971 and in 1991. 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. However, if the Town's best interests are to be served in the future, there should be a local plan to administer the remaining, limited water space.

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, needing more room to maneuver.

2. *Increased Number of Boat Moorings:* The number of boats at moorings has also increased substantially over the past decade. In most instances, additional moorings were placed in areas which were designed not to block channels or interfere with navigation in recognized fairways. On the other hand, many moorings have been placed and maintained since 1980 in areas which hinder, block, or obstruct fairways and navigation channels which have heretofore been used by boaters. The placement of new moorings has been done on a one-by-one, piecemeal basis, without any clear, concise, boating traffic system or plan. Also, the placement of moorings in the harbor is a relatively inefficient use of limited harbor space. Once a mooring is placed and occupied by a boat, that area is generally not available for other, competing boating uses. Unplanned proliferation of moorings, leads to obstruction or elimination of major harbor areas for any other practical waterborne use, while at the same time, impedes navigation by all boats using the harbor

3. *Increase in Small Boat Activities.* In recent years, the Mystic River has seen the introduction of new types of waterborne sporting activities and also a substantial increase in traditional boating activities, including, but not limited to, sculling, kayaking, small outboard-powered navigation (such as by inflatable dinghy), wind-surfing, and jet

skiing. 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 increased hazard, both to the small boats and to larger vessels navigating in these areas.

4. *Day Cruising*: During the recent past, Mystic has become a popular locale for cruise vessels. Mystic offers unique attractions, which include an historic village, a beautiful river and harbor, Mystic Seaport, Mystic Aquarium, varied shopping and sightseeing opportunities, and, more recently, Foxwoods Casino. Day cruise activity includes schooner trips "out of Mystic", harbor cruises by Mystic Seaport's 1908 steamboat, SS. Sabino, and trips to Mystic by vessels based on Long Island and elsewhere. The vessels used in this activity are of large size and--when operating regularly--place added constrictions and hazards on all 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 result in pressures to adversely affect those factors which make the river and its environs so attractive in the first place.

GOALS: Mooring areas, docking areas, and site lines should be laid out 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 delineated in Fig. 7. No moorings will be allowed to be placed outside of these mooring 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 same exception applies in instances where a mooring is sought 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 proposed mooring areas will be spaced in a manner which will allow reasonable scope for storm tackle and otherwise allow for easy, low-speed navigation to said mooring areas.

2. *Review of State and Federal Permit Applications* The Commission may review and make recommendation on all applications to the

Department of the Army, Corps of Engineers, and to the State of Connecticut Department of Environmental Protection to construct and maintain any structures or to perform any dredging activity within the waters subject to the jurisdiction of the Commission, and in the neighboring waters of Groton, which might have an impact on activities within the Town of Stonington waters. Through its own resources, the Commission has developed a detailed map of the waterways, structures and bounds within the Mystic River Estuary, based on 1991 aerial survey photographs, Corps of Engineers soundings, National Oceanographic and Atmospheric Administration Chart 13214, and Geological Survey maps for Old Mystic and Mystic. It has appeared to this Commission that applications, in many instances, do not adequately reveal the impact that such projects may have on navigation because the drawings in such applications are often in too narrow a context to illustrate broader potential impact. The burden then is on reviewing officials to establish a larger context, but this is difficult without the more accurate maps that the Commission has developed.

3 *Open Areas.* In establishing mooring areas within the waters of its jurisdiction and prohibiting moorings from being placed in areas not included within such areas, the Commission has thus attempted to open up large areas of the waters within its jurisdiction for general navigation and boating purposes. These areas include the traditionally open water area between Williams Beach and Murphy Point, the area south of the bridge to Masons Island up to the northerly edge of the designated mooring area to the east of Masons Island, the area surrounding Enders Island, the area south of Pogy Bay, the area west of Masons Island from Mystic River Marina to Ram Point, and most of the Mystic River north of Mystic Seaport. Also, a 150 ft wide navigational channel, primarily for small boats, has been established through the mooring area extending south and east of the Mystic Channel in the area west and south of Ram Point and Seal Rocks. Also, navigational lanes for small boats have been reserved and established in and around designated mooring areas in Mystic Harbor, as shown in the various parts of fig. 7.

G. Shellfish. Conscious of the shellfish resources within its jurisdiction, the Mystic Harbor Commission will coordinate with the Stonington Shellfish Commission to ensure mutually-supportive policies. Water quality is of particular importance to shellfish. The Harbor Management Commission's policy and plans inherently support the Shellfish Commission's requirements. A proposed shellfish plan for the east side of Masons Island is being established. A general description of the Mystic River shellfish

conditions, and the applicable rules which govern, 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 the Commission, is set forth in section IV of this Report. It is the policy of this Commission that, in evaluating any proposed activity or in monitoring any on-going activities, the objectives 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) [*Tautoga onitis*], scup (porgy) [*Stenotomus chrysops*], weakfish [*Cynoscion regalis*], tomcod [*Microgadus tomcod*], sea run brown trout [*Salmo trutta*], eel [*Anguilla rostrata*], blue crab [*Callinectes sapidus*], and others. There is an extensive lobster fishery in and near the southern area of the jurisdiction of the Commission for both commercial and recreational license holders. There are also many bait species present, which are used in the recreational fishery. These include mummichog [*Fundulus heteroclitus*] and striped killifish [*Fundulus majalis*], rock crab [*Cancer irroratus*], green crab [*Carcinus maenas*], and bunker (atlantic menhaden, pogy) [*Brevoortia tyrannus*]. It is the policy of the Commission to preserve these fisheries by the adoption and implementation of the following policies:

1. Areas of the River where recreational fishing is historically intensive shall be preserved from encroachment by structures and boat moorings.
2. In desirable fishing areas where boat moorings exist, moorings shall be spaced at distances which allow access to and use by small fishing boats.
3. The Commission shall take appropriate action within its powers to maintain and improve water quality throughout the Mystic River Estuary
4. 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.

5. 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 car. The Mystic River estuary, particularly between US Rte 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, or elsewhere, many people seem to draw strength from the serenity of the Mystic River.

Issues include:

- 1 Protection of scenic vistas
2. 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 area of 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 6 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 purposes is likely to involve activities in both towns. For example, a vessel navigating the length of the Mystic River channel from Noank to Mystic Seaport 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 in accordance with the Noank Grid, which had been established by the Town of Groton. 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 Commission to the fullest extent possible. From the time that the Mystic Harbor Management Commission was established, it 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 legal boundary between the Town of Groton and the Town of Stonington It came as a great surprise to the Commission when it found that the many maps which indicated the boundary line between the Town of Stonington and the Town of Groton 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 communities 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 communities agreed upon a line which is, generally speaking, the dividing line between the two communities 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., 41071-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. The servicing of these moorings, including parking facilities, launch services, and dinghy access, is from the Noank section of the Town of Groton. These moorings were placed and serviced by commercial businesses in the Noank area. The Groton Harbor Management Commission had been aware of the ambiguous town line for several years, and was of the opinion that it was in the best interests of all parties to provide *de facto* regulation. On the other hand, the Mystic Harbor Management Commission is very concerned that the Noank mooring area has expanded greatly over the past few years, to the extent that it has preempted available "open water" areas of the harbor for other boating and recreational uses. To address these and other boating problems, the Commission has adopted the following policies:

i. **Designated Mooring Areas:** That the mooring of vessels in the Mystic area of the Noank Harbor be limited to those areas designated as mooring areas in Fig. 7a. - 7f.

ii. **Relocation of Existing Moorings:** That all moorings placed and currently utilized outside of the areas designated in Fig 7c. be removed or relocated to the specifically-designated mooring area. To the extent that the moorings removed or relocated are served by facilities located in the Village of Noank, then such moorings should be relocated to mooring areas located in the Town of Groton. The Harbormasters of the Mystic River, and also Noank Harbor, will coordinate with one another to implement this policy. Every effort will be made to try to ensure that no person will lose an opportunity to maintain an existing mooring within the present grid area as the result of implementation of this policy.

iii. **Mooring Tackle:** That the ground tackle requirements, spacing, and inspection of moorings be established uniformly throughout Noank Harbor, and that said requirements for both towns be identical.

3. **Navigation:** Over the past few years, boating traffic and general water use of the Mystic River have 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. In narrow areas of the river, such as between the railroad bridge and the drawbridge in the center of Mystic, it is the Commission's intent to prevent further encroachment in this section. This not only allows room for boats to

safely pass one another in this areas, but it 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:

- i. Under no circumstances shall there be any encroachment by structures or secured vessels at docks that would impede navigation within any federally-designated channel areas.
- ii. There shall be a minimum setback for structures from federally-designated channel areas of at least 25 ft.
- iii. Moored or anchored vessels shall be so situated as to remain at least 25 ft from the edge of a federally-designated channel, regardless of the direction of wind or current.
- iv. Where appropriate, turning areas and holding basins for vessels navigating the River shall be kept free of structures and moorings.
- v. 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 River.

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:

It shall be prohibited to place any mooring in the waters within the jurisdiction of the Mystic Harbor Management Commission without a permit from the designated Harbormaster. No vessel moored or anchored shall extend beyond the mooring area into any designated channel, fairway, turning basin, or transient anchorage. Unpermitted moorings may be removed by the Harbormaster. The owner thereof shall be notified, if possible. If not possible, equipment shall be treated as lost items. Commercial moorings may not be placed in the river without the proper Department of Environmental Protection and Army Corps of Engineers permit(s).

Section 2 - Mooring Records:

- a) The Harbormaster(s) shall keep a detailed record of each mooring, its location, and the owner's name, home and business address, telephone number(s), date mooring was set, and name, length, registration number or documentation, and type of boat to be attached thereto. All vessels shall have current registrations in the State of Connecticut or have paid the required Connecticut state taxes.
- b) The Harbormaster(s) shall maintain in a public place a waiting list for mooring space, and a list for assignment of mooring space, and both lists shall be updated annually.
- c) Applications for all moorings shall be renewed annually

Section 3 - Allocation of Moorings:

a) The Harbor Management Commission shall establish and post in a public place, an allocation procedure and priority list for moorings. Moorings shall be allocated to the general public on a "first come, first served" basis.

b) As provided in Section 2(b) above, available moorings shall be offered to the most senior 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 senior qualified applicant. The 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 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 facilities, lists of applicants will be maintained in accordance with 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. In the allocation of mooring locations, owners of existing moorings shall be deemed the senior applicants for the nearest designated mooring location.

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. Moorings that are either inside or outside a designated mooring area, and are inherently associated with property rights, may be "grandfathered", provided that: a) they have been in place prior to enactment of the regulations, b) they are documented with the Harbormaster, and c) the annual 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; 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 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 Permit:

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 the last calendar day of March is allowed, after which period applications received 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 \$10.00. [Connecticut General Statute 22a-113s authorizes a maximum mooring fee of \$200] 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.

Section 8. Mooring Permits are Non-transferable:

Whenever a permittee parts with possession of or transfers the title or 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 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 involved) and the permittee continues to pay the required fees. If the replacement vessel is significantly smaller, larger, or of different draft or 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, i.e., to a child, a parent, a sibling, or a spouse.

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 figures 6a and 6b and shall be a part of this ordinance. The areas, identified A through G, 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 spacing of moorings in desirable fishing areas in order to facilitate access by small boats.

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 shall mark the precise location with a stake or float indicating the registration number. The applicant or his agent shall place the mooring at that precise location. 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 for transient anchorage 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 of commercial and recreational vessels. Accordingly, the following regulations shall apply to the use and users of designated transient anchorage:

- a) Vessels may remain at the transient anchorage areas for a period not to exceed 7 consecutive days, except in cases of special circumstances and after notification of and approval by the Harbormaster. Sufficient holding tank capacity and pump out arrangements should be utilized to ensure no sewage discharge. See Appendix A.
- b) Vessels shall be anchored securely and properly
- c) Vessels must be anchored so as to remain within the designated areas at all times and under all conditions.
- d) Vessels shall not be left unattended for more than a 24 hour period.
- e) No structures or permanent moorings may be placed in the designated transient mooring areas. This shall not, however, be construed to deny a riparian owner's access to navigable waters.

Section 12. Anchoring, mooring, and Docking Sanitation:

[Reserved for future use: see discussion of No Discharge Zone in Appendix A.] This section will be amended to include future federal and state sanitation regulations as they become law

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 Harbor Management Commission has established minimum standards for tackle to secure vessels adequately in the area. The Town of Stonington assumes no liability for personal injury or property damage which results from the utilization of any tackle which meets or exceeds these standards.

1. *Standards.* Mooring tackle in the lower area of Mystic Harbor (including the "Noank Grid") shall meet the minimum standards shown in Table TS-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 TS-1 Minimum Tackle Standards

2. *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.

3. *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.

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

5 *Length of Chain:* The minimum scope of the chain should be two and one-half times the depth of the water at high tide. The bottom and top chain should each consist of approximately 50 percent of the scope.

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

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

8. *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.)

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

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

11 *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.

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

13 *Regular Inspection:* Regular inspection of mooring and tackle is the responsibility of the permittee. 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.

C. ARTICLES.

1. ARTICLE I --GENERAL PROVISIONS

Section 1. Applicability:

The provisions 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 7g.

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 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 Harbor Management Commission shall review and comment on development proposals affecting Mystic Harbor and may review and make recommendations regarding all applications for permits or approvals for all floats, structures, and other marine facilities within harbors under its jurisdiction. All uniformed officers of the 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, and shall 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. A fine not to exceed \$100.00 shall be imposed for each offense. Fines levied under the provisions 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 provided for under Federal statutes or the laws of the State of Connecticut, or for prosecution for violations of any other relevant Federal, State, or local statute, law, or regulation.

Section 5. Harbor Management Fund:

A Harbor Management Fund is hereby created to receive and expend moneys for harbor management purposes determined by the Harbor Management Commission. All revenues generated by (1) mooring permits, (2) fines levied under the provisions of this ordinance, and (3) other fees generated shall be deposited into this Fund in accordance with the provisions of Connecticut General Statute 22a-113s.

2. ARTICLE II. HARBOR REGULATIONS

Section 6. Liability:

The Town of Stonington, the Mystic Harbor Management Commission, Commissioners, and Harbormasters shall not, by adoption or administration of these regulations, assume any risk of personal injury and 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.) He may control waterborne traffic in any portion of the waters of a harbor or marine facility under his jurisdiction by use of authorized State regulatory markers, signals, orders, or directions 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 regulations in the interest of safety of persons and vessels or other property. The operation of any vessel within the harbor area shall not exceed posted speed limits as provided for under Connecticut General Statutes Section 15-16 CGS Section 15-140, which addresses reckless operation and wakes which endanger persons or property, applies.

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 pot floats, is prohibited in all channels and fairways as delineated in the DEP 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 ropes and floats in accordance with State law

Section 10 Water-skiing:

Water-skiing is prohibited in all designated channels, fairways, turning basins, and anchorage and shall be in conformance with Connecticut General Statutes Section 15-134 and regulations established by the Commissioner of 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. See 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 cause 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 Commissioner of Environmental Protection (under Connecticut General Statutes Section 15-121) and in accordance with Federal statutes and regulations 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 persons shall operate lights or lighting devices on a vessel in the Harbor in such manner as to constitute an interference to visual navigation. CGS Section 15-129a governing lights on vessels applies.

Section 15. Abandoned Vessels.

When a vessel has been abandoned in the harbor, the Harbor Master may take custody and control of such vessel in accordance

with Connecticut General Statutes Section 15-140c 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 any vessel shall not make it fast or secure it to any dock, jetty, breakwater, bulkhead, wharf, pier, 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 Harbormaster and thereafter act in accordance with the Harbormaster's instructions.

Section 17. Unseaworthy Vessels Prohibited in 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 remove such vessels, consistent with the authority granted by CGS 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/or movement of vessels whenever a vessel is moved, impounded, or held as a result of violations of this ordinance. CGS 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

3. ARTICLE III--REGULATIONS CONCERNING SECURING OF VESSELS.

Section 20 Secure Berthing, Mooring and Anchoring of Vessels:

All vessels anchored, moored, or berthed within the jurisdiction of the Harbor Management 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 may and should, without penalty, add reasonable scope, weights, or extra anchors in anticipation of storm conditions. Prompt return to usual mooring provisions shall be effected within 7 days after such storm.

D DEFINITIONS:

- Anchoring:** to secure a vessel temporarily to the bottom of a water body by dropping an anchor or anchors or other ground tackle from a vessel.
- Berth.** space for a single vessel alongside a pier, finger float, or other structure.
- Buffer:** an open water area between the shore and a designated mooring area.
- Channel.** a water area officially marked and maintained to permit unobstructed movement of vessels
- Commercial Mooring:** a mooring that is rented or leased or available for rental or lease.

- Commercial Vessel:** any vessel used in or engaged for any type of commercial operation.
- 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 unobstructed movement of vessels.
- Harbor Facility:** an area or structure providing private or public access to the water
- 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:** the 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 when used for extended stays aboard which require sewage discharge issues to be addressed.
- Marine Facilities:** 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.
- Mooring Tackle:** the hardware and cordage used to secure a moored vessel.

- Open Area:** synonymous with "open water"
- Open Water:** a water area designated of the Water Use Plan where moorings and structures are restricted in order to preserve the area for navigation, natural resource, or public recreational purposes.
- Public Access:** an area where the public has free access to the water from the land.
- Public Area:** all areas of the harbor except those areas under specific government lease to private parties or owned privately.
- 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 use of commercial and recreational vessels.
- Underway:** the condition of a vessel that is not anchored, moored, made fast to the shore, 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 CGS Section 15-127.

Appendix A WATER QUALITY OF THE MYSTIC RIVER:

1. PRESENT SOURCES OF POLLUTION

The five major factors affecting water quality are described in this section as they affect the river as a whole. All pollution 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 population and the warmer water. The main sources of pollution are: stream discharge, storm runoff, sewer treatment plant effluent, boating activity, and poor river circulation. They are discussed in relation to the degree of importance, starting with the most prevalent source of pollution for each of the four sections of the river.

a. Stream Discharge

Stream discharge provides the transport of non-point pollutants into the Mystic River. There are two streams in the Town of Stonington which discharge into the Mystic River, i.e., Pequotsepos Brook and Whitford Brook. Pequotsepos Brook is mostly contained in a nature preserve, with little development in its small watershed area. This brook discharges into the northeast corner of the Mystic Harbor, in proximity to the Mystic Community Center, with its public bathing beach. Pequotsepos Brook is not considered to be detrimental to water quality in the Harbor, but may, itself, become contaminated due to extensive marine activity at its mouth.

Whitford Brook, with its feeder brooks, forms the headwaters of the Mystic River. Long-term development within the Whitford Brook watershed has resulted in concern for water quality in the Mystic River. The Mystic River Whitford Brook Watershed Association (MRWBWA) has started to monitor water conditions through sponsorship of the Mystic River Watch Program. A system of water sampling has been established for periodic analysis. Specifically being addressed by MRWBWA are: Water Quality and Scientific Monitoring, Finfish and Shellfish, Land Protection, Recreational Uses/Public Access, Cultural and Historical Heritage, Master Map Baseline, Public Awareness, and Education. The first Annual MRWBWA Report, containing fecal coliform count, pH averages, nitrate averages, phosphate averages, and silicate averages, was made available in early 1991. It has been established that the water quality is not the best, with higher than acceptable fecal coliform counts.

b) Storm Runoff

Storm runoff from developed areas is considered to be a major source of pollution. This phenomenon is summarized by Sarton, et al, "Water Pollution Aspects of Street Surface Contaminants", *Journal of the Water Pollution Control Federation* , vol. 46, no 3, 1974, where it is stated that, "...storm runoff typically contains substantial quantities of impurities, so much so that it is a more serious source of pollutants in many areas than are municipal wastes." It is pointed out that runoff contains 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 nutrients that foster algae growth, heavy metals, pesticides, and bacteriological agents.

At least the first inch of rain on a developed or development site should be captured and 80% of the suspended solids should be removed prior to discharge of surface water into the harbor.

The storm runoff conditions apply particularly to the high density population area in the Village of Mystic, where the runoff drains directly into the River. There is no known source of information on this situation, as it applies to the Mystic River

c) Sewer Treatment Plant Effluent

The Mystic Sewer Treatment Plant provides primary and secondary treatment. This allows phosphates and other nutrients to be discharged directly into the river. The location at the Railroad Bridge results in the effluent being carried up the river and east into Mystic Harbor on the incoming tide and then, as planned, down the river on the outgoing tide. Because of the proximity of the Mystic Community bathing beach in Mystic Harbor, the treatment plant is in an undesirable location. The plant operates over capacity during the summer and cannot properly function. A situation existed in Mumford Cove, in Groton, which required the installation of a pipeline to the treatment plant on the Thames River. The Wright-Peirce plan to convey the excess flow via a new pipeline from the Mystic plant to the Stonnington Borough sewage treatment plant was rejected by a Town referendum. The overloaded Mystic plant remains an immediate critical problem.

The addition of tertiary treatment or a pipeline are the types of options which must be addressed in the future, if the problems of phosphates and other nutrients are to be addressed.

d) Boating Activity

Boating activity on the river has been increasing steadily each year. The Route One Highway Bridge opens at quarter past the hour each hour during the summer months. Many of these boats are visiting yachtsmen going to Mystic Seaport. There are approximately 1500 boats, either moored or berthed at docks, that are considered home ported at Mystic.

One characteristic of heavy boating activity is bottom churning from propeller action. This is very noticeable by comparing turbidity in the summer with that in the winter months, when there is much less boating and other activity. Sediments from pollutants from past decades are stirred up and remain in suspension during the boating season.

Boat moorings and docks also contribute to degradation of water quality. The soapy rinse water from topside wash downs, the particulate and dissolved release from anti fouling paint, discharge of galley dishwater (also known as "gray" water) engine fluid spills, and the uncontrolled discharge of sewage from boats all contribute to the present degradation of the water quality of the Mystic River. The problem of "live aboards", rest rooms for transients, and pumpout facilities must also be addressed.

e) River Circulation

River circulation refers to the dynamic characteristics of the Mystic River Estuary. River circulation has been described as the biological, geological, and physical oceanography of an estuary. It has been realized that, biologically, estuarine waters provide the spawning grounds, habitats, and nutrients for two-thirds of the world's fish harvest. From a geological point of view, the estuary is a system of channels and bars that is a constantly changing sedimentary process. From a physical oceanographic point of view, it is the interplay of river flow, tidal fluctuation, and water distribution.

The major flow in the river is from tidal action 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 the east and west sides of Masons Island. These constrictions result in a percentage of water being shifted back and forth in the river before pollutants either settle out or find their way to the sea. Eventual flushing occurs due to mixing at the interface of "captured" and "free" water, helped by river flow and wind action.

The actual circulation is usually a complex pattern peculiar to the particular estuary. Stratification between fresh and salt water is known to occur in varying degrees. It is necessary that the characteristics of the river be understood to insure that the dynamic life of the river can result in a healthy ecological environment.

2. DESCRIPTION OF PRESENT WATER QUALITY

The Mystic River is divided into four sections: Upper, Mid Upper, Mid Lower, and Lower, as described in the Harbor Management Plan. The water quality issues of each of these sections is addressed below, starting with the northern headwaters and proceeding southward towards Fishers Island Sound. Although the jurisdiction of this Commission is only on the Stonington side, the description of water quality applies on both sides of the town line, except for isolated coves.

At the present time, those areas of the Mystic River that are classified, are 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.

a) Upper Section

The upper section of the Mystic River extends from Old Mystic to the southern end of Elmgrove Cemetery. Whitford Brook flows into the river at Old Mystic. The adjacent uplands are mostly residential and there is a roadway along most of the western shore. The water quality in this section is influenced by development in the Whitford Brook and Mystic River watershed. The biggest concentration of housing is "The Highlands" in the Town of Ledyard, which has been plagued with sewer problems. The Highlands treatment facility has recently been assumed by the Town of Ledyard, which plans to upgrade to tertiary treatment by 1997.

Stream discharges and lack of river circulation are considered the main sources of pollution in the upper section. A unique situation in this area is presented by the Mystic Aquarium, which has a permit to discharge filter backwash containing wastes from various sea creatures.

The water quality in this area is classified as "SB" by the State of Connecticut. Salinity varies from 3 to 17 ppt (parts per thousand), going southward from the mouth of Whitford Brook to Elmgrove Cemetery. Tidal range is approximately 1.75 ft. Recreational shellfishing in this area is not permitted as a designated use.

b) Mid-Upper Section

The mid-upper section of the river extends from the southern end of Elmgrove Cemetery to the Railroad Bridge. The adjacent uplands on both sides of the river are highly developed. This section includes the area known as "Downtown" Mystic, with either marinas or docks placed along much of the shoreline. Boat traffic in the channel is heavy during the summer. Storm runoff and boating activity are considered the main sources of pollution.

The water quality in this section is classified as "SB" by the State of Connecticut. This is observed to be the most contaminated section of the river. Water temperatures reach approximately 24° C (75°F) on the surface in July. Tidal range is approximately 2.0 ft. Recreational shellfishing is not permitted in this area and swimming is rarely seen in this area.

c) Mid-Lower Section

The mid-lower section of the river is from the Railroad Bridge to the constricted channel area between Sixpenny Island and Masons Island on the west, and Riding Way Bridge on the east.

This section contains a relatively large, shallow body of water designated as Mystic Harbor. Seven marinas are in operation in this area. The remaining shoreline is mostly residential. The incongruent situation of a sewer treatment plant, the Mystic Community Center bathing beach, and a newly-expanded marina are all present along the approximately 0.5 mile northern shoreline. The sewer plant, stream discharge, boat activity and poor river circulation are considered to be the main sources of pollution. Tidal flow is concentrated on the west side of Mystic Harbor in the narrow main channel.

The water quality is classified "SB" by the State of Connecticut. The increasing observation of sea lettuce patches in the summer season is evidence of rising pollution levels. Salinity averages approximately 26 ppt. Tidal range is approximately 2.3 ft. Recreational shellfishing is not permitted in this area due to the bacterial pollution level and the proximity of the sewage treatment plant.

d) Lower Section

The lower section of the Mystic Harbor Management Commission jurisdiction is that area from the constricted channel areas at Masons Island (located off Sixpenny Island to the west and at Riding Way bridge to the east) southward to the northern tip of Ram Island. The uplands are residential, with strict zoning and other environmental controls. Federally-designated special anchorage areas on either side of Masons Island are indicated on NOAA chart 13214. These anchorage areas can accommodate vessels with drafts to 5 ft. Many moorings exist in the lower section of the Mystic River.

Stream discharge from the mid-lower section is the main source of pollution. There is good tidal flow and mixing in the southern half of this section, due to the proximity of the major outlet of Long Island Sound, known as "the Race", to the southwest of Ram Island. Approximately 85% of the tidal flow in and out of Long Island Sound is through the Race. Fishers Island Sound conducts some of this tidal flow, with average east-west currents by Ram Island peaking at 1.9 and 1.6 knots, respectively, during the outgoing and incoming tides.

The waters of the northernmost area of this section are classified as "SB" by the State of Connecticut. This is the least contaminated section of the river. Salinity averages approximately 29 ppt. The average tidal range is 2.3 feet. Water temperature peaks at approximately 22°C (72°F). Swimming is allowed in all parts of this section. Recreational shellfishing is allowed in portions of this section. Maps showing the shellfishing areas are available from the Town Shellfish Commission.

3. WATER QUALITY MANAGEMENT PROGRAM

The Mystic Harbor Management Commission plans to initiate a program to reverse the trend of ever-increasing pollution in the river, as resources become available. This program will be coordinated with the River Management Program sponsored by the Connecticut Department of Environmental Protection. The River Advisory Committee has been meeting since May, 1989.

Table A3-1 is a summary of pollution sources previously discussed. Initial action for the Mystic River will require the determination of an environmental baseline with continued monitoring for the detection of changes. Nitrogen, phosphorus, dissolved oxygen, salinity, temperature, secchi disk depth (for turbidity/water clarity), fecal coliform/enterococci, eel grass, and sea lettuce beds should be monitored from May through September.

	Stream Discharge	Storm Runoff	Sewer Plant Effluent	Boating Activity	River Circulation
Upper Section	Primary	Secondary			Primary
Mid-Upper (Village) Section	Secondary	Primary	Secondary	Primary	
Mid-Lower Section	Primary	Secondary	Primary	Primary	Primary
Lower Section	Primary		Secondary	Secondary	

Table A3-1 Significance of pollution sources in the Mystic River.

In addition, a means of environmental patrol will be considered to verify compliance with environmental protection regulations. Identification of sewer treatment plant effluent problems and unauthorized discharges from any source, including boating activity, would be undertaken by such a patrol. Remedial and preventive methods will be considered for future action. Topics may include a pipeline for sewer plant effluent, runoff filtering, and dredging for improved water circulation. Land contaminants such as septic tank leachment and storage tank facilities require a system for periodic inspection.

As back-up to environmental patrol, it will be necessary that communication be integrated with other agencies, such as the Fire District, the Police Department, and the Department of Agriculture / Aquaculture Division (DA/AD). A log of events should be available as documentation. Availability of equipment for emergency use should be pre-established. Examples of candidate equipment include the following:

- a) Portable oil booms
- b) Absorbent materials
- c) Portable lighting
- d) Earth moving equipment
- e) Vacuum trucks
- f) Collection tanks
- g) Suction pumps
- h) Rakes, shovels, brooms, etc.
- i) Drip pans.

This plan must be an ongoing evolution if it is to reverse the decades-old process of river pollution. It is not intended that constraints be so restrictive that the river cannot be enjoyed. For example, the discharge of "gray water" (such as dishwater) is considered acceptable by Federal and State standards, and

is considered reasonable for the Mystic River. Policies relating to vessel holding tank capacity must be considered for the permissible duration of onboard stays. New and expanding marinas will be required to provide pump-out stations to ensure adequate facilities within the Commission's jurisdiction.

Connecticut General Statutes Sec. 15-170(f) designates all waters of the Mystic River shoreward from a line running from Morgan Point (Noank) to Mason Point (Masons Island) to be a "No Discharge" zone. This has been designated as area "10" by the Connecticut Department of Environmental Protection (DEP). Connecticut's Clean Vessel Act Plan must be formally approved by the U.S. Environmental Protection Agency (EPA). It is necessary that the availability of pumpout facilities be demonstrated for approval. Once approved, the Mystic Harbor Management Plan may be amended and signs posted. Existing federal regulation under Section 312 of the Clean Water Act prohibits the discharge of untreated sewage from vessels within three miles of the coastline. This regulation is presently in effect for all of this plan's jurisdiction and surrounding waters.

It is understood that sources of revenue and volunteer help will be required for any water quality management activity to be successful.

Appendix B SHELLFISH IN THE MYSTIC RIVER ESTUARY:

1. EXISTING SHELLFISH SITUATION

Under the waters of the Mystic River there is a rich population of shellfish, which is important from both the recreational and commercial standpoints. By far, the most populous species is the hard clam, however, there are some areas with important soft clam and scallop populations. In recent years, scallops have been largely absent, but there is the possibility they may return in the future.

The 4 sections of the Mystic River, defined in Section III of the Plan, have different shellfish growing area classifications. These classifications are defined by the National Shellfish Sanitation Program (NSSP), which is evaluated by the US Food and Drug Administration. These classifications are an inherent part of the Connecticut State Shellfish Sanitation Program. There are 5 "Shellfish Growing Area Classifications", which are defined:

(A) APPROVED AREA. An area which has been approved by the State Department of Agriculture/Aquaculture Division (DA/AD) for growing or harvesting shellfish for direct marketing as licensed by DA/AD and recreation. This classification is determined by a "sanitary survey" conducted by the DA/AD, with local assistance, demonstrating conformance to bacteriological and pollution-free criteria. An APPROVED shellfish growing area may be temporarily closed when a public health emergency resulting from, for example, a hurricane or flooding, is declared. The bacteriological standard for this water classification is a fecal coliform median or geometric mean maximum permitted number (MPN) not to exceed 14 per 100 ml and not more than 10% of the samples exceed an MPN of 43 per 100 ml.

[A sanitary survey consists of a shoreline survey to identify and assess potential pollution sources, meteorological effects, water quality examination, and assessment using prescribed standards, and corrective action where necessary. Sanitary surveys are required for all shellfish growing area classifications, with the exception of PROHIBITED areas.]

(CA) CONDITIONALLY APPROVED AREA. An area determined by the DA/AD to meet APPROVED AREA criteria for a predictable period. The period is conditional upon established performance standards specified in a management plan. A CONDITIONALLY APPROVED shellfish growing area is a closed shellfishing area when

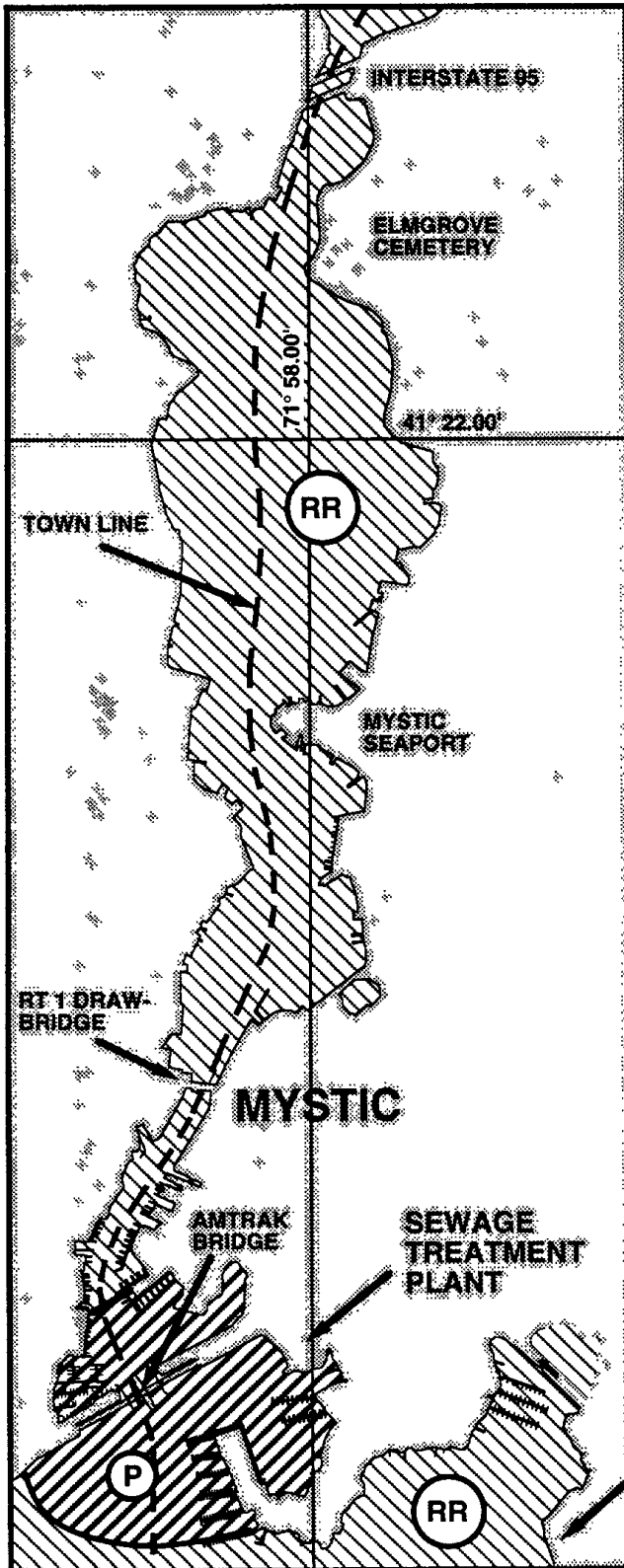


Figure B-1a. Shellfish Growing Classifications for the middle region of Mystic Harbor.

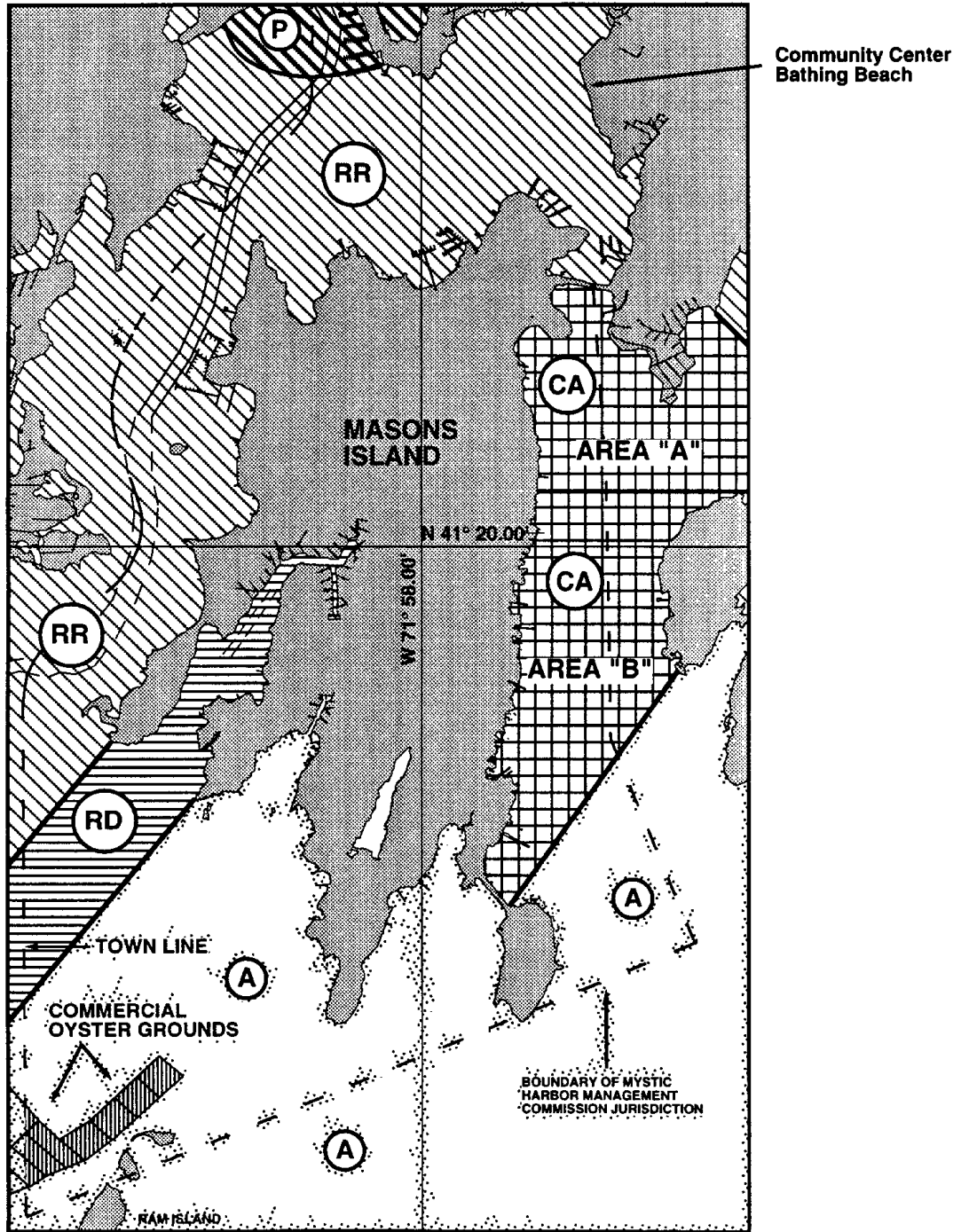


Figure B-1b. Shellfish Growing Classifications for the lower Mystic Harbor

it does not meet the approved growing area criteria. It is temporarily closed by the control authority as specified in the management plan. The bacteriological standard for this water classification is a fecal coliform median or geometric mean MPN not to exceed 14 per 100 ml and not more than 10% of the samples may exceed and MPN of 43 per 100 ml when the area is open.

(RD) RESTRICTED DEPURATION. An area classified by DA/AD and used by DA/AD licensed operations for the harvesting of shellfish and transfer to a Depuration Plant or to an APPROVED area for purification. These shellfish removed from a RESTRICTED DEPURATION area may not be directly marketed or consumed prior to the purification process. This classification requires a sanitary survey and must meet specified bacteriological standards. The bacteriological standard for this water classification is a fecal coliform median or geometric mean MPN not to exceed 88 per 100 ml and not more than 10% of the samples may exceed an MPN of 260 per 100 ml.

(RR) RESTRICTED RELAY: An area defined by DA/AD for licensed DA/AD operations, wherein harvested shellfish are transferred to APPROVED areas for natural biological purification using the ambient environment as a treatment system. These shellfish may not be directly harvested or consumed prior to the purification process. This classification requires a sanitary survey and collection of water quality data.

(P) PROHIBITED: An area prohibited for the harvesting of shellfish for any purpose except depletion and aquaculture operations licensed by DA/AD. A PROHIBITED shellfish growing area is closed for the harvesting of shellfish (except licensed aquaculture operations) at all times. This classification may result from the presence of conditions that could pose a health hazard, such as marine biotoxins, or could be the result of insufficient shoreline survey and water quality information demonstrating that the area conforms to requirements for a better classification.

Figure B-1 shows the shellfish growing area classifications for the jurisdiction of the Mystic Harbor Management Commission. Most of the Upper Section of the river is classified RESTRICTED RELAY (RR). The Mid-Upper Section contains both RESTRICTED RELAY (RR) and PROHIBITED (P) areas. The Mid-Lower Section also contains both RESTRICTED RELAY (RR) and PROHIBITED (P) areas. The PROHIBITED area is in the immediate vicinity of the Murphy Point Sewage Treatment Plant. The Lower Section is mostly classified as RESTRICTED DEPURATION (RD), but there is a small RESTRICTED RELAY (RR) area near Sixpenny Island and, more importantly,

there are substantial APPROVED (A) and Conditionally Approved (CA) areas. The Lower Section also contains leased shellfish beds for commercial operation, as shown in Figure B-1b. A portion of these beds actually extends into Groton waters, based on the 1992 Town Line agreement. Commercial shellfishing, which is conducted with a permit from the Shellfish Commission and the Connecticut Department of Agriculture/Aquaculture Division, may be performed throughout the Mystic River area, subject to restrictions, except for the PROHIBITED (P) area near Murphy Point.

2. PROPOSED UPGRADED AREAS

In April, 1993, the Aquaculture Division (State of Connecticut) and the Town of Stonington signed a memorandum of understanding (MOU) to manage 2 Conditionally Approved (CA) shellfishing areas east of Masons Island. They are designated AREA "A" and AREA "B" and are shown in Figure B-1b. Both areas contain substantial shellfish populations.

The establishment of AREAS "A" and "B" followed an extensive water sampling program and a survey of the adjacent shoreline to ensure that the water quality met the NSSP requirements. The MOU requires frequent water sampling and periodic shoreline surveys to document that the water quality stays within the guidelines for a Conditionally Approved area. Any decline in the water quality east of Masons Island will force the closure of these shellfish grounds.

AREA "A", which is open year-round, is closed for a minimum of 7 days after a 2" rainfall and following any major failure of the Mystic Water Pollution Control Authority (WPCA) Facility. Before the area may be reopened to recreational shellfishing, the water must be tested.

AREA "B" must be closed for the boating season (May 1 through October 31) due to the possibility of moored live-aboard boats between Masons Island and Andrews Island. (AREA "B" contains a special anchorage area noted on NOAA chart 134214.) AREA "B" is not closed after rainfall, but must close if there is a failure of the Mystic WPCA Facility

The density of anchored and moored boats with the capability to live aboard is an important factor in determining whether or not a Conditionally Approved area can be established and maintained. Regardless of the water quality in an area, the presence of a large number of moored boats with this capability is considered to create a potential for pollution. In the calculation to determine whether or not a shellfishing area may be opened, a single moored, live-

aboard boat requires a volume of 1 million cu. ft. of water to offset its pollution potential. This equates to an area of 40,000 sq yd (more than 8 acres) per boat for a 3' water depth.

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**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 three (3) years, and two (2) members shall hold office for four (4) years and until their successors shall be appointed.

Terms of not more than two (2) members shall terminate in any single year. The appointments 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; thence running in an easterly direction along 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 along 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 easternly site 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 in 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 waters, as the term navigable waters 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. 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 Commission'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 22a-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-113o 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 contiguous to the waterfront and within the waters delineated in Section IV of this ordinance that are received for review by other municipal agencies, in accordance with the procedure described in Section VI 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 of 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 recommendations 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, provided 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 an 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 line item of \$100.00 for the purpose of funding tie 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