

BOROUGH OF FENWICK HARBOR MANAGEMENT PLAN

Prepared By:

**FENWICK HARBOR MANAGEMENT COMMISSION
FENWICK, CONNECTICUT**

Consultant to the Harbor Management Commission:

Geoffrey Steadman
Westport, Connecticut

October 2004

Prepared for Adoption:

May 2005

FORWARD

This document contains the *Borough of Fenwick Harbor Management Plan* (Plan), October 2004, prepared by the Fenwick Harbor Management Commission. Pursuant to Section 22a-113m of the Connecticut General Statutes, the Plan has been reviewed by the U.S. Army Corps of Engineers, approved by the Connecticut Commissioners of Environmental Protection and Transportation in March 2005, and adopted by the Fenwick Board of Warden and Burgesses (Board) on May 28, 2005. The Plan was prepared by the Commission in accordance with the Commission's express duty set forth in the Ordinance adopted by the Board on January 23, 1990 establishing a Harbor Management Commission for the Borough of Fenwick.

Through that Ordinance (included in Appendix D of the Plan) the Harbor Management Commission is authorized to carry out all of the powers and duties granted to municipal harbor management commissions by the State legislation known as the Connecticut Harbor Management Act (included in Appendix C). Those powers and duties include preparing a Harbor Management Plan for the Borough. The Plan should be thought of as a complementary document to the Borough's Plan of Conservation and Development prepared by the Fenwick Planning and Zoning Commission. It should be noted that an important legislative purpose of the Harbor Management Act is to increase local involvement and authority in matters pertaining to a municipality's navigable waters.

The Plan contains goals, policies, and recommendations for protection of environmental quality in the Fenwick Harbor Management Area (HMA) and for safe and beneficial use of the HMA. The HMA encompasses the Borough's jurisdiction on South Cove, the Connecticut River, and nearshore Long Island Sound.

The Plan increases Borough influence and authority in the HMA which includes marine waters that previously have been subject primarily to State and Federal authorities. Upon adoption of the Plan by the Board of Warden and Burgesses, public and private actions affecting the use and condition of the HMA are to be consistent with the Plan. The Harbor Management Commission is responsible for ensuring this consistency through a "Harbor Management Review" process established in the Plan.

The Plan increases coordination among the different Borough boards and commissions that carry out responsibilities affecting the HMA. It establishes a policy framework to ensure that the boards and commissions incorporate an awareness and understanding of harbor management concerns into their deliberations and that their actions are consistent with the harbor management goals, policies, and recommendations included in the Plan. The Plan also establishes formal procedures and agreements to maintain Borough autonomy and ensure future coordination with the Town of Old Saybrook as the Town acts to implement its own harbor management plan.

ACKNOWLEDGMENTS

A number of persons have assisted with preparation of the *Borough of Fenwick Harbor Management Plan* including Borough officials, members of Borough commissions, Fenwick residents, and other interested parties.

The Plan was prepared at the direction of the Fenwick Harbor Management Commission:

Bruce Arneill, Chairman	Frank Gilhool (Alternate)
Bill Benner	Lisa Jarvis, Secretary
Bill Christensen	Sam Jones, Vice Chairman
David Frankel (Alternate)	Matthew Myers (Alternate)

The Commission gratefully acknowledges the assistance and participation of the following persons who have served as a special committee to provide advice and comments to the Commission for preparation of the Plan: Chuck Chadwick, Arnold Chase, Jim Daras, Skip Gengras, Jarv Jarvis, Frank Keeney, Joe Lavendier, Marfie Lavendier, Charles Robertson, and Bill Webster.

Special appreciation is extended to Chuck Chadwick, Warden of the Borough of Fenwick, and to the Fenwick Burgesses—Millicent Benner, Peter Brainard, Virginia Bush, C. Douglas Collins, Richard Patterson, and Damon Smith—for their support and for their recognition of the need for active involvement and long-range planning by the Borough to help ensure preservation of Fenwick's unique natural environment and quality of life.

Thanks are also extended to Grant Westerson, State of Connecticut Harbor Master for the Town of Old Saybrook, for his advice and assistance during preparation of the Plan. Thanks also to the Old Saybrook Harbor Management Commission for its specific recognition of the Borough's Harbor Management Area in the Old Saybrook Harbor Management Plan and for its commitment to ongoing coordination and cooperation between the Fenwick and Old Saybrook harbor management commissions to address issues of common interest.

The interest of all other Borough commissions with responsibilities affecting the Fenwick shoreline and Harbor Management Area, including the Planning and Zoning Commission, Historic Commission, and Park Commission, is greatly appreciated.

Geoffrey Steadman of Westport, Connecticut served as consultant to the Harbor Management Commission for preparation of the Plan. Mr. Steadman worked at the direction of the Commission to prepare the Plan document as well as all preceding draft Plan documents. Photographs in the document are provided by Mr. Steadman. The aerial photos are from July 1998; ground photos are from different dates throughout 2001.

Special thanks are extended to the citizens of Fenwick who have expressed their concern for the conservation of the Borough's vital shoreline resources and have supported the efforts of the Harbor Management Commission to plan for the preservation of those resources.

CONTENTS

	<u>Page</u>
Foreword.....	iii
Acknowledgments.....	v
Contents	vii
 INTRODUCTION.....	 ix
 CHAPTER ONE:	
THE FENWICK HARBOR MANAGEMENT AREA	1
The Borough of Fenwick	2
The Fenwick Harbor Management Area.....	4
 CHAPTER TWO:	
ROLES, RIGHTS, AND AUTHORITIES FOR	
HARBOR MANAGEMENT AT FENWICK.....	13
Borough of Fenwick	14
Town of Old Saybrook.....	18
Regional Organizations.....	19
State of Connecticut.....	20
Federal Government.....	25
The General Public	26
Waterfront Property Owners.....	28
Private Organizations.....	29
 CHAPTER THREE:	
HARBOR MANAGEMENT ISSUES AND PLANNING	
CONSIDERATIONS	31
Environmental Quality Issues and Considerations	32
Public Health, Safety, and Welfare Issues and Considerations	36
``Institutional Framework" Issues and Considerations	40
Water Use and Navigation Issues and Considerations	45
Shoreline Access and Land Use Issues and Considerations	51

CONTENTS (Continued)

	<u>Page</u>
CHAPTER FOUR:	
HARBOR MANAGEMENT GOALS AND POLICIES	
OF THE BOROUGH OF FENWICK.....	57
Goal 1: Recognition of Harbor	
Management Area Resources and Values.....	59
Goal 2: Management Balance and Priority.....	59
Goal 3: Active and Coordinated Management	
of the Harbor Management Area and Shoreline	
by the Borough of Fenwick.....	59
Goal 4: Natural Resource Conservation and Enhancement.....	62
Goal 5: Maintaining and Improving Water Quality.....	65
Goal 6: Public Health, Safety, and Welfare.....	66
Goal 7: Recreational Use.....	69
Goal 8: Planning and Regulation of Land Use	
Affecting the Harbor Management Area.....	73
Goal 9: Water-Dependent Uses.....	76
Goal 10: Access to the Harbor Management Area.....	76
Goal 11: Community Support, Education, and Participation.....	83
Goal 12: Preservation of Community Character.....	83
Goal 13: Response to Changing Conditions.....	84
 CHAPTER FIVE:	
RESPONSIBILITIES AND RECOMMENDATIONS FOR	
PLAN IMPLEMENTATION.....	85
Fenwick Board of Warden and Burgesses.....	85
Fenwick Harbor Management Commission.....	88
Other Fenwick Commissions and Organizations.....	101
State of Connecticut Harbor Master with Jurisdiction at Fenwick.....	103
State and Federal Agencies with Harbor Management Authority.....	108
Borough Residents.....	110
 APPENDICES:.....	113
Appendix A: Glossary of Marine and Harbor	
Management Terms.....	115
Appendix B: Selected References.....	133
Appendix C: The Connecticut Harbor Management Act.....	139
Appendix D: An Ordinance Establishing the	
Borough of Fenwick Harbor Management Ordinance.....	143

Introduction

The Borough of Fenwick is a historic community at the mouth of the Connecticut River on Long Island Sound, unique in terms of not only its coastal setting but also its municipal autonomy within the Town of Old Saybrook. Fenwick encompasses about 235 acres of land on a peninsula bounded on three sides by coastal waters. To the north is South Cove and the Connecticut River, to the east is the main channel of the Connecticut River, and to the south is Long Island Sound.

The Fenwick peninsula was developed as a summer resort community called New Saybrook in 1871. In 1899 a Special Act of the Connecticut Legislature created and incorporated the Borough of Fenwick as a “body politic” within the Town of Old Saybrook.

The Borough, governed by a Board of Warden and Burgesses, is empowered to function as a municipality by the Special Act and by the Municipal Powers section of the Connecticut General Statutes. In this regard, the Borough assesses and collects taxes, controls finances and property, enacts ordinances for the health, safety, and welfare of its residents, and conducts other municipal duties. Pursuant to State laws and Borough ordinances, the Borough has prepared and adopted a municipal Plan of Conservation and Development and Zoning Regulations to guide and regulate land use. No commercial use of any property is permitted in the Borough.

Virtually all of the land within the bounds of the Borough has been designated a Historic District included on the National Register of Historic Places. The purpose of this designation is to preserve and protect the Borough's unique coastal area setting and the distinctive architectural characteristics of Fenwick's residential structures and other buildings.

Throughout its history, the Borough's character and quality of life have been intrinsically tied to the water and shoreline resources of the Connecticut River, South Cove, and Long Island Sound. The natural coastal resources associated with the Fenwick shoreline, including coastal waters, tidal wetlands, intertidal flats, beaches and sand dunes, and shorefront flora and fauna, are of extremely high quality, relatively undisturbed, and irreplaceable. For the purpose of conserving natural resources and ecological functions, conservation easements administered by the Lynde Point Land Trust establish significant restrictions on the use of all Borough-owned properties and other portions of the shoreline.

The presence of such unspoiled natural resources highlights the importance of active involvement and long-range planning by the Borough to help ensure: 1) protection of the natural environment; 2) preservation of the Borough's quality of life; and 3) appropriate

enjoyment of the Borough's shoreline and marine areas for recreational activities in harmony with the natural and historic environment.

The Fenwick Harbor Management Commission and Harbor Management Plan

The need for active Borough involvement and planning with respect to its shoreline and marine areas was recognized by the Board of Warden and Burgesses when it adopted the Fenwick Harbor Management Ordinance in 1990 to create the five-member Fenwick Harbor Management Commission. Through this Ordinance, the Commission is authorized to carry out all of the powers and duties granted to municipal harbor management commissions by the State legislation known as the Connecticut Harbor Management Act (Sections 22a-113k through 22a-113t of the Connecticut General Statutes).

A principal duty of the Fenwick Harbor Management Commission is to prepare the Borough's Harbor Management Plan which is to include the identification of existing and potential waterfront problems as well as recommendations for addressing those problems. In this regard, the Harbor Management Plan should be thought of as a complementary document to the Fenwick Plan of Conservation and Development. The Harbor Management Plan, however, focuses on conditions in and affecting Fenwick's marine jurisdiction. That jurisdiction, known as the Fenwick Harbor Management Area (HMA), is defined in the Harbor Management Ordinance and includes all of the area within the territorial boundaries of the Borough below the mean high water line, including portions of South Cove, the Connecticut River, and nearshore Long Island Sound.

The Harbor Management Commission prepared a Draft Harbor Management Plan dated May 2002 for review by the Warden, Burgesses, commissions, organizations, and residents of the Borough of Fenwick and by the Connecticut Department of Environmental Protection's Office of Long Island Sound Programs (DEP OLISP). The Commission considered all of the comments that it received concerning the Draft Plan and prepared an April 25, 2003 Plan Addendum to include appropriate modifications to the Draft Plan based on those comments. At that time the Commission formally submitted the Draft Plan and Plan Addendum to the DEP OLISP for the purpose of the having the DEP OLISP coordinate State review and approval by the Connecticut Commissioners of Environmental Protection and Transportation and review by the U.S. Army Corps of Engineers in accordance with Section 22a-113m of the Connecticut General Statutes. The Commission prepared a revised Plan document dated October 2004 to incorporate the Draft Plan modifications identified in the Addendum and other modifications identified as necessary by the State of Connecticut and Corps of Engineers during the review and approval process. After receipt of State approval in March 2005, the Commission submitted the Plan document to the Fenwick Board of Warden and Burgesses for adoption in accordance with Section 22a-113m of the Connecticut General Statutes and the Fenwick Harbor Management Ordinance. Following a public hearing on May 28, 2005, the Plan was adopted by the Board on that date.

The *Borough of Fenwick Harbor Management Plan* has five chapters:

- **Chapter One: The Fenwick Harbor Management Area** describing the Borough's coastal area setting and historical use and development, as well as environmental conditions in the HMA and conditions concerning use of and access to the HMA.
- **Chapter Two: Roles, Rights, and Authorities for Harbor Management at Fenwick** including review of the agencies, laws, programs, and authorities affecting the HMA and the interests and rights of persons and organizations for use of the HMA.
- **Chapter Three: Harbor Management Issues and Planning Considerations** to be addressed by the Borough through the provisions of the Harbor Management Plan.
- **Chapter Four: Harbor Management Goals and Policies of the Borough of Fenwick** established as the Borough's basic guidelines for harbor management and directed toward achieving an appropriate balance between beneficial use of the HMA and conservation of the HMA's vital natural and cultural resources.
- **Chapter Five: Responsibilities and Recommendations for Plan Implementation** including responsibilities and recommendations presented with respect to the Board of Burgesses, Harbor Management Commission, other Fenwick commissions and organizations, the State of Connecticut Harbor Master with jurisdiction at Fenwick, State and Federal agencies, and Borough residents.

The Harbor Management Plan provides a policy and decision-making framework to guide the Borough's future actions as well as the actions of outside agencies with authorities or programs affecting the Fenwick Harbor Management Area.

How Will the Borough Benefit From the Harbor Management Plan?

The Borough benefits from the Harbor Management Plan in several ways. The Plan articulates and establishes the Borough's goals for use and conservation of its marine resources in a duly approved and adopted planning document. The Plan also establishes formal procedures and agreements to maintain Borough autonomy and ensure future coordination with the Town of Old Saybrook as the Town implements its own harbor management plan.

Further, the Plan strengthens the Borough's role, relative to State and Federal agencies, in the planning and management of in-water and shoreline activities. Without a Harbor Management Commission and Harbor Management Plan, the Borough's authority to address a number of important concerns in the HMA is very limited. All tidal waters, submerged lands, and intertidal areas are held in trust by the State of Connecticut for the

benefit of the general public; most activities below the high tide line are subject to the control and jurisdiction of the State of Connecticut and Federal government, acting primarily through the Department of Environmental Protection and U.S. Army Corps of Engineers, respectively.

Through its Harbor Management Commission and a Borough Harbor Management Plan, Fenwick has the opportunity for an expanded role in the planning, management, and regulation of in-water and waterfront activities. An important legislative purpose of the Harbor Management Act is, in fact, to increase local involvement and authority in matters pertaining to a municipality's navigable waters. The Plan provides the basis for an increased Borough role in any State and Federal decisions that affect the waterfront and HMA. Following adoption of the Plan by the Borough and approval by the State of Connecticut, local, State, Federal, and private actions affecting the HMA are to be consistent with the Plan. The Harbor Management Commission will evaluate this consistency.

While the Plan does not give the Harbor Management Commission regulatory power to approve or deny the proposals that it reviews, it provides a special mechanism whereby the Commission's findings must be considered and incorporated into the relevant State and Federal decisions. Without the Plan there is no formal mechanism or overall context to define the Borough's involvement in the outside decisions that affect its shoreline and HMA.

In addition, the Plan provides a guiding framework (e.g., the Borough's harbor management goals and policies) within which the existing and future activities of all Borough commissions with responsibilities affecting the waterfront and HMA can be carried out in a coordinated and effective manner. The Plan helps to ensure that awareness and understanding of waterfront and harbor management concerns are incorporated into the actions of Borough commissions without changing any of their existing authorities.

Also, the duties of any State of Connecticut Harbor Master with jurisdiction over the Fenwick HMA must be carried out in accordance with the Plan. Previously, the jurisdiction of the Old Saybrook Harbor Master has been considered to include the Fenwick HMA. Upon adoption of the Harbor Management Plan by the Borough, the Governor may consider appointing a Harbor Master with specific jurisdiction over Fenwick waters; that appointment must be from a list of candidates submitted to the Governor by the Fenwick Harbor Management Commission.

What will it Cost to Implement the Harbor Management Plan?

The costs of implementing the Harbor Management Plan should be minimal. The most significant aspects of the Plan are its goals, policies, and recommendations which are considered in existing decision-making processes, with no significant added cost to the Borough.

Any recommendations leading to capital projects (including recommendations for improving Borough-owned waterfront properties and enhancing natural resources, for example) could require future expenditures of Borough funds, but only if the Borough chooses to implement those recommendations. The Plan does not commit the Borough to

future expenditures, but provides a basis for implementing the recommendations should funds be available in the future.

Management of the Borough's Waterfront Resources is an Ongoing Process

Management of Fenwick's waterfront and marine resources must be viewed as an ongoing process that should continue to evolve in response to changing conditions and circumstances in the years ahead. As the Harbor Management Commission works to implement the Harbor Management Plan, it must be remembered that the Plan will not be able to identify every issue or concern that is likely to affect the Fenwick Harbor Management Area in the future, nor will it be able to provide a definitive answer to every problem. The need for case-by-case decision-making will remain, but the Plan will provide a framework (its goals, policies, and recommendations) to guide this decision-making. The framework must be flexible because it will require modification over time as conditions change. To ensure that the Plan responds to changing conditions, the Plan may be amended by the Borough as needed.

As Fenwick moves forward in the 21st century, care must be taken to ensure that any changes affecting the Borough do not have adverse impacts on the unspoiled natural environment or result in a loss of the strong sense of community identity that has characterized the Borough since its founding. Toward this end, the Harbor Management Commission will provide a continuing forum to hear the concerns, questions, and thoughts of Borough residents and others concerning the waterfront, HMA, and Harbor Management Plan.

Chapter One:

The Fenwick Harbor Management Area

This first chapter of the Fenwick Harbor Management Plan describes conditions in and near the Fenwick Harbor Management Area (HMA). The HMA encompasses the Borough's harbor management jurisdiction on South Cove, Folly Creek (commonly known and hereinafter referred to as Crab Creek), the Connecticut River, and nearshore Long Island Sound. Included is background information concerning:

- 1) The Borough of Fenwick's history and municipal authorities;**
- 2) The Fenwick Harbor Management Area, including the Borough's jurisdiction on:**
 - **South Cove;**
 - **Crab Creek;**
 - **The Connecticut River; and**
 - **Long Island Sound.**

The information presented emphasizes how the community character and quality of life of the Borough of Fenwick have always been intrinsically tied to the water and shoreline resources of the Connecticut River, South Cove, and Long Island Sound. Perhaps the most evident and significant finding in the course of preparing the Borough's Harbor Management Plan is that the natural coastal resources associated with the Fenwick shoreline, including coastal waters, tidal wetlands, intertidal flats, beaches and sand dunes, and shorefront flora and fauna, are of extremely high quality, generally undisturbed, and irreplaceable.

The presence of such unspoiled natural resources highlights the importance of active involvement and long-range planning by the Borough to help ensure: 1) protection of the natural environment; 2) preservation of the Borough's quality of life; and 3) appropriate enjoyment of the Borough's shoreline and marine areas for recreational activities in harmony with the natural and historic environment.

The Borough of Fenwick

The Borough of Fenwick has a unique and prominent location at the mouth of the Connecticut River on Long Island Sound. (See Figure 1-1.)* The Connecticut River is one of the Nation's great waterways and Long Island Sound has been designated an estuary of national significance by the U.S. Congress.

The Borough occupies a peninsula, often called Lynde's Neck, on the west bank of the Connecticut River. (See figures 1-2 and 1-3.)* Bounded on three sides by coastal waters, the Fenwick peninsula is a “coastal barrier” between the open waters of the Sound and the sheltered waters of South Cove and the lower Connecticut River estuary.

Fenwick's total land area is about 235 acres within the larger boundaries of the Town of Old Saybrook.¹ Although located within the boundaries of the Town, Fenwick functions as a municipality in its own right—one of nine incorporated boroughs in the State of Connecticut. It is a place rich in history. The Borough derives its name from Colonel George Fenwick, one of the principal leaders of the original Saybrook colony which began with the first English settlement at nearby Saybrook Point in 1635.

Much of the land that is now Fenwick was farmed for many years prior to its purchase by the New Saybrook Company in 1870. A summer resort community called New Saybrook was then established, made possible by the opening of the Connecticut Valley Railroad from Hartford to Saybrook Point in 1871. The railroad was extended to New Saybrook in the following year, via a causeway across South Cove. A wooden bridge to provide pedestrian and carriage access to the new community from Saybrook Point was also built across South Cove; individual lots for cottage development were sold; and an elegant hotel called Fenwick Hall was constructed.

Despite considerable initial success, however, and the popularity of the resort with many of Connecticut's business and civic leaders, the New Saybrook Company failed, Fenwick Hall had constant financial troubles, and by the early 1880's those who had built cottages and become summer residents were concerned about the future of their community.

As a first step in preserving and revitalizing the community and achieving local political control, an Association of Fenwick residents was incorporated by resolution of

* Photos available with the Harbor Management Plan in the Borough Office.

¹ The Town of Old Saybrook is one of the oldest and most historic communities in Connecticut. The Saybrook settlement, the fourth oldest in Connecticut, was established in 1635 to encompass a large area of land centered around the mouth of the Connecticut River. Included was land now within the boundaries of the towns of Old Saybrook (including the Borough of Fenwick), Westbrook, Essex, Deep River, Chester, and Old Lyme. The Town of Old Saybrook within its present boundaries was incorporated in 1854. For a description of some of the history of the Old Saybrook area and of waterfront and marine conditions in the Town of Old Saybrook, the reader should refer to the *Town of Old Saybrook Harbor Management Plan*, June 2003.

the Connecticut Legislature in 1885. Several years later, Morgan Gardner Bulkley, a prominent resident who also happened to be the former Governor of Connecticut, purchased Fenwick Hall and all of the available vacant land on the peninsula. An entity called the Fenwick Hall Company was established to manage those acquired properties. Then, through a Special Act of the Connecticut Legislature in 1899, the Borough of Fenwick was created and incorporated as a separate “body politic” within the Town of Old Saybrook.

The Special Act empowered the Borough to assess and collect taxes, control finances and property, enact ordinances for the health, safety, and welfare of its residents, and conduct other municipal duties. The Act set up a Board of Warden and Burgesses with specific powers and duties to administer the Borough's local government; the Warden was designated as the Borough's chief executive officer.

Some significant changes affecting the Borough's landscape occurred in the period 1916-1918. Rail service to Fenwick across South Cove was discontinued and the railroad released its right-of-way. This enabled the railroad causeway to be converted into an automobile highway. The new highway replaced the wooden bridge east of the rail line that had carried Beach Road across South Cove. The wooden bridge had required constant maintenance and was a source of friction between the Town of Old Saybrook and the Borough since the Town was responsible for its maintenance. At the same time as the old highway bridge was abandoned (its remnant pilings still exist in the Cove), that part of the State-maintained Beach Road that passed through the center of Fenwick and then turned west along the Borough's Long Island Sound shoreline was also abandoned and rerouted over the new highway bridge. Today, vehicle access to the Borough from the north is via the State Route 154 causeway which follows the old railroad right-of-way across South Cove. Route 154 then extends diagonally through the northwest corner of the Borough, connecting Fenwick to shore points west.

The Borough's landscape was further changed in 1917 when Fenwick Hall caught fire and its wind blown embers set fire to the Fenwick Station of the Hartford Yacht Club on Folly Point. Both buildings were destroyed.

The great hurricane of 1938 caused considerable destruction of waterfront cottages. Subsequent storms and the ongoing, steady process of coastal erosion have also affected Fenwick's Long Island Sound shoreline. As evidence of the power of that erosion, there is no longer any vestige of the old Beach Road that once ran along the Borough's shoreline.

In 1942 the Fenwick Hall Company deeded most of its properties to the Borough in order that the land could be preserved as open space. A significant portion of this land was incorporated into the Fenwick Golf Course whose first holes were built in 1894, making it one of the oldest courses in the United States. The Grove area on South Cove and the area adjoining Crab Creek were also included in the Fenwick Hall donation to the Borough. Today, these and most other Borough-owned properties are covered by conservation easements administered by the Lynde Point Land Trust. The purpose of the easements, which establish significant restrictions on use of the Borough-owned land, is to conserve natural resources and ecological functions.

The Borough established a Zoning Commission and its first Zoning Regulations in 1946. As with the first regulations, the purpose of the current Zoning Regulations is to

preserve the Borough of Fenwick as a family residence community and to promote the public health, safety, comfort, convenience, and general welfare. The current regulations permit single family residences and several other noncommercial uses including parks, playgrounds, and recreational areas. No commercial use of any property is permitted.

The Borough's present population continues to reflect Fenwick's carefully guided land use, small land area, sensitive natural resources, and historical development as a summer resort community. The year-round population of 37 may expand to about 750 during the summer season.

In 2004 the strong sense of community identity which has characterized Fenwick throughout its history continues. That sense of identity is intrinsically tied to the Borough's unique and unspoiled coastal resources. Those resources include coastal waters, tidal wetlands, intertidal flats, beaches and sand dunes, and shorefront flora and fauna. Scenic vistas of the Connecticut River, South Cove, and Long Island Sound are provided from a number of locations within the Borough. Adding to the feeling of being in an unspoiled natural environment, Fenwick roads are narrow and uncurbed, including several that are unpaved. Older shingle-style family cottages and some newer homes are clustered around the edges of the golf course and along parts of the Borough's South Cove and Long Island Sound shorelines. The special historic character of the Borough has been recognized through establishment of the Fenwick Historic District included on the National Register of Historic Places. Also within the Borough, the Federal Lynde Point Lighthouse and the Saybrook Breakwater Light are structures of national historic interest.

Recognizing the importance of active Borough involvement and planning in order to protect and properly manage its unique land and water resources, Fenwick has established a Park Commission, Historic District Commission, Harbor Management Commission, and Planning and Zoning Commission. The Town of Old Saybrook provides police, fire, and other municipal services in the Borough.

Through the efforts of the Planning and Zoning Commission (which has evolved from the original Zoning Commission) the Borough has prepared and adopted a municipal Plan of Conservation and Development. That plan includes goals for retaining the scenic and historic open character of the Borough, maintaining the Borough's historic link to the waters that surround it, and protecting and preserving the Borough's unique natural resources.

Consistent with those goals and pursuant to Section 22a-113k of the Connecticut General Statutes, the Borough has also established a municipal jurisdiction for the purpose of protecting and managing the marine and waterfront resources in the waters surrounding the Fenwick peninsula. This area of jurisdiction is known as the Fenwick Harbor Management Area (HMA).

The Fenwick Harbor Management Area

The Fenwick Harbor Management Area delineates the jurisdiction of the Borough's Harbor Management Commission and the area of focus of the Fenwick Harbor Management Plan. Section 1 of the Borough's Harbor Management Ordinance (see Appendix D of the Plan) charges the Commission with the specific responsibility of

preparing the Harbor Management Plan which may be thought of as a complementary, “water-side” equivalent of the Fenwick Plan of Conservation and Development.

The Harbor Management Ordinance establishes the jurisdiction of the Harbor Management Commission as all of the waters within the territorial boundaries of the Borough below the mean high water line and bounded by “a line running northerly and perpendicular to the shore from the northwest corner of the Borough to the centerline of South Cove, thence easterly along the centerline of the Cove to the west side of the Connecticut River channel, thence southerly along the channel to the south end of the Federal west jetty, thence westerly maintaining the same distance from the shore to a point of intersection with a line perpendicular to the shore from the southwest corner of the Borough, and thence to the southwest corner of the Borough.” (See Figure 1-4.)* As so defined, the HMA encompasses a total of about 480 acres of open water surface on South Cove, the Connecticut River, and Long Island Sound. This total does not include Crab Creek and the intertidal area adjoining the Creek.

The Fenwick HMA is essentially encircled by the harbor management jurisdiction of the Town of Old Saybrook. Nearby the Fenwick HMA, in the waters within the Town's harbor management jurisdiction, visiting and resident boaters, excursion boats, commercial barges, ferry boats, and other vessels all share the Connecticut River's navigable waterway. While the Zoning Regulations of the Borough of Fenwick preclude the development of marine commercial facilities at Fenwick, and the presence of valuable and undisturbed coastal resources in and adjoining the HMA limits opportunities for public access to the HMA from the Borough, a number of public and commercial water-dependent facilities are located nearby on the Old Saybrook shoreline.² Those facilities provide substantial opportunities for public access to the lower Connecticut River and are of more than adequate capacity to support all recreational boating activities that may take place in the Fenwick HMA.

The water and waterfront resources associated with the Fenwick HMA were vital to the establishment and historical development of the Borough. Today, those same resources continue to provide irreplaceable natural and cultural values, including scenic and open space values. They also help to establish the pattern and extent of land development. While the predominant use of waterfront land is for conservation and residential purposes, a few small areas provide limited opportunities for access to the HMA for fishing, boating, enjoyment of water views, and environmental study. In addition, visiting boaters may pass through or anchor in the HMA for recreational enjoyment.

Most significantly, the natural coastal resources of the Connecticut River, South Cove, and Long Island Sound at Fenwick provide vital natural values that are related, for example, to fish and wildlife habitat, water quality, and other ecological functions. In sum, the overall quality of life in the Borough of Fenwick is largely dependent on the Borough's costal area setting at the mouth of the Connecticut River on South Cove and

* Photos available with the Harbor Management Plan in the Borough Office.

² See the *Town of Old Saybrook Harbor Management Plan*, June 2003.

Long Island Sound. (The general locations of the Borough's coastal resources are shown on Figure 1-5. *)

Fenwick's waterfront and harbor management jurisdiction is described below with respect to three different shoreline environments as provided by South Cove, the Connecticut River, and Long Island Sound. Each is distinct in terms of its coastal resources and waterfront land uses.

South Cove

Fenwick's South Cove shoreline extends for a little over one mile (about 6,000 feet) from the northwest corner of the Borough to the tip of Folly Point. The Harbor Management Area encompasses about 160 acres of surface water area on the Cove.

Use of South Cove by any vessel other than a small outboard-powered or hand-powered craft is precluded by the extreme shallowness of the Cove. In addition, there are a number of submerged obstructions to navigation in the Cove, including rocks and the remnant pilings of the old Beach Road bridge.

Roughly the south half of the Route 154 causeway (which follows the right-of-way of the old Connecticut Valley Railroad) passes through the HMA. (See Figure 1-6. *) The causeway provides opportunities for scenic views of the Cove, Connecticut River, and Saybrook Point by motorists, pedestrians, and bicyclists. In addition, fishing from the bridge is a popular activity. There are three openings through the causeway bridge, including one near the Fenwick shoreline. (See Figure 1-7. *) These openings have limited vertical clearances but enable small craft to enter the western part of the Cove. It is suggested in reports for the Town of Old Saybrook that the bridge openings are not sufficient to allow adequate flushing of the Cove, thereby contributing to the substantial, ongoing siltation. Historical accounts from the late 1800's describe much deeper waters in the Cove than at present.

The South Cove section of the HMA also includes tidal wetlands along the shoreline, a sandy beach at Folly Point, the shoreline of the Borough-owned property known as the Grove conservation area, and the former site of a small boating facility once operated by the Borough and known as the Fenwick Yacht Club. No significant areas of submerged aquatic vegetation in the Cove are identified on coastal resources maps prepared by the Connecticut Department of Environmental Protection. Such vegetation, if historically present in the Cove, may have been lost due to poor water quality, nutrient enrichment, or physical disruption.

The Grove area is located just west of the Route 154 causeway bridge. (See Figure 1-8. *) In the days of Fenwick Hall this wooded area was a popular picnic and recreation area as well as a gathering spot for charitable outings. It was later used by the Borough for debris disposal but remains an important open space resource providing opportunity for passive recreational use enhanced by its proximity to the Cove. No management plan has been prepared by the Borough to guide use of this property. The Grove is covered by a conservation easement administered by the Lynde Point Land Trust; any future uses of

* Photos available with the Harbor Management Plan in the Borough Office.

this property that may be considered in the future must be consistent with the conditions of the easement.

To the east of the causeway bridge is the former location of the Borough boating facility known as the Fenwick Yacht Club where a small marina, boat storage area, and marine railway were once provided. (See Figure 1-9.*) The remnants of this facility are still visible. Further east, on Folly Point, is the former site of the Fenwick Station of the Hartford Yacht Club which was built in 1900 and destroyed by the Fenwick Hall fire of 1917. (See Figure 1-10.*)

The shallow open water area of South Cove between the causeway bridge and Folly Point has historically been able to support a few boat mooring locations (see Figure 1-11*), generally not more than ten in any one year because of the shallow waters and lack of any nearby waterfront facilities enabling access to mooring locations. In the absence of a duly appointed Harbor Master for the Borough of Fenwick, mooring locations here have been subject to the permitting authority of the Old Saybrook Harbor Master.

The mouth of Crab Creek is just west of Folly Point, providing tidal exchange into the Crab Creek wetland area*.

A few homes are on or near the South Cove shoreline of the Borough, along with one fairway of the Fenwick Golf Course. Also, the Borough owns a strip of land six feet wide (formerly owned by the Fenwick Hall Company) above the high water line along much of the Borough's South Cove shoreline. The term "high water" in the historical description of the six-foot strip is not based on any surveyed datum or legal definition of tidal water elevations; the precise location of the strip has never been formally surveyed. The strip is not continuous in three locations on the Borough's South Cove shoreline.(See page 3-27.*)

The water quality in South Cove is classified by the State of Connecticut as "SB." (The highest classification applied to the State's coastal and marine surface waters is "SA.") Designated uses of Class SB waters are "marine fish, shellfish and wildlife habitat, shellfish harvesting for transfer to a depuration plant or relay to approved areas for purification prior to human consumption, recreation, industrial and other legitimate uses including navigation." The Connecticut River Watch Program reports that elevated levels of bacteria may be found in the Connecticut River (and therefore South Cove), particularly after heavy rainfall.

Crab Creek

The tidal portion of Crab Creek and the marsh adjoining the creek below the mean high water line are also part of the Harbor Management Area. (See figures 1-12 and 1-13.*) Crab Creek provides tidal exchange into the eastern part of the Fenwick peninsula and ultimately into the small body of water known as the Hepburn lagoon (see Figure 1-14*).

A significant part of the natural marsh that once adjoined the creek was filled with sediment dredged from the Connecticut River in 1929 to maintain the navigation channel. In 2004 the Connecticut Department of Environmental Protection is implementing a plan

* Photos available with the Harbor Management Plan in the Borough Office.

to remove some of that material as necessary to restore intertidal elevations and a healthy tidal wetland ecosystem. That work is proceeding with the consent and approval of the Borough and of the Lynde Point Land Trust which is the administrator of the conservation easement covering this area.

Connecticut River

Fenwick's Connecticut River shoreline (see Figure 1-15*) measures slightly over one-half mile (about 3,000 feet) from the tip of Folly Point to the point where the shoreline meets the Federal west jetty at the mouth of the River. The jetty itself extends about 2,000 feet into Long Island Sound. The Harbor Management Area encompasses about 50 acres of surface water area on the River. This section of the HMA adjoins the Saybrook Outer Bar channel which is the entrance channel connecting the Connecticut River with Long Island Sound. Prominent features of the shoreline here include the entire eastern edge of the Fenwick peninsula, Lynde Point, and the historic Lynde Point Lighthouse. The lighthouse is located on about a half-acre of Federally owned property. Also included in this part of the HMA is the Saybrook Breakwater Light on the south end of the jetty.

This part of the HMA is truly the location where the Connecticut River meets Long Island Sound. The Connecticut River is the largest river system in New England and one of the Nation's great waterways. Called "Quinatucquet" (meaning "long tidal river") by Native Americans, it flows 410 miles from its headwaters near the Canadian border to Long Island Sound and provides nearly 70 percent of the Sound's freshwater input. The River is tidally influenced as far north as Windsor Locks, about 60 miles upriver from the Sound, and its tidal region is considered one of the richest ecological systems in the United States. The mean tidal range at the mouth of the River is 3.6 feet.

The River's watershed encompasses an area of over 11,000 square miles included in four states; the entire watershed has been designated as the Silvio O. Conte National Fish and Wildlife Refuge for the purpose of ecosystem conservation. The region of the River's lower 36 miles has been designated by The Nature Conservancy (TNC) as one of the "40 Last Great Places" in the Western Hemisphere. In addition, this lower reach of the River—often referred to as the Tidelands of the Connecticut River—is recognized as containing "Wetlands of International Importance" designated under the intergovernmental treaty called the Convention on Wetlands of International Importance (sometimes called the Ramsar Convention). A number of governmental agencies and concerned organizations, including but not limited to the Connecticut Department of Environmental Protection, U.S. Fish and Wildlife Service, and TNC, work as partners to protect and manage the special and unique resources of the Connecticut River.

The mouth of the River is relatively shallow. Constantly shifting shoals and sandbars hindered colonial navigation and prevented establishment of a deep-water port near the rivers of its size without a major city at its mouth. Due to the presence of the sandbars, the River's estuary has remained relatively undeveloped and free of any industrial development.*

* Photos available with the Harbor Management Plan in the Borough Office.

Navigation on the River is served by the Connecticut River Federal Navigation Project which includes a Congressionally authorized channel that extends from the mouth of the River upstream for approximately 52 miles to Hartford. The navigation project also includes the two stone jetties at the mouth of the River which were authorized by Congress in 1872 in an attempt to maintain a deep channel between them. The west jetty at Fenwick was completed in 1875. Between the jetties is the channel known as the Saybrook Outer Bar Channel—the main channel connecting the River with Long Island Sound. The Outer Bar channel is authorized by Congress to be 300 feet wide and 15 feet deep at mean low water. The western edge of the channel is about 400 feet off Lynde Point and marks the eastern boundary of the Fenwick HMA.

Responsibility for maintaining the channel and jetties rests with the U.S. Army Corps of Engineers. In 1929 material dredged from the Saybrook Outer Bar channel was pumped into the tidal wetlands adjoining Crab Creek, resulting in the loss of ecologically valuable wetland resources. This manner of dredged material disposal is no longer permissible. Described above, the Borough in 2002 is considering plans by the Connecticut Department of Environmental Protection to restore the wetlands filled in 1929.

Prior to construction of the jetties and Outer Bar channel, the Federal Government constructed the Lynde Point Lighthouse (often called the Inner Light) which, along with the Outer Light, is a prominent landmark of State and National significance. (See Figure 1-16.)*

In 1802 the Federal Government purchased a small piece of land on which to build the lighthouse and also received title to some underwater lands from the State Legislature at Lynde Point needed for the structure. Right of access across the Fenwick peninsula to the site was also secured. A wooden lighthouse was completed and lighted the following year. The present structure, built of granite, was completed in 1838 along with a home for the lighthouse keeper and his family.

In 1886 the Federal Government built the Saybrook Breakwater Lighthouse (often called the Outer Light) on the south end of the west Federal jetty. (See Figure 1-17.)* The Outer Light is one of the most prominent landmarks in the State of Connecticut. Its likeness adorns the Connecticut automobile license plates used to generate funds for projects to protect and enhance Long Island Sound.

The mouth of the River is relatively shallow. Constantly shifting shoals and sandbars hindered colonial navigation and prevented establishment of a deep-water port near the

The Inner and Outer lights are both structures of national historic interest, listed on the National Register of Historic Places. Responsibility for maintaining these vital aids to navigation today rests with the United States Coast Guard. There is no longer need for lighthouse keepers as both lights are fully automated. As a result, the Federally owned residence associated with the Inner Light is not occupied for purposes of lighthouse maintenance. With the exception of the Federally owned lighthouse property, all land along the shoreline in this part of the HMA is privately owned.

The shoreline is characterized by unspoiled sandy and cobble beaches and tidal wetlands (see figures 1-18 and 1-19*) except in the area of the Inner Light where a

* Photos available with the Harbor Management Plan in the Borough Office.

concrete seawall protects the existing facilities. The lighthouse and protecting seawall are the only man-made structures on the Borough shoreline between Folly Point and the base of the west jetty. These structures extend into the Connecticut River and block any pedestrian passage along the shoreline below the mean high water line at this point.

The water quality in the Connecticut River is classified by the State of Connecticut as “SB.” Noted in the previous section on South Cove, State-designated uses of Class SB waters are “marine fish, shellfish and wildlife habitat, shellfish harvesting for transfer to a depuration plant or relay to approved areas for purification prior to human consumption, [and] recreation, industrial and other legitimate uses including navigation.” Runoff and siltation from throughout the River's immense watershed eventually enters Long Island Sound; a silt plume funneled through the jetties is often visible for a substantial distance into the Sound.

In recent years there have been a number of accomplishments with regard to understanding and improving water quality conditions in the Connecticut River. Nevertheless, pollution and the risk of pollution still exist. Needless to say, actions that take place far from the Borough's jurisdiction can contribute to any pollution that may be found near the mouth of the River and the Fenwick HMA. It is also recognized that just as the actions of all communities and individuals in the Connecticut River watershed can affect the quality of water in the River, so too can the actions of all those communities and individuals contribute to maintenance and improvement of water quality.

When describing the Connecticut River at Fenwick it must be mentioned that the River has the most diverse fish populations of any New England river system. In the lower reaches of the River there is good fishing for largemouth bass, bluefish, panfish, northern pike, catfish, eel, carp, white perch, and striped bass. The Fisheries Division of the Connecticut Department of Environmental Protection, in coordination with the U.S. Fish and Wildlife Service, is involved with restoration, management, regulation, and research concerning several important fish species and populations in the Connecticut River. For example, the Fisheries Division's programs are directed toward enhancing existing populations of American shad and restoring Atlantic salmon in accordance with the goals of the Connecticut River Atlantic Salmon Commission of which the State of Connecticut is a member. The shad population of the Connecticut River is the second largest in North America; commercial fishing for shad occurs on the River from April 1 to June 15. The Fisheries Division is also working to restore anadromous herring populations and is conducting research concerning the endangered shortnose sturgeon. All of these species are of interest near the Fenwick HMA.

Vessel speed in the Connecticut River is controlled by State boating laws and regulations. Regulation of Connecticut State Agencies (RCSA) Section 15-121-B15 establishes a steerage speed area in the Saybrook Bar Channel between the Inner Light and Outer Light.

Long Island Sound

Fenwick's Long Island Sound shoreline measures a little over one mile (6,000 feet) from the base of the Federal west jetty to the Borough's southwest corner. About 270 acres of surface water area are included in this part of the Harbor Management Area. One of the most prominent shoreline features is the area of vegetated sand dunes and

undisturbed sandy and cobble beach west of the jetty. (See figures 1-15, 1-20, and 1-21.)* Since its construction in 1875, the jetty has trapped a substantial amount of sand moved by littoral processes along the Long Island Sound shoreline from west to east; that sand has been shaped by the wind into natural dune formations that are exceedingly rare on the Connecticut coast. The dunes and nearby undisturbed shoreline provide habitat for a variety of species of native flora and fauna. (See Figure 1-22.)*

The protected waters west of the jetty have historically been a popular location for anchoring boaters. Since 1963 the nearby cottage owners have maintained a restricted swimming area immediately west of the jetty. This area is appropriately marked with buoys as authorized by the State of Connecticut.

Most significantly, the natural coastal resources of the Connecticut River, South Cove, and Long Island Sound at Fenwick provide vital natural values that are related, for example, to fish and wildlife habitat, water quality, and other ecological functions. In sum, the overall quality of life in the Borough of Fenwick is largely dependent on the Borough's coastal area setting at the mouth of the Connecticut River on South Cove and Long Island Sound. (The general locations of the Borough's coastal resources are shown on Figure 1-5.)*

Further west along the shoreline is the Fenwick Pier at the foot of Fenwick Avenue. This concrete structure owned by the Borough has provided opportunities for swimming, enjoyment of water views, and small boat access to Long Island Sound by Borough residents and their guests since it was built in 1890. (See figures 1-23 and 1-24.)* A rock breakwater offshore and parallel to the shore protects the pier from waves generated in the Sound.

The central and western sections of the Borough's Long Island Sound shoreline are characterized by waterfront homes and narrow beaches. Concrete seawalls have been constructed to protect some of those homes from the ongoing process of shoreline erosion. In addition, there are several old rock and timber groins constructed in an effort to maintain the eroding sandy beaches. Several privately owned concrete and timber piers provide access to the Sound. (See figures 1-25 through 1-28.)*

Near the Borough's western boundary is an area of freshwater wetlands cut off from tidal exchange and hereinafter called the "Fenwick west" wetland area. (See Figure 1-29.)* This area, vegetated with *Phragmites* grass which can pose a fire hazard, is also a breeding area for ticks and mosquitos. The Fenwick west wetland is owned by the Borough and covered by a conservation easement administered by the Lynde Point Land Trust. Any future plans for environmental enhancement of this area would therefore require approval from the Land Trust before they could be implemented.

The Borough's western boundary is marked by the extension of Old Fenwick Road also known as the Park Avenue extension. (See Figure 1-30.)* This Town of Old Saybrook-owned street end provides an opportunity for visual access to Long Island Sound and to the shoreline below the mean high water line. The capacity of this street end to accommodate public use, however, is limited by the lack of any parking spaces or other facilities to accommodate water access and by its proximity to residential properties.

* Photos available with the Harbor Management Plan in the Borough Office.

Water quality in nearshore Long Island Sound in this part of the HMA is classified by the State of Connecticut as “SA.” Class SA is the highest classification applied to the State's coastal and marine surface waters. Designated uses of Class SA waters are “marine fish, shellfish and wildlife habitat, shellfish harvesting for direct human consumption, recreation, and all other legitimate uses including navigation.”

Vessel speed in the Long Island Sound portion of the Fenwick HMA is controlled by State boating laws and regulations. Regulation of Connecticut State Agencies (RCSA) Section 15-121-B14 states that “no person shall operate a motorboat at a speed in excess of six miles per hour within one hundred feet of shore, or of a dock, pier, float, or anchored or moored vessel, unless such motorboat is approaching such float, dock, or shore for the purpose of enabling a person engaged in waterskiing to take off or land.” Further, RCSA Section 15-121-B12 states that no person shall operate or allow the operation of a vessel inside markers demarking a duly authorized restricted swimming area, nor shall any person operate a vessel at more than steerage speed when within one hundred feet of such markers.³

³ Laws and regulations affecting the Fenwick Harbor Management Area, including boating laws and regulations enforced by agencies of the State of Connecticut, are subject to change and/or renumbering. Persons affected by or otherwise interested in those laws and regulations should consult the Connecticut General Statutes and Regulations of Connecticut Agencies for current laws and regulations, and may contact the appropriate agency for information on the status of current law.

Chapter Two: Roles, Rights, and Authorities for Harbor Management at Fenwick

This chapter describes the “institutional framework” for harbor management at Fenwick. A number of commissions, departments, and agencies at the local, State, and Federal levels have authorities and responsibilities affecting the Fenwick Harbor Management Area (HMA). All of these governmental entities will have continuing roles that affect the HMA; an understanding of their current authorities and responsibilities is therefore necessary when planning for the most appropriate management of the Borough's shoreline and waterfront resources into the future. In addition, waterfront property owners and the public at large have important water-related rights, and there are private organizations with harbor management interests.

Information on the institutional framework for harbor management at Fenwick is presented in the following order:

- 1) Borough of Fenwick;**
- 2) Town of Old Saybrook;**
- 3) Regional Organizations;**
- 4) State of Connecticut;**
- 5) Federal Government;**
- 6) The General Public;**
- 7) Waterfront Property Owners;**
- 8) Private Organizations.**

When considering the institutional framework for harbor management at Fenwick, it must be recognized that the Borough is a specially incorporated municipality within the Town of Old Saybrook; the Fenwick HMA is essentially encircled by the harbor management jurisdiction of the Town. State- and Federal-level authorities and responsibilities pertinent to harbor management in Old Saybrook are also applicable in Fenwick's jurisdiction. For a more detailed description of those State and Federal interests as well and of the interests of the Town of Old Saybrook for harbor management, the reader should refer to the “Town of Old Saybrook Harbor Management Plan” dated June 2003. Also, it should be recognized that the general rights of waterfront property owners and the public at large for the use of navigable waters apply in all Connecticut jurisdictions and are not specific to individual municipalities.

Borough of Fenwick

In addition to the Board of Warden and Burgesses and the Harbor Management Commission, other Fenwick agencies, notably the Planning and Zoning Commission, Historic Commission, and Park Commission, have important responsibilities affecting the Borough's shoreline and Harbor Management Area.

The boundaries of municipal jurisdictions authorized by State statute for planning and zoning purposes and for harbor management purposes intersect at the mean high water line. In accordance with the State legislation enabling the functions of municipal planning and zoning commissions, Fenwick's planning and zoning authority ends at the mean high water line. For harbor management purposes, the Connecticut Harbor Management Act enables municipalities to extend their local jurisdictions waterward of the mean high water line, on navigable waters within the limits of the municipality. Since use and development of land above the mean high water line can have an important impact on the Fenwick HMA, the authorities and decisions of the Borough's Planning and Zoning Commission have significance with respect to harbor management at Fenwick. As a result, coordination and consistency among the Borough's Plan of Conservation and Development, Zoning Regulations, and Harbor Management Plan is particularly important.

Board of Warden and Burgesses

The Board of Warden and Burgesses, as the legislative body of the Borough of Fenwick, has important oversight responsibilities that affect harbor management. For example, the Board of Warden and Burgesses enacts all Borough ordinances, including the ordinance (hereinafter referred to as the Harbor Management Ordinance) establishing the Fenwick Harbor Management Commission and directing the Commission to prepare the Borough's Harbor Management Plan. (See Appendix D of the Harbor Management Plan.) The Board of Warden and Burgesses is also responsible for appointing the members of the Harbor Management Commission.

In addition, the Board has enacted the Borough's Zoning Regulations and the ordinances establishing the Planning and Zoning Commission, Historic Commission, and Park Commission.

In accordance with Section 22a-113m of the Connecticut General Statutes which specifies the procedure for State approval and local adoption of municipal harbor management plans, the Board is responsible for adoption of the Fenwick Harbor Management Plan and any subsequent amendments to the Plan. Section 22a-113m states that a harbor management plan “may be adopted by ordinance by the legislative body of each municipality...” “Adopted *by* ordinance,” however, should not be confused with “adopted *as* an ordinance.” The Fenwick Harbor Management Plan and any future Plan amendments need not be published and adopted *as* an ordinance. Consistent with the approach taken by other Connecticut towns to adopt harbor management plans, the “ordinance” by which the Board may adopt the Plan and any future amendments can be short and simple—more in the form of a resolution than an ordinance.

The Warden is the Borough's Chief Executive Officer, responsible for administration of Borough government, administration of Town financial and legal matters, and coordination of Board meetings. As such, the Warden provides important leadership for implementing special projects and other initiatives for shoreline improvement and harbor management as recommended in the Harbor Management Plan.

Harbor Management Commission

The need for active Borough involvement and authority in matters pertaining to Fenwick's marine jurisdiction in the Connecticut River, South Cove, and Long Island Sound has long been recognized by the Board of Warden and Burgesses. This need was confirmed through establishment of the Fenwick Harbor Management Commission by the Borough's Harbor Management Ordinance in 1990. (See Appendix D of the Harbor Management Plan.)

The Harbor Management Commission was established by the Board of Warden and Burgesses with authority provided by the Connecticut Harbor Management Act (Sections 22a-113k through 22a-113s of the Connecticut General Statutes). In this regard, the Harbor Management Commission is no different from other Borough agencies such as the Planning and Zoning Commission and Historic Commission that are also authorized to function by State enabling legislation.

The Town Ordinance establishing the Commission (hereinafter referred to as the Harbor Management Ordinance) sets forth the Commission's jurisdiction, powers, duties, and responsibilities and specifies that the Commission shall be comprised of five members and three alternate members appointed by the Board of Warden and Burgesses. In addition, the State of Connecticut Harbor Master with jurisdiction in the Fenwick HMA is to serve as an ex-officio member of the Commission without vote.

As authorized by the Connecticut Harbor Management Act, the jurisdiction of the Commission is defined as all of the area within the territorial boundaries of the Borough of Fenwick below the mean high water line and bounded offshore by a line running northerly and perpendicular to the shore from the northwest corner of the Borough to the centerline of South Cove, thence easterly along the centerline of the Cove to the west side of the Connecticut River channel, thence southerly along the channel to the south end of the Federal west jetty, thence westerly maintaining the same distance from the shore to a point of intersection with a line perpendicular to the shore from the southwest corner of the Borough, and thence to the southwest corner of the Borough.

This area of jurisdiction is more precisely defined for purposes of the Harbor Management Plan as the Fenwick Harbor Management Area. (See Chapter One.)

Section 3 of the Harbor Management Ordinance specifies that the Fenwick Harbor Management Commission is to prepare a Harbor Management Plan for the Borough. In effect, the ordinance gives the Commission all of the powers and duties authorized to municipal harbor management commission by the Connecticut Harbor Management Act.

Since its formation, the Harbor Management Commission has worked to address the various issues affecting use and conservation of the Fenwick HMA, and to coordinate its activities with other Borough commissions. The Commission's basic goals have been to maintain safe use of the HMA, protect the environmental quality associated with the

Borough's shoreline and HMA, and guide beneficial use and enjoyment of the Borough's waterfront facilities.

In the absence of a State Harbor Master appointed with specific jurisdiction in the Fenwick HMA, the Commission has worked closely with the Old Saybrook Harbor Master in the course of addressing matters concerning the safe and efficient operation of the navigable waters in the HMA.

Planning and Zoning Commission

The five-member Planning and Zoning Commission is appointed by the Board of Warden and Burgesses to carry out all of the powers and duties conferred on municipal planning and zoning commissions by State statutes. In this regard the Planning and Zoning Commission is responsible for preparing the Borough's Plan of Conservation and Development and for conducting coastal site plan reviews of activities or projects proposed within the coastal area of the Borough for consistency with the coastal management policies established in the Connecticut Coastal Management Act. (See the following section on the Connecticut Department of Environmental Protection.)

The 1996 Amendment to the Borough's Plan of Conservation and Development includes four goals:

- 1. Retain the scenic and historic open character of the Borough which provides generous views of the Connecticut River and Long Island Sound for residents and guests, maintaining the area's historic link to the waters that surround it.*
- 2. Provide recreational and community facilities for residents and guests to Fenwick, recognizing and reinforcing the original development of Fenwick as a family summer resort community. Foster activities and facilities which help create a sense of community within Fenwick.*
- 3. Protect and preserve the unique natural resources located within the boundaries of the Borough of Fenwick.*
- 4. Assure that all new construction, including new single family dwellings or accessory structures, and all additions to existing dwellings, are compatible with the scale, massing, location, design, and historic character of existing development.*

The Planning and Zoning Commission is also responsible for implementing the Borough's Zoning Regulations which regulate land use and development in the Borough. The purpose of the Zoning Regulations is to preserve the Borough of Fenwick as a family residence community and promote the public health, safety, comfort, convenience, and general welfare. All property within the limits of the Borough consists of one zoning district known as Residence District A which permits, in addition to single family residences, several other noncommercial uses, including parks, playgrounds, and recreational areas; private marine facilities; Borough structures and properties not more

than one story in height; and Borough marine facilities and jetties. No commercial use of any property is permitted.

In addition, the Zoning Regulations contain the following requirements concerning restoration and protection of Long Island Sound and the Lower Connecticut River Conservation Zone. (See the later section on Regional Organizations.)

CONSIDERATION FOR RESTORATION AND PROTECTION OF LONG ISLAND SOUND: All development established and conducted in the Borough shall include reasonable consideration for restoration and protection of the ecosystem and habitat of Long Island Sound. The Zoning Enforcement Officer may require modifications to any zoning application to include reasonable measures to reduce hypoxia, pathogens, toxic contaminants and floatable debris in Long Island Sound in accordance with such best management practices as may be recommended by the Connecticut Department of Environmental Protection... or other recognized source.

GATEWAY RESTRICTIONS: All development within the Borough of Fenwick shall be compatible with the preservation of the natural or traditional riverway scene and consistent with the purposes of the Act and standards of the Lower Connecticut River Conservation Zone as established by the Connecticut River Gateway Commission.

Historic Commission

Described in Chapter One, virtually all of the land within the bounds of the Borough of Fenwick is designated a Historic District pursuant to Section 7-147b of the Connecticut General Statutes. That designation is achieved through the Borough's Historic District Ordinance adopted in 1975. The purpose of the Fenwick Historic District is to preserve and protect the distinctive characteristics of the buildings and unique coastal area setting of the Borough.

The Historic District Ordinance also establishes the five-member Fenwick Historic Commission appointed by the Board of Warden and Burgesses. The ordinance authorizes the Historic Commission to carry out all of the powers and duties conferred upon a municipal historic commission by Section 7-147c C.G.S. Among these powers and duties, no building or structure may be erected within the Fenwick Historic District until after an application for a certificate of appropriateness as to exterior architectural features has been submitted to the Historic Commission and approved by the Commission.

Park Commission

The Fenwick Park Commission, consisting of not less than three nor more than five members annually nominated by the Warden and appointed by the Burgesses, is established by Borough Ordinance and charged with managing, maintaining, and controlling all real property held by the Borough for park and recreational purposes. Described in Chapter One, Borough properties used for park and recreation purposes and adjoining the Harbor Management Area include the Fenwick Pier, Fenwick golf course, and Grove conservation area.

The Park Commission may recommend to the Board of Warden and Burgesses rules and regulations for the use of the park and recreation properties managed by the Commission, including rules establishing fees for the use of recreational facilities.

Town of Old Saybrook

The Fenwick Harbor Management Area is essentially encircled by the harbor management jurisdiction of the Town of Old Saybrook. As a result, actions originating in or involving the Old Saybrook Harbor Management Area can have a significant effect on the Fenwick HMA. In fact, a number of the same harbor management issues and planning considerations are of interest to both the Town and Borough. (See Chapter Three.)

The Town of Old Saybrook has established a Town Harbor Management Commission pursuant to Section 22a-113k of the Connecticut General Statutes and Town of Old Saybrook Ordinance No. 77. The *Town of Old Saybrook Harbor Management Plan* prepared by the Old Saybrook Harbor Management Commission was approved by the Connecticut Commissioners of Environmental Protection and Transportation pursuant to Section 22a-113m C.G.S. and adopted by the Old Saybrook Town Meeting effective January 1, 2004. The Fenwick Harbor Management Commission provided input to the Old Saybrook Harbor Management Commission in the formulation of the Old Saybrook Harbor Management Plan.

The Old Saybrook Harbor Management Plan recognizes the harbor management jurisdiction of the Borough and contains the following provision regarding coordination between the Town and Borough for harbor management purposes.

The Town recognizes the municipal authority of the Borough of Fenwick under Section 22a-113k of the Connecticut General Statutes to establish a harbor management commission and prepare a harbor management plan for the area below the mean high water line within the Borough's jurisdiction. The Town should coordinate harbor management initiatives with the Borough to the extent necessary and practical to address issues of common concern and to provide for beneficial use and management of the Town's waterfront and harbor resources in the public interest. Town harbor management initiatives should be coordinated with any harbor management commission and harbor management plan duly established by the Borough for managing use and conservation of the Borough's duly established harbor management jurisdiction in South Cove, the Connecticut River, and nearshore Long Island Sound.

There is need for ongoing coordination between the Fenwick and Old Saybrook harbor management commissions to address issues of common interest and to pursue implementation of the Fenwick and Old Saybrook harbor management plans in a coordinated and mutually beneficial manner. In addition, the Old Saybrook Police Department and volunteer Fire Department have important responsibilities for law enforcement, fire protection, and emergency response in the Fenwick HMA.

Like other municipal police departments in Connecticut, the Old Saybrook Police Department has State-delegated authority to enforce the State boating laws and regulations that apply in the Connecticut River, nearshore Long Island Sound, and other navigable waters within the Old Saybrook and Fenwick harbor management areas. The Police Department's Marine Patrol Unit conducts regular patrols in the Connecticut River and Long Island Sound during the boating season, and is on call at all other times. Enforcement of the State boating laws and regulations is sometimes carried out in coordination with the Connecticut Department of Environmental Protection's Law Enforcement Division and the State Police which supervises marine patrol activities in the towns of Old Lyme and Essex. The Marine Patrol Unit also helps to enforce the State's boat registration laws and may conduct boating safety inspections for compliance with State requirements for boating safety (e.g., concerning personal flotation devices, fire extinguishers, lights). The Police Department considers education of the boating public to be one of its highest priorities.

Old Saybrook's Marine Patrol Unit also provides assistance to boaters in distress and responds to emergency situations, including search and rescue situations, in coordination with the Old Saybrook Fire Department, State Police, DEP, Coast Guard, and other emergency services from neighboring towns. The Police Department's underwater Dive Team works, as necessary, in coordination with other law enforcement and emergency services agencies.

Old Saybrook's volunteer Fire Department has important responsibilities for fire protection and emergency response and management on the shoreline and in the harbor management areas of the Town and Borough. The Fire Department operates and vessels for emergency response and responds to boating and other water emergencies in coordination with the fire departments of neighboring towns, the Old Saybrook Police Department, State Police, Connecticut DEP, and U.S. Coast Guard, as necessary.

Regional Organizations

Two regional agencies with responsibilities and activities that may affect the Fenwick Harbor Management Area are the Connecticut River Estuary Regional Planning Agency (CRERPA) and the Connecticut River Gateway Commission.

It is the responsibility of CRERPA, as established by State statute, to prepare, adopt, and assist in the implementation of a regional plan of development for its service area which includes nine towns of Old Saybrook (including Fenwick), Chester, Clinton, Deep River, Essex, Killingworth, Lyme, Old Lyme, and Westbrook. CRERPA also reviews and advises on proposed actions (including zoning and subdivision proposals) of regional significance, and provides technical assistance, including assistance for long-range planning, preparation of land use regulations, and review of development proposals, to the towns.

The agency recognizes the tourism and recreational values of the Connecticut River and the River's importance to the regional economy and is interested in a number of issues with regard to the River. For example, CRERPA prepared the brochure that illustrates and describes the Connecticut River Estuary Canoe/Kayak Trail which begins

at Old Lyme. In addition, CRERPA assisted in the successful effort to obtain designation of the Connecticut River as an American Heritage River. The agency has also conducted significant research concerning the potential impacts of dock and pier construction in the Connecticut River.

The Connecticut River Gateway Commission was established in accordance with Section 25-102e of the Connecticut General Statutes and is charged with specific responsibilities for implementing the purposes of the Lower Connecticut River Conservation Zone, including the legislative goals to preserve the unique scenic, ecological, scientific, and historic values associated with the Connecticut River and “to prevent deterioration of the natural and traditional riverway scene for the enjoyment of present and future generations.”

The Lower Connecticut River Conservation Zone covers the Fenwick peninsula. The Borough's zoning regulations include minimum standards established by the Gateway Commission for the use of property consistent with the purposes of the Conservation Zone. Among its responsibilities, the Gateway Commission may revise those minimum standards, and such revisions must then be incorporated into local zoning and other land use regulations. In addition, no adoption, amendment, or repeal of a local zoning, subdivision, or planning regulation with respect to property within the conservation zone may become effective without approval by the Gateway Commission. The Gateway Commission also must review any application submitted to a local zoning board of appeals to determine if the action requested in the application is adverse to the protection and development of the conservation zone.

State of Connecticut

On the State level, a number of laws, regulations, and programs affect the Fenwick Harbor Management Area. The principal legislation of interest includes the Connecticut Harbor Management Act of 1984 (P.A. 84-287; Sections 22a-113k through 22a-113t of the Connecticut General Statutes). This Act enables municipalities to establish harbor management commissions and develop harbor management plans consistent with State laws and guidelines. The intent of the Harbor Management Act is, in important part, to increase the authority and control of local governments over matters pertaining to the use and condition of their harbors. In 2004, 18 Connecticut municipalities are implementing State-approved and locally adopted harbor management plans; a number of other towns are planning to prepare harbor management plans.

In accordance with Section 22a-113m C.G.S., any harbor management plan proposed by a municipality must be submitted to the Connecticut Department of Environmental Protection (DEP) and Department of Transportation (DOT) for approval by the commissioners of environmental protection and transportation before the plan is adopted by the municipality.

There are numerous State laws and regulations affecting the Fenwick Harbor Management Area, including laws and regulations controlling the operation and speed of all vessels. Those laws and regulations are subject to change and/or renumbering. Persons affected by or otherwise interested in such laws and regulations, including

Regulations of Connecticut State Agencies (RCSA) Sec. 15-121-B15 concerning vessel speed on the Connecticut River and RCSA Sec. 15-121-B14 concerning restricted speed near shore, should consult current statutes and regulations and may contact the appropriate agency for information on the status of current law.

The most prominent State agencies with roles and responsibilities affecting the Fenwick HMA are various units of the DEP and DOT.

Department of Environmental Protection

Within the DEP, important responsibilities affecting harbor management at Fenwick are carried out by the Office of Long Island Sound Programs (OLISP) as well as all other DEP bureaus.

- **Office of Long Island Sound Programs:** OLISP has important responsibilities regarding:

- ***Determining the consistency of coastal development proposals with the Connecticut Coastal Management Act (CCMA).*** The OLISP (in addition to the Fenwick Planning and Zoning Commission) is responsible for ensuring that activities within Fenwick's designated coastal area conform with the policies of the CCMA, including policies for protecting coastal resources. The OLISP may provide comments to the Planning and Zoning Commission during its review of a development proposal in the coastal area and may comment on that proposal, but the decision to approve or deny any particular application to the Planning and Zoning Commission rests with the Commission.

- ***Providing technical assistance for harbor management and reviewing and approving municipal harbor management plans.*** The OLISP provides information and guidance to municipal harbor management commissions preparing and implementing harbor management plans. Proposed harbor management plans and plan amendments submitted by municipalities to the DEP for approval in accordance with Section 22a-113m C.G.S. are reviewed by the OLISP for conformance with the Connecticut Harbor Management Act and other State laws and regulations. The OLISP also coordinates review by the DOT and U.S. Army Corps of Engineers of proposed plans and plan amendments. In accordance with Section 22a-113m C.G.S., the Commissioner of Environmental Protection (along with the Commissioner of Transportation) must approve any harbor management plan or plan amendment before it may be adopted locally.

- ***Reviewing coastal area development proposals and issuing or denying permits.*** The OLISP issues or denies permits for the following activities: placement of structures such as docks, piers, pilings, bulkheads, and commercial moorings below the high tide line; placement of structures in tidal wetlands; filling in tidal wetlands; filling in coastal, tidal, or navigable waters; dredging for navigation and disposal of

dredged material; and construction and maintenance of nonfederal channels. Anyone proposing any of these activities must submit an application to the OLISP.

Proposed work involving filling, dredging, or structures in wetlands or coastal and navigable waters in Connecticut are also subject to Federal regulatory programs administered by the Corps of Engineers (see the later section on the U.S. Army Corps of Engineers). The OLISP attempts to coordinate its review of permit applications requiring Corps permits to the greatest degree possible with the Corps.

The OLISP also processes applications for Certificates of Permission (COPs). Applicants proposing specific minor activities may apply to the OLISP for a COP in lieu of a Structures and Dredging Permit. The review period for issuing a COP is shorter than the review period for an individual permit application.

In addition, the OLISP may issue general permits which authorize activities with only minimal environmental impacts.

– ***Providing funding assistance that can be used for harbor management purposes.*** The OLISP administers several State grant programs that are available for funding harbor management and improvement projects. For example, the OLISP administers the DEP's Coves and Embayments Program that supports wetland restoration and other environmental enhancement programs. In addition, the OLISP administers the State's Long Island Sound License Plate Program that may provide funds for a number of harbor management-related projects.

– ***Administration of the State's Coastal Nonpoint Source (NPS) Pollution Program.*** Federal law requires that all states with Federally approved coastal zone management programs develop Coastal Nonpoint Source Pollution Programs to protect their coastal waters from NPS pollution. Connecticut's NPS program is administered by the OLISP and based on a combination of regulatory, planning, and management authorities implemented by a number of agencies. The OLISP's role is to ensure that implementation of those authorities occurs in the most coordinated and effective manner needed to avoid or reduce NPS pollution.

• **Bureau of Outdoor Recreation:** Within the Bureau of Outdoor Recreation, the Boating Division offers boating safety instruction and certifies boaters on completion of basic boating and personal watercraft operation courses. The Boating Division must also review any local boating regulations before they can be adopted by a municipality. The Boating Division's Navigation Safety/Boating Access Unit is responsible for implementing the State's permitting program concerning all regulatory, special purpose, and navigational markers, including markers for speed zones and swimming areas.

Also within the Bureau of Outdoor Recreation, the Conservation Law Enforcement Division has responsibility for enforcing State boating laws, fish and wildlife laws, and other State laws and regulations. The Law Enforcement Division, with facilities across the Connecticut River from Fenwick at Old Lyme, conducts regular patrols of the River. The main focus of these patrols is on boating safety, including enforcement of State boating laws concerning speed and reckless operation. The Division checks boat operators for proper safety equipment and valid registration documents and investigates

any boating accidents that may occur in the River. The Law Enforcement Division cooperates with local police departments (including the Old Saybrook Police Department's Marine Patrol), the State Police, and the Coast Guard, as necessary, in law enforcement and search and rescue efforts. The Law Enforcement Division also enforces the State rules and regulations concerning recreational and commercial fishing.

- **Other DEP Agencies:** Other DEP agencies also have roles and responsibilities affecting the Fenwick HMA. These agencies and some of their relevant activities include: the Bureau of Water Management which develops site-specific water quality goals for the State's surfacewaters and groundwaters, classifies waters (including the surfacewaters of the Fenwick HMA) in accordance with best and highest designated uses, applies applicable water quality criteria to assess attainment of the State's water quality goals, and monitors the quality of the State's water resources; the Bureau of Natural Resources which manages inland and marine fish populations for commercial and recreational fishing and is involved with restoration, management, regulation, and research concerning several important fish species and populations in the Connecticut River; and the Bureau of Waste Management which conducts pollution prevention, monitoring, and enforcement inspections and provides emergency response for oil and chemical spill incidents and releases of hazardous materials and petroleum products.

Department of Transportation

Within the Department of Transportation, the Bureau of Aviation and Ports, the Bureau of Policy and Planning, and the Bureau of Engineering and Highway Operations all have responsibilities affecting the Fenwick Harbor Management Area. Noted above, in accordance with Section 22a-113m of the Connecticut General Statutes, any harbor management plan proposed by a municipality must be submitted to the DOT for approval by the Commissioner of Transportation (approval by the Commissioner of Environmental Protection is also required) before it can be adopted by the municipality.

The DOT has jurisdiction over the harbors, navigable waterways, and harbor masters of the State. Harbor masters and deputy harbor masters appointed by the Governor are subject to the direction and control of the Commissioner of Transportation (see below).

The DOT's Bureau of Aviation and Ports is responsible for establishing a variety of navigation-related regulations. In addition, the DOT's Harbor Liaison Officer in the Bureau of Aviation and Ports provides information to the State's harbor masters.

The DOT's responsibilities concerning highway and bridge planning, design, and maintenance are also of interest at Fenwick as those responsibilities affect the Route 154 causeway across South Cove. Bridge maintenance can affect water quality and as a result the DOT and the DEP have cooperatively established procedures for the containment of pollutants associated with painting and maintenance of DOT bridges.

State of Connecticut Harbor Master

State of Connecticut harbor masters are State officers appointed by the Governor of Connecticut in accordance with Section 15-1 of the Connecticut General Statutes for three-year terms.

Under Section 15-1 C.G.S., harbor masters are responsible for the general care and supervision of the harbors and navigable waterways over which they have jurisdiction; and are responsible to the Commissioner for the safe and efficient operation of such harbors and waterways. Among their powers and duties, harbor masters are empowered to enforce the provisions of the Connecticut General Statutes concerning removal of abandoned and derelict vessels, including Section 15-11a and Section 15-140c.

Under Section 15-154 C.G.S., harbor masters are empowered to enforce all State boating laws within their jurisdiction and have authority to make arrests. No police training is provided to Connecticut harbor masters, however, and the DOT has advised harbor masters who have not been certified as law enforcement officers to report violations of law to the local police department or other law enforcement authorities rather than become directly involved with arrests or confrontations with violators. Harbor masters are provided only minimum compensation by the State for the performance of their duties.

Section 15-1 C.G.S. also requires any harbor master to exercise his or her duties in a manner consistent with any harbor management plan for a harbor over which he or she has jurisdiction. This section also requires that the harbor master for any municipality with a State-approved and locally adopted harbor management plan be appointed by the Governor from a list of not less than three candidates provided by the municipality's harbor management commission. Section 22a-113k C.G.S. specifies that the harbor master or deputy harbor master for any municipality with a duly established harbor management commission shall be a nonvoting, ex-officio member of that commission.

Harbor masters are State officers and employees as defined by the Connecticut General Statutes and, as a consequence, are generally considered to be protected from liability and entitled to indemnification and representation for acts performed in the discharge of their duties.

As of October 1, 2004, no harbor master has been appointed by the Governor for the Borough of Fenwick. The Old Saybrook Harbor Master, however, has jurisdiction over the navigable waters of the Town of Old Saybrook. Since Fenwick is a specially incorporated municipality within the Town, representatives of the Governor's Office and the DOT are of the opinion that the current jurisdiction of the Old Saybrook Harbor Master includes the Fenwick Harbor Management Area. It is also their opinion that upon the Borough's adoption of the Harbor Management Plan, the Governor may consider appointing a harbor master with specific jurisdiction over Fenwick waters.

Currently, the Old Saybrook Harbor Master has a number of State-established authorities affecting use of the Fenwick HMA, including authority for control of any boat moorings placed in the HMA, removal of derelict and abandoned vessels and structures, and other actions conducted in the interest of maintaining safe navigation.

Federal Government

The principal Federal agencies with responsibilities and authorities pertaining to the Fenwick Harbor Management Area are the U.S. Army Corps of Engineers and U.S. Coast Guard. Other Federal agencies also have some relevant responsibilities and the Federal Government owns the Lynde Point lighthouse property on the eastern edge of the Fenwick peninsula.

U.S. Army Corps of Engineers

The Corps of Engineers, acting through its New England District, is responsible for constructing and maintaining Federal navigation projects, including the Connecticut River Federal navigation channel and the Federal jetties at the mouth of the Connecticut River. In addition, all proposed work involving filling, dredging, or placement of structures in wetlands or navigable waters in the Fenwick HMA is subject to Federal regulatory programs administered by the Corps.

The Corps' principal regulatory authorities pertinent to harbor management originate from Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. Under Section 10, the Corps regulates structures in or affecting navigable water, as well as excavation or deposition (dredging or filling) of materials in navigable waters. Under Section 404, the Corps is responsible for evaluating applications for Department of the Army permits for any activities that involve placement of dredged or fill material into waters of the United States, including adjacent wetlands.

The Corps may issue two types of permits — individual permits and general permits — for structures and work subject to the Section 10 and 404 regulatory programs.

An individual permit is issued following evaluation of a specific proposal and involves public notice of the proposed activity, review of comments and, if necessary, a public hearing. In general, an individual permit must be obtained from the Corps for most activities that involve:

- Filling in wetlands and navigable water;
- Placement of structures in navigable water; and
- Dredging and disposal of dredged material.

A general permit is an authorization issued for categories of activities that are judged to be substantially similar in nature and to cause only “minimal individual and cumulative adverse environmental impacts.”

In accordance with Section 22a-113m of the Connecticut General Statutes, any harbor management plan proposed by a municipality must be submitted to the Corps of Engineers for review and comments before the plan is approved and adopted.

U.S. Coast Guard

Coast Guard stations at New London and New Haven, under the direction of Group Long Island Sound in New Haven, have responsibility for carrying out different Coast Guard functions in the Connecticut River and Long Island Sound in and near the Fenwick Harbor Management Area.

The harbor management-related responsibilities of the Coast Guard in the Fenwick area include: 1) placement and maintenance of aids to navigation, including the Federal aids to navigation that mark the Federal channel in the Connecticut River, and operation of the Lynde Point and Saybrook breakwater lighthouses; 2) search and rescue operations; 3) responding to oil and hazardous materials spills; 4) enforcement of Federal boating laws and regulations; 5) administration pertaining to the construction, alteration, and operation of bridges across navigable waters of the United States, including the Route 154 causeway bridge; 6) ice-breaking on the Connecticut River to maintain safe navigation for commercial vessels; and 7) control of water-based special events and issuance of "marine events" permits.

Other Federal Agencies

Other Federal agencies have less direct roles and responsibilities affecting the Fenwick HMA. The U.S. Fish and Wildlife Service, for example, provides advice and comments to the Corps of Engineers regarding the potential impacts that proposed development activities requiring a Corps permit may have on fish and wildlife resources. The FWS also operates the Silvio O. Conte National Fish and Wildlife Refuge which encompasses the entire Connecticut River watershed and is participating in several efforts to enhance Connecticut River fisheries. Also, the U.S. Environmental Protection Agency has a number of responsibilities directed toward protection and improvement of water quality; the Federal Emergency Management Agency is responsible for conducting studies and publishing maps to determine flood vulnerability and for providing flood insurance in communities such as Fenwick that participate in the National Flood Insurance Program; and the National Oceanic and Atmospheric Administration prepares navigation charts, conducts bathymetric surveys, and determines changes in sea level.

The General Public

The Connecticut River, South Cove, and Long Island Sound are public waters; the general public has important rights to use these waters for navigation, recreation, and other purposes in accordance with the Public Trust Doctrine—the body of law pertaining to waters subject to the ebb and flood of the tide as well as navigable freshwaters.⁴ Under the Public Trust Doctrine, the title to tidewaters, navigable freshwaters, submerged lands beneath those waters, and the plant and animal life inhabiting those waters is held by the State of Connecticut in trust for the benefit of the general public.

The concept of the Public Trust Doctrine is based in English common law and on the principle, dating back to Roman civil law, that certain lands and resources are so

⁴ Information in this section on public waters and the Public Trust Doctrine is from *Connecticut Water Law: Judicial Allocation of Water Resources* (1967) by Robert I. Reis, published by the University of Connecticut, and from *Putting the Public Trust Doctrine to Work* (November 1990) by David C. Slade, published by the Connecticut Department of Environmental Protection, Coastal Resources Management Division.

important to the public that private ownership or other impediments to public use should not be permitted. English common law established a distinction between public and private waters and that distinction was applied in the 13 colonies. Essentially, tidal water courses connected with the sea were deemed so important for transportation and commerce that their ownership, including ownership of the underlying soil, was retained by the King. After the American Revolution, the 13 original states, including Connecticut, succeeded to the "rights of sovereign prerogative," including the right of title to tidewaters and submerged lands. Since that time, state and Federal courts, including the U.S. Supreme Court, have consistently held that the states hold that title in trust for the public's benefit. In Connecticut, there are a number of State Supreme Court decisions confirming the Public Trust in navigable waters and defining the Public Trust area as the area waterward of the mean high water line; private ownership of upland areas adjoining the Public Trust area (including ownership by a municipality or any governmental agency) may not extend past the mean high water line.

The rights of the general public for use of navigable waters, including the waters of the Fenwick Harbor Management Area, are generally classified under three major headings: 1) transportation and navigation; 2) recreational activities; and 3) commercial and consumer use of "sea products" (e.g., fishing).

The use of public waters for navigation is the central and essential public right and generally takes precedence over other rights. The public has the right to pass and repass on navigable waters without interference or obstruction. Where an obstruction does occur, it constitutes a public nuisance. The right of free navigation is subject to lawfully enacted restrictions (concerning the operation of vessels in the interest of public safety, for example) and includes the right to anchor.

To the extent that members of the public can gain access to navigable waters without trespassing on the adjoining uplands of waterfront property owners (see below) they may use navigable waters for recreational purposes, including boating, swimming, and related activities.

Foremost among the rights associated with commercial and consumer use of sea products in public waters is the right of fishing, including shellfishing. This right is established in the earliest Connecticut court cases and was made explicit with respect to the Connecticut River.

When discussing public rights for use of tidal and navigable waters, questions concerning the public's right of access to these waters are particularly important. Where title to the land adjoining navigable waters is in private ownership, the property owner may deny access across his or her land to the Public Trust area. Described below, the right of access to public waters is one of the most significant rights associated with the ownership of lands bordering navigable water; possession of this right distinguishes the waterfront property owner from members of the general public.

Waterfront Property Owners

Certain rights — referred to as riparian or littoral rights⁵ — are inherent in the ownership of lands bordering navigable water. One of the most important of these rights is the right of access to navigable water. The littoral right of access to a navigable water course is totally distinct from the right of the general public to use that water course.

The Connecticut courts have held that the owner of upland property adjacent to navigable water has “certain exclusive yet qualified rights and privileges” in the adjoining submerged land and navigable waters, including the exclusive right to build docks and piers from the upland to reach deep water (often referred to as “wharfing out”). These structures, however, must not “obstruct the paramount right of navigation” and must be acceptable under applicable regulatory statutes, including the statutes that protect wetlands and other natural resources. In other words, the exercise of the littoral right must not interfere with the rights of the State and the general public and with the Federal interest in navigation. To the extent that State and Federal activity and regulation is necessary to secure the benefits of public waters for the general public, the individual littoral right is subservient and inferior. Described earlier in this chapter, both the U.S. Army Corps of Engineers and the Connecticut Department of Environmental Protection regulate the construction of docks and piers and other activities waterward of the high tide line in tidal and navigable waters. The State and Federal regulatory programs help to ensure that the exercise of littoral rights is consistent with the public's interest in those waters.

It is important to note that a waterfront property owner cannot exclude the general public from lawful uses of the Public Trust area adjoining the owner's property. Also, all littoral rights must be exercised with due regard for the rights of other littoral owners; the waterfront property owner can not wharf out from the shore, for example, in a manner that encroaches on the littoral area of an abutting waterfront property owner. In addition, the Connecticut courts have held that the littoral right to wharf out is severable from the upland and freely alienable; this means that littoral rights can be transferred by the waterfront property owner to a party that does not own the adjacent upland.

At Fenwick, the owners of waterfront properties have important littoral rights of access to the HMA. Existing wharf and pier structures along the Long Island Sound shoreline, for example, were constructed in accordance with those rights. The Borough, as the owner of waterfront property, also has important littoral rights of access to the HMA.

⁵ With regard to water rights law, water rights arise when property either abuts or contains water. If the water in question is flowing (e.g., river or stream) the rights are said to be riparian. If the property is subject to the ebb and flow of the tide, or is located on a lakeshore, the rights are said to be littoral rights. Despite these distinctions, the terms “riparian” and “littoral” are commonly used interchangeably. The term littoral rights is herein used to describe the rights of the owners of property adjoining the Fenwick Harbor Management Area.

Private Organizations

Several private groups and organizations have significant interests concerning areas in and near the Fenwick Harbor Management Area, including interests for protection of the environmental quality associated with the Connecticut River, South Cove, and Long Island Sound. These groups and organizations include, but are not limited to: The Nature Conservancy, which in 1993 designated the “tidelands of the Connecticut River”—roughly the lower half of the River—as one of the “40 Last Great Places” in the hemisphere; the Connecticut River Watershed Council, Inc., one of the most prominent of the many environmental organizations concerned with the Connecticut River; and the Connecticut River Watch Program, a volunteer water quality monitoring, protection, and improvement program for the River and its tributaries.

In addition, the Lynde Point Land Trust has important responsibilities affecting the Borough shoreline through its administration of the conservation easements which establish restrictions on the uses of the properties covered by those easements, including Borough-owned properties. For example, all plans and facilities for access to the HMA and affecting areas covered by the easements must be approved by the Land Trust.

Chapter Three:

Harbor Management Issues and Planning Considerations

This chapter describes harbor management issues and planning considerations of interest to the Borough of Fenwick. These have been identified by the Borough's Harbor Management Commission in the course of preparing the draft Fenwick Harbor Management Plan.

Some of the issues and considerations represent immediate problems and require prompt attention; others may be of more significance in the future or require long-term approaches to their resolution. All may be addressed through the Borough's goals, policies, and other provisions established in the Harbor Management Plan.

The issues and considerations affecting the Fenwick Harbor Management Area (HMA)⁶ can be grouped into five categories related to:

- 1) environmental quality and resources;*
- 2) public health, safety, and welfare;*
- 3) the "institutional framework" for harbor management;*
- 4) water use and navigation; and*
- 5) shoreline access and land use.*

There are inter-relationships among the above categories, as well as among the issues and considerations within each category. Environmental quality, for example, can be adversely affected by water use and shoreline access; public safety considerations are of interest with respect to water use and navigation; and "institutional" coordination among agencies is needed for enforcement of boating laws and to implement specific projects for preserving and enhancing the Fenwick HMA and shoreline.

When considering the issues and considerations affecting the Fenwick HMA, it must be recognized that the area is essentially encircled by the harbor management jurisdiction of the Town of Old Saybrook which includes substantial public and commercial water-dependent facilities. Actions originating in or involving the Old Saybrook Harbor Management Area can have a significant effect on the Fenwick HMA. In fact, a number

⁶ The Fenwick Harbor Management Area is the area of jurisdiction of the Borough of Fenwick Harbor Management Commission as defined in the Borough of Fenwick Harbor Management Ordinance and Harbor Management Plan. The HMA includes all of the area within the territorial boundaries of the Borough below the mean high water line, including portions of South Cove, the Connecticut River, and nearshore Long Island Sound.

of the same harbor management issues and planning considerations are of interest to both the Fenwick and Old Saybrook harbor management commissions. As a result, some of the issues and considerations described in this chapter are also described in the "Town of Old Saybrook Harbor Management Plan" dated June 2003.

Environmental Quality Issues and Considerations

1. Preservation of Fenwick's natural coastal resources. Due to the high resource quality and relatively undisturbed character of the aquatic and other coastal resources found in and near the Fenwick Harbor Management Area and shoreline, environmental considerations are inherent in most all of the harbor management issues and planning considerations of interest at Fenwick. The Borough's character and quality of life are intrinsically tied to the unspoiled natural resources in and adjoining the HMA. The most profound influences on environmental conditions and resources are of course the Connecticut River—one of the Nation's great waterways, and Long Island Sound—an estuary of National significance as designated by the U.S. Congress through the National Estuary Program administered by the U.S. Environmental Protection Agency. Described in Chapter One, the prominent coastal resources at Fenwick include the surface waters of South Cove, the lower Connecticut River, and nearshore Long Island Sound within the Borough's jurisdiction, as well as Folly Creek (commonly known and hereinafter referred to as Crab Creek) and the Hepburn lagoon. The entire Fenwick peninsula may be considered a "coastal barrier" resource; there are substantial areas of tidal wetlands, intertidal flats, rocky and sandy beaches, and sand dunes in and adjoining the HMA. Lynde Point is identified by the State of Connecticut, U.S. Fish and Wildlife Service, and The Nature Conservancy as a "wetland/buffer complex" with one of the most extensive natural sand flat communities in the State.

Fenwick's coastal resources provide important recreational opportunities and cultural values as well as vital ecological functions related to fish and wildlife habitat, water quality, and flood and erosion control. As a result of the unique and special environmental conditions associated with the Fenwick HMA and shoreline, the preservation and enhancement, where possible, of Fenwick's natural coastal resources must be a principal consideration in any decisions affecting use of the shoreline and HMA.

For the purpose of conserving natural resources and ecological functions, conservation easements administered by the Lynde Point Land Trust establish significant restrictions on the use of most Borough-owned properties, including the Fenwick golf course, the Grove area, the Crab Creek wetland area, the former Fenwick Yacht Club site, and other portions of the shoreline.

More specific issues and considerations concerning water quality, tidal wetlands, and fish and wildlife resources in and near the HMA are described below.

2. Potential conflicts between environmental conservation goals and goals for water and shoreline use and access. One of the most basic harbor management issues at Fenwick and in other municipalities along the Connecticut shoreline concerns the need to achieve and maintain balance between goals for conserving environmental quality and goals for achieving beneficial use of water and shoreline areas. The natural environment of the Connecticut River, South Cove, and Long Island Sound at Fenwick provides vital ecological functions and the opportunity for water and shoreline uses that provide important community benefits. Natural resources and environmental quality, however, may be damaged by those same uses. As a result, the importance of understanding and applying the concept of environmental carrying capacity (see no. 3 below) becomes particularly significant when making decisions affecting the Fenwick Harbor Management Area.

3. Carrying capacity of the natural environment. “Carrying capacity” is a term that refers to the amount of use or development that a particular area or resource can accommodate before unacceptable impacts on environmental quality, public safety, beneficial use, or other conditions occur. There are important considerations regarding the capacity of the natural environment of the Fenwick Harbor Management Area to accommodate water and shoreline uses without the occurrence of significant adverse impacts on environmental quality. The environmental carrying capacity of the HMA is clearly limited and there are a number of potential environmental impacts associated with in-water uses and shoreline activities. Those impacts can be caused by: 1) the construction, maintenance, and operation of boating and water access facilities; 2) boating uses and activities that can generate noise, wake, pollution, and other impacts; 3) nonpoint sources of pollution caused by runoff into the HMA from upland areas and by groundwater transport; and 4) excessive pedestrian traffic in and near sensitive resource areas such as wetlands, sand dunes, and intertidal flats.

The concept of environmental carrying capacity is difficult to apply. It is not easy to precisely determine the amount of future use and development that can occur in and adjoining the HMA before adverse environmental impacts become unacceptable. This does not mean, however, that the HMA's environmental carrying capacity should not be an important consideration in future decisions by the Borough's Harbor Management Commission and other agencies concerned with water and shoreline use.

(Carrying capacity concerns regarding the capacity of surface water areas in the HMA to safely accommodate boating and other water uses are described on page 3-8.)

4. Cumulative impacts on environmental resources. When considering the carrying capacity of the Fenwick Harbor Management Area and shoreline for water access and for boating and other water uses, consideration must be given to the cumulative impacts that can result from individually minor but collectively significant actions that take place over a period of time. In other words, the seemingly insignificant impacts of apparently small-scale dock, pier, and seawall construction, as well as discharges from individual storm drains and vessel holding tanks, groundwater transport of household and lawn pollutants, and septic system leachate, could, over time, and when added together, have an important effect on environmental quality in the HMA. As a result, it will be necessary for the

Harbor Management Commission and other concerned agencies to consider potential cumulative impacts when reviewing any proposals for uses and activities affecting the shoreline and HMA.

5. Improvement and maintenance of water quality. In recent years there have been a number of accomplishments with regard to understanding and improving water quality conditions in the Connecticut River and Long Island Sound. Nevertheless, pollution and the risk of pollution still exist and are important harbor management concerns for the Borough of Fenwick. Bacteria and other pollutants can affect the enjoyment of boating activities in the Harbor Management Area, the vitality of fish and wildlife, and the health of those who come in contact with the water. Simply stated, the potential for water pollution should be of concern to everyone. If there is pollution in the HMA, including pollution in South Cove, the Connecticut River, nearshore Long Island Sound, Crab Creek, and the Hepburn lagoon, Fenwick's character and quality of life will be diminished.

Sources of pollution are generally categorized as “point” and “nonpoint” sources. Potential “point” sources are easily identified and include discharges from any storm drains emptying into the HMA. (Point sources of pollution also include discharges of treated wastewater from industrial facilities and municipal sewage treatment plants. There are no such discharges at Fenwick.) In addition, there is always the threat of fuel spills from recreational and commercial vessels in and near the HMA.

Other potential sources of pollution include discharges of treated and untreated sewage from vessel holding tanks, even though the extent to which these discharges may contribute to water quality problems in the lower Connecticut River is not known, but there is concern wherever there is a concentration of docked or moored vessels.

Unlike point sources of pollutants, “nonpoint” pollution does not originate from a specific identifiable source; because of its nonspecific nature is more difficult to regulate and control. Types of nonpoint source (NPS) pollution generally include stormwater runoff from roads, parking lots, backyards, and golf courses, as well as groundwater transport of household and lawn pollutants and septic system leachate. Key pollutants include bacteria, nutrients, and suspended solids. Such pollutants can adversely affect public health and make necessary the closure of swimming beaches and shellfish beds. As precipitation runs off pavement and land to the nearest catch basin or waterway draining to the HMA, it gathers oil, bacteria, sediment, and other substances that eventually enter the water. Any poorly functioning septic system that leaks bacteria and excessive nutrients into groundwater is another nonpoint source of pollution. Nonpoint pollutants also include floating debris and other trash improperly discarded and floating on the water. In addition, any contaminants such as lead paint chips and metal shavings associated with bridge repair and maintenance operations on the Route 154 causeway bridge across South Cove or the Sequassen Avenue bridge over Crab Creek would be of concern.

With regard to all existing and potential sources of point and nonpoint pollution, there is concern that seemingly minor sources may, when added together over time, have a significant cumulative impact on water quality.

When considering possible pollution sources affecting the HMA, particularly nonpoint sources, as well as possible pollution abatement measures, it is important to recognize that actions that take place far from the Borough's jurisdiction can contribute to pollution in Fenwick waters. This is so because the drainage area of the Connecticut River encompasses over 11,000 square miles. Nevertheless, just as the actions of all communities and individuals within the Connecticut River watershed can affect the quality of water in the River, so too can the actions of all those communities and individuals, including Fenwick and its residents, contribute to maintaining and improving water quality.

6. Conservation and restoration of tidal wetlands. The lower Connecticut River from Cromwell to Long Island Sound, including part of the Fenwick Harbor Management Area, is recognized as containing “Wetlands of International Importance” and is designated one of the “40 Last Great Places” in the Hemisphere. Within this vast ecological system, individual wetland units and other resource areas related to those units are all linked by the tidal waters of the Connecticut River. At Fenwick, tidal wetlands adjoining South Cove are considered particularly valuable, and Lynde Point is identified as a “wetland/buffer complex” of Statewide significance.

The ecological functions and beneficial values of wetlands were once poorly understood or not appreciated. At Fenwick, for example, the tidal wetlands adjoining Crab Creek were once filled with dredged material from the Connecticut River channel; tidal flow to other wetlands was restricted by development. Since that time, however, tidal wetlands have been the subject of much attention and study. As a result, their biological productivity and values related to fish and wildlife habitat, water quality, and floodwater storage are generally well recognized, along with their recreational, scientific, educational, and scenic values. In 2004 the Borough is participating with the Connecticut Department of Environmental Protection (DEP) in a program to restore tidal wetlands in the Crab Creek area; there may be opportunities for restoring additional wetlands elsewhere in the Borough, including in the “Fenwick West wetland” area near the Borough's western boundary. The ultimate success of these wetland restoration efforts will require preparation and implementation of detailed plans with State and Borough support and commitment. Implementation of any wetland restoration plans affecting the Crab Creek area will require approval from the Lynde Point Land Trust as administrator of the conservation easement covering this area.

7. Conservation of fish and wildlife resources. The Fenwick Harbor Management Area provides valuable fish and wildlife habitat with much ecological and recreational value. Biological productivity in the tidal wetlands of the lower Connecticut River is especially high, and those wetlands provide critical habitats for a variety of rare plants and animals. Aside from the marshes themselves, the waters, intertidal flats, and underwater lands of the Connecticut River, South Cove, and nearshore Long Island Sound at Fenwick are important finfish and shellfish areas.

Shellfish resource areas at Fenwick include sub-tidal bottom areas as well as intertidal flats. At one time significant shellfishing took place in the Borough, but such activities have been precluded or severely limited in recent years due to water quality concerns.

The existing shellfish habitat areas, however, contribute to the diversity of benthic life in the HMA and provide a source of food for shorebirds and marine life. In addition, these habitat areas provide opportunities for future recreational use.

Given the extent and significance of the fish and wildlife resources in and near the HMA, decisions affecting use of the Fenwick HMA and shoreline must take into consideration requirements for protecting those resources. The possible loss of fish and wildlife resources as a result of cumulative development impacts, water pollution, human disturbances, overfishing, and other conditions is an important concern. If the water quality and intertidal resources of the HMA are degraded for fish and wildlife habitat, the overall environmental quality of Fenwick's water and shoreline areas is also likely to suffer.

8. Preservation of shoreline scenic quality and water views. The scenic quality associated with the Fenwick Harbor Management Area and shoreline is among the most important of resources. Scenic views over tidal marshes and creeks, Long Island Sound, the Saybrook Lighthouse, South Cove, and the Connecticut River are available from a number of locations in the Borough. A good part of the Borough's character and quality of life depends on maintaining not only opportunities for scenic views of the water, but also the scenic quality of the shoreline. That scenic quality can be adversely affected by uncontrolled or excessive recreational uses and other activities.

9. Recognition and preservation of cultural resources. In addition to the ecological values associated with the Connecticut River, South Cove, and Long Island Sound at Fenwick, there are important cultural values (including historic, educational, and scientific values) associated with the Borough's Harbor Management Area and shoreline. The Borough has a substantial maritime-related heritage; much of its history can be described with reference to the Connecticut River and Long Island Sound. The Federal lighthouse at Lynde Point and the Saybrook breakwater light are structures of national historic interest. In addition, virtually all of the land within the bounds of the Borough (excluding the Federally owned lighthouse property) has been designated a Historic District pursuant to Section 7-147b of the Connecticut General Statutes. The purpose of this designation is to preserve and protect the distinctive characteristics of the buildings and unique coastal area setting of the Borough of Fenwick. As the Borough continues to manage its HMA and shoreline for beneficial use and conservation purposes, there will be a need for continued recognition of water-related cultural values and the importance of preserving those values.

Public Health, Safety, and Welfare Issues and Considerations

1. Enforcement of boating laws and public safety regulations. The principal laws and regulations controlling boating use in the Fenwick Harbor Management Area are the State of Connecticut's boating laws and regulations. Some Federal boating laws and

regulations also affect boating activities. State laws and regulations concerning vessel speed and wake in the HMA are of particular interest because any vessels speeding and generating excessive wakes in and near the HMA, especially near the shoreline and close by other vessels, may adversely affect public safety and the enjoyment of boating, swimming, and other water activities in the HMA. Excessive wakes can damage docked and moored boats and also contribute to shoreline erosion. Also of interest are the State laws and regulations concerning motorboat noise levels because of the adverse effect of excessive noise levels on the quality of life in waterfront residential areas.

Among the regulations controlling vessel speed in the HMA is Section 15-121-B14 of the Connecticut Boating Regulations which states that “no person shall operate a motorboat at a speed in excess of six miles per hour within one hundred feet of shore, or of a dock, pier, float, or anchored or moored vessel [unless to enable a waterskier to take off or land].”⁷ The speed and wake of vessels (including personal watercraft) operating in the HMA is of concern in several locations, including in and near the South Cove mooring area, the designated swimming area near the Federal west jetty at the mouth of the Connecticut River, and in the area of the Fenwick pier.

While the Borough of Fenwick may apply for permission from the State to place regulatory markers identifying restricted speed areas and restricted swimming areas in the HMA, the Borough has no resources or authority for enforcement of the State-established speed restrictions or other boating laws and regulations in the HMA. Enforcement responsibility rests with the Law Enforcement Division of the Connecticut Department of Environmental Protection and Town of Old Saybrook Police Department.

2. Emergency response capabilities. A number of emergency situations are possible in and near the Fenwick Harbor Management Area. As a result, there is a continuing need for effective capabilities to assist boaters in distress and to respond to other emergencies. The Old Saybrook Police and Fire departments have the principal responsibilities for emergency response in the HMA, in coordination with other agencies including the police and fire departments of other municipalities in the lower Connecticut River, and the Coast Guard, Connecticut Department of Environmental Protection, and State Police, as necessary.

3. Carrying capacity of the Harbor Management Area for safe boating and other water uses. In addition to the above-described considerations regarding the environmental carrying capacity of the Fenwick Harbor Management Area and shoreline, the carrying capacity of the HMA for safe boating and other water uses is also of interest. Carrying capacity may be discussed with respect to the capacity of the HMA's surface water areas in South Cove, Long Island Sound, and the Connecticut River to

⁷ Laws and regulations affecting the Fenwick Harbor Management Area, including boating laws and regulations enforced by agencies of the State of Connecticut, are subject to change and/or renumbering. Persons affected by or otherwise interested in those laws and regulations should consult the Connecticut General Statutes and Regulations of Connecticut Agencies for current laws and regulations, and may contact the appropriate agency for information on the status of current law.

accommodate boating and other water uses without the occurrence of adverse impacts on public safety and navigation.

In theory, it may be possible to determine the carrying capacity of a specific waterbody for boating activities (in terms of how many boats can safely operate in the waterbody, for example). In practice, it is not possible except on the most site-specific basis to precisely determine the amount of future boating use that can occur before adverse impacts become unacceptable. This does not mean, however, that the carrying capacity of the HMA for safe boating use should not be an important consideration in future decisions concerning use of the HMA, including any decisions to designate boat mooring locations and provide additional water access facilities in South Cove or on the Borough's Long Island Sound shoreline.

4. Water use conflicts and vessel congestion. In and near the Fenwick Harbor Management Area there is potential for congestion and conflicts among different types and sizes of vessels. Potential conflicts between recreational and commercial vessels using the Connecticut River channel adjoining the HMA are of concern and so are potential conflicts among different recreational activities, including power boating and nonmotorized water activities such as canoeing and kayaking in South Cove and along the Long Island Sound shoreline and swimming in Long Island Sound. If boating conditions in and near the HMA should become congested on a regular basis, that congestion would be an indication that the carrying capacity of the HMA for safe boating use is being approached or exceeded.

5. Risk of shoreline erosion and flooding. Shoreline erosion and flooding are natural, ongoing processes that will continue to affect the shoreline adjoining the Fenwick Harbor Management Area. There is need for continued attention to these processes and to appropriate measures to mitigate their adverse impacts. Considerable sections of the Borough fall within flood hazard areas identified on the Flood Insurance Rate Map (FIRM) for the Borough of Fenwick. Shoreline property falls within both the A-Zone designation (areas potentially subject to “still water” flooding from a 100-year flood event) and V-Zone designation (areas potentially subject to flooding and damaging wave heights from the 100-year flood). The Town of Old Saybrook has designated flood evacuation routes from the Borough and other shoreline areas subject to coastal flooding.

Erosion is an important concern along the Borough's Long Island Sound shoreline where past hurricanes and other coastal storms have had considerable impact. Over the years, some shoreline properties have been fortified with concrete seawalls; groins have been constructed in several locations in an effort to maintain sandy beach areas. While structural shore protection measures are needed in some places to protect existing development, those measures can also have adverse impacts on nearby properties and environmental resources. As a result, careful consideration must be given to determining the benefits and potential adverse effects of such structures that may be proposed in the future along the Long Island Sound shoreline.

6. Risk of fuel spills in the marine environment. Vessels carrying petroleum products regularly navigate the Connecticut River channel adjoining the Fenwick Harbor

Management Area enroute to upriver terminals. Because of the potential for accidental spills from vessels transporting petroleum products, there is a continuing need for specific procedures and requirements for guarding against and responding to fuel spill emergencies in the lower Connecticut River. In addition, there is the potential for accidental fuel spills from recreational vessels using the HMA. The Borough does not have resources for responding to fuel spills; effective response to fuel spill emergencies in and near the HMA will require coordination on the part of Federal and State agencies and appropriate municipal agencies from lower Connecticut River towns.

7. Obstructions and hazards to navigation. The operators of vessels in South Cove must be aware of the remnant piles—identified on navigation charts—associated with the Fenwick bridge that once connected the Borough with Saybrook Point. In addition, navigation in the western part of the Cove is restricted by shallow depths caused by ongoing shoaling and the limited vertical clearance at the openings in the Route 154 causeway bridge. Due to shallow water depths and other obstructions, local boating knowledge of conditions in the Harbor Management Area, and particularly of conditions in South Cove, is important for ensuring safe boating in the HMA. In addition, floating debris from upstream on the Connecticut River, particularly during periods of high flow, can cause public safety concerns and interfere with boating activities. There is need for the Borough to have continued and ongoing awareness of water and waterfront conditions. There is also need for procedures for prompt removal or marking of any obstructions or hazards to navigation that may arise, and for initiating maintenance dredging of the Federal navigation channel adjoining the HMA in the most timely manner (see no. 1 on page 3-17).

8. Abandoned and derelict vessels and structures. No problems regarding abandoned or derelict vessels and structures in the Harbor Management Area were identified in 2001. If such problems arise in, adjoining, or near the HMA in the future, however, they must be quickly addressed because of the potential hazard or inconvenience to navigation that may be caused by floating debris or other obstructions. Abandoned or derelict vessels or structures can also detract from the overall scenic quality of Fenwick waters and leak fuel and oil that will pollute the waters of the HMA. In the absence of a Borough harbor master (see no. 13 on page 3-16), the Old Saybrook Harbor Master is empowered by State law to remove abandoned vessels from the Fenwick HMA and may request assistance from the Old Saybrook Police Department to do so. Coordination between the Borough and the Old Saybrook Harbor Master is needed to help ensure efficient removal of any abandoned or derelict vessels that may be found in the future.

9. Fire prevention and preparedness on and near the shoreline. Fire prevention and preparedness are harbor management concerns because of the presence of volatile fuels, wooden and fiberglass hulls, and other combustible materials associated with boats that may be moored in South Cove or otherwise use Borough boating facilities and the Harbor Management Area. Also, suitable fire protection for existing and future residential development near and adjoining the HMA must be provided. The development plans of

all applicants seeking zoning/building approval in the Borough must include necessary measures for fire protection. Adequate access for fire trucks and other emergency vehicles must be provided, and adequate water supply must be available on or near the site for fire-fighting purposes.

“Institutional Framework” Issues and Considerations

1. Borough authority for harbor management. Without a specific plan for managing its shoreline and harbor resources, the Borough's authority to address some important concerns in and adjoining the Harbor Management Area is limited. All tidal waters, submerged lands, and intertidal areas are held in trust by the State of Connecticut for the benefit of the general public. Most all of the activities that take place below the mean high water line in the Connecticut River, South Cove, and Long Island Sound at Fenwick are subject to the control and jurisdiction of the State and Federal government, acting primarily through the Connecticut Department of Environmental Protection and the U.S. Army Corps of Engineers. The Borough, acting through the Board of Burgesses and other agencies, has been able to provide comments with respect to State and Federal decisions that affect shoreline development, environmental resources, and the boating and other activities that take place in the HMA. Without a specific plan, however, there would be no formal basis for an expanded Borough role in the planning, management, and regulation of in-water and shoreline activities. An important aim of the Connecticut Harbor Management Act is to create that expanded role, but only for municipalities that choose to prepare and adopt municipal harbor management plans.

2. Funding for harbor management and shoreline improvements. During the course of work to prepare Fenwick's Harbor Management Plan, some questions arose concerning the costs that may be associated with implementing the Plan and how funds may be raised to pay for shoreline improvement projects in the Borough. Regarding the costs of Plan implementation, many of the Borough's goals, policies, and other provisions for harbor management included in the Plan can be carried out through the existing functions of Borough agencies (such as the Harbor Management Commission) and State and Federal agencies and through the harbor management consistency review process (see no. 5 on page 3-12), with no added expense to the Borough. Specific projects for shoreline improvement and management, however, including restoration of boating access facilities and completion of wetland restoration plans, will require additional expenditures. The Harbor Management Plan does not commit the Borough to future expenditures, but provides a basis for implementing specific projects should funds be obtained through available grant programs or allocated through established budgeting processes in the future.

There is currently no dedicated funding mechanism to cover the costs of shoreline and harbor improvement projects in the Borough. Section 22a-113s of the Connecticut General Statutes, however, authorizes a municipality's harbor management commission to receive and expend funds specifically for harbor management purposes. This statute also authorizes a municipality to charge a fee for mooring permits and other activities within the scope of a harbor management plan, provided those fees are used exclusively for harbor improvements in the public interest. In addition, there are other potential sources of funds for harbor management, including State, Federal, and private grants.

3. Establishment and maintenance of public support and awareness. Public input, support, and awareness is essential for implementing the Fenwick Harbor Management Plan. Achievement of Fenwick's goals for managing its Harbor Management Area and shoreline will depend on support from the Borough's citizens. Also needed is continued citizen awareness of harbor management concerns and the importance of the Fenwick HMA and shoreline to the Borough's character and quality of life. In addition, it will be necessary for the Borough to provide a continuing opportunity for residents to express their concerns, questions, and ideas regarding the shoreline, HMA, and Harbor Management Plan. Opportunities for citizens and nongovernmental organizations to contribute to achievement of the Borough's shoreline improvement and harbor management goals, through volunteer assistance and other means, can also be considered and defined.

4. Cost, length, and complexity of regulatory programs affecting work in navigable water. The process of applying for and obtaining permits for work affecting navigable water (including permits for docks, piers, and necessary shore protection structures) can be lengthy and frustrating for the applicant, whether or not that applicant is a municipality or a private waterfront property owner. The number of agencies involved in the permit process, each with different roles and authorities, can be confusing for proponents of waterfront development projects. The need for multiple approvals, including State and Federal approvals, can make the review process seem cumbersome and confusing at times, and confusion and lack of awareness by project proponents can sometimes lead to violations of regulatory requirements.

Representatives of other Connecticut towns that have prepared harbor management plans report that implementation of those plans in their communities has not added to the cost, length, and complexity of existing governmental programs affecting the use of navigable waters. In some instances the existence of a local harbor management plan has served to expedite the regulatory process with respect to municipal projects. Also, the Fenwick Harbor Management Commission can assist local permit applicants by being a source of information on the requirements of existing State and Federal regulatory programs affecting work in the Harbor Management Area.

5. Harbor management consistency review. An important aim of the State legislation authorizing municipalities to establish harbor management commissions and prepare harbor management plans was to create an expanded local role in the planning, management, and regulation of the uses and activities that take place in and adjoining

navigable and tidal waters. Following approval and adoption of the Fenwick Harbor Management Plan, all Borough, State, Federal, and private actions affecting the Harbor Management Area must be consistent with the Borough's Plan. This consistency requirement will be an important tool for the Borough to use to ensure that State and Federal actions conform with Fenwick's needs and goals. The Harbor Management Commission will be responsible for evaluating the consistency of proposed actions with the Plan. It will be necessary to conduct the consistency evaluation according to a specific procedure to ensure that none of the authorities of other Borough agencies is usurped, and that the evaluation achieves coordination among all agencies concerned with the HMA, including the Borough's land use agencies. The Harbor Management Commission will work with the other agencies to establish procedures to ensure that the Harbor Management Consistency Review process is conducted in an expeditious manner, within the time frames of the Borough's already-existing review processes, and in a manner that best achieves the goals of coordinated management of Fenwick's harbor and shoreline resources.

6. Changing conditions affecting the Harbor Management Area. Environmental and other conditions affecting the Fenwick Harbor Management Area are subject to ongoing changes as are applicable laws and regulations and the programs of the governmental agencies and nongovernmental organizations with an interest in the HMA and shoreline. Issues and planning considerations related to the HMA will also change. The Fenwick Harbor Management Plan will not be able to anticipate every issue that is likely to affect the HMA in the future. As a result, the Plan will need to be a “working document” that can be modified in response to changing conditions and needs. There must be a procedure for on-going examination of conditions affecting the waterfront and HMA and of the effectiveness of the Plan. A procedure is also needed for hearing public comments and preparing amendments to the Plan and/or Borough ordinances for implementing the Plan as necessary.

7. Establishment of Borough regulations for harbor management purposes. Section 22a-113m of the Connecticut General Statutes enables a municipality to establish local regulations for implementing a harbor management plan, including regulations for use of waterfront facilities and operation of the local harbor management commission. In addition, Section 15-136 of the Connecticut General Statutes enables any municipality to establish, by ordinance, “local regulations respecting the operation of vessels on any body of water within its territorial limits.” Before local regulations pertaining to the operation of vessels can take effect, they must be reviewed by the Commissioner of Environmental Protection to determine that they are not “arbitrary, unreasonable, unnecessarily restrictive, inimical to uniformity or inconsistent [with State law].” Other Connecticut towns preparing harbor management plans have identified the need for local regulations pertaining to boating safety and have established appropriate regulations for that purpose, including regulations establishing restricted vessel-speed zones. The Fenwick Harbor Management Commission may recommend, for adoption by the Board of Burgesses, regulations for beneficial use of the Fenwick pier area and any boating access facilities

that may be re-established on South Cove. The Commission may also consider the need for any local regulations pertaining to the operation of vessels on South Cove.

8. Coordination among Borough agencies for harbor management. There are several Borough agencies, in addition to the Harbor Management Commission, with responsibilities affecting the Fenwick Harbor Management Area. These include the Planning and Zoning Commission, Zoning Board of Appeals, Park Commission, and Historic District Commission.

(See Chapter Two.) There are also several Town plans, ongoing planning initiatives, and regulations affecting the HMA and shoreline. Accomplishment of the Borough's goals for beneficial use of the HMA and shoreline will require that all Borough agencies with relevant responsibilities carry out those responsibilities in the most coordinated and committed manner. In this regard, it will be necessary to incorporate awareness and understanding of the Borough's harbor management goals into the actions of all Borough agencies.

9. Coordination between Borough goals for harbor management and land use. There is an important overlap in the interests of the Fenwick Planning and Zoning Commission and Harbor Management Commission on the Borough's shoreline. Some of the land use issues of interest to the Planning and Zoning Commission are also of interest to the Harbor Management Commission and may be addressed through the Fenwick Harbor Management Plan. The focus of the Harbor Management Plan is on the water and intertidal resources of the Harbor Management Area. Upland conditions, however, including the type and extent of shoreline open space and residential and recreational development, will continue to exert a major influence on the HMA. Some of those upland conditions should therefore be addressed in the Harbor Management Plan.

The Borough's principal policies for guiding shoreline land use and development are contained in the Fenwick Plan of Conservation and Development. To achieve the most desirable management of the Borough's shoreline and HMA, implementation of the Harbor Management Plan and the Borough's land use policies should be coordinated to the extent possible, along with the actions of the Harbor Management Commission and Planning and Zoning Commission. The Harbor Management Plan should be implemented as a document that complements the Borough's established land use policies and zoning regulations.

10. Coordination with State and Federal authorities. In addition to the Borough agencies with shoreline- and harbor management-related responsibilities, several State and Federal agencies also have significant authorities affecting the Fenwick shoreline and Harbor Management Area, most notably the Connecticut departments of Environmental Protection and Transportation, and the U.S. Army Corps of Engineers. (See Chapter Two.) Achievement of Fenwick's goals for beneficial use of the shoreline and HMA will require coordination among Borough, State, and Federal agencies and interests. State and Federal decisions must be consistent with Fenwick's goals and there must be consideration of Borough input in Federal and State decisions affecting shoreline and water activities, including decisions regarding the issuance of State and Federal permits

for work in navigable water. A mechanism is needed to facilitate that coordination. In this regard, an important aim of the State legislation authorizing municipalities to establish harbor management commissions and prepare harbor management plans was to create an expanded local role—relative to State and Federal roles—in the planning, management, and regulation of water uses and activities. Accordingly, the Fenwick Harbor Management Plan can provide the basis for an increased Borough role in the State and Federal decisions that affect environmental resources and the boating and other activities that take place in the HMA. In addition, coordination among Borough, State, and Federal interests will be needed to address a number of issues of common interest, including, for example, issues concerning water quality, boating safety, and maintenance of the Federal Navigation Project (jetties, beacons, and channel) in and near the HMA.

11. Coordination with the Town of Old Saybrook. The Harbor Management Area of the Borough of Fenwick, a political subdivision of the Town of Old Saybrook, is essentially encircled by the Town's harbor management jurisdiction. As a result, actions originating in or involving the Old Saybrook Harbor Management Area can have a significant effect on the Fenwick HMA. In fact, a number of the same harbor management issues and planning considerations are of interest to both the Fenwick and Old Saybrook harbor management commissions. As a result, there is need for ongoing coordination between the Fenwick and Old Saybrook harbor management commissions to address issues of common interest and to pursue implementation of the Fenwick and Old Saybrook harbor management plans in a coordinated and mutually beneficial manner. In addition, while the presence of valuable and relatively undisturbed coastal resources in and adjoining the Fenwick Harbor Management Area limit opportunities for public access to the HMA from the Borough, a number of water-dependent facilities are established nearby the HMA in the marine commercial districts of Old Saybrook. Those facilities provide substantial opportunities for public access to the lower Connecticut River and are of adequate capacity to support all recreational boating activities in the Fenwick HMA.

12. Coordination with the Lynde Point Land Trust. The Lynde Point Land Trust is responsible for administration of several conservation easements established for the purpose of conserving natural resources and ecological functions in and near the Harbor Management Area. (See Chapter One.) The easements provide restrictions concerning use and development of most Borough-owned properties, including the Fenwick golf course, the Grove area, the Crab Creek wetland area, and other portions of the shoreline, including the former Fenwick Yacht Club site. All plans and facilities affecting the areas covered by the conservation easements must be approved by the Land Trust as consistent with the terms and conditions specified in the easements. As a result, there will be need for coordination with the Land Trust to ensure that any provisions of the Harbor Management Plan affecting the easement areas, including provisions concerning enhanced access to the HMA and wetland restoration, are consistent with the conservation easements.

13. Defining an appropriate harbor master role for implementing the Harbor Management Plan. Described in Chapter Two, State harbor masters are appointed by the Governor of Connecticut, report to the Commissioner of Transportation, and are charged with the general care and supervision of the navigable waters in their particular municipal jurisdictions. In addition, harbor masters have important responsibilities for implementing municipal harbor management plans. No harbor master has been appointed for the Borough of Fenwick. The Old Saybrook Harbor Master, however, has jurisdiction over the navigable waters of the Town of Old Saybrook. Since Fenwick is a political subdivision of the Town, representatives of the Governor's Office and the Connecticut Department of Transportation are of the opinion that the current jurisdiction of the Old Saybrook Harbor Master includes the Fenwick Harbor Management Area. It is also their opinion that at such time as the Borough may adopt a Harbor Management Plan, the Governor may consider appointing a harbor master with specific jurisdiction over Fenwick waters.

Currently, the Old Saybrook Harbor Master has a number of State-established authorities affecting use of the Fenwick HMA, including authority for control of any boat moorings placed in the HMA, removal of derelict and abandoned vessels and structures, and other actions conducted in the interest of maintaining safe navigation. In the absence of a Harbor Management Plan for Fenwick, however, there would be no formal requirement for the Old Saybrook Harbor Master to work closely with or coordinate his activities with the Borough.

An important purpose of the Connecticut Harbor Management Act is to provide local direction and control with regard to harbor master activities and to ensure continuity between the actions of current and future harbor masters in each municipality. While the harbor master for any municipality is a State official appointed by the Governor, State statutes direct the harbor master to work in conjunction with the local harbor management commission and in a manner consistent with a local harbor management plan. In addition, to increase local direction with regard to harbor master activities, State law requires that the harbor master for any municipality with an approved and adopted harbor management plan be appointed by the Governor from a list of not less than three candidates provided by that municipality's harbor management commission.

The Fenwick Harbor Management Plan may describe certain responsibilities for Plan implementation to be carried out by either the Old Saybrook Harbor Master or a harbor master specifically appointed for the Borough. In addition, the Harbor Management Commission may determine if it is in the Borough's best interests to petition the Governor for appointment of a Fenwick Harbor Master or to continue work with the harbor master appointed for the Town of Old Saybrook.

Water Use and Navigation Issues and Considerations

1. Maintenance of the Federal Navigation Project. The Connecticut River Federal Navigation Project in and near the Fenwick Harbor Management Area consists of the

Saybrook Outer Bar Channel and two stone jetties at the mouth of the River. (See Chapter One.) The Federal west jetty is located within the boundaries of the HMA. Continued safe navigation by the many recreational and commercial vessels using the Outer Bar Channel requires periodic maintenance dredging. The stone jetties have also needed maintenance from time to time.

The New England District of the U.S. Army Corps of Engineers is responsible for maintaining the Navigation Project and has conducted dredging operations in the River's several "bar channels," including the Saybrook Outer Bar Channel, where natural depths are not sufficient to support waterborne transportation. Any future maintenance dredging in the Outer Bar Channel will be carried out according to the need for such dredging as determined by the Corps. Prior to any future dredging, an assessment of the potential environmental impacts of dredging operations, including the disposal of dredged material, must be conducted by the Corps. Necessary State and Federal approvals must then be obtained. A significant consideration affecting future Federal maintenance dredging will be the availability of suitable dredged material disposal areas. In 1929, material dredged from the Saybrook Outer Bar channel was placed in tidal wetlands adjoining Crab Creek, resulting in the loss of natural wetland values. This manner of dredged material disposal is not permissible today, but at such time as the Outer Bar channel may be dredged again it may be possible to consider using dredged material for beneficial beach nourishment purposes on Fenwick's Long Island Sound shoreline.

2. Proposals for nonfederal dredging projects. Maintenance dredging outside of the Federal Navigation Project, especially at commercial marina facilities in Old Saybrook and other Connecticut River towns, is necessary from time to time to maintain the continued viability of recreational boating facilities on the River. There are no commercial boating facilities in the Borough of Fenwick, but future plans that may be considered by the Borough to restore or maintain water access facilities on South Cove and Long Island Sound may involve consideration of some dredging to enhance that access. From time to time, some waterfront property owners may also think of dredging to enhance their access to navigable waters. All nonfederal dredging must be carried out in accordance with permits issued by the Corps of Engineers and Connecticut Department of Environmental protection to minimize adverse environmental impacts. While the potential environmental impacts from maintenance dredging of existing waterfront facilities and channels are generally anticipated to be minor, dredging associated with the development of new boating facilities could have more significant impacts on water quality and aquatic resources. As a result, it is significantly more difficult to obtain State and Federal permits for new dredging projects than it is to obtain permits for maintenance dredging of previously dredged areas.

3. Aids to navigation and markers. Aids to navigation mark the Connecticut River Federal channel and other boating activity areas near the Fenwick Harbor Management Area. The most prominent aids to navigation at Fenwick include the historic Lynde Point Lighthouse and Saybrook Breakwater Light, both maintained by the U.S. Coast Guard. In general, aids to navigation include Federal aids maintained by the Coast Guard and "private" aids to navigation that may be placed by the Connecticut Department of

Environmental Protection, a municipality, or private interests. Private aids can be placed to help boaters avoid shallow water areas and other potential hazards and to identify restricted speed areas.

State and Federal permits are required for placement of all private aids to navigation. State and Federal permits are also required for placement of regulatory markers to identify restricted speed and swim areas. As defined in the Regulations of Connecticut State Agencies, such regulatory markers are distinct from navigational markers that may be used to mark navigation channels. Municipalities and others can apply to the DEP's Navigation Safety/Boating Access Unit for permission to install State-regulated markers, including regulatory markers identifying applicable vessel speed regulations. The Fenwick Harbor Management Commission may consider placement of regulatory markers as may be needed to implement certain provisions of the Borough's Harbor Management Plan. Also, any observed problems with the functioning of the existing Federal aids to navigation marking the Connecticut River channel may be transmitted by the Commission to the U.S. Coast Guard.

4. Designation of navigation fairways. Section 22a-113n of the Connecticut General Statutes enables municipalities preparing harbor management plans to designate navigation fairways that must be kept free of any obstructions in order to facilitate ease and safety of navigation. Fairway designations, for example, may be applied to water areas frequently used by recreational vessels traveling between waterfront facilities and designated navigation channels. When considering any future plans to restore or maintain water access facilities on South Cove and Long Island Sound and when managing use of any mooring locations that may be designated in South Cove (see below), the Borough may consider the designation of navigation fairways as part of those plans.

5. The continuing need for boating education. The continuing need to educate the operators of recreational vessels in and near the Harbor Management Area is a basic concern at Fenwick, as it is in all Connecticut waterways, because not all boat operators demonstrate adequate boat handling skills nor awareness of boating regulations and responsibilities. Section 15-140e of the Connecticut General Statutes requires that “no resident of the state, person owning property in the state or person owning a vessel in the state shall operate on the waters of the state a vessel which is required to be registered or numbered pursuant to [the General Statutes] unless such person has a valid vessel operator license by the U.S. Coast Guard or has obtained a safe boating certificate issued by the Commissioner of Environmental Protection.” Due to the vitality of water activity in the Connecticut River near the Fenwick Harbor Management Area, including recreational power boating activities mixed with nonmotorized water uses, excursion vessels, and commercial barges, it is especially important that all vessel operators be fully aware of the laws and regulations for safe vessel operation and conduct their operations accordingly. Operators of all vessels in and near the HMA need to be aware of a number of regulations and conditions, including the vessel speed restrictions. In addition, local boating knowledge of conditions in the HMA is important for ensuring boating safety.

6. Managing boat mooring and anchoring in the Harbor Management Area.

Section 22a-113n of the Connecticut General Statutes enables municipalities preparing harbor management plans to designate mooring and anchoring areas. In the Fenwick Harbor Management Area, an area of South Cove generally between the Route 154 causeway bridge and Folly Point has traditionally been used for boat mooring and anchoring. In the absence of a Fenwick Harbor Management Plan and harbor master, the Old Saybrook Harbor Master has managed use of this area by recreational boaters. Opportunities for mooring and anchoring in this area, however, are severely limited by such conditions as shallow water depths, the presence of valuable coastal resources, and the lack of waterfront facilities to serve moored or anchored boats. Opportunities for placing boat moorings in Long Island Sound are limited by exposure to wind and waves from the Sound.

The Fenwick Harbor Management Plan can designate specific mooring and anchoring areas in the Harbor Management Area and establish specific policies and procedures for their use. Those policies and procedures may take into consideration available water depths, the presence of sensitive coastal resources, the availability of suitable on-land access areas to serve mooring locations, and other factors that may reasonably limit the number of boat moorings that may be placed in the HMA. Such policies and procedures must be followed by the Old Saybrook Harbor Master or any Borough of Fenwick Harbor Master appointed by the Governor when issuing permits for the use of mooring locations in the HMA. The Borough's Harbor Management Commission may also establish requirements for the mooring tackle used to secure any vessel in the HMA and may, pursuant to Section 22a-113s of the Connecticut General Statutes, require an annual fee (not to exceed \$200.00) for a mooring permit.

Anchoring of vessels may take place in the HMA in accordance with the public's rights for the use of navigable waters (see Chapter Two), as long as anchoring occurs in a manner and locations so as not to interfere with navigation or cause other unacceptable adverse impacts, including impacts on coastal resources, moored vessels, and other users of the HMA. Vessels have traditionally anchored in the above-described area of South Cove although there are no nearby public waterfront facilities to enable boaters to come ashore from anchored vessels.

Historically, vessels have also anchored in Long Island Sound to the west of the Federal west jetty and boaters have come ashore to use the sandy beach in this area. In accordance with necessary permits from the State of Connecticut, markers designating a restricted swimming area within which vessels may not enter have been placed just west of the jetty by the Lynde Point Association which represents property owners on the Point.

7. Availability of facilities for visiting boaters. While visiting boaters may anchor in suitable locations within the Fenwick Harbor Management Area, there are no public waterfront facilities in the Borough providing services for boaters who may wish to come ashore from anchored vessels. A number of shoreside facilities for visiting boaters, however, are provided nearby at Old Saybrook, including facilities provided by commercial marinas at Saybrook Point and Town facilities at North Cove.

8. Availability of vessel waste pump-out facilities. Vessel waste pump-out facilities pump sewage from a boat's holding tank and then contain that waste before properly disposing of it into a sewage disposal system. These facilities are important components of State and local programs to improve the water quality of Long Island Sound and its tributaries, including the Connecticut River. Described in the earlier section on Environmental Quality (see no. 5 on page 3-4), the potential for discharges of sewage from vessel holding tanks is a potential water quality concern in and near the Fenwick Harbor Management Area. Although it is difficult to determine the extent to which these discharges may be taking place and contributing to water pollution, there is concern wherever there are concentrations of docked, moored, or anchored vessels.

A municipality preparing a harbor management plan is required by the Connecticut Department of Environmental Protection to address local needs for vessel waste disposal. Adequate vessel waste pump-out facilities are provided nearby the HMA to serve the needs of all resident and visiting boaters at Fenwick. Pump-out facilities are provided at several commercial marinas in Old Saybrook and a pump-out station is also provided at the DEP's marine facility at Old Lyme.

9. Live-aboard vessels. The principal issue raised by the short- or long-term use of vessels as living quarters concerns the water pollution that may be caused by uncontrolled waste discharges, including illegal discharges of marine sanitation devices. There is also the potential for adverse impacts on waterfront scenic quality (as may be caused by any live-aboard vessel anchored for an extended period of time in the HMA, for example). While issues of this sort may not be of immediate concern in the Harbor Management Area, such problems could arise in the future and would have to be addressed through applicable regulations and policies.

10. Personal watercraft operation. Issues concerning personal watercraft operation are of interest at Fenwick, especially because of the opportunity for launching personal watercraft from the Baldwin Bridge State boat launching ramp at Old Saybrook. Some waterfront communities in Connecticut and other states have become concerned with increasing personal watercraft use in conflict with other water uses and in violation of boating laws and public safety requirements.

Officials of the Connecticut Department of Environmental Protection have stated that municipalities have no authority to establish regulations specifically intended to control the operation of personal watercraft. The operation of personal watercraft in the State is subject to the same boating safety regulations, including vessel speed regulations, that apply to the operation of all other vessels. Personal watercraft are also subject to the regulations controlling motorboat noise. As a result, it appears that any issues concerning personal watercraft use at Fenwick are most appropriately addressed through enforcement of existing regulations and through the increased education of watercraft operators.

11. Nonmotorized boating uses. Nonmotorized boating activities such as canoeing and kayaking contribute importantly to the beneficial use of the Fenwick Harbor Management Area; these activities can be supported and encouraged through a variety of Borough

policies, plans, and programs, including support for the Connecticut River Estuary Canoe/Kayak Trail (see Chapter One). The shallow and sheltered waters South Cove, for example, are well suited for canoeing and kayaking. Conflicts between nonmotorized boating activities and other water uses may arise from time to time and there is an ongoing need to address and avoid those conflicts in order to maintain safe and beneficial use of the HMA.

12. The Route 154 causeway across South Cove. Roughly the south half of the Route 154 causeway across South Cove passes through the Fenwick Harbor Management Area. The causeway provides opportunities for scenic views of the Cove, Connecticut River, and Saybrook Point by motorists, pedestrians, and bicyclists. In addition, fishing from the bridge is a popular recreational activity. The three openings through the causeway bridge, including one opening near the Fenwick shoreline, have limited vertical clearances but provide opportunities for small outboard-powered or hand-powered craft to enter the western part of the Cove. Any larger vessels are precluded from operating in the area west of the causeway by the Cove's shallowness. It is suggested in reports for the Town of Old Saybrook that the bridge openings are not sufficient for allowing adequate flushing of the Cove, and thereby contribute to the ongoing siltation.

It is necessary to ensure that the condition or use of the causeway, as well as any future plans to repair or rebuild the causeway, do not have adverse effects on the resources of the Cove and opportunities for beneficial use of the HMA. In this regard, future bridge repairs or painting should be carefully controlled to ensure that paint chips and other pollutants do not enter the water.

13. Littoral/riparian rights and the public right for use of navigable water. Waterfront property owners at Fenwick have important littoral/riparian rights for access to the navigable waters of the Connecticut River, Long Island Sound, and South Cove. Those rights, however, must be balanced against the public right to use navigable, public trust waters which are held by the State in trust for the general public. (See Chapter Two.) A principal conflict between littoral/riparian and public rights in navigable water often arises over the construction of docks and piers by waterfront property owners (see no. 15 on page 3-23).

Also of potential concern are possible conflicts between adjacent waterfront landowners over the lateral limits of their littoral/riparian rights. A shorefront owner has the riparian right for access to navigable water, for example, but the extension of any dock or pier can not infringe on the adjacent owner's riparian area.

14. Unauthorized encroachments into navigable waters. Unauthorized encroachments into navigable waters are commonly defined as structures or other work placed or undertaken without necessary local, State, or Federal approvals. With respect to the Fenwick Harbor Management Area, potential encroachments of concern would include any structure or other work (such as dredging and filling) waterward of the high tide line that is placed or carried out without necessary permits or in a manner not consistent with permit conditions. In some instances, encroachments of this type may result from a lack of awareness of applicable regulations and permit requirements.

While the U.S. Army Corps of Engineers and Connecticut Department of Environmental Protection have the principal responsibility for elimination or correction of any unauthorized encroachments that may be identified in the HMA, the Borough can have an important advisory role with respect to the resolution of any encroachment issues that may arise in the future.

15. Extension of docks and piers to navigable water. Proposals to construct or extend docks and piers to reach navigable water in the Connecticut River and other areas may raise complex planning issues regarding: 1) the potential environmental impacts of those structures (including impacts on wetlands and intertidal flats as well as aesthetic impacts); 2) the possible effect of those structures on small boat navigation and other public uses of Public Trust waters; 3) the appropriate size and length to which docks and piers should be constructed or extended; and 4) the extent to which a municipality can and should control or limit such structures. The Harbor Management Commission will have to address these concerns when reviewing any future proposals for the construction or extension of docks and piers into the Harbor Management Area.

As with dredging, filling, and the use of shore protection structures, the environmental impacts of individual docks and piers may be relatively minor but the cumulative impacts may be much more significant.

Shoreline Access and Land Use Issues and Considerations

1. Consideration of water-dependent uses on the Fenwick shoreline. The State of Connecticut has established policies to promote and protect water-dependent uses such as marinas and boating facilities on the Connecticut coast. The Connecticut Coastal Management Act (CCMA), for example, establishes the legislative policy "To give high priority and preference to uses and facilities which are dependent upon proximity to the water or the shorelands immediately adjacent to marine and tidal waters." The CCMA defines water-dependent uses to include facilities such as marinas, boat yards, commercial fishing facilities, and industrial uses requiring direct access to marine and tidal waters, as well as uses which provide general public access to those waters. Local policies to support and encourage water-dependent uses are typically contained in municipal harbor management plans.

At Fenwick, due to the existing residential character of the shoreline and the extensive presence of sensitive coastal resources such as tidal wetlands, intertidal flats, and sand dunes, there is no opportunity for development of the sort of water-dependent uses generally encouraged by other municipalities. The Fenwick shoreline is reserved for residential and recreation/open space uses and for the government facility associated with the Lynde Point Lighthouse. Substantial water-dependent facilities, however, including boatyards and marinas to serve the needs of recreational and commercial vessels on the Connecticut River, are located nearby in the marine commercial areas of Old Saybrook.

As a result of these existing conditions, consideration of future water-dependent development opportunities by the Borough of Fenwick is primarily limited to consideration of the needs and opportunities for use and maintenance of the Fenwick pier and for restoration of the former Fenwick Yacht Club site on South Cove. (See nos. 6 and 7 on page 3-26.)

2. Shoreline zoning regulations. Shoreline zoning regulations can be applied by coastal municipalities to support and encourage water-dependent uses and to help preserve and enhance natural resources. Fenwick's zoning regulations (see Chapter Two) are intended to preserve the unique residential character and unspoiled natural resources of the Borough. Described in the previous section concerning the "Institutional Framework" for harbor management, achievement of the Borough's goals for beneficial use of the Harbor Management Area and shoreline will require that all Borough agencies with responsibilities affecting the shoreline and HMA, including the Harbor Management Commission and Planning and Zoning Commission, carry out their duties in the most coordinated manner. In this regard, the Planning and Zoning Commission may wish to consider updating and/or amending some existing zoning requirements, as necessary, to help achieve the Borough's goals for beneficial use and conservation of the shoreline and HMA as established in the Harbor Management Plan.

3. Potential impacts of upland development projects on the Harbor Management Area. In addition to having positive impacts on the community, upland development throughout the Fenwick peninsula—including possible redevelopment of residential properties, infrastructure improvements, and improvements to recreational facilities such as the golf course and Borough boating access facilities—also raises the possibility of adverse impacts on the Harbor Management Area. Those impacts, for example, could be associated with increased runoff, groundwater transport of household and lawn pollutants, and septic system leachate generating key pollutants including bacteria, nutrients, and suspended solids affecting water quality; restriction of tidal flow affecting wetland restoration projects; and other stresses on the natural environment. All proposals for upland development projects should therefore be carefully planned and reviewed to help ensure that positive benefits are realized, and that any potential adverse impacts are avoided or minimized. (See no. 5 on page 3-12 in the previous section concerning the "Institutional Framework" for harbor management.) In addition, all proposals affecting use of Borough-owned properties must be consistent with the conditions established in the conservation easements administered by the Lynde Point Land Trust for the purpose of conserving natural resources and ecological functions.

4. Conditions affecting public access to the Harbor Management Area. Issues concerning public access to navigable waters are basic harbor management concerns throughout Connecticut. Harbor management plans prepared by Connecticut municipalities typically contain policies and plans for public access to navigable waters and thereby establish a basis for obtaining funds (including State and Federal grants) as well as State and Federal permits for developing water access facilities. Any discussion of public access to the Fenwick Harbor Management Area, however, must be based on

the understanding that opportunities for such access from the land are severely limited by the lack of publicly owned land adjoining the HMA and by the extensive presence of undisturbed natural resources such as tidal wetlands, intertidal flats, and sand dunes. The HMA is relatively small in terms of its geographic extent, its natural resources are fragile, and increased access to it for boating and other recreational activities raises the possibility of adverse impacts on not only the natural environment, but also public safety and the existing historic and esthetic character of the Borough.

In addition, access to the HMA through all Borough-owned properties must be consistent with the conditions established in the conservation easements administered by the Lynde Point Land Trust for the purpose of conserving natural resources and ecological functions

Substantial opportunities for general public access to the Connecticut River and Long Island Sound, however, are available nearby in Old Saybrook and Old Lyme where private, Town, and State facilities provide opportunities for boating access as well as opportunities for fishing and passive recreational pursuits. In addition, opportunities for access to the waters of South Cove is available from the Route 154 causeway bridge, and pedestrian access to Long Island Sound is available from the Old Fenwick Road street end (see no. 5 below).

Access to the HMA from the water is not subject to all of the same constraints that affect access from the land. Consistent with the Public Trust Doctrine, the open waters and submerged lands subject to the ebb and flood of the tide are held in trust by the State of Connecticut for the benefit of the general public. Described in Chapter Two, the general public has important rights of navigation and access waterward of the mean high water line. The right of free navigation is subject to lawfully enacted restrictions (concerning the operation of vessels in the interest of public safety, for example) and includes the right to anchor.

5. Public access through the public street end at Old Fenwick Road. Old Fenwick Road (also known as the Park Avenue extension) marks the western boundary of the Borough of Fenwick. This Town of Old Saybrook-owned street end provides an opportunity for visual access to Long Island Sound and to the shoreline below the mean high water line. The carrying capacity of this street end to accommodate public use is limited by the lack of any parking spaces or other facilities to accommodate water access and by its proximity to residential properties. Any future plans concerning use of this street end for public use and enjoyment must be consistent with space limitations and neighborhood character.

6. Use and maintenance of the Fenwick Pier. The Fenwick Pier has long provided opportunities for swimming and limited boating access to Long Island Sound for Borough residents and guests. A rock breakwater protects the pier from waves generated in the Sound. The pier and breakwater require periodic maintenance to ensure continued beneficial use of this facility and the safety of those who use it. Work to maintain and/or enhance this facility requires authorization from the Connecticut Department of Environmental Protection and Corps of Engineers. (See Chapter Two.) Rules and

regulations for use of the Fenwick Pier as well as plans for its maintenance and enhancement may be incorporated in the Fenwick Harbor Management Plan.

7. Restoration of former Fenwick Yacht Club site. Historically, the Borough operated a small boating facility known as the Fenwick Yacht Club on Fenwick's north shoreline to provide opportunities for access to South Cove. A small marina, boat storage area, and marine railway were provided. The remnants of this facility are visible a short distance east of the present Route 154 causeway. When considering any opportunities for re-establishing this facility, the Harbor Management Commission will need to balance reasonable goals for beneficial access to the Cove from this site with the need to protect a fragile natural environment and the existing residential character of nearby areas. The carrying capacity of the site as well as the costs of project development and maintenance must be considered along with a number of other factors, including the conditions established in the affected conservation easement administered by the Lynde Point Land Trust, in determining the feasibility of re-establishing this facility and preparing any site development plans.

Guidelines for the development and management of any boating access facility re-established in this area as well as rules and regulations for facility use may be incorporated in the Fenwick Harbor Management Plan.

8. Use and management of the Grove conservation area. The Grove conservation area (see Chapter One), including an area formerly used by the Borough for debris disposal, is located on Fenwick's South Cove shoreline west of the Route 154 causeway bridge. This shoreline area is not only an important open space resource, but also provides opportunity for passive recreational use enhanced by its proximity to the Cove. No management plan has been formally established by the Borough to guide beneficial public use of this property in concert with protection of the natural environment. When considering a management plan for this property, the Borough may consider use of the area for passive recreational activities that are consistent with the area's natural conditions, including activities such as walking, nature observation, picnicking, fishing, and canoeing access. All considered uses must be consistent with the conditions established in the affected conservation easement administered by the Lynde Point Land Trust. Guidelines for the use of this shoreline open space property may be incorporated in the Fenwick Harbor Management Plan.

9. Shore protection measures. Shoreline erosion is a natural, ongoing process that will continue to affect water and waterfront use and development at Fenwick, especially along the Borough's Long Island Sound shoreline (see no. 5 in the previous section concerning Public Health, Safety, and Welfare). Shore protection measures are needed in certain locations to protect existing development along the shoreline, but those measures can also have some adverse impacts and therefore need to be carefully planned and constructed. Shore protection structures such as seawalls also require regular maintenance or else their deterioration may adversely affect the environment. In natural shoreline areas, structural measures for shore protection may cause adverse impacts on environmental quality and accelerated erosion of the shoreline nearby. To build shore protection structures it is

necessary to obtain permits from the Connecticut Department of Environmental Protection and Corps of Engineers (see Chapter Two); structural measures for erosion control, however, are generally discouraged except under certain conditions where it is necessary to protect existing inhabited structures, roads, utilities, or water-dependent facilities.

10. Consideration of conservation easements. The several conservation easements administered by the Lynde Point Land Trust in and near the Harbor Management Area must be considered in the development of any Borough plans affecting shoreline access and land use in the areas covered by the easements. The purpose of the easements (see Chapter One) is to conserve natural resources and ecological functions. In this regard, the easements establish restrictions on the uses of the properties covered, including the Fenwick golf course, the Grove area, the Crab Creek wetland area, the former Fenwick Yacht Club site, and other portions of the shoreline. All plans and facilities for access to the HMA and affecting these areas must be approved by the Land Trust as consistent with the terms and conditions specified in the easements.

11. Borough-owned land adjoining South Cove: In the late 1800's a group of Fenwick residents formed the Fenwick Hall Company to purchase the land holdings of the defunct New Saybrook Company from the company's receiver. (The New Saybrook Company was the developer of the original summer resort community on the Fenwick peninsula.) This purchase included waterfront land around portions of Lynde Point and took place prior to creation of the Borough of Fenwick by Special Act of the Connecticut Legislature in 1899.

During the next century, various land sales occurred; in the 1940's large parcels of land were gifted to the Borough of Fenwick with the provision that those parcels be held as park land. The Fenwick Hall Company continued to exist during this period and retained identifiable land holdings. Those holdings were not contiguous and included a discontinuous strip of land six feet wide around the perimeter of Lynde Point. The precise locations of the Company's holdings have been difficult to understand over the years. Adding to that difficulty, the Town of Old Saybrook Tax Assessor's Office, in order to facilitate sending a tax bill, decided to represent the lands owned by the Fenwick Hall Company by placing a single "phantom" lot on the Assessor's Tax Map. That lot was shown within the marsh area at the eastern end of Lynde Point. As a result of this representation and because in some places there were no easily discernable boundaries to the Fenwick Hall Company holdings (almost all of which were not or could not be developed) the various parcels came to lose for the most part their specific identities within the overall boundaries of the Borough.

Just before the recent turn of the century, the Fenwick Hall Company deeded all of its holdings either to the Borough or to private individuals, and ceased business. Some of the land so conveyed to the Borough was placed under a conservation easement similar to the other easements established during the 1990's for other Borough properties. A six-foot strip of land running along much of the north shoreline of Lynde Point (south shoreline of South Cove) was conveyed to the Borough but was not placed under a conservation easement. Other portions of the originally defined six-foot strip on the

Long Island Sound shoreline of the Fenwick peninsula were conveyed to private owners. On the South Cove shoreline, the strip is not continuous but is interrupted by Route 154, by the shoreline of the privately owned property marked by a substantial concrete seawall, and by the privately owned shoreline in the area known as Folly Point.

The precise location of the strip has never been formally surveyed. The strip has been described as running from high water to a distance of six feet inland—a description which dates to the time of formation of the Fenwick Hall Company. The term “high water” in the description is not based on any surveyed datum or legal definition concerning tidal water elevations. It is assumed by Borough officials that use of the term was a layman's attempt at the time to simply identify the line between “wet” and “dry” land.

Connecticut courts have generally interpreted that historical references to the term “high water,” in the absence of any other clarification, should be considered at the present time to be references to “mean high water.” (See, for example, *Michalczo v. Woodmont*, 175 Conn. 535 (1978).)

The original intent of the Fenwick Hall Company in holding the six-foot strip is unclear. There is some speculation that the strip was for the purpose of controlling development along the water's edge. Whatever the intent may have been, the Borough of Fenwick now owns the strip and intends to administer it in the same manner as the other park land owned by the Borough. The Special Act establishing the Borough prohibits commercialization of any land, public or private, in the Borough. Also, the conservation easements on the landward side of the strip specify conservation-related uses and therefore, to a certain extent, control use of the six-foot strip.

Chapter Four:

Harbor Management Goals and Policies of the Borough of Fenwick

This chapter contains the Borough of Fenwick's goals and policies for use of the Fenwick Harbor Management Area (HMA) and for conservation of the HMA's vital natural and cultural resources. The goals and policies are directed toward achieving an appropriate balance among several important public purposes, including: protection and enhancement of environmental quality and the unique quality of life associated with the Borough's location on the Connecticut River, South Cove, and Long Island Sound; provision of opportunities for appropriate water-dependent recreational activities and access to the HMA; and maintenance of the health, safety, and welfare of those who use the Borough's HMA and shoreline.

The 13 goals and accompanying policies should be thought of as the basic guidelines for harbor management at Fenwick; their achievement should be supported by all citizens and Borough officials. The goals and policies establish a guiding framework for management decisions that directly or indirectly affect the Fenwick HMA and shoreline by the Harbor Management Commission and other Borough commissions.

In some instances, conflicts may arise among different management goals and policies. An effort to increase recreational use of the HMA and access to the HMA, for example, would likely result in an adverse impact on environmental quality. In those instances where established goals and policies concerning environmental conservation, public health, safety, and welfare, recreational use, and access to the HMA may conflict, first priority should be given to goals and policies for maintaining the public health, safety, and welfare and second priority to goals and policies for environmental conservation and enhancement. It is the responsibility of the Harbor Management Commission, through its decisions, and in some instances in coordination with other Borough commissions, to balance and, where necessary, prioritize the competing goals and policies based on consideration of the overall public interest.

Collectively, the goals and policies, along with the responsibilities and recommendations contained in Chapter Five of the Fenwick Harbor Management Plan, establish the Borough of Fenwick's response to the harbor management issues and planning considerations described in Chapter Three. The goals and policies are numbered for reference purposes and not to denote priority. Geographic areas of the Borough of Fenwick addressed in the goals and policies are shown on Figure 4-2: The Fenwick Water-Use Plan.

HARBOR MANAGEMENT GOALS:

GOAL 1: RECOGNITION OF HARBOR MANAGEMENT AREA
RESOURCES AND VALUES

GOAL 2: MANAGEMENT BALANCE AND PRIORITY

GOAL 3: ACTIVE AND COORDINATED MANAGEMENT OF THE

HARBOR MANAGEMENT AREA AND SHORELINE BY THE BOROUGH

GOAL 4: NATURAL RESOURCE CONSERVATION AND ENHANCEMENT

GOAL 5: MAINTAINING AND IMPROVING WATER QUALITY

GOAL 6: PUBLIC HEALTH, SAFETY, AND WELFARE

GOAL 7: RECREATIONAL USE

GOAL 8: PLANNING AND REGULATION OF LAND USE

AFFECTING THE HARBOR MANAGEMENT AREA

GOAL 9: WATER-DEPENDENT USES

GOAL 10: ACCESS TO THE HARBOR MANAGEMENT AREA

GOAL 11: COMMUNITY SUPPORT, EDUCATION, AND PARTICIPATION

GOAL 12: PRESERVATION OF COMMUNITY CHARACTER

GOAL 13: RESPONSE TO CHANGING CONDITIONS

**GOAL 1: RECOGNITION OF HARBOR MANAGEMENT AREA
RESOURCES AND VALUES**

Recognize that the Fenwick Harbor Management Area and adjoining shoreline provide valuable environmental, cultural, recreational, and other resources and values that contribute significantly to the overall quality of life in the Borough, and that those resources should be managed and preserved in the public interest.

GOAL 2: MANAGEMENT BALANCE AND PRIORITY

Achieve and maintain an appropriate balance among goals and policies to: a) protect and enhance the environmental quality, natural resources, and ecological functions associated with the Fenwick Harbor Management Area; b) maintain the public health, safety, and welfare; c) provide opportunities for beneficial recreational use of the HMA; and d) provide opportunities for beneficial access to the HMA. In those instances where these established goals and policies may conflict, goals and policies for maintaining the public health, safety, and welfare and for conserving and enhancing coastal resources and environmental quality should receive priority.

**GOAL 3: ACTIVE AND COORDINATED MANAGEMENT OF THE
HARBOR MANAGEMENT AREA AND SHORELINE BY THE BOROUGH OF
FENWICK**

Actively manage use of the Fenwick Harbor Management Area and adjoining shoreline in the public interest. Establish and maintain, in accordance with the intent of the Connecticut Harbor Management Act and the Borough of Fenwick Harbor Management Ordinance, a principal role for the Borough in the planning, management, and regulation of activities on, in, or contiguous to the HMA.

POLICIES:

3.1 Harbor Management Area Boundaries: The Borough of Fenwick's harbor management jurisdiction should be known as the Fenwick Harbor Management Area and shall be all of the area within the territorial boundaries of the Borough of Fenwick below the mean high water line and bounded offshore by a line running northerly and perpendicular to the shore from the northwest corner of the Borough to the centerline of South Cove, thence easterly along the centerline of the Cove to the west side of the Connecticut River channel, thence southerly along the channel to the south end of the Federal west jetty, thence westerly maintaining the same distance from the shore to a point of intersection with a line perpendicular to the shore from the southwest corner of the Borough, and thence to the southwest corner of the Borough. (See Figure 4-2 and the Borough of Fenwick Harbor Management Ordinance.)

3.2 Harbor Management Commission Responsibilities: The Fenwick Harbor Management Commission may exercise all of the relevant powers and duties granted

to municipal harbor management commissions by the Connecticut Harbor Management Act (Sections 22a-113k through 22a-113s of the Connecticut General Statutes) and specified in the Borough of Fenwick Harbor Management Ordinance, including the powers and duties associated with preparing and implementing the Borough's Harbor Management Plan.

- 3.3 **Harbor Management Plan:** In accordance with authority provided by the Connecticut Harbor Management Act and the Borough of Fenwick Harbor Management Ordinance, the Fenwick Harbor Management Plan should be implemented as the Borough's principal guide, in coordination with the Borough's Plan of Conservation and Development, for conservation of coastal resources on, in, or contiguous to the Harbor Management Area and for beneficial use of the HMA.
- 3.4 **Harbor Management Ordinances:** Borough ordinances should be adopted and/or amended by the Board of Burgesses, as needed, for implementing the Harbor Management Plan and regulating use of the Harbor Management Area and adjoining shoreline in the public interest; all Borough ordinances affecting the HMA and shoreline should be effectively enforced by the responsible authority.
- 3.5 **Harbor Management Funds:** Adequate funds should be obtained by the Board of Burgesses and allocated to manage and improve the Fenwick Harbor Management Area and adjoining shoreline, as necessary, consistent with the Harbor Management Plan and Section 22a-113s of the Connecticut General Statutes which authorizes establishment of a municipal fund to be used for harbor management and improvement purposes.
- 3.6 **Public Support and Awareness:** The presentation and discussion of all relevant community concerns regarding the Harbor Management Area and Harbor Management Plan, including concerns expressed by Borough residents, public officials, users of the HMA, and interested agencies and organizations, should be encouraged and considered by the Harbor Management Commission.
- 3.7 **Harbor Master Responsibilities:** In accordance with Section 15-1 of the Connecticut General Statutes, any duly appointed State of Connecticut harbor master with jurisdiction in the Fenwick Harbor Management Area shall exercise his or her duties in a manner consistent with the Fenwick Harbor Management Plan and shall work cooperatively with the Fenwick Harbor Management Commission to implement the Plan and achieve effective enforcement of State boating laws and regulations in the HMA in coordination with the appropriate enforcement authorities.
- 3.8 **Harbor Management Consistency Review:** Proposals affecting the Harbor Management Area should be reviewed for consistency with the Harbor Management Plan. A "Harbor Management Consistency Review" process should be established and carried out by the Harbor Management Commission to ensure effective implementation of the Plan and coordinated, efficient, and comprehensive local

review by the Borough of proposed projects affecting real property on, in, or contiguous to the HMA. (See the section on the Fenwick Harbor Management Commission in Chapter Five.)

- 3.9 Updating and Amending the Harbor Management Plan and Borough Ordinances Affecting the Harbor Management Area:** The Harbor Management Plan and Borough ordinances affecting the Harbor Management Area should be updated and amended as necessary to respond to changing circumstances and conditions affecting the Harbor Management Area and shoreline. (See Goal 13.)
- 3.10 Coordination among Borough Boards and Commissions for Harbor Management:** All Borough boards and commissions with authorities and responsibilities affecting the Harbor Management Area, including the Board of Burgesses, Harbor Management Commission, Planning and Zoning Commission, Zoning Board of Appeals, Park Commission, and Historic District Commission, should carry out their harbor management-related responsibilities in the most coordinated manner, consistent with the provisions of the Harbor Management Plan.
- 3.11 Coordination with State and Federal Authorities:** State and Federal agencies with authorities and responsibilities affecting the Harbor Management Area, including the Department of Transportation, the Department of Environmental Protection's Office of Long Island Sound Programs, other DEP bureaus and divisions, and the U.S. Army Corps of Engineers, should carry out their responsibilities affecting the Harbor Management Area in the most coordinated manner and in a manner consistent, to the maximum extent permissible in accordance with Federal law, with the provisions of the Harbor Management Plan.
- 3.12 Coordination with the Town of Old Saybrook:** To address issues affecting the Harbor Management Area that are of concern to both the Borough of Fenwick and Town of Old Saybrook, including issues affecting areas of the Connecticut River, South Cove, and Long Island Sound, the Borough should maintain effective communication with the Town of Old Saybrook Harbor Management Commission and coordinate harbor management initiatives, to the extent necessary and practical, with the Town.
- 3.13 Coordination with the Lynde Point Land Trust:** All proposals affecting Borough-owned properties should be prepared in coordination with the Lynde Point Land Trust to ensure that those proposals are consistent with the terms and conditions of the applicable conservation easements administered by the Land Trust for the purpose of conserving natural resources and ecological functions.
- 3.14 Administration of Mooring Permits:** To provide for adequate navigation access for recreational vessels, for the safety of persons and property, for the beneficial use of the limited mooring locations available in South Cove and Long Island Sound within the Harbor Management Area, and for protection of environmental quality, all

mooring locations in the HMA should be carefully managed. No boat may be moored in the HMA without proper authorization from a duly appointed State of Connecticut harbor master with jurisdiction in the HMA. (See policy 7.6.)

3.15 Participation of Private Groups and Nongovernmental Organizations:

Private groups and nongovernmental organizations concerned with the Harbor Management Area and shoreline, including but not limited to the Lynde Point Land Trust and associations representing Borough of Fenwick property owners, should be encouraged to participate in efforts to achieve the Borough's harbor management goals through volunteer assistance and other means.

GOAL 4: NATURAL RESOURCE CONSERVATION AND ENHANCEMENT

Conserve and enhance the environmental quality, natural resources, and ecological functions associated with the Fenwick Harbor Management Area and the larger Connecticut River and Long Island Sound watersheds of which the HMA is part.

POLICIES:

4.1 Consideration of Ecological Principles: Coastal resources in and adjoining the Harbor Management Area, including rocky shorefronts, beaches and dunes, intertidal flats, tidal wetlands, estuarine embayments, nearshore waters, shorelands, and shellfish concentration areas as defined in Section 22a-93 of the Connecticut General Statutes, should be managed with consideration of the ecological principles affecting those resources, including inter-relationships among resource areas. It should be recognized that the tidal waters and other natural resources found in the HMA are part of the Connecticut River and Long Island Sound watershed systems and that certain actions within these systems can have significant impacts on other parts of the systems, or on the systems as a whole.

4.2 Balancing Environmental Conservation Goals with Goals for Use of the Harbor Management Area and Shoreline: Any efforts to provide opportunities for beneficial recreational and other uses of the Harbor Management Area should be in balance with efforts to protect and enhance the environmental quality, natural coastal resources, and ecological functions associated with the HMA and shoreline and with the larger watershed systems of which the HMA and shoreline are part. In those instances where the goals and policies for beneficial recreational use and access to the HMA may conflict with the goal and policies for natural resource conservation and enhancement, the goal and policies for natural resource conservation and enhancement should receive priority.

4.3 Recognizing the Carrying Capacity of the Natural Environment: Beneficial use of the Harbor Management Area and shoreline should be planned and managed in a manner consistent with the capacity of the HMA and shoreline to support that use in an environmentally sound manner. Design and review of any proposals for development or other activities on, in, or contiguous to the HMA should take into

consideration the capacity of the natural environment to support the proposed activity without the occurrence of significant adverse impacts on natural resource functions and values. New or expanded uses, development, or activities judged to exceed the capacity of the natural and man-made environment to support them should be avoided. (See policy 6.3 concerning the capacity of the HMA for safe boating and other water uses.)

4.4 Consideration of Cumulative Impacts on Environmental Resources: Decisions affecting use of the Harbor Management Area and shoreline should consider the cumulative impacts on environmental resources and quality that may result from the incremental impacts of a single action added to other past, present, and reasonably foreseeable actions. Consideration should be given to the incremental impacts of stormwater runoff, groundwater transport of household and lawn pollutants, and septic system leachate generating key pollutants including bacteria, nutrients, and suspended solids affecting water quality in the HMA. It should be recognized that cumulative impacts on environmental quality can result from individually minor but collectively significant activities taking place over a period of time. Efforts to increase public awareness of the cumulative impacts that everyday activities (including activities associated with property maintenance) may have on water quality in the Fenwick HMA should be encouraged and supported.

4.5 Conservation of Intertidal Resources Including Tidal Wetlands and Intertidal Flats: The ecological values of intertidal resources in the Harbor Management Area, including tidal wetlands and intertidal flats, should be recognized and preserved, including values related to fish and wildlife habitat, nutrient productivity, water quality functions, and floodwater storage and buffer.

4.6 Conservation of Shellfish Resource Areas: The use, enhancement where feasible, and conservation of shellfish resources in the Harbor Management Area should be managed in the public interest.

4.7 Maintaining Shoreline Scenic Quality and Water Views: Scenic quality associated with the Harbor Management Area and adjoining shoreline should be preserved and, to the extent feasible, enhanced. Design and review of proposals for development and other activities affecting the HMA should take into consideration cumulative impacts on scenic quality and the capacity of the natural and built environment to support the proposed development without significant adverse impacts on scenic quality.

4.8 Maintaining Shore Protection Structures: No seawall or other shore protection structure on, in, or contiguous to the Harbor Management Area should be allowed to deteriorate to the extent that it causes a significantly adverse impact on environmental quality. Any deteriorated seawall or other shore protection structure should be repaired or replaced where such deterioration is causing significant adverse impacts on natural resources or ecological functions.

4.9 Environmental Restoration: Degraded natural resources including but not limited to tidal wetlands on, in, or contiguous to the Harbor Management Area should be restored, to the extent feasible, where such restoration will enhance the overall quality of natural coastal resources through improvements to water quality, scenic quality, fish and wildlife habitat, and other natural values. Restoration of tidal wetland resources and associated ecological functions historically lost or degraded by placement of fill material or restriction of tidal flow in the HMA, including the Folly Creek (commonly known and hereinafter referred to as Crab Creek) and Fenwick West wetland areas, should be encouraged and supported to the extent feasible. (See Figure 4-2.)

4.9.1 Detailed plans for restoration projects: Any project for restoring coastal resources should be in accordance with a detailed plan based on best available scientific information, formulated with input from potentially affected parties, and duly approved by the Board of Burgesses following a careful review of environmental and economic costs and benefits by all Borough boards and commissions with relevant authorities.

4.9.2 Planning for tidal wetland restoration: Tidal wetlands should be restored through restoration of tidal circulation and/or intertidal elevations necessary to support healthy wetland ecosystems, control mosquito populations, and reduce the risk of marsh fires. Any plan for restoration of tidal wetlands in the HMA should incorporate the results of detailed hydrologic and hydraulic analyses. The potential positive and negative impacts of reintroduced tidewater, including impacts on properties adjoining the area proposed for restoration and on stormwater detention capabilities, should be evaluated prior to any action to approve that plan.

4.9.3 Managing restored wetlands: Any restored tidal wetlands should be managed to: 1) provide tidal floodwater storage and stormwater detention functions; 2) reduce mosquito, fire, and other hazards; 3) protect ecological functions related to water quality maintenance, fish and wildlife habitat, and other natural values; and 4) provide appropriate recreational, educational, scientific, and other beneficial public purposes.

4.9.4 Monitoring restoration projects: The effects of any project for restoring coastal resources should be carefully monitored and evaluated over time. Any future increase of tidal flow into restored wetland areas should be carefully monitored and controlled to ensure that increased tidal flow does not adversely affect adjoining roads, other infrastructure, and upland properties in any significant way.

4.10 Conservation Easements: All uses, development, and activities on, in, or contiguous to the Harbor Management Area, including any projects for environmental

restoration, are to be consistent with the requirements of all conservation easements duly established for the purpose of conserving natural resources and ecological functions, including the conservation easements administered by the Lynde Point Land Trust. (See policy 10.9.)

GOAL 5: MAINTAINING AND IMPROVING WATER QUALITY

Maintain and improve water quality in the Harbor Management Area, including surface water and ground water quality; encourage and support all feasible measures to restore and maintain the highest quality of surface and ground water.

POLICIES:

5.1 Reduction of Nonpoint Source Pollution: Efforts to improve water quality in the Harbor Management Area should include:

- reduction or elimination of nonpoint sources of pollution (including stormwater runoff from roads, parking areas, the Fenwick golf course, and other surfaces in the Borough as well as seepage from septic systems);
- improvement and repair of stormwater and wastewater collection and treatment facilities as necessary in accordance with best available technology;
- reduction or elimination of pollution caused by boating activities; reduction of the amount of sand, debris, and other pollutants discharging into the HMA from roads and waterfront properties;
- regular septic system inspection and maintenance;
- application of lawn maintenance and landscaping practices that minimize use of chemical fertilizers and pesticides;
- reduction or elimination of all other human activities that unnecessarily introduce sediment, debris, or pollutants into the HMA; and
- discouragement of nuisance waterfowl congregation, especially of mute swans.

5.2 Best Management Practices: The use of suitable best management practices (BMPs) to manage, reduce where feasible, or otherwise control stormwater runoff and thereby reduce the potential for nonpoint source pollution to enter the Harbor Management Area should be encouraged and supported.

5.2.1 Buffer zones: Buffer zones of natural vegetation to naturally filter polluted runoff draining into the Harbor Management Area should be established and maintained along the shoreline and the banks of all watercourses in the HMA.

5.2.2 Wetlands buffers/setbacks: Appropriate buffer/setback distances should be maintained and, where feasible, increased around existing and restored tidal wetlands in the Harbor Management Area.

- 5.2.3 **Public outreach and education:** Efforts to increase public awareness concerning the sources and impacts of nonpoint source pollution, and of opportunities for Borough residents to avoid or reduce activities that contribute to nonpoint source pollution, should be encouraged and supported.

Water Quality Monitoring: An ongoing program of water quality monitoring in the Harbor Management Area and upstream in the Connecticut River by qualified governmental and nongovernmental agencies should be encouraged and supported to identify existing and potential sources of pollution and to establish and maintain a data base of information to support water quality improvement efforts.

- 5.4 **Marine Sanitation Devices and Vessel Waste Pump-out Stations:** Marine sanitation devices should not be discharged into the Harbor Management Area. Existing State and Federal regulations controlling the disposal of waste from vessels should be publicized for resident and visiting boaters and strictly enforced. The nearby locations of existing vessel waste pump-out stations with adequate capacity to serve the needs of boaters in the Harbor Management Area should be publicized through appropriate notices and publications having substantial circulation in the Borough.

- 5.5 **Avoiding Adverse Impacts from Bridge Work:** Any future work to maintain, repair, or construct bridges crossing parts of the Harbor Management Area, including the Route 154 causeway across South Cove and the Sequassen Avenue bridge over Crab Creek, should be closely monitored to reduce or avoid any potentially adverse impacts on water quality resulting from maintenance, repair, or construction work.

- 5.6 **Upgrading Surface Water Quality:** Upgrading of existing surface water quality in the Harbor Management Area should be pursued through reduction or elimination of nonpoint sources of pollution (including identified sources of bacteria impairment caused by stormwater runoff, septic system leachate, waterfowl, and other sources) and other appropriate actions.

- 5.7 **Managing Water Quality on a Watershed-wide Basis:** Beneficial efforts to improve water quality in the Harbor Management Area that are planned and implemented, to the extent practical, on a watershed-wide basis in coordination with other communities in the Connecticut River watershed, including the Town of Old Saybrook, should be encouraged and supported.

GOAL 6: PUBLIC HEALTH, SAFETY, AND WELFARE

Manage and regulate use of the Fenwick Harbor Management Area and shoreline to assure orderly and efficient beneficial uses and to provide for the continued health, safety, and welfare of HMA users and Borough residents; maintain navigation safety in the HMA.

POLICIES:

6.1 Regulating Vessel Speed, Wake, and Noise Levels: The speed, wake, and noise levels of vessels operating in and near the Harbor Management Area should be regulated by appropriate authorities to ensure public safety and to protect public and personal property and sensitive natural resources and maintain the quality of life. The operation of all vessels in and near the HMA shall be in accordance with all applicable boating laws and regulations, including regulations established by the State of Connecticut pursuant to applicable sections of the Connecticut General Statutes, and including laws concerning motorboat noise levels established through Section 15-129 of the Connecticut General Statutes.

6.2 Enforcement of Boating Laws and Regulations: Strict and effective enforcement of applicable boating laws and regulations by appropriate authorities should be encouraged and supported, along with the imposition of appropriate penalties on violators as authorized through those laws and regulations.

6.3 Recognizing the Carrying Capacity of the Harbor Management Area for Safe Boating and Other Water Uses: Design and review of proposals affecting the Harbor Management Area, including proposals for water access facilities, should take into consideration the capacity of the HMA (including the capacity of surface waters in the HMA) to accommodate boating use and activities while maintaining ease and safety of navigation, avoiding vessel congestion, and supporting existing beneficial uses of the HMA. (See policy 4.3 concerning the carrying capacity of the natural environment of the HMA.)

6.4 Avoiding Water Use Congestion and Conflicts: Any opportunities for increasing beneficial water use in the Harbor Management Area should be balanced against the need for avoiding: a) congestion in the HMA; and b) conflicts among different recreational activities, including power and nonmotorized boating activities, swimming, and other water activities. In those instances where the goals and policies for beneficial recreational use and access to the HMA may conflict with the goal and policies for public health, safety, and welfare, the goal and policies for public health, safety, and welfare should receive priority.

6.5 Aids to Navigation: The continued and timely maintenance of any buoys, beacons, signs, or other aids to navigation needed to maintain ease and safety of navigation to, from, and through the Harbor Management Area should be encouraged and supported. It should be recognized that shallow water depths and potential obstructions to navigation exist within the HMA and that local boating knowledge of conditions in the HMA is important for ensuring safe navigation to, from, and through the HMA. (See policies 7.4 and 9.2.)

6.6 Mitigating Flood and Erosion Hazards: All appropriate measures to reduce or avoid the potential impacts of flooding and erosion on, in, or contiguous to the Harbor Management Area should be encouraged and supported.

6.6.1 Conformance with applicable regulations and standards: All construction in designated flood and erosion hazard zones contiguous to the Harbor Management Area shall conform to applicable floodplain regulations and construction standards.

6.6.2 Repair of shore protection structures: Timely repair and maintenance of bulkheads and other shore protection structures needed to protect existing development from flooding and erosion should be encouraged and supported.

6.6.3 Careful planning of structural measures: Structural measures including, but not limited to, seawalls and riprap to stabilize the shoreline and/or protect infrastructural facilities, water-dependent uses, or existing inhabited structures from flooding and erosion should be carefully planned and constructed so that the application of these measures will not result in significantly adverse impacts on coastal resources, ecological functions, and other properties.

6.6.4 Use of nonstructural measures: The use of nonstructural measures to avoid unwise use of flood and erosion hazard areas should be encouraged and used wherever feasible except in those instances where structural measures are necessary and unavoidable for the protection of infrastructural facilities, water-dependent uses, or existing inhabited structures and where there is no feasible, less environmentally damaging alternative and where all reasonable mitigation measures and techniques have been provided to minimize adverse environmental impacts.

6.6.5 Coordinated approach to shore protection: To the extent practical and feasible, a coordinated, area-wide approach to the repair or development of structural shore protection measures needed to protect infrastructural facilities, water-dependent uses, or existing inhabited structures from flooding and erosion should be encouraged.

6.7 Removal or Identification of Obstructions to Navigation: Any obstruction or hazard to navigation in the Harbor Management Area should be removed or marked by suitable aids to navigation in the most timely manner by any duly appointed State of Connecticut harbor master with jurisdiction in the HMA or by any other responsible authority. Markers to identify obstructions or hazards to navigation should be placed in accordance with necessary State and Federal authorizations.

6.8 Removal of Abandoned and Derelict Vessels and Structures: In accordance with applicable laws and regulations, all derelict, abandoned, or deteriorated vessels and structures presenting a hazard or obstruction to persons, property, or navigation should be marked, as necessary, and removed from the Harbor Management Area or repaired, where feasible, in the most timely manner.

6.9 Maintaining Public Safety at Community Shoreline Areas: Community areas and facilities providing opportunities for access to the Harbor Management Area, including but not limited to the area of the Fenwick Pier, should be managed and maintained to provide for the safe and beneficial use and enjoyment of those areas and facilities. When considering any future expansion, enhancement, or new development of community water access facilities, consideration should be given to any issues that may affect the safety of facility users.

6.10 Restricted Swimming Areas: Pursuant to the procedure established in Section 15-121-A5 of the Connecticut Boating Safety Regulations, the Borough of Fenwick and any resident or association of the Borough may apply to the Connecticut Commissioner of Environmental Protection for permission to place markers to designate a restricted swimming area in the Harbor Management Area. Any areas so designated should be of an appropriate size needed to maintain safe and enjoyable swimming use and not unreasonably interfere with other beneficial uses of the HMA. No vessel shall be operated within such markers nor shall any vessel be operated at greater than steorage speed within 100 feet of such markers in accordance with Section 15-121-B12 of the Connecticut Boating Safety Regulations.

A restricted swimming area should be maintained in the nearshore area immediately west of the Federal west jetty at the mouth of the Connecticut River in accordance with authorization provided by the State of Connecticut. (See Figure 4-2.) The Borough may consider the need for restricted swimming area designation at other locations within the HMA, including the area of the Fenwick Pier.

6.11 Supporting Emergency Response Capabilities: To the extent practical, facilities and services to support effective response to emergencies on, in, or contiguous to the Harbor Management Area, including water access areas to accommodate emergency vessels, should be provided.

GOAL 7: RECREATIONAL USE

Provide opportunities for beneficial recreational use of the Fenwick Harbor Management Area and shoreline, consistent with the carrying capacity of the HMA and shoreline to support that use without any significant adverse impacts on environmental quality and the public's health, safety, welfare, and enjoyment.

POLICIES:

7.1 Boating Uses: Beneficial opportunities for recreational boating and boating-related uses of the Harbor Management Area, including opportunities for boat mooring and

anchoring consistent with the Public Trust Doctrine and Borough goals for environmental conservation and enhancement, should be encouraged and supported.

7.2 Boating Facilities: It should be recognized that public and commercial water-dependent facilities of sufficient capacity for supporting all recreational boating activities in the Harbor Management Area are established nearby the HMA in the marine commercial districts of the Town of Old Saybrook. Those facilities provide opportunities for boat docking, launching, storage, maintenance, and repair, and provide other services for recreational boaters using the HMA, including vessel waste pump-out service. (See policy 9.1.)

7.3 Nonboating Uses: Beneficial opportunities for nonboating recreational use of the HMA and shoreline, including opportunities for swimming, walking, nature observation, fishing, enjoyment of water views, and other beneficial activities consistent with Borough goals for environmental conservation and enhancement, should be encouraged and supported.

7.4 Aids to Navigation: The continued and timely maintenance of any buoys, beacons, signs, or other aids to navigation needed to maintain ease and safety of navigation to, from, and through the Harbor Management Area should be encouraged and supported. It should be recognized that shallow water depths and potential obstructions to navigation exist within the HMA and that local boating knowledge of conditions in the HMA is important for ensuring safe navigation to, from, and through the HMA and beneficial recreational use of the HMA. (See policies 6.5 and 9.2.)

7.5 Designation of Navigation Fairways: Where necessary, specific water areas to be kept free of obstructions may be designated as navigation fairways by the Harbor Management Commission in consultation with any duly appointed State of Connecticut harbor master with jurisdiction in the Fenwick Harbor Management Area. The purpose of any navigation fairway designated in the HMA should be to ensure safe passage of recreational vessels to, from, through, and alongside areas of boating activity in the HMA.

7.6 Mooring Locations: The location and placement of all mooring tackle in the Harbor Management Area should be carefully planned and regulated in a manner that provides for safe and equitable distribution of individual-private mooring locations, including any locations that may be designated in South Cove and Long Island Sound.

7.6.1 Regulation of mooring locations: To provide for adequate navigation access for recreational vessels, for the safety of persons and property, for beneficial use of the Harbor Management Area, and protection of environmental quality, it is the responsibility of any duly appointed State of Connecticut harbor master with jurisdiction in the

Fenwick Harbor Management Area to approve any and all locations in the HMA. The Harbor Master shall issue a permit for each approved mooring location. The issuance of mooring permits and placement of all mooring tackle shall be in accordance with procedures established by the Harbor Management Commission and in accordance with applicable State and Federal laws and regulations.

- 7.6.2 **Number and position of mooring locations:** It should be recognized that opportunities for placement of boat moorings in the Harbor Management Area are limited by such conditions as shallow water depths in South Cove, exposure to wind and waves in Long Island Sound, the presence of valuable coastal resources including any submerged aquatic vegetation (SAV) that may be found in the Cove, and the lack of waterfront facilities for access to mooring locations.

Determination of the precise number and position of any and all mooring locations in the HMA, including any location in South Cove and Long Island Sound, should be based on careful consideration of:

- 1) water depths and bottom conditions;
- 2) the availability of suitable on-land access areas to serve the moorings; and
- 3) the need to achieve the most efficient use of limited mooring space without adversely affecting navigation safety or environmental resources such as but not limited to SAV.

Generally, mooring locations should not be permitted in any areas of significant SAV. If it is determined that such areas cannot be avoided, mooring tackle with marine embedment ("helix") anchors should be considered to protect SAV.

- 7.6.3 **South Cove Mooring Area:** A seasonal mooring area is designated in South Cove. The general boundaries of the South Cove mooring area are shown on Figure 4-2. Use of the mooring area will be consistent with the capacity of the area to accommodate moored vessels without undue impacts on public safety and environmental quality. Mooring locations will be managed by the Harbor Management Commission and State of Connecticut Harbor Master having jurisdiction in the Fenwick Harbor Management Area, taking into consideration the generally shallow water depths, obstructions to navigation, traditional water uses, and lack of waterfront facilities on the Fenwick shoreline to support access to the mooring area. The South Cove mooring area shall not be considered a "Harbor of Refuge" providing safe haven for vessels in time of storm. It is recognized that North Cove nearby in the harbor management jurisdiction of the Town of Old Saybrook provides a designated harbor

of refuge that may be used by boaters navigating the Connecticut River and Long Island Sound in the vicinity of the Fenwick HMA.

7.7 Anchoring Locations: It should be recognized that opportunities for anchoring in the HMA are limited by such conditions as shallow water depths in South Cove, exposure to wind and waves in Long Island Sound, and the presence of valuable coastal resources, and that local boating knowledge of conditions in the HMA is important for ensuring safe anchoring in the HMA. Anchoring of vessels in the HMA should not cause an obstruction or hazard to navigation nor any significantly adverse impacts on environmental quality or other public uses or purposes within the HMA. All anchoring of vessels shall be subject to any order of any duly appointed State of Connecticut harbor master with jurisdiction in the Fenwick HMA as needed to maintain the safe and efficient operation of the HMA.

7.7.1 Transient Anchorage Area: An anchorage area that may be used by transient vessels is designated west of the Federal west jetty. The general boundaries of the transient anchorage area are shown on Figure 4-2. Use of the transient anchorage area will be consistent with the capacity of the area to accommodate short-term anchoring (not to exceed 24 consecutive hours) of recreational vessels without adverse impacts on public safety and environmental quality. Use of the transient anchorage area shall not cause any undue interference with beneficial use of the duly permitted Lynde Point restricted swim area. The transient anchorage area shall not be considered a “Harbor of Refuge” providing safe haven for vessels in time of storm. It is recognized that North Cove nearby in the harbor management jurisdiction of the Town of Old Saybrook provides a designated harbor of refuge that may be used by boaters navigating the Connecticut River and Long Island Sound in the vicinity of the Fenwick HMA. It is also recognized that there are no waterfront facilities on the Fenwick shoreline available for use by boaters anchoring in the transient anchorage area.

7.8 Boating Education: Local training and educational programs to increase boating skills and awareness of navigation conditions, laws, and responsibilities in and near the Harbor Management Area as provided by agencies and organizations offering State-certified training and educational programs should be encouraged and supported.

7.9 Personal Watercraft Use: The operation of all personal watercraft in the Harbor Management Area shall be in accordance with all applicable boating laws and regulations, including noise levels established in Section 15-129 of the Connecticut General Statutes.

GOAL 8: PLANNING AND REGULATION OF LAND USE AFFECTING THE HARBOR MANAGEMENT AREA

Plan for and regulate Borough land use in a manner consistent with the carrying capacity of the natural and man-made environment to support that use, and in coordination with planning and regulation for use of the Fenwick Harbor Management Area.

POLICIES:

8.1 Recognition of Potential Land Use Impacts on the Harbor Management Area:

The significant influence that Borough land use may have on the condition of the Harbor Management Area should be recognized and considered in Borough land use decisions, including decisions of the Planning and Zoning Commission, Zoning Board of Appeals, Park Commission, and Historic District Commission.

8.2 Planning and Regulation of Borough Land Use: All development proposals affecting the Harbor Management Area should be carefully planned and regulated to mitigate any potentially significant impacts on beneficial uses and conditions in the Harbor Management Area.

8.2.1 Coordination between land use and harbor management planning and regulation: Planning and regulation of Borough land use should be undertaken in coordination with planning and regulation for beneficial use of the Harbor Management Area and conservation of the environmental quality associated with the HMA.

8.2.2 Application of appropriate land use policies and zoning regulations: Borough land use policies and zoning regulations should recognize the value and sensitivity of the Borough's coastal resources.

8.2.3 Evaluate potential resource impacts: The potential impacts on natural coastal resources that may be directly or indirectly caused with development proposals affecting the Fenwick peninsula should be carefully evaluated.

8.3 Recognition of Carrying Capacity for Land Use: It should be recognized that the Fenwick peninsula has a limited capacity (carrying capacity) to support use and development without the occurrence of significantly adverse impacts on coastal resources in and adjoining the Harbor Management Area. New or expanded uses and development on the Fenwick peninsula that exceed the carrying capacity of the natural and man-made environment to support such uses and development in an environmentally sound manner should be avoided.

8.4 Coordination Among Borough Boards and Commissions: The actions of the Harbor Management Commission and the actions of the Fenwick Planning and Zoning Commission and other Borough boards and commissions influencing Borough land use should be coordinated to the extent necessary to ensure the most effective implementation of the Borough's Plan of Conservation and Development and Harbor Management Plan.

8.5 Avoiding and Eliminating Any Unauthorized Encroachments along the Shoreline and/or into Navigable Water: No structures (including docks, piers, floats, pilings, seawalls, and moorings) or other development shall be placed, nor any other work (such as dredging or filling) undertaken on, in, or contiguous to the Harbor Management Area without necessary local, State, or Federal authorization. Any unauthorized work including structures and development on, in, or contiguous to the HMA should be considered unauthorized encroachments and eliminated or otherwise corrected.

8.6 Coordination Between the Harbor Management Plan and the Plan of Conservation and Development: The Harbor Management Plan and the Fenwick Plan of Conservation and Development should be administered as complementary documents with consistent goals and policies respecting use and conservation of the Borough's coastal resources. Together, the Harbor Management Plan and Plan of Conservation and Development should serve as the Borough's principal guides for land and water use on, in, and contiguous to the Harbor Management Area.

8.7 Stabilization of Waterfront Properties: Shore protection measures should be carefully planned and constructed to protect shoreline areas and facilities from shoreline erosion, to support beneficial shoreline use and development, and to minimize adverse impacts on natural resources, ecological functions, and nearby properties.

8.8 Planning for Conservation and Beneficial Use of the Grove Area on South Cove: The Grove area adjoining South Cove should be designated and managed by the Borough as an open space/conservation area for the purpose of preserving natural resources and providing appropriate opportunity for passive recreational use. Use of the Grove area, including the former debris disposal site used by the Borough, should be in accordance with an open space management plan prepared and adopted by the Borough. The open space plan should provide for: 1) preservation and enhancement of existing natural features and ecological values, including values related to plant and wildlife habitat, water quality, and scenic quality; and 2) public access to South Cove consistent with the capacity of the natural environment to support public use in a safe and environmentally sound manner.

The open space plan should be developed through a cooperative effort involving all Borough boards, commissions, and organizations with interests and responsibilities affecting land use and conservation of natural resources. The plan

should provide opportunity for public use of the area for passive recreational activities consistent not only with natural capacities, but also with all applicable Borough ordinances and the conservation easement administered by the Lynde Point Land Trust.

The open space plan should identify the passive recreational uses permitted in the open space/conservation area, including bird watching, general nature observation, ecological study, and enjoyment of scenic views of South Cove. The plan should identify the locations of: a pedestrian trail to be maintained from the parking area of the Fenwick Golf Course to the South Cove shoreline; an area for scenic views of South Cove; and two designated parking spaces to be reserved in the golf course parking area for open space users. The plan should also specify appropriate signage to mark the trail and the designated parking spaces and to display rules and regulations for use of the area. In addition, the plan should include provisions for monitoring use of the open space/conservation area to ensure that any significant adverse impacts on natural resources and/or nearby areas are avoided or eliminated. (See goal 10.)

8.9 Planning for Future Beneficial Use of Any Excess Federal Properties on Lynde

Point: The Borough, acting through the Board of Burgesses and all boards, commissions, and organizations with interests and responsibilities affecting land use and conservation of natural resources, should assume a leadership role in any planning concerning the future disposition of Federal properties on Lynde Point, including properties currently associated with the Lynde Point lighthouse. Any future use of these properties should be consistent with the capacity of the adjoining land and water areas to support that use in an environmentally sound manner. (See Goal 10.)

8.10 Establishing the Location of the Six-foot Strip of Borough-owned Land

Adjoining South Cove: To the extent that planning and regulation of waterfront land use may be affected by the precise location of the strip of land six feet wide owned by the Borough above the high water line along the Borough's South Cove shoreline, the waterward boundary of the strip, absent any other clarification, should be determined based on the current location of the Mean High Water line as defined by the U.S. Army Corps of Engineers and applied for purposes of the Connecticut General Statutes and regulatory programs administered by the Connecticut DEP's Office of Long Island Sound Programs. The Harbor Management Commission will provide appropriate assistance to affected property owners, as necessary, for determining the location of the six-foot strip based on the current MHW line.

GOAL 9: WATER-DEPENDENT USES

Support, maintain, and where practical improve, water-dependent uses that enhance the quality of the Fenwick Harbor Management Area and the quality of life in the Borough.

POLICIES:

9.1 Water-Dependent Facilities: The continued operation and, where feasible, enhancement of the Borough's water-dependent facilities, including the Fenwick Pier and beach recreation areas, should be encouraged and supported. The carefully planned expansion of the Borough's water-dependent facilities may be encouraged and supported where consistent with Borough needs, environmental conservation and enhancement objectives, Borough zoning regulations and all other applicable Borough ordinances, the conservation easement administered by the Lynde Point Land Trust, and all applicable provisions of the Harbor Management Plan. It should be recognized that public and commercial water-dependent facilities of sufficient capacity for supporting all recreational boating activities in the Harbor Management Area are established nearby the HMA in the marine commercial districts of the Town of Old Saybrook. (See policy 7.2.)

9.2 Navigation Structures and Facilities: The continued operation and timely maintenance of necessary navigation structures and facilities in and adjoining the Harbor Management Area, including aids to navigation maintained by the U.S. Coast Guard and the Connecticut River Federal Navigation Project maintained by the U.S. Army Corps of Engineers, should be encouraged and supported as necessary to maintain ease and safety of navigation. (See policies 6.5 and 7.4.)

GOAL 10: ACCESS TO THE HARBOR MANAGEMENT AREA

Provide beneficial opportunities for access to the Fenwick Harbor Management Area for active and passive recreational uses by Borough residents and visitors, consistent with the carrying capacity of the HMA to support that access in an environmentally sound manner.

POLICIES:

10.1 Use of Public Water-Access Right-of-Ways: Existing water access areas, including water access right-of-ways at Old Fenwick Road (also known as the Park Avenue extension) and the Route 154 causeway, should be utilized for beneficial access to the Harbor Management Area by Borough residents and visitors. Public use of these areas should be consistent with available parking and the capacity of the areas to support public use without the occurrence of unacceptable adverse environmental impacts. Launching of trailered boats should not be permitted from these water-access right-of-ways.

10.2 Right of Navigation: The public's right of navigation and use of the land and water resources seaward of the mean high water line in the Harbor Management Area

should be recognized and protected, consistent with the Public Trust Doctrine, the riparian/littoral rights of waterfront property owners, and Borough goals and policies for conservation and enhancement of natural resources.

10.3 Balancing Littoral/Riparian Rights with the Public's Rights for Use of Navigable Water: The littoral/riparian rights of the owners of land contiguous to the Harbor Management Area, including the right of access to the water, the right of accretions and relictions, and the right to other improvements and useful purposes, should be protected where the exercise of these rights is carried out in a reasonable manner without substantial impairment of the public's interest in or use of the Public Trust area.

10.4 Boat Mooring and Anchoring Opportunities: Opportunities for boat mooring in the Harbor Management Area should be available on a fair and equitable basis in accordance with State regulations and duly established Borough provisions to provide for adequate navigation access, the safety of persons and property, beneficial use of the HMA, and protection of environmental quality.

It is recognized that anchoring of vessels may take place throughout the HMA in accordance with the public's rights for use of navigable water. It is also recognized that opportunities for mooring and anchoring in the HMA are limited by such conditions as shallow water depths in South Cove, exposure to wind and waves in Long Island Sound, the presence of valuable coastal resources, and the lack of waterfront facilities on the Fenwick shoreline to support access to and from mooring and anchoring locations. Further, it is recognized that local boating knowledge of conditions in the HMA is important for ensuring safe anchoring in the HMA. (See policies 7.6 and 7.7.)

10.5 Access to the Harbor Management Area from the Fenwick Pier: The Fenwick Pier should be managed and maintained as a water access facility providing safe and enjoyable opportunities for beneficial access to the Harbor Management Area. Use of the pier for swimming, limited boating access, and enjoyment of water views should be in accordance with all applicable Borough ordinances, restrictive deed covenants concerning use of the property, and the capacity of the structure and surrounding areas to support recreational use in a safe and environmentally sound manner. Any work needed to maintain and/or repair the pier to ensure continued beneficial use and enjoyment should be in accordance with specific plans prepared by the Borough and any necessary State and Federal authorizations for work seaward of the high tide line.

10.6 Access to the Harbor Management Area from the Grove Area: The Grove area, including the former debris disposal site used by the Borough, should be designated and managed by the Borough as an open space/conservation area. Use and management of the area should be according to an open space management plan

prepared and adopted by the Borough to preserve and enhance existing natural features and ecological values and to provide opportunity for public access to South Cove for passive recreational activities. (See policy 8.8.) Passive recreational uses to be permitted in the open space area should include bird watching, general nature observation, ecological study, and enjoyment of scenic views of South Cove.

Permitted uses should be consistent with all applicable Borough ordinances and the conservation easement administered by the Lynde Point Land Trust. Opportunities for public access should be consistent with the capacity of the natural environment to support public use in a safe and environmentally sound manner.

A pedestrian trail should be established and maintained along a suitable route connecting the parking area of the Fenwick Golf Course with the South Cove shoreline. An area for scenic views of South Cove should be provided. In addition, two designated parking spaces should be reserved in the golf course parking area for open space users. Use of the open space/conservation area should be in accordance with specific rules and regulations adopted by the Borough to ensure preservation and enhancement of natural resources and safe and enjoyable public use. Appropriate signage should be used to mark the trail and designated parking spaces and to display rules and regulations for use of the open space/conservation area.

Use of the open space/conservation area should be carefully monitored to identify any significant adverse impacts that use of the area may have on natural resources and/or nearby areas. Appropriate actions should be taken to ensure that any such impacts are avoided or eliminated. (See policy 8.8.)

10.7 Access to the Harbor Management Area from Any Excess Federal Properties

on Lynde Point: Any future access to the Harbor Management Area from any future excess Federal properties on Lynde Point should be carefully planned and managed, to the satisfaction of the Board of Burgesses, to ensure consistency with the capacity of the adjoining land and water areas to support that use in an environmentally sound manner. (See policy 8.9.)

10.8 Access to the Harbor Management Area from the Fenwick Yacht Club Site:

Beneficial opportunities for restoring water access facilities at the site of the former Fenwick Yacht Club on South Cove should be carefully evaluated and may be pursued in accordance with detailed plans developed by the Harbor Management Commission. Such plans should be formulated with input from potentially affected parties and duly approved by the Board of Burgesses following a careful review of environmental and economic costs and benefits by all Borough boards and commissions with relevant authorities. Any water access facilities developed in this location should be consistent with the capacity of the adjoining land and water areas to support those facilities in an environmentally sound manner.

10.9 Access Through Conservation Easements: All plans and facilities for access to the Harbor Management Area are to be consistent with the requirements of all conservation easements duly established for the purpose of conserving natural resources and ecological functions, including the conservation easements administered by the Lynde Point Land Trust. (See policy 4.10.)

10.10 Planning, Design, and Review of Water Access Structures: All public and private floats, docks, piers, and other in-water structures to provide reasonable access to the Harbor Management Area for boating and other beneficial purposes must conform with all applicable Borough, State, and Federal laws, regulations, and ordinances including the Zoning Regulations and the Historic District Regulations of the Borough of Fenwick. All proposals for water access structures should be carefully planned, designed, and reviewed to mitigate any potentially significant adverse impacts that would otherwise affect beneficial uses and conditions on, in, or adjoining the HMA, including any adverse impacts on the existing scenic character of the Borough's shoreline (see policy 4.7). Appropriate conditions should be included in the State and/or Federal permits for approved structures, as necessary, to avoid, reduce, or otherwise mitigate any significant adverse impacts associated with construction, use, and maintenance of permitted structures. Those conditions and other pertinent information should be included in a Borough inventory of in-water structures on, in, or contiguous to the HMA. (See responsibility no. 16 of the Harbor Management Commission in Chapter Five of the Harbor Management Plan.) For the purpose of this policy it is recognized that reasonable access to navigable water does not necessarily mean access during all stages of the tide cycle nor access ideally suited for a vessel of a particular length and draft.

10.10.1 Review by the Harbor Management Commission: All applications submitted to State and/or Federal agencies for authorization to place temporary or permanent water-access structures in the Fenwick HMA, including but not limited to a) applications to the Connecticut Department of Environmental Protection's Office of Long Island Sound Programs (DEP OLISP) for individual permits and Certificates of Permission and b) General Permit registration forms for "4/40 docks" submitted to the DEP OLISP, should be concurrently submitted by the applicant to the Fenwick Harbor Management Commission. Said applications and registration forms will be reviewed by the HMC for consistency with the *Borough of Fenwick Harbor Management Plan*. Such review shall be in accordance with the "Harbor Management Review Process" established by the Plan. (See responsibility no. 6 of the Harbor Management Commission in Chapter Five of the Harbor Management Plan.) The results of the HMC's review will be transmitted by the HMC to the appropriate State and/or Federal agency with authority to approve or deny the application. In conducting its review, the HMC may hold a duly noticed public meeting to hear comments provided by the applicant and other interested parties concerning the application.

10.10.2 **Applicant's responsibility to show no significant impacts:** In the course of the Fenwick HMC's review of an application for consistency with the *Borough of Fenwick Harbor Management Plan*, it should be the responsibility of the applicant to demonstrate that the proposed activity will: 1) not unreasonably interfere with public navigation, including navigation by hand-paddled craft such as canoes and kayaks; 2) not have a significant adverse impact on natural coastal resources; and 3) not unreasonably interfere with the natural and traditional scenic quality of the Fenwick HMA nor with public views of the HMA and shoreline.

10.10.3 **“Set-back” distances:** All floats, docks, piers, and other in-water structures to reach navigable water should be set back a sufficient distance from the boundaries of designated and normally used navigation channels in the HMA and from any mooring areas, anchoring areas, and fairways that may be designated in the HMA. This “set-back” distance should be of sufficient length to ensure that the in-water structures and any vessels docked at such structures do not unreasonably interfere with navigation or beneficial use of mooring and anchoring areas.

Appropriate “set-back” distances may be determined on a case-by-case basis by the Harbor Management Commission based on a review of existing conditions in the HMA and along the shoreline. In the absence of compelling reasons to the contrary, however, all in-water structures, including any vessel docked or anchored at such structures, should be set back no less than 30 feet from the nearest boundary line of the nearest designated and normally used channel and from the nearest boundary of any designated mooring area, anchoring area, and fairway.

10.10.4 **Avoidance of adverse impacts:** Construction, use, and maintenance of floats, docks, piers, and other in-water structures to reach navigable water should not have any significant adverse impact on natural resources, scenic quality, and navigation, including navigation by hand-paddled craft such as canoes and kayaks.

10.10.5 **Minimal length and mass:** To avoid adverse impacts on natural resources, scenic quality, and navigation, the length and mass of all floats, docks, piers, and other in-water structures to reach navigable water should be minimized to the extent reasonable and practical. The appropriate extent to which in-water structures should extend waterward to reach navigable water should be evaluated on a case by case basis by the Harbor Management Commission in the course of the Borough's “Harbor Management Review Process.” (See responsibility no. 6 of the Harbor Management Commission in Chapter Five of the Harbor Management

Plan.) Such case by case evaluation should take into consideration the littoral rights of waterfront property owners; existing conditions such as distance from shore to navigable water; traditional public uses of the waters in the vicinity of the proposal; the presence of sensitive coastal resources such as tidal wetlands, intertidal flats, and shellfish beds; and other pertinent conditions.

Fixed pier structures that would extend waterward of the Mean Low Water line are discouraged. Access ramps, and floats should be removed on a seasonal basis. All structures should be consistent in scale, appearance, and materials with the existing scenic character of the Borough shoreline and should be designed to minimize visual impact. Consistent with the Borough's interest in maintaining the existing scenic character of the shoreline, structures that would be built into docks and piers for the purpose of lifting or hoisting boats out of the water are discouraged to the extent such structures would significantly increase the mass and visual impact of dock and pier structures and/or allow for use of a larger boat than would otherwise be accommodated in the area of the particular structure.

- 10.10.6 **Extension of existing structures discouraged:** Any proposals for extension of the authorized length and/or mass of existing, duly permitted water-access structures are generally discouraged unless such extension is shown to be necessary for the purpose of avoiding adverse impacts on natural coastal resources or for the purpose of providing other demonstrated public benefits. In the absence of compelling reasons to the contrary, including avoidance of adverse impacts on natural coastal resources and providing other public benefits, any such proposals for extension of existing water-access structures will be considered inconsistent with the *Borough of Fenwick Harbor Management Plan*.
- 10.10.7 **Shared use:** Construction of floats, docks, piers, and other in-water structures to reach navigable water by groups of waterfront property owners for shared use should be encouraged as a preferred alternative to the construction of single structures for use by individual owners.
- 10.10.8 **Inspection:** All floats, docks, piers, and other in-water structures to reach navigable water should be subject to inspection to ensure conformance with, and continuing adherence to, any terms and conditions associated with the approval of such structures.
- 10.10.9 **“As built” surveys:** To reduce potential adverse impacts on navigation resulting from the construction of new or extended in-water structures and to ensure compliance with any conditions included in the State and/or Federal permits for such structures, the permittee should be

required, as a permit condition, to provide an “as-built” survey or other documentation following completion of the permitted construction.

10.10.10 **Maintenance:** No float, dock, pier, or other in-water structure to reach navigable water should be allowed to deteriorate to the point that a hazard or inconvenience to navigation or condition adversely affecting public safety and/or environmental quality may result. All in-water structures authorized by State and/or Federal permits in the HMA must be maintained in accordance with the maintenance conditions specified in those permits. Any observed deterioration of a State- or Federally authorized in-water structure affecting or potentially affecting navigation and/or environmental quality in the HMA should be brought to the attention of the appropriate State and/or Federal agency for appropriate enforcement action. All available remedies may be considered to achieve removal or repair of any abandoned structure or any structure deteriorated to the extent that navigation and/or environmental quality is adversely affected. (See responsibility no. 16 of the Harbor Management Commission in Chapter Five of the Harbor Management Plan.)

10.10.11 **Littoral owners:** Permits for the placement of docks or other water access structures below the High Tide Line should be granted only to: a) those who possess the littoral right to place such structures; or b) those who have received a specific written legal authorization from the affected littoral property owner to do so.

10.11 **Littoral Rights for Access to Navigable Water:** It is recognized that the owners of land contiguous to the Harbor Management Area have certain littoral rights associated with that ownership, including the right of reasonable access to navigable water, the right of accretions, and the right to other improvements and useful purposes. It is also recognized that those rights must be exercised in a manner that does not unreasonably interfere with the public's right of free navigation or with the public interest in protecting natural coastal resources and the scenic quality associated with the Connecticut River and its tidelands.

10.11.1 **Avoiding conflicts between littoral owners:** Waterfront property owners should exercise their littoral rights in a manner that does not interfere with the littoral rights of other waterfront property owners

GOAL 11: COMMUNITY SUPPORT, EDUCATION, AND PARTICIPATION

Develop and maintain community awareness of Harbor Management Area resources and management concerns, and maintain a base of community support for implementing the Fenwick Harbor Management Plan.

POLICIES:

11.1 Community Forum: A continuing forum for the expression and discussion of all community concerns related to the use and conservation of Harbor Management Area resources and implementation of the Harbor Management Plan should be provided.

11.2 Special Programs and Events: Special programs and events to increase awareness of Harbor Management Area resources and support for management efforts may be encouraged and supported, along with community participation in such programs and events.

11.3 Educational and Scientific Use: Educational and scientific use of the Harbor Management Area should be encouraged and supported in suitable locations, consistent with the carrying capacity of the HMA to support that use in a safe and environmentally sound manner.

GOAL 12: PRESERVATION OF COMMUNITY CHARACTER

Preserve the Borough's existing character and beneficial quality of life associated with the Connecticut River, South Cove, and Long Island Sound at Fenwick.

POLICIES:

12.1 Preservation of Cultural Resources: Resources with historic significance on, in, or contiguous to the Harbor Management Area should be identified and preserved in accordance with the purpose of the Fenwick Historic District. Resources with other cultural significance, including scientific and archaeological significance, should also be identified and preserved.

12.2 Preservation of Residential Character: Existing and future uses and development on, in, or contiguous to the Harbor Management Area should not adversely affect the character of Fenwick's residential areas.

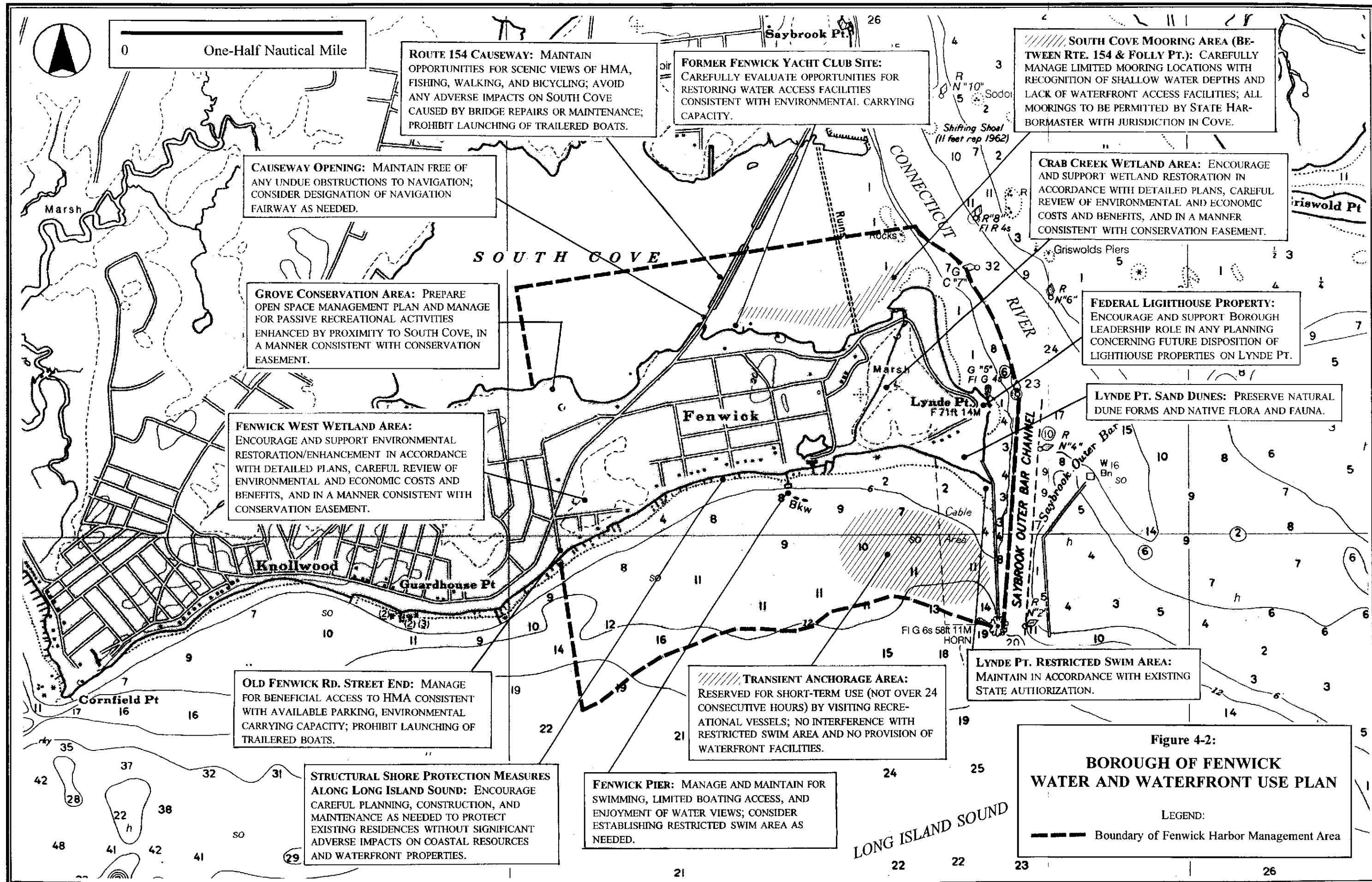
GOAL 13: RESPONSE TO CHANGING CONDITIONS

Monitor conditions on, in, or contiguous to the Harbor Management Area and consider any amendments/revisions to the Harbor Management Plan and supporting Borough ordinances that may be needed to respond to changing conditions and circumstances.

POLICIES:

13.1 Annual Review: An annual review of Harbor Management Area and shoreline conditions and of the status of implementing the provisions of the Harbor Management Plan should be conducted by the Harbor Management Commission with input from interested citizens, agencies, and organizations.

13.2 Amendment/Revision of the Harbor Management Plan and Applicable Borough Ordinances: The Harbor Management Plan and/or Borough ordinances for implementing the Plan should be duly amended/revised, as necessary, with input from interested citizens, agencies, and organizations.



Chapter Five: Responsibilities and Recommendations for Plan Implementation

This chapter contains responsibilities and recommendations for implementing the Borough of Fenwick's harbor management goals and policies established in Chapter Four of the Harbor Management Plan. Some of those goals and policies can be realized in the near future; others will require a longer period of time to achieve. Also, some conditions on, in, and contiguous to the Fenwick Harbor Management Area (HMA) may change over time, along with public understanding of those conditions. As a result, the provisions of the Harbor Management Plan may require updating or amendment in the future. It is therefore important that the Borough's harbor management efforts be considered part of an on-going process; those efforts should be coordinated, as necessary, with the actions of all agencies with programs and authorities that affect the HMA, including the Borough's boards and commissions and relevant agencies of the Town of Old Saybrook, State of Connecticut, and Federal Government.

The responsibilities and recommendations in this chapter are presented with respect to:

- 1) Fenwick Board of Warden and Burgesses;**
- 2) Fenwick Harbor Management Commission;**
- 3) Other Fenwick Commissions and Organizations;**
- 4) State of Connecticut Harbor Master;**
- 5) State and Federal Agencies with Harbor Management Authority; and**
- 6) Borough Residents.**

The responsibilities and recommendations are summarized as Figure 5-1. The order in which the responsibilities and recommendations are presented does not imply priority.

Fenwick Board of Warden and Burgesses

The Board of Warden and Burgesses, as the legislative body of the Borough of Fenwick, should provide leadership and support for implementing the Harbor Management Plan. The Warden, as the Borough's Chief Executive Officer, should encourage an active, ongoing Borough role for managing the Harbor Management Area

and shoreline in accordance with the Fenwick Harbor Management Ordinance and the legislative intent of the Connecticut Harbor Management Act.

The Board of Warden and Burgesses should contribute to implementation of the Harbor Management Plan through:

1. Adoption of the Harbor Management Plan and any future Plan amendments needed to respond to changing conditions and circumstances.

Section 22a-113m of the Connecticut General Statutes specifies the procedure for approval and adoption of municipal harbor management plans. In accordance with this procedure, the Fenwick Harbor Management Plan and any future amendments to the Plan must be reviewed by the U.S. Army Corps of Engineers, approved by the Connecticut commissioners of Environmental Protection and Transportation, and then adopted by the Board of Warden and Burgesses before becoming effective.

So that the Borough of Fenwick may plan and manage use of its Harbor Management Area and shoreline to the maximum extent permissible under Borough, State, and Federal law, the Board of Warden and Burgesses should adopt the Harbor Management Plan to serve as the Borough's principal guide (in coordination with the Fenwick Plan of Conservation and Development) for beneficial use of the HMA and protection of environmental quality in the HMA. Any appropriate Plan amendments that may be prepared by the Harbor Management Commission in the future should be adopted by the Board following the same procedure used to adopt the Plan. Adoption of the Plan and any future Plan amendments by the Board should be noted in the Borough's Harbor Management Ordinance.⁸

2. Amendment of Borough ordinances, as necessary, to achieve the Borough's goals and policies for harbor management.

The Board of Warden and Burgesses is responsible for enacting and amending all Borough ordinances, including the Borough of Fenwick Harbor Management Ordinance which established the Harbor Management Commission and directs the Commission to prepare the Borough's Harbor Management Plan. The Board may amend the Harbor Management Ordinance and other Borough ordinances affecting the Harbor Management Area, as necessary, to achieve the Borough's harbor management goals and policies established in the Harbor Management Plan. In this

⁸ The procedure for the Board of Burgesses to follow in adopting the Harbor Management Plan and Plan amendments is specified in Section 22a-113m of the Connecticut General Statutes which states that a municipality's harbor management plan and any modification to the Plan "... may be adopted by ordinance by the legislative body of each municipality..." "Adopted by ordinance," however, should not be confused with "adopted as an ordinance." [Emphasis added.] The Fenwick Harbor Management Plan and future Plan amendments need not be published and adopted as an ordinance. The "ordinance" by which the Board of Burgesses should adopt the Plan and any future Plan amendments should be short and simple — more in the form of a resolution than an ordinance, but referenced in the Borough's existing Harbor Management Ordinance.

regard, the Board should consider proposed ordinance amendments that may be suggested by the Harbor Management Commission for implementing certain provisions of the Plan. Any amendments to Borough ordinances that pertain to the operation of vessels must be submitted to the Connecticut Department of Environmental Protection for review and approval as required by Section 15-136 of the Connecticut General Statutes.

3. Encouragement and support of special projects to achieve the Borough's harbor management goals and policies.

The Board of Warden and Burgesses, through its decisions affecting the capital and operating budgets of Borough agencies and the funding of special projects, may encourage and support implementation of proposed projects and other initiatives for environmental enhancement and harbor management that may be recommended in the Harbor Management Plan and the Borough's Plan of Conservation and Development. Examples include projects described in Chapter Four of the Harbor Management Plan for restoration and enhancement of natural coastal resources and improvement of Borough-owned properties providing opportunities for visual and physical access to the Harbor Management Area.

4. Coordination for implementing the Harbor Management Plan.

The Board of Warden and Burgesses should provide leadership for achieving Fenwick's harbor management goals and policies established in the Harbor Management Plan as well as the goals and policies in the Borough's Plan of Conservation and Development. The Board should work to ensure that all Borough commissions, including the Harbor Management Commission, actively pursue implementation of the Harbor Management Plan in the most coordinated and efficient manner, in accordance with the established mandates of each commission. In this regard, the Board should encourage and support a coordinated effort by the Harbor Management Commission, Planning and Zoning Commission, Park Commission, Historic District Commission, and other involved agencies to prepare and implement an open space management plan for the Grove area adjoining South Cove. This planning effort should include establishment of appropriate rules, regulations, and other provisions to maintain safe and environmentally sound use of the Grove area for passive recreational use, including access to South Cove for bird watching, general nature observation, ecological study, and enjoyment of scenic views.

5. Consideration for establishing a Harbor Management Account (within the Borough's General Fund) to be used exclusively for harbor management purposes.

Section 22a-113s of the Connecticut General Statutes enables a municipality with an adopted harbor management plan to establish a special fund to be used specifically for harbor management purposes. That section also enables the Borough to establish fees for any activity within the scope of the Harbor Management Plan and specifies that such fees be deposited into the special fund. In accordance with its

responsibilities for the finances of the Borough, the Board of Warden and Burgesses may consider and approve the establishment of a special Borough account (within the Borough's General Fund) to be used for waterfront improvement and harbor management purposes. Those purposes may be recommended by the Harbor Management Commission subject to necessary approvals from the Board of Warden and Burgesses.

Fenwick Harbor Management Commission

In accordance with its powers, duties, and responsibilities authorized by the Connecticut Harbor Management Act (Sections 22a-113k through 22a-113t of the Connecticut General Statutes) and the Fenwick Harbor Management Ordinance, the Harbor Management Commission may carry out all of the relevant powers and duties granted to municipal harbor management commissions through the Harbor Management Act, as well as any other powers and duties that may be granted to the Commission by Borough ordinances.

The Harbor Management Commission is responsible for:

1. Planning and management of uses and activities on, in, and contiguous to the Harbor Management Area as authorized by Borough, State, and Federal law.

Consistent with its powers and duties authorized by the Connecticut General Statutes and established by ordinance in the Borough's Harbor Management Ordinance, the harbor Management Commission should carry out the Borough's most direct responsibilities for managing the Fenwick Harbor Management Area, including responsibilities for implementing the Harbor Management Plan.

Through implementation of the Harbor Management Plan and according to the legislative intent of the Connecticut Harbor Management Act, the Commission should work to continue to expand the Borough's role, relative to State and Federal authorities, for planning, managing, and regulating actions affecting the Fenwick HMA.

2. Ongoing coordination with Borough, State, and Federal agencies and organizations for waterfront improvement and harbor management.

The Harbor Management Commission should assist in the coordination of all public and private agencies and organizations with authorities or interests concerning the Harbor Management Area, including the agencies and organizations noted in Chapter Two of the Harbor Management Plan. The Commission should maintain regular communication and liaison with the various Borough commissions with relevant authorities or interests, including the Planning and Zoning Commission, Zoning Board of Appeals, Park Commission, and Historic District Commission, as well as the Harbor Management Commission of the Town of Old Saybrook. (See the later section on "Other Fenwick Commissions and Organizations.") The Commission should also maintain regular communication and liaison with the

Lynde Point Land Trust to ensure that all plans and facilities for access to the Harbor Management Area and for enhancement of environmental resources in and adjoining the HMA are consistent with the requirements of conservation easements administered by the Land Trust.

In addition, the Harbor Management Commission should maintain regular communication and liaison with various divisions and units of the Connecticut Department of Environmental Protection (DEP), U.S. Army Corps of Engineers, and other relevant State and Federal agencies, as necessary. (See the later section on “State and Federal Agencies with Harbor Management Authority.”)

The purpose of this communication and liaison should be to address matters affecting implementation of the Harbor Management Plan and, in general, to help advance the Borough's harbor management goals and policies.

3. Actions to ensure continued boating and navigation safety in the Harbor Management Area.

Acting in coordination with any duly appointed State of Connecticut harbor master with jurisdiction in the Fenwick Harbor Management Area and other responsible agencies as necessary, the Harbor Management Commission should support and promote boating and navigation safety in the Harbor Management Area. To help ensure continued boating and navigation safety, the Commission may:

- a. Prepare recommendations for Borough ordinances pertaining to boating safety,** waterfront use, and harbor management, as needed, and submit the recommendations to the Board of Burgesses for adoption.

Section 15-136 of the Connecticut General Statutes enables the Borough to adopt local regulations respecting the operation of vessels within the Harbor Management Area. In addition, Section 22a-113n of the Connecticut General Statutes enables the Borough to adopt ordinances to implement the Harbor Management Plan. Under this authority, the Commission may recommend Borough ordinance changes to address boating, navigation, waterfront use, and other concerns as needed, and provide those recommendations to the Board of Burgesses for consideration.

- b. Review aids to navigation in and near the Harbor Management Area.**

With assistance from the Harbor Master, the Commission may provide comments, as necessary, to the U.S. Coast Guard on the adequacy of Federal aids to navigation near the Harbor Management Area. Acting in coordination with the Old Saybrook Harbor Management Commission, the Commission may request maintenance of existing aids and placement of any additional Federal channel markers that may be necessary.

In addition, the Commission should review the proposed placement of any “private” (nonfederal) aids to navigation in the HMA. As necessary, the Commission may consider, recommend, and direct the placement (following

receipt of necessary State and Federal permits) of private aids to navigation that may be needed to maintain and improve navigation ease and safety in the HMA.

c. Designate navigation fairways as needed and ensure that designated fairways are kept free of obstructions.

Navigation fairways to be kept free of obstructions may be designated by the Commission, where necessary, to ensure safe passage of recreational vessels to, from, and alongside boating activity areas in the Harbor Management Area, including any docking and launching areas on the Borough's shoreline. The Commission should review proposed actions affecting the HMA to ensure that any designated navigation fairways are kept free of obstructions.

d. Evaluate the appropriate extent to which docks, floats, and piers should extend from shore to reach navigable water.

In accordance with the Borough's harbor management goals and policies established in Chapter Four of the Harbor Management Plan, review of any proposed in-water structures such as docks, floats, and piers should be conducted by the Commission taking into consideration: the littoral rights of waterfront property owners; the public's right for use and access to navigable water; existing conditions such as distance from shore to navigable water; relevant State and Federal resource protection laws including the Connecticut Coastal Management Act, the Tidal Wetlands Act, and the Structures and Dredging Act; and other relevant conditions. The Commission's recommendations concerning the appropriate distance that docks, floats, and piers should extend from the shore to reach navigable water should be a major consideration in the decisions of State and Federal agencies with authority to authorize such structures. (See the later section on "State and Federal Agencies with Harbor Management Authority.")

e. Support for dredging of the Federal Navigation Project, as needed.

Acting in coordination with the Old Saybrook Harbor Management Commission, the Commission may serve as an advocate for maintenance dredging of the Connecticut River Federal Navigation Project (including the Saybrook Outer Bar Channel adjoining the Harbor Management Area). The Commission may encourage the Corps of Engineers and Connecticut Department of Environmental Protection to carry out the necessary environmental assessments and other predredging requirements to allow maintenance dredging to occur in the most timely manner.

f. Review the condition and operation of the Route 154 causeway bridge crossing the Harbor Management Area.

The condition and operation of the Route 154 causeway bridge across South Cove may be considered by the Commission on a regular basis, based on observations and on any necessary communications with the agencies responsible for bridge repair and maintenance. This review should be conducted to help avoid any adverse impacts on the Harbor Management Area, including impacts on navigation and water quality, caused by use, maintenance, and repair of the bridge. Any apparent deficiencies and suggestions for improved bridge maintenance should be brought to the attention of the appropriate agencies.

g. Support and cooperate with State and Federal agencies to identify and eliminate any unauthorized encroachments in the Harbor Management Area.

In accordance with the Harbor Management Plan, any unauthorized structures (including docks, piers, bulkheads, pilings, and moorings) or any other work (including dredging or filling of aquatic areas) extending into areas waterward of the high tide line should be eliminated or otherwise corrected. Any existing unauthorized encroachments (those pre-dating the effective date of the Harbor Management Plan and identified either prior to, or after the effective date of the Plan) should be evaluated individually by the accountable State and/or Federal regulatory agency, with appropriate input from the Commission. Specific measures should be developed to remove or otherwise correct these existing violations.

The Commission should work in coordination with the appropriate State and Federal authorities to ensure that unauthorized encroachments constructed or occurring after the effective date of the Harbor Management Plan are eliminated by the offending party. The Commission should discourage the issuance of “after-the-fact” permits that would bring future unauthorized encroachments into compliance, unless there are compelling, clearly demonstrated reasons to do so.

4. Recommendation and/or adoption and amendment of rules, regulations, and procedures for harbor management.

The Harbor Management Commission may recommend, for adoption by the appropriate Borough agency, rules and regulations for the proper control, management, and maintenance of all waterfront facilities of the Borough. The Commission may also adopt and amend its own rules and procedures as needed to guide its various activities for implementing the Harbor Management Plan. All adopted rules and procedures should conform to the adopted Harbor Management Plan and requirements of Borough ordinances.

- a. **Prepare and update, as necessary, “Rules and Procedures for Mooring and Anchoring Vessels” and “Minimum Standards for Mooring Tackle.”**

To provide for adequate access for recreational vessels, for the safety of persons and property, and for the most beneficial use of the Harbor Management Area, the Commission may adopt and, as necessary, amend specific “Rules and Procedures for Mooring and Anchoring Vessels” and “Minimum Standards for Mooring Tackle” in the HMA. The Commission should regularly review any adopted rules and procedures in coordination with the Harbor Master, and prepare any modifications or additions that may be appropriate.

5. Adoption and amendment of Commission Bylaws.

The Harbor Management Commission may adopt and amend, as necessary, administrative rules and procedures (bylaws) to guide its various activities, including review of proposals referred to the Commission by Borough, State, and Federal agencies. The bylaws should address the duties and election of the Commission's officers, the functioning of any standing committees, and the conduct of meetings and hearings of the Commission.

6. Implementation of a “Harbor Management Review Process” to review all proposals potentially affecting the Harbor Management Area and to determine the consistency of those proposals with the Harbor Management Plan.

With authority provided by Section 22a-113p of the Connecticut General Statutes and the Fenwick Harbor Management Ordinance, the Harbor Management Commission should review proposals affecting real property on, in, or contiguous to the Harbor Management Area and determine the consistency of those proposals with the Harbor Management Plan. The Commission should develop and apply specific procedures when reviewing proposals referred to the Commission by: 1) Borough agencies; 2) the Connecticut Department of Environmental Protection; and 3) the U.S. Army Corps of Engineers.

The Commission may recommend that any proposal so reviewed be approved, denied, or approved with conditions; that recommendation must be considered by the approving agency. The Review Process should be carried out within the framework of the existing Borough, State, and Federal approval processes so as not to add additional time to these already-established processes.

- a. **The Harbor Management Review Process should include review of proposals submitted to Borough of Fenwick commissions for approval as well as proposals prepared by Borough agencies.**

In accordance with authority provided by Section 22a-113p of the Connecticut General Statutes, the Harbor Management Commission may review and make recommendations, consistent with the Harbor Management Plan, on any proposal affecting real property on, in, or contiguous to the Harbor Management

Area that is received by the Planning and Zoning Commission, Zoning Board of Appeals, Park Commission, and Historic District Commission.

The following proposals submitted to or prepared by the above-noted Borough agencies will be referred by those agencies to the Harbor Management Commission for review and determination of consistency with the Harbor Management Plan:

- i. All development proposals located on real property on, in, or contiguous to the HMA.
- ii. All activities involving placement of temporary or permanent structures (e.g., docks, floats, piers), dredging, filling, or other activities waterward of the mean high water line.
- iii. All proposed revisions or amendments to Borough plans, rules, or regulations affecting real property on, in or contiguous to the HMA.

The Harbor Management Commission should review proposals for consistency with the Harbor Management Plan and determine if the proposal is consistent with the Plan. The Commission should provide its consistency determination to the approving Borough agency either prior to or during any public hearing on the proposed action. If a public hearing is not held, the Commission should provide its comments prior to final action by the approving agency. Failure of the Commission to provide a recommendation to the approving agency will be considered as an approval of the proposal.

When reviewing a proposal for consistency with the Harbor Management Plan, the Harbor Management Commission should consider whether the proposal is consistent with the Plan's goals, policies, and recommendations.

The approving agency must consider the comments and recommendations of the Harbor Management Commission. As required by Section 22a-113p of the Connecticut General Statutes, if the Commission finds a proposal to be inconsistent with the Harbor Management Plan, that proposal can not be approved unless the approving Borough agency acts to over-ride the Harbor Management Commission's finding by a two-thirds vote (instead of a simple majority).

All applicants whose proposals are reviewed by the Harbor Management Commission should be provided an opportunity to describe the proposal to the Commission and answer any questions posed by the Commission. Also, any citizens potentially affected by the proposal should be afforded an appropriate opportunity to speak in favor of, or in opposition to, a proposal as it relates to the Harbor Management Plan.

In addition, all Borough agencies should work cooperatively with the Harbor Management Commission when developing any plans for Borough-sponsored projects or other initiatives that may affect the HMA. Plans for Borough-

sponsored initiatives should be submitted to the Commission for review as part of the Harbor Management Review Process.

b. The Harbor Management Review Process should include the review of applications to the Connecticut Department of Environmental Protection.

Proposals involving filling, dredging, or placement of structures waterward of the high tide line in the Harbor Management Area must be submitted by the project proponent to the Department of Environmental Protection's Office of Long Island Sound Programs for review and approval. To help ensure that State decisions affecting the HMA are consistent with the Harbor Management Plan, the applicant is required to provide the Commission with a copy of any application provided to the DEP for filling, dredging, or placement of in-water structures in the HMA. The Commission should review those applications and comment to the DEP on the consistency of each application with the Harbor Management Plan. The Commission's review should be conducted in a manner similar to that previously described with respect to proposals submitted to or prepared by Borough agencies.

Also, proposals prepared by State agencies and affecting the HMA should be designed for consistency with the Harbor Management Plan and reviewed by the Harbor Management Commission for consistency with the Plan.

c. The Harbor Management Review Process should include review of applications to the U.S. Army Corps of Engineers.

Proposals involving filling, dredging, or placement of structures waterward of the mean high water line in the Harbor Management Area must be submitted by the project proponent to the Corps of Engineers for review and approval with respect to Federal laws and regulations. In coordination with this Federal review, the Corps should forward the public notices of applications for filling, dredging, or placement of in-water structures in the HMA to the Harbor Management Commission. The Commission should review those applications and comment to the Corps on the consistency of each application with the Harbor Management Plan. The Commission's review should be conducted in a manner similar to that described above with respect to proposals submitted to or prepared by Borough and State agencies.

Also, proposals prepared by Federal agencies and affecting the HMA should be designed for consistency with the Harbor Management Plan, and reviewed by the Harbor Management Commission for consistency with the Plan.

7. On-going examination of the effectiveness of the Harbor Management Plan and conditions in the Harbor Management Area and on the shoreline; preparation of proposed amendments to the Plan and/or Borough ordinances for implementing the Plan, as necessary.

The Harbor Management Plan should be amended, as needed, to respond to changing circumstances. Throughout the course of the year, members of the Harbor Management Commission should observe conditions and activities in the Harbor Management Area and consider how well the Plan is functioning with respect to those conditions and activities. Any observed problems should be discussed at a Commission meeting. Borough officials and residents should be encouraged to attend Commission meetings and to express any comments or observations they may have regarding the Plan and its effectiveness.

a. Annual Plan review.

Each year the Commission may hold a formal review meeting to determine if any changes to the Plan are required. The Commission may consider any physical or institutional changes affecting the HMA and shoreline that have taken place during the previous year, including development proposals, new development, physical changes caused by forces of nature, improvement or degradation of environmental quality, and any new plans or requirements established by Borough, State, or Federal agencies.

b. Specific actions to amend the Plan and/or Borough ordinances for implementing the Plan.

If the Commission determines that some aspect of the Plan should be amended, it should:

- 1) Prepare recommended changes to the Plan, including any text and map changes;
- 2) Obtain public comments on the proposed changes;
- 3) Submit the proposed changes to the Corps of Engineers for review and to the Connecticut departments of Environmental Protection and Transportation for review and approval;⁹
- 4) Make any changes to the Plan document following review of public comments and comments from the Corps, DEP, and DOT; and
- 5) Submit the changes to the Board of Burgesses for Borough adoption following a public hearing.

The Commission need not be restricted to any specific time period for making changes to the Plan. If unusual circumstances arise that demand immediate

⁹ In accordance with the procedure for State approval and Town adoption of the Harbor Management Plan, proposed Plan amendments should be sent to the Office of Long Island Sound Programs (OLISP) of the Connecticut DEP. The OLISP will distribute copies of the proposed amendments to other DEP divisions, to the Connecticut DOT's Bureau of Aviation and Ports, and to the Corps of Engineers. The OLISP will coordinate review and approval of the proposed amendments by these agencies.

modification of the Plan, the Commission may initiate the review and revision process at any time.

c. Preparation of an annual “Harbor Management Plan Addendum” as needed.

Instead of rewriting and reprinting the entire Harbor Management Plan to incorporate the results of an annual Plan review, the Commission may prepare a Plan Addendum to summarize the more significant changes that may have taken place and to present any proposed amendments to the Plan's goals, policies, and recommendations. As its resources may allow, the Commission should periodically publish a revised Plan document to incorporate updated descriptions of all waterfront and HMA conditions that have changed since the Plan was adopted, as well as any Plan amendments that may be adopted in the future.

8. Review of actions by the Harbor Master.

Any person aggrieved by a decision or action of any duly appointed State of Connecticut Harbor Master as that decision or action affects the Fenwick Harbor Management Area may present his or her grievance to the Harbor Management Commission. The Commission may review the decision or action of concern and provide an opportunity for all involved parties to present relevant information.

While there is no authority provided in the Connecticut General Statutes for a municipal agency to overturn Harbor Master decisions or to act as an appeals board with regard to those decisions, the Harbor Management Commission can hear any local concerns with regard to the Harbor Master's actions. The Commission may attempt to resolve those concerns without usurping the Harbor Master's authority and then, if necessary, bring those concerns to the attention of the Department of Transportation's Bureau of Aviation and Ports for any corrective action that may be necessary.

9. Provision of recommendations to the Governor for appointment of a Fenwick Harbor Master as necessary.

Section 15-1 of the Connecticut General Statutes requires that the appointment of the harbor master for any municipality with an adopted harbor management plan shall be made by the Governor from a list of not less than three nominees submitted by that municipality's harbor management commission. Harbor masters are appointed by the Governor for three-year terms and until a successor is appointed. Historically, the Old Saybrook Harbor Master has had jurisdiction over the navigable waters within the boundaries of the Town of Old Saybrook, including the Fenwick Harbor Management Area. The Harbor Management Commission will be responsible for determining if it is in the Borough's best interests to continue to work with the harbor master appointed for the Town of Old Saybrook or to petition the Governor for appointment of a harbor master with specific jurisdiction limited to the HMA. Accordingly, the Harbor Management Commission may consider

providing the Governor with recommendations for appointment of a Fenwick Harbor Master as necessary.

10. Advisory participation in all Borough-supported initiatives affecting the Harbor Management Area and shoreline.

In accordance with the Harbor Management Review Process, the Harbor Management Commission should serve in an advisory capacity to any Borough agency initiating a planning, development, or regulatory action with a potential impact on the Harbor Management Area and/or shoreline. The Commission should provide information on how the proposed initiative can best be planned and implemented to achieve consistency with the Harbor Management Plan. The Commission's advisory comments can help to avoid (before the proposal is finalized) any potential concerns or conflicts. Another important purpose of the Commission's involvement should be to help establish and maintain a spirit of cooperation and coordination among all Borough agencies with authorities that directly and indirectly affect the HMA and shoreline.

11. Support and promotion of activities to increase awareness of Harbor resources and the Harbor Management Plan and to educate the public concerning shoreline improvement and harbor management initiatives.

Effective management of the Fenwick Harbor Management Area and shoreline and achievement of the Borough's harbor management goals and policies require ongoing public support and involvement. In addition to providing a continuing forum for the expression of comments by concerned citizens, the Harbor Management Commission may support and promote special programs and events to stimulate public interest and community involvement in matters pertaining to the HMA and shoreline.

The Commission, through public information materials and other means, can take an active role to inform and educate local residents and others about the provisions of the Harbor Management Plan and conditions in the HMA. The Commission also can be a source of information to citizens and organizations planning activities that would affect the HMA and not familiar with the requirements of State and Federal permitting programs and the provisions of the Harbor Management Plan.

The Commission may promote programs to educate the public with regard to proper use and protection of HMA and shoreline resources in accordance with the Harbor Management Plan. Each year the Commission may hold a "State of the Shoreline" meeting to provide information to Borough residents and hear citizen comments concerning the Plan, HMA, and shoreline.

12. Administration and application of funds for waterfront improvement and harbor management purposes.

The Harbor Management Commission should work with the Board of Burgesses to administer and apply funds for beneficial harbor management and shoreline

improvement purposes, consistent with the Commission's authorized powers and duties and with the Harbor Management Plan.

a. Establishment of Harbor Management Account.

With authority provided by Section 22a-113s of the Connecticut General Statutes, a special account may be maintained within the Borough's General Fund to receive and expend monies for harbor management and shoreline improvement purposes determined by the Harbor Management Commission with appropriate approvals from the Board of Burgesses.

Section 22a-113s of the Connecticut General Statutes gives the Commission authority to propose a fee schedule for any activity within the scope of the Harbor Management Plan. Collected fees must be deposited into the Harbor Management Account and used for maintenance and improvement of the Harbor Management Area for the public and for necessary expenses for personnel and equipment directly related to the functions of the Commission and Harbor Master. The Commission should regularly report to the Board of Burgesses on the status, use, and application of any monies from the Harbor Management Account.

b. Identify and pursue potential sources of funds for harbor management and shoreline improvement purposes.

The Commission should evaluate potential funding sources and pursue funds for operating expenses and special projects. Potential sources of funds to be considered may include but are not limited to mooring permit fees, donations, allocations from the Borough's General Fund, and grants obtained from State and Federal government and private sources.

c. Propose and review fee schedule for mooring permits and other activities within the scope of the Harbor Management Plan.

Any mooring permit fees proposed by the Harbor Management Commission for adoption by the Board of Burgesses must not exceed the maximum annual fee as established in Section 22a-113s of the Connecticut General Statutes. In accordance with Section 22a-113s, any fees collected must be dedicated for maintenance and improvement of the Harbor Management Area for the public, and for personnel and equipment directly related to the function of the Commission and Harbor Master. The Commission may also propose a fee schedule for other activities in and adjoining the Harbor Management Area and within the scope of the Harbor Management Plan.

d. Preparation and review of annual operating budget.

The Commission should prepare, for presentation to the Board of Burgesses, an annual operating budget including an estimate of revenues and expenses.

13. Coordination of harbor management initiatives with the Town of Old Saybrook.

The Harbor Management Commission should coordinate its planning and management activities, to the extent necessary and practical, with the Town of Old Saybrook. The purpose of this coordination should be to address issues of common interest affecting the Fenwick Harbor Management Area and nearby waters, including issues concerning water quality and boating safety.

The Commission should establish specific liaison procedures with the Old Saybrook Harbor Management Commission to address issues of common interest affecting the Connecticut River, South Cove, and Long Island Sound.

14. Maintenance of a file of information and materials pertaining to the Harbor Management Area and shoreline.

The Harbor Management Commission should oversee a Borough file containing information and materials pertaining to the Harbor Management Area and shoreline. The file should be maintained in a designated Borough facility. The file should serve as a source of information on existing and historic conditions in the HMA and on the shoreline and can be used by the Commission when making decisions pertaining to the HMA and when developing programs to increase citizen awareness of the HMA and Harbor Management Plan. Included in the file should be information on docks, piers, and other structures waterward of the high tide line, as well as all applications for Borough, State, and Federal permits reviewed by the Commission. The file may also include reports, documents, studies, and photographs pertaining to the HMA and shoreline, and a compilation of applicable Borough, State, and Federal laws, regulations, and policies pertaining to management of the HMA.

15. Pursuit of grants for harbor management and shoreline improvement purposes.

The Harbor Management Commission, with assistance from other Borough agencies, may pursue governmental and private grants to help fund harbor management and shoreline improvement projects. The Harbor Management Plan provides the basis for several projects potentially eligible for State and Federal grants, including grants available through the Connecticut Department of Environmental Protection's Long Island Sound License Plate Program, Coves and Embayments Program, and River Restoration Program, and through Federal programs, including programs identified through the American Heritage Rivers Initiative for the Connecticut River. Water quality improvement projects, projects to restore and enhance tidal wetlands, and education and outreach programs to

increase public awareness of harbor management concerns and support for the Harbor Management Plan are examples of potentially eligible projects.

16. Ongoing study of Harbor Management Area and shoreline conditions to provide useful information for decision-making and other management purposes.

The Harbor Management Plan establishes a Borough planning and management framework to be built upon in the future. To be effective, the Plan should be considered part of an on-going process that will continue to evolve in the future as the Borough pursues various projects and initiatives to enhance beneficial use and conservation of the Harbor Management Area and shoreline.

Conditions in the HMA, particularly conditions pertaining to uses and activities and the “institutional framework” for harbor management (see Chapter Two), may change over time. Some of the changes that may occur may affect the Plan's goals and policies. As a result, it will be necessary for the Harbor Management Commission to continue to monitor conditions in the HMA and on the shoreline for the purpose of identifying any changes that may influence future management decisions and programs. The Commission may also encourage and support scientific studies and other investigations, including investigations by local students, that will provide useful information for harbor management purposes.

To ensure that all in-water structures in the HMA are properly authorized in accordance with applicable Borough, State, and Federal laws, the Commission may conduct and maintain an inventory of all such structures on, in, or contiguous to the HMA, including bulkheads, seawalls, breakwaters, docks, floats, and piers. This inventory should include the permittee's name, assessor's map and lot number of the affected property, a description of the structure, any conditions included in the State and/or Federal permits for approved structures, and other pertinent information.

The Commission may evaluate available remedies to achieve repair or removal of any abandoned structure in the HMA or of any structure deteriorated to the extent that a hazard or inconvenience to navigation or condition adversely affecting public safety and/or environmental quality may result, including establishment of a derelict structure removal fund maintained by the Borough of Fenwick. Recommendations for any Borough ordinances needed to implement such remedies as may be deemed feasible will be provided to the Board of Warden and Burgesses for action. Consideration may be given to establishing a derelict structure removal fund within the Borough's Harbor Management Account. (See recommendation no. 5 concerning the Board of Warden and Burgesses and responsibility no. 12 of the Harbor Management Commission in Chapter Five of the Harbor Management Plan.)

17. Retaining and supervising consultants and assistants, as needed, to assist with implementation of the Harbor Management Plan.

Section 22a-113l of the Connecticut General Statutes empowers the Harbor Management Commission to enter into contracts, retain consultants and other assistants, and receive and expend funds for harbor management purposes. Implementation of aspects of the Harbor Management Plan may require the

Commission to apply expertise and services that the Borough may not be able to provide. The Commission may therefore retain consultants and assistants, subject to the availability of funds, to assist with its powers, duties, and responsibilities pursuant to Plan implementation. In this regard, the Commission may consider retaining a “dockmaster” to assist the Old Saybrook Harbor Master with management of water access facilities and any boat mooring locations that may be designated within the Fenwick Harbor Management Area.

18. Encouragement of the presentation and discussion of public concerns related to the Harbor Management Area, shoreline, and Harbor Management Plan.

The Harbor Management Commission should provide opportunities for citizens to express their shoreline- and harbor management-related questions, concerns, or suggestions. Providing a continuing forum for the expression of citizens concerns should help the Commission identify changing conditions and circumstances affecting the Harbor Management Area and shoreline. This forum is also needed to help develop public awareness of harbor management goals and policies and to maintain a base of public support for management programs and special projects. Each year the Commission may hold a special public meeting — a “State of the Shore” meeting — to hear the concerns, questions, and thoughts of Borough residents concerning the HMA, shoreline, and Harbor Management Plan.

Other Fenwick Commissions and Organizations

In addition to the Harbor Management Commission, other Borough agencies have harbor management-related responsibilities as described in Chapter Two of the Harbor Management Plan. These include the Planning and Zoning Commission, Zoning Board of Appeals, Park Commission, and Historic District Commission. Also, the Lynde Point Land Trust, although not a Borough agency, has the important responsibility of administering conservation easements that affect use and development of certain areas adjoining the Harbor Management Area.

The Harbor Management Plan does not alter the authorities of Borough agencies. The Plan requires, however, that all Borough agencies with harbor management-related responsibilities carry out those responsibilities in a manner consistent with the goals and policies established in the Plan. The Harbor Management Review Process will help to ensure this consistency. (See the preceding section on the Harbor Management Commission.) Also, the Plan does not alter the responsibilities of the Lynde Point Land Trust nor affect the existing conservation easements.

Borough agencies other than the Harbor Management Commission have the following basic responsibilities for implementing the Fenwick Harbor Management Plan:

1. Referral of applications for activities affecting the Harbor Management Area to the Harbor Management Commission for review and determination of consistency with the Harbor Management Plan.

Each Borough agency with authority to approve a proposed action affecting real property on, in, or contiguous to the Harbor Management Area should refer the application for that action to the Harbor Management Commission for review and recommendations consistent with the Harbor Management Plan. In accordance with the Borough's Harbor Management Review Process, the application should be provided to the Commission prior to any public hearing held on the proposal or, if a hearing will not be held, prior to any final action taken by the approving Borough agency.

As required by Section 22a-113p of the Connecticut General Statutes, if the Harbor Management Commission finds that an application is inconsistent with the Harbor Management Plan, then the application can not be approved unless the Borough agency with authority for approving the application acts to over-ride the Commission's finding by a two-thirds vote (instead of a simple majority). This "two-thirds" requirement does not alter the authority of the agency having primary jurisdiction over the proposal to deny, modify, or condition a proposal that has received an unfavorable recommendation from the Harbor Management Commission.

Each Borough agency affected by the Harbor Management Review Process should work with the Harbor Management Commission to establish appropriate procedures for providing applications to the Commission and to otherwise maintain coordination with the Commission.

The Harbor Management Review Process should be carried out to ensure that activities that will affect the HMA are reviewed for consistency with the Harbor Management Plan. The process should be carried out within the framework of the Borough's existing review processes and not add additional review time to existing review processes.

2. Design of Borough proposals affecting the Harbor Management Area for consistency with the Harbor Management Plan.

Just as proposals submitted to the Borough for approval should be consistent with the Harbor Management Plan, so should any proposals prepared by the Borough. Each Borough agency should consult with the Harbor Management Commission when developing plans for Borough-sponsored projects or other initiatives that may affect the Harbor Management Area and/or shoreline. Plans for Borough-sponsored initiatives affecting the HMA should be submitted to the Harbor Management Commission for review as part of the Harbor Management Review Process. The purpose of this review should be to ensure that Borough-sponsored proposals are consistent with the Harbor Management Plan and contribute to achievement of the Borough's harbor management goals and policies. The review should also serve to enhance communication and coordination among the involved Borough agencies.

3. Conducting agency responsibilities in a manner consistent with the Harbor Management Plan and in a manner that contributes to Plan implementation.

The following Borough agencies should carry out their following responsibilities affecting the Harbor Management Area in a manner consistent with the Harbor Management Plan and in a manner that contributes to Plan implementation:

Planning and Zoning Commission: Implementation and amendment, as necessary, of the Borough's Plan of Conservation and Development as that Plan affects the HMA and shoreline. Enforcement and amendment, as necessary, of the Borough's Zoning Regulations as those regulations affect the HMA and shoreline.

Park Commission: Maintenance of water access facilities, including the Fenwick Pier on Long Island Sound.

Historic District Commission: Approval of development plans to maintain the Borough's unique quality of life related to its location on Long Island Sound and the Connecticut River.

State of Connecticut Harbor Master with Jurisdiction at Fenwick

Any duly appointed harbor master with jurisdiction over the Fenwick Harbor Management Area—either the Old Saybrook Harbor Master or a harbor master appointed by the Governor specifically for the Borough of Fenwick—will have responsibilities described in the Connecticut General Statutes and Fenwick Harbor Management Plan for the general care and supervision of the navigable waterways within the jurisdiction of the Borough of Fenwick. These responsibilities are subject to the direction and control of the State's Commissioner of Transportation acting through the Bureau of Aviation and Ports of the Department of Transportation (DOT). In addition, as required by Sections 15-1 and 22a-13k of the Connecticut General Statutes, respectively, the harbor master must conduct his or her duties in a manner consistent with the Fenwick Harbor Management Plan and must serve as an ex-officio member of the Borough's Harbor Management Commission.

Any duly appointed harbor master with jurisdiction over the HMA should work cooperatively with the Harbor Management Commission and perform an active role for harbor management through:

1. Conducting all duties in a manner consistent with the Harbor Management Plan.

The Harbor Master's principal authorities are established in Section 15-1 through 15-10 of the Connecticut General Statutes. Section 15-1 requires that "... harbor masters or deputy harbor masters shall exercise their duties in a manner consistent with any harbor management plan adopted... for a harbor over which they have jurisdiction." State-authorized actions by any duly appointed harbor master with jurisdiction over the HMA must therefore be consistent with the harbor management goals and policies contained in the Fenwick Harbor Management Plan. This requirement provides opportunity for the Harbor Master to work closely with the Harbor Management Commission and perform an active role for accomplishing the Borough's harbor management goals and objectives.

2. Serving as ex-officio member of the Harbor Management Commission and generally assisting the Commission with implementation of the Harbor Management Plan.

As required by Section 22a-113k of the Connecticut General Statutes, the Harbor Master must serve as a nonvoting, ex-officio member of the Harbor Management Commission. The Harbor Master and Commission should work together to identify the Harbor Master's specific responsibilities for performing an ongoing, active harbor management role, including assistance to the Commission, as needed, for implementing the Harbor Management Plan. The Harbor Master, for example, may provide information to the Commission with respect to conditions in the Harbor Management Area and may work on specific projects at the direction of the Commission to achieve harbor management goals and objectives.

3. Implementation of specific requirements for administration, placement, and inspection of all mooring tackle placed in the Harbor Management Area.

The Harbor Master is responsible for administration, placement, and inspection of all boat moorings in the Harbor Management Area in accordance with Section 15-8 and other applicable sections of the Connecticut General Statutes. Mooring-related responsibilities include:

a. Issuance of all mooring permits; allocation of all mooring locations; and collection of any mooring permit fees.

The Harbor Master must approve the location of all moorings within the Harbor Management Area. The Harbor Master shall issue a permit for each approved mooring location or area in accordance with any rules and procedures for mooring and anchoring vessels that may be established by the Harbor Management Commission consistent with the Harbor Management Plan.

When a permit is issued for a mooring, the Harbor Master shall assign a specific location for that mooring. No mooring shall be placed or maintained in any part of the HMA until the location of that mooring has been approved by the Harbor Master.

Any mooring permit fee duly established by the Harbor Management Commission will be collected by the Harbor Master from any person, association, corporation, or other group receiving a new or renewed permit for a mooring location in the HMA. The Harbor Master will deposit the collected fee into a designated account (i.e., the Fenwick Harbor Management Account), and provide a regular accounting of collected fees to the Commission.

b. Maintenance of complete and accurate records of all mooring applications, permit fees, moorings, and moored vessels.

The Harbor Master should maintain complete and accurate records of all mooring applications, any collected permit fees, moorings, and moored vessels. This information should be maintained in such a manner that information can easily be obtained with regard to: a) any individual mooring, vessel, or owner; and b) all moorings within the Harbor Management Area. An up-to-date copy of mooring records should be maintained in a designated Borough facility.

c. Placement of mooring tackle to ensure proper location in suitable areas.

The Harbor Master should supervise the placement of all mooring tackle to ensure its proper location in suitable areas. Supervision of mooring placement may be delegated by the Harbor Master to a “dockmaster” or other assistant appointed by the Harbor Management Commission.

d. Inspection of mooring tackle at appropriate intervals to ensure compliance with minimum mooring tackle requirements.

The Harbor Master is responsible for ensuring that mooring tackle used in the Harbor Management Area is inspected at appropriate intervals. Each mooring permit holder shall be responsible for periodically having his or her mooring tackle inspected to ensure that it meets or exceeds minimum standards for mooring tackle duly established by the Harbor Management Commission. This inspection may be performed by the Harbor Master, Borough “dockmaster,” or other qualified person. Any mooring tackle found to be inadequate (e.g., with excessive wear or not meeting minimum standards) must be replaced by the mooring permit holder before the mooring location can be used.

Each mooring permit holder should submit appropriate evidence to the Harbor Master that an inspection has been performed and that the tackle meets or exceeds minimum standards. The Harbor Master should maintain complete and accurate records regarding mooring tackle inspection, including date of inspection and name of inspector.

e. Revocation of mooring permits for failure to comply with permit provisions:

The Harbor Master shall revoke a mooring permit under certain conditions as specified in any rules and procedures for mooring and anchoring vessels that may be adopted by the Harbor Management Commission consistent with the Harbor Management Plan.

4. Enforcement of boating laws and regulations in the Harbor Management Area to the extent qualified and authorized under State law and in coordination with appropriate local, State, and Federal law enforcement agencies.

Section 15-154 of the Connecticut General Statutes provides any harbor master or deputy harbor master with authority to enforce the State of Connecticut's boating statutes. In accordance with this authority, any duly appointed harbor master with jurisdiction over the Fenwick Harbor Management Area should work in coordination with local (Town of Old Saybrook), State, and Federal law enforcement agencies to ensure proper enforcement of the State's boating laws and regulations as they relate to use of the Fenwick Harbor Management Area, and for communication of those statutes and regulations, as necessary, to the public. Further, as necessary for maintaining a safe and functional HMA environment, the Harbor Master may assist with any necessary interpretation of the statutes and regulations as they apply to the HMA. This interpretation should be carried out in collaboration with the Harbor Management Commission, Old Saybrook Police Department, Connecticut Department of Environmental Protection, Connecticut Department of Transportation, and other involved agencies and departments.

The Harbor Master should provide information and other appropriate assistance to local, State, and Federal law enforcement agencies, as needed, to help maintain boating and navigation safety in the HMA. For example, the Harbor Master should advise the Old Saybrook Police Department, the Connecticut DEP's Law Enforcement Division, Corps of Engineers, and Coast Guard of any problems concerning enforcement of State and/or Federal laws and regulations in the HMA.

The Harbor Master should enforce State boating laws and regulations to the extent legally authorized and qualified to do so. The Harbor Master should call upon the Old Saybrook Police Department, Department of Environmental Protection, or other law enforcement authority as necessary for assistance in situations involving potential arrest or confrontation.

a. Enforcement and interpretation of the Connecticut boating statutes and regulations concerning removal of abandoned and derelict vessels.

In accordance with Section 15-140c of the Connecticut General Statutes, any vessel "not moored, anchored or made fast to the shore and unattended for a period greater than 24 hours, or left [upon private property] without the consent of said property owner for a period greater than twenty-four hours" shall be

presumed abandoned. Acting in coordination with the Harbor Management Commission and other appropriate agencies or departments, the Harbor Master should enforce the provisions of this statute in the Harbor Management Area. In accordance with Section 15-140c, all expenses necessarily incurred in the removal of an abandoned vessel shall be a lien upon that vessel.

If, in the Harbor Master's judgement, an abandoned or derelict vessel causing a hazard or obstruction to persons, property, aquatic resources, or navigation has no resale value, that vessel should be removed in accordance with authority provided by Section 15-11a of the Connecticut General Statutes.

5. Provision of information concerning boating laws and regulations, the Harbor Management Plan, and other harbor management-related topics to interested citizens.

The Harbor Master should assist the Harbor Management Commission with provision of pertinent information to Fenwick residents and other interested citizens, including persons who directly contact the Harbor Master to ask questions or request information. Information provided by the Harbor Master may concern applicable boating laws and regulations, conditions in the Harbor Management Area, provisions of the Harbor Management Plan, and other information intended to maintain boating safety and environmental quality and increase public awareness and support for the Borough's harbor management efforts.

6. Ongoing communication with Borough, State, and Federal agencies for harbor management purposes.

In addition to communication and coordination with the Harbor Management Commission and other relevant Borough and Town of Old Saybrook agencies, the Harbor Master should establish and maintain regular communication, as necessary, with various divisions and units of the Connecticut DEP, the Department of Transportation's Bureau of Aviation and Ports, Corps of Engineers, U.S. Coast Guard, and other State and Federal agencies with harbor management responsibilities. The purpose of this liaison, which can be conducted at the direction of the Harbor Management Commission, should be to address matters affecting the safe and functional use of the Harbor Management Area and to otherwise advance the Borough's harbor management goals and policies.

7. Supervision of consultants and assistants hired by the Harbor Management Commission.

The Harbor Master may assist the Harbor Management Commission in supervising the work of any consultants and assistants hired by the Commission to assist with implementation of the Harbor Management Plan, including any Fenwick "dockmaster" retained to assist with management of water access facilities and mooring locations.

State and Federal Agencies with Harbor Management Authority

The Connecticut Department of Environmental Protection, Connecticut Department of Transportation, and U.S. Army Corps of Engineers are the principal State and Federal agencies with harbor management authorities. (See Chapter Two.) To the extent permitted by law, these and other State and Federal agencies should carry out their responsibilities in accordance with the provisions of the Fenwick Harbor Management Plan, and generally cooperate with the Harbor Management Commission for Plan implementation.

The basic State and Federal responsibilities for Plan implementation include:

1. Review and approval of the Fenwick Harbor Management Plan and any future Plan amendments needed to respond to changing conditions and circumstances.

Section 22a-113m of the Connecticut General Statutes specifies the procedure for approval and adoption of municipal harbor management plans. In accordance with this procedure, the Fenwick Harbor Management Plan, and any future amendments to the Plan, must be reviewed by the U.S. Army Corps of Engineers, approved by the Connecticut commissioners of environmental protection and transportation, and then adopted by the Board of Burgesses before becoming effective. (See the previous section on the Board of Burgesses.)

So that the Borough of Fenwick may plan and manage use of the waterfront and Harbor Management Area in accordance with the legislative intent of the Connecticut Harbor Management Act, the Connecticut commissioners of environmental protection and transportation should approve the Fenwick Harbor Management Plan to serve as the Borough's principal guide (in coordination with the Fenwick Plan of Conservation and Development) for beneficial use of the HMA and shoreline and for protection of environmental quality in the HMA. Any appropriate Plan amendments that may be prepared by the Harbor Management Commission in the future should also be reviewed and approved by the commissioners according to the same procedure used to approve the Plan.¹⁰

In addition, any revisions to Borough ordinances pertaining to the operation of vessels and adopted by the Board of Burgesses to implement provisions of the Harbor Management Plan must be submitted to the DEP for review and approval as required by Section 15-136 of the Connecticut General Statutes.

¹⁰ The procedure for State and Federal review and approval of the Plan and Plan amendments is specified in Section 22a-113m of the Connecticut General Statutes which states that: "A copy of the plan shall be forwarded to the U.S. Army Corps of Engineers for review, comments, and recommendations. Such plan shall be submitted to the commissioners of environmental protection and transportation. Said commissioners shall act on the plan not more than sixty days after submission of such plan... A modification to the plan may be proposed at any time and shall be approved in the same manner as the plan."

In the future, State and Federal agencies may provide the Harbor Management Commission with information and suggestions for Plan amendments that may be needed to address new and changing circumstances in the HMA.

2. Consideration of the Commission's consistency findings in State and Federal review and decision-making processes concerning applications and proposals affecting the Harbor Management Area.

The placement of all structures (including docks, piers, pilings, bulkheads, and aids to navigation) in the Harbor Management Area as well as any dredging and filling of aquatic areas must be authorized by the Connecticut Department of Environmental Protection and the U.S. Army Corps of Engineers. Applicants seeking DEP permits for in-water structures, dredging, or filling in the HMA are required to submit copies of their permit applications to the Harbor Management Commission at the same time as they submit them to the DEP. The Commission will review those applications, determine their consistency with the Harbor Management Plan, and comment to the DEP and Corps of Engineers on the consistency of each proposal with the Plan. In their review and decision-making processes, the DEP and Corps of Engineers should, to the maximum extent permissible in accordance with State and Federal law, give primary consideration to the Commission's consistency findings and recommendations.

Regarding any permit application submitted to the DEP and/or Corps, those agencies should provide the Harbor Management Commission with sufficient information to enable the Commission to make an informed decision on the consistency of the application with the Plan. The Commission should be provided with a copy of any permit issued by the DEP or Corps for filling, dredging, or placement of structures in the HMA.

In addition to proposals affecting the HMA and submitted to State and Federal agencies for approval, proposals prepared by State and Federal agencies and affecting real property on, in, or contiguous to the HMA should also be designed for consistency with the Harbor Management Plan and should be provided to the Harbor Management Commission for review and comment.

3. Coordination and cooperation with the Harbor Management Commission for implementation of the Harbor Management Plan.

State and Federal agencies should recognize the Harbor Management Plan as the Borough's principal guide (in coordination with the Fenwick Plan of Conservation and Development) for safe and beneficial use of the Fenwick Harbor Management Area and protection of environmental quality in the HMA. The Department of Environmental Protection, Corps of Engineers, and other State and Federal agencies should apply their planning as well as regulatory programs in a manner to assist the Harbor Management Commission with Plan implementation. The agencies should provide information and technical assistance to the Commission for the purpose of achieving the Plan's goals and policies. In addition, State and Federal grant programs may be used to help implement special projects to achieve the Borough's harbor management goals and policies.

Borough Residents

Borough residents may contribute to implementation of the Harbor Management Plan in several ways. Everyone must adhere to Borough, State, and Federal laws and regulations pertaining to use of the Harbor Management Area. In addition, there are a number of voluntary (nonregulatory) harbor management and shoreline improvement initiatives that can be carried out by residents, civic-minded organizations, and others.

Residents should contribute to harbor management efforts and to implementation of the Harbor Management Plan through:

1. Design of any proposals affecting the Harbor Management Area to be consistent with the Harbor Management Plan.

The design of projects that would affect the Harbor Management Area and shoreline should be consistent with the Borough's goals and policies established in the Harbor Management Plan. Project proponents may discuss their conceptual plans with the Harbor Management Commission prior to preparing final plans and permit applications.

In the course of the Harbor Management Review Process, project proponents should present their completed proposals to the Harbor Management Commission and may appear before the Commission to discuss the proposed project.

2. Expression of shoreline- and harbor management-related interests or concerns to the Harbor Management Commission.

Interested and concerned citizens may attend meetings of the Harbor Management Commission to increase their awareness of harbor management and shoreline considerations. At those meetings, citizens should express any interests or concerns they may have with respect to the Harbor Management Area, shoreline, and Harbor Management Plan. Observed violations of boating laws, evidence of pollution, and other actions adversely impacting the HMA and shoreline may be reported to the Commission, Harbor Master, or other responsible authority at any time.

3. Voluntary assistance to help achieve harbor management goals and policies.

There are a number of voluntary initiatives for managing and enhancing the Harbor Management Area and shoreline that may be carried out by Borough residents. Waterfront property owners, for example, have an important responsibility to contribute to the maintenance of clean, safe, and attractive conditions on the waterfront and in the HMA. Sites and structures on, in, or contiguous to the HMA, including shore protection structures, should be maintained in a manner that preserves environmental quality, waterfront scenic quality, and beneficial use of the HMA and shoreline. Voluntary, community-based efforts that may be organized by the Harbor Management Commission to improve the environmental quality of the HMA and shoreline should be encouraged and supported by Borough residents.

Borough residents may volunteer to participate in special events and other efforts that may be organized from time to time by the Harbor Management Commission and others to increase environmental awareness and maintain and

improve the quality of the HMA and shoreline. Special events may be organized to beautify public waterfront spaces and other waterfront locations and to assist with environmental enhancement projects.

4. Increased awareness of shoreline and Harbor Management Area resources, potential impacts on those resources, and the Borough's harbor management goals and policies.

Increased public awareness may be developed through attendance and participation at meetings of the Harbor Management Commission, voluntary participation in projects aimed at maintaining and enhancing the environmental quality of the Harbor Management Area and shoreline, reading reports, studies, and articles pertaining to harbor management topics, and in other ways.

Of much significance for the long-term beneficial use and management of the HMA and shoreline, residents and civic-minded organizations should recognize the vital natural resources and natural resource values provided by the Connecticut River, Long Island Sound, and South Cove at Fenwick. Expression of this recognition should serve as a constant reminder to public officials, including the Board of Burgesses, of their responsibility to manage and preserve the HMA and shoreline resources for the benefit of future generations.

In addition, Borough residents should recognize that seemingly minor actions can, when added over time to similar actions, have significantly adverse cumulative impacts on the HMA and shoreline. All citizens, no matter how environmentally conscious, should become more aware of the impacts their actions may have on environmental quality, navigation, and other waterfront and HMA conditions. At the same time, all citizens can contribute to efforts to enhance environmental quality and improve other conditions on the Borough's shoreline and in the HMA. For example, all residents can contribute to reducing nonpoint source (NPS) pollution just by increasing their awareness and understanding of how their everyday activities can contribute to that pollution in the Connecticut River and Long Island Sound watersheds.

APPENDICES

APPENDIX A:
GLOSSARY OF MARINE AND HARBOR MANAGEMENT TERMS

APPENDIX B:
SELECTED REFERENCES

APPENDIX C:
CONNECTICUT HARBOR MANAGEMENT ACT

APPENDIX D:
AN ORDINANCE ESTABLISHING THE BOROUGH OF FENWICK
HARBOR MANAGEMENT COMMISSION

**BOROUGH OF FENWICK
HARBOR MANAGEMENT PLAN
OCTOBER 2004
PREPARED FOR ADOPTION: MAY 2005**

APPENDIX A: GLOSSARY OF MARINE AND HARBOR MANAGEMENT TERMS¹¹

Abandoned Vessel: Any vessel, as defined by State statute, not moored, anchored, or made fast to the shore, and left unattended for a period greater than 24 hours, or left upon private property without consent from the waterfront property owner for a period greater than 24 hours.

Accretion: The addition of new land to the shoreline through the action of natural forces depositing water- or airborne material or by reason of an act of man such as the accretion formed as a result of jetty or breakwater construction, or beach fill deposited by mechanical means; also defined as the process of gradual and imperceptible addition to riparian land made by the water to which the land is contiguous.

Active Recreational Use: Recreational uses generally requiring facilities and organization for participation and/or having a more significant impact on the natural environment than passive recreational uses.

Aids to Navigation: All markers on land or in the water placed for the purpose of enabling navigators to avoid navigation hazards and/or to fix their position. Aids to navigation include Federal aids placed and maintained by the U.S. Coast Guard, and "private" aids placed and maintained by all other government and private interests under permit from the U.S. Coast Guard and Connecticut Department of Environmental Protection. Private aids include any buoys, signs, and other markers identifying restricted speed areas.

American Heritage Rivers Initiative: A Federal program intended to increase public enjoyment of the historic, cultural, recreational, economic, and environmental values provided by America's great rivers. The program is to provide Federal assistance in support of local projects that protect natural resources, promote economic revitalization, and preserve cultural heritage. The Connecticut River is one of 14 rivers nationwide that have been designated as American Heritage Rivers.

Anchorage: A nonchannel water area that may be designated for the safe anchoring of vessels.

Anchoring: To secure a vessel temporarily to the bottom of a waterbody by dropping an anchor or anchors from a vessel.

Aquaculture: Cultivation or propagation of water-dwelling organisms; farming of waters and tidal wetlands and the production of protein food, including oysters, clams, mussels, and other shellfish on underwater farmland.

¹¹ The definitions of terms contained in this Glossary of Terms are for the purpose of the *Borough of Fenwick Harbor Management Plan* only. The meaning and use of the terms included herein may differ in State and Federal laws and regulations.

Aquatic Environment: Waters of the United States, including wetlands, that serve as habitat for interrelated, interacting communities and populations of plants and animals.

Aquifer: An underground geological formation, or group of formations, containing usable amounts of groundwater and capable of yielding considerable quantities of water to wells and springs.

A-Zone: That portion of the floodplain as marked on Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency that is likely to be inundated by a flood with a one-percent annual chance of occurring ("100-year" flood) and not subject to wave action. (See V-Zone.)

Bathymetry: The measurement of depths of water; also information derived from such measurements.

Beach: The zone of unconsolidated material, including a foreshore and backshore, that extends landward from the low water line to the place where there is marked change in material or physiographic form, or to the line of permanent vegetation (usually the effective limit of storm waves). The seaward limit of a beach is the mean low water line.

Beach Nourishment: Natural or artificial placement of suitable material, usually sand, on or near a beach for the purpose of expanding an existing beach or replenishing an eroding beach.

Benthic: That portion of the marine environment inhabited by marine organisms that live permanently in or on the bottom of the sea.

Benthos: All marine plant and animal organisms living on or in the bottom of the sea.

Berth: An in-water area typically defined by floating walkways and finger floats, the purpose of which is to provide wet storage space for a vessel.

Best Management Practices (BMPs): Regulatory, structural, or nonstructural techniques applied to prevent and reduce nonpoint source pollution. Some examples of BMPs are buffers of streamside vegetation to keep pollutants from entering a watercourse; construction of wetlands to act as natural filters; and better maintenance of lawns and septic systems.

Bioaccumulation: The uptake of substances (metals, for example) leading to elevated concentrations of those substances within plant or animal tissue.

Bioassay: A test whereby living organisms are used to measure the effect of a substance, factor, or condition through comparison of "before and after" data; determination of the concentration of a substance in the tissues of an organ or organism in this manner is often used to test the toxicity of sediments and water that may be contaminated with toxic substances.

Biochemical Oxygen Demand (BOD): A measure of the demand on a water body's dissolved oxygen supply that will be generated, over a specified time period, by the biological decomposition of organic material.

Bioconcentration: The concentration of contaminants by an aquatic organism through its digestive tract or gill tissues.

Biotic Community: A naturally occurring assemblage of plants and animals that live in the same environment and are mutually sustaining and interdependent.

Bivalve: A mollusk with two shells hinged together (a clam or oyster, for example).

Bulkhead: A vertical wall of wood, steel, or concrete, built parallel to the shoreline and designed to deflect waves and control erosion.

Buoy: A float; especially a floating object moored to the bottom of a waterbody to mark a channel, mooring location, restricted speed area, or the location of something beneath the surface of the water such as a rock or shoal.

Carrying Capacity: A term generally used to refer to the level of use or extent of modification that environmental or man-made resources may bear before unacceptable resource deterioration or degradation occurs.

Channel: A water area specifically designated for unobstructed movement of vessels, shown on navigation charts, and marked in-water by aids to navigation. The Connecticut River navigation channel adjoining the Fenwick Harbor Management Area is a Federal navigation channel authorized by Congress and maintained by the U.S. Army Corps of Engineers.

Clean Vessel Act: Federal legislation intended to reduce overboard discharge of sewage from recreational boats and providing funds for the construction, renovation, operation, and maintenance of pump-out stations for holding tanks and dump stations for portable toilets.

Clean Vessel Act Program: Connecticut's program, administered by the Department of Environmental Protection, to implement the goals of the Clean Vessel Act and through which Federal funds for the purpose of the Act are distributed.

Coastal Resources: Resources including coastal waters, estuarine embayments, beaches, wetlands, intertidal flats, islands, coastal hazard areas, developed shoreline, and other resources as defined in the Connecticut Coastal Management Act.

Coliform Bacteria: Widely distributed microorganisms found in the intestinal tracts of humans and other warm-blooded animals and used as an indicator of the sanitary quality of water.

Commerce Power: The Federal authority, established by the commerce clause of the U.S. Constitution, whereby the Congress has exclusive powers over interstate commerce and therefore jurisdiction over all navigable waters of the United States.

Commercial Mooring: A mooring as defined by the Corps of Engineers for which any type of fee is charged, (excepting any fee charged by a municipality for a mooring permit issued by that municipality's harbor master) and which must be authorized by a permit from the Corps of Engineers, the Connecticut Department of Environmental Protection, and the harbor master.

Commercial Vessel: Any vessel, licensed or unlicensed, used, or engaged for any type of commercial venture, including but not limited to the carrying of cargo and/or passengers for hire and commercial fishing.

Connecticut Harbor Management Act: The legislation contained within the State of Connecticut General Statutes, Sections 22a-113k through 22a-113t, as may be amended from time to time, and which authorizes municipalities to establish harbor management commissions and prepare harbor management plans.

Contaminant: A chemical or biological substance in a form that can be incorporated into, onto, or be ingested by and that harms aquatic organisms, consumers of aquatic organisms, or users of the aquatic environment. A contaminant that causes actual harm is sometimes referred to as a pollutant. (See Pollutant.)

Controlling Depth: The most shallow depth in the navigable parts of a waterway, thereby governing the maximum draft of vessels that can safely use that waterway.

Corps of Engineers: The U.S. Army Corps of Engineers which is the principal Federal agency with roles and responsibilities pertaining to harbor management in Connecticut. These roles and responsibilities include authority to regulate structures and work seaward of the mean high water line as well as responsibility to maintain Federal navigation projects.

Cultural Resources: Natural and man-made resources related to open space, natural beauty, scientific study, outdoor education, archaeological and historic sites, and recreation.

Cumulative Impacts: The impacts on environmental or man-made resources that result from the incremental impact of an action when added to other past, present, and reasonably foreseeable actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Department of Environmental Protection (DEP): The principal State agency responsible for management of the State's natural resources. The DEP's Office of Long Island Sound Programs (OLISP) is responsible for ensuring that activities within the State's coastal area conform with the policies of the Connecticut Coastal Management Act and Harbor Management Act. The OLISP also reviews proposed development activities and issues or denies permits for the following activities: placement of structures below the high tide line; placement of structures and filling in tidal wetlands; filling in coastal, tidal or navigable waters; dredging for navigation and disposal of dredged material; marine mining; and construction and maintenance of nonfederal channels.

Deputy Harbor Master: A deputy harbor master for any Connecticut municipality with navigable waters within its limits who may be appointed by the Governor of Connecticut in accordance with Section 15-1 of the Connecticut General Statutes, and who shall carry out his or her duties under the direction of the harbor master.

Dike: A general term for a longitudinal, dam-like barrier that serves to confine floodwater or separate floodwater from floodprone areas, thereby helping to protect those areas.

Discharge of Dredged Material: Any addition of dredged material into waters of the United States. Dredged material discharges include: open water discharges; discharges resulting from

unconfined disposal operations (such as beach nourishment or other beneficial uses); discharges from confined disposal facilities which enter waters of the United States (such as effluent, surface runoff, or leachate); and overflow from dredge hoppers, scows, or other transport vessels.

Disposal Site: An in-water or upland location where specific dredged material disposal activities are permitted.

Dissolved Oxygen (DO): The oxygen, vital to fish and other aquatic life, freely available in water. Traditionally, the level of dissolved oxygen has been accepted as the single most important indicator of a water body's ability to support beneficial aquatic life.

Dock: A structure that can be used as a landing or berthing space for a vessel or vessels; generally defined as a wharf or portion of a wharf extending along the shoreline and generally connected to the upland throughout its length. Docks may float upon the water or be fixed structures abutting the shoreline.

Dolphin: A cluster of piles, bound firmly together and driven into the bottom of a harbor, to which boats may be secured.

Dredging: The excavation of sediments and other material from aquatic areas for the purpose of maintaining adequate depths in navigation channels and berthing areas as well as for other purposes.

Easement: The legal means by which a landowner voluntarily sets permanent restrictions on the future use of land while retaining ownership. The owner can still sell the land (subject to applicable municipal, State, and Federal regulations) and sell it, but use of the land will always remain subject to the terms of the easement. Covenants placed in the easement can be tailored to fit the specific resource characteristics of the land and can specify the type of uses and activities that can take place on the land, including for example, conservation uses. Use of land owned by the Borough of Fenwick is subject to conditions specified in conservation easements administered by the Lynde Point Land Trust.

Ecosystem: The interacting system consisting of a biologic community and its nonliving environment, each influencing the properties of the other and both necessary for the maintenance of life.

Effluent: Treated or untreated wastewater that flows out of a wastewater treatment plant, sewer, industrial outfall, marine sanitation device, or other source; generally refers to wastes discharged into surface waters.

Emergency: A state of imminent or proximate danger to life and property.

Erosion: The wearing away of the shoreline by the action of natural forces including wave action and currents.

Estuary: A confined coastal water body with an open connection to the sea and a measurable quantity of salt in its waters. Estuaries are of particular ecological value and significance because they provide important natural values concerning, for example, fish and wildlife habitat, flood

protection, and the maintenance of water quality. The Connecticut River estuary and other Connecticut estuaries contribute to the ecological health of Long Island Sound.

Excursion Vessel: A vessel providing sight-seeing tours available to the general public.

Fairway: A specific water area to be kept free of obstructions to ensure safe passage of recreational and commercial vessels to, from, through, and alongside navigation channels, mooring areas, anchorages, and berthing areas.

Fecal Coliform Bacteria: Specific coliform bacteria associated with the digestive tract of warm-blooded animals.

Federal Navigation Project: Authorized by Acts of Congress and maintained by the U.S. Army Corps of Engineers, Federal navigation projects may consist of designated channels and anchorages as well as dikes, breakwaters, and jetties designed to maintain ease and safety of navigation. The Federal Navigation Project in and near the Fenwick Harbor Management Area consists of the Connecticut River entrance channel and two riprap jetties at the mouth of the River.

Filling: The act of adding or depositing material to replace an aquatic area with dry land or to change the bottom elevation of a water body.

Fill Material: Any material used for the primary purpose of replacing an aquatic area with dry land or changing the bottom elevation of a water body for any purpose. Dredged material can be used as fill material.

Float: Any structure, buoyant on the water surface, extending seaward, and affixed and secured in place to the shore, a bulkhead, or a dock, whose purpose is to berth and secure vessels and provide a means of access to and from the shore. The term float includes a floating dock.

Floatable Debris: Trash floating in coastal waters or washed upon the shore and which may reduce beneficial use and enjoyment of a waterbody, present a nuisance or hazard for boaters, and harm wildlife.

Floating Home: Any structure constructed on a raft, barge or hull, moored or docked and that is used primarily for single or multiple-family habitation or that is used for the domicile of any individual(s).

Flood/Flooding: A general and temporary condition of: 1) partial or complete inundation of normally dry land resulting from the overflow of inland and/or coastal waters; and 2) the unusual accumulation of waters from any source.

Flood Insurance Rate Map (FIRM): An official map of a community prepared by the Federal Emergency Management Agency identifying the elevation of the "100-year" flood and the areas that would be inundated by that level of flooding, and used to determine flood insurance rates. The FIRM of the Borough of Fenwick is dated July 18, 1983.

Floodplain: Low lands adjoining the channel of a river, stream, watercourse, or other body of water, which have been or may be inundated by flood water, and those other areas subject to flooding.

Food Chain: A sequence of organisms in any natural community through which energy is transferred, each of which uses the lower member of the sequence as a food source, with plants being the ultimate basis of the sequence.

Food Web: The inter-related food relationships in an ecosystem including its production, consumption, and decomposition, and the energy relationships among the organisms involved in the energy transfer cycle.

Foreshore: The part of the shore lying between the mean high water line and the low water mark which is ordinarily traversed by the rising and falling tides and which is held in trust by the State of Connecticut for the public interest and use.

Freshwater Wetlands: Wetlands subject to regulatory authority of the State of Connecticut pursuant to the Inland Wetlands and Watercourses Act. Freshwater wetlands perform a variety of ecologically important functions, including functions related to maintaining and improving water quality, as well as providing important fish and wildlife habitat.

General Permit: A type of permit issued by the Corps of Engineers for structures and work subject to the Section 10 and 404 regulatory programs. A general permit is an authorization issued on a nationwide or regional basis for categories of activities judged to be substantially similar in nature and to cause only minimal individual and cumulative adverse environmental impacts.

Gray Water: Wastewater generated by water-using fixtures other than toilets on recreational and commercial vessels.

Greenbelt: A linked system of natural areas along the shoreline of a watercourse or body of water, often including public easements, open space land, and public access walkways. A greenbelt typically provides a natural, protective buffer area between the upland and aquatic area, conserves valuable natural resources, and may provide opportunities for passive recreational use.

Groundwater: The supply of freshwater found beneath the earth's surface (usually in aquifers) which is often used for supplying wells and springs.

Habitat: The place where a human, animal, plant, or microorganism population lives, and the living and nonliving characteristics, conditions, and surroundings of that place.

Harbor Master: A harbor master for any Connecticut municipality with navigable waters within its limits who may be appointed by the Governor of Connecticut in accordance with Section 15-1 of the Connecticut General Statutes and responsible, in accordance with other sections of the General Statutes, for the general care and supervision of the navigable waters within the territorial limits of the municipality. In the absence of a harbor master appointed by the Governor for the Borough of Fenwick, the Harbor Master for the Town of Old Saybrook has jurisdiction in the Fenwick Harbor Management Area.

Harbor Management Area: The area of jurisdiction of the Fenwick Harbor Management Commission as defined in the Borough Ordinance establishing the Commission and encompasses the Borough's harbor management jurisdiction on the Connecticut River, South Cove, and nearshore Long Island Sound seaward of the mean high water line.

Harbor Management Commission: The duly appointed body of the Borough of Fenwick with responsibilities for managing the navigable waters within the Borough's Harbor Management Area, including responsibilities for preparing and implementing the Borough's Harbor Management Plan as set forth in the Connecticut Harbor Management Act and the Borough Ordinance establishing the Commission.

Harbor Management Plan: A municipal plan for the balanced use of navigable waters within a municipality's territorial limits for recreational and other purposes and for the protection of environmental resources as prepared by the municipality's harbor management commission, adopted by the municipality's legislative body, and approved by the Connecticut departments of Environmental Protection and Transportation in accordance with Sections 22a-113k through 113t of the Connecticut General Statutes.

Hazard to Navigation: Any obstruction, usually sunken, that presents a sufficient danger to navigation so as to require expeditious, affirmative action such as marking, removal, or redefinition of a designated waterway to provide for navigational safety.

High Tide Line: The line or mark left upon tide flats, beaches, or along shore objects that indicates the intersection of the land with the water's surface at the maximum height reached by a rising tide. Proposed work and structures seaward of the high tide line are subject to State regulatory authorities. (Proposed work and structures seaward of the mean high water line are subject to Federal as well as State regulatory authorities; see below.)

Hydraulic Dredging: One of the two primary dredging techniques (distinguished from mechanical dredging) utilizing suction dredging of sediments.

Hydraulics: The science dealing with the practical applications (such as the effects of flow and the transfer of energy) of water or other liquids in motion.

Hydrology: The science dealing with the properties, distribution, and circulation of water on the surface of the land, below the surface, and in the atmosphere, particularly with respect to precipitation and evaporation.

Hypoxia: A condition of degraded water quality characterized by a deficiency of oxygen.

Individual Permit: A type of permit issued by the Corps of Engineers for structures and work subject to the Section 10 and 404 regulatory programs. An individual permit is issued following evaluation of a specific proposal and involves public notice of the proposed activity, review of comments and, if necessary, a public hearing. In general, an individual permit must be received from the Corps for most activities that involve: a) filling of wetlands and navigable waters; b) placement of structures in navigable waters; and c) dredging and disposal of dredged material. mooring permit issued by a municipality's harbor master.

Intertidal Flats: Coastal resources consisting of very gently sloping or flat areas located between high and low tides and composed of muddy, silty and fine sandy sediments and generally devoid of vegetation.

Jetty: Generally, a structure on an open coast extending into a body of water; designed to prevent shoaling of a channel by littoral materials and to direct and confine stream or tidal flow; defined in the State Navigation Law as a structure located within the shorelines of a body of water for the purpose of controlling currents usually to prevent filling in of a channel. Jetties are built at the mouths of rivers or tidal inlets to help deepen and stabilize a channel.

Knot: The unit of speed used in navigation equal to one nautical mile (6,076.115 feet or 1,852 meters) per hour.

Land Use: The character and condition of the use of land and which may be described in terms of general categories, such as residential, commercial, industrial, and open space, or with reference to the specific use or development of a specific site.

Launching Ramp: A man-made or natural facility used for the launching and retrieval of boats; primarily providing facilities for boaters to launch trailered boats and park their vehicles and trailers while engaging in boating activities.

Littoral: Of or relating to or living or located on a shoreline subject to the ebb and flood of the tide.

Littoral Drift: The movement of sand by littoral (often called longshore) currents acting along the shore in a direction generally parallel to the beach.

Live-Aboard Vessel: Any berthed, anchored, or moored vessel that is used as a permanent residence. (See Floating Home.)

Maintenance dredging: The generally periodic and repetitive removal of recurring, naturally deposited bottom sediment from an existing navigation channel or berthing area.

Marine Facility: Any facility (including but not limited to docks, floats, piers, ramps, hoists, parking areas, concessions and service facilities), either publicly or privately owned, intended primarily to be used by or for the service of vessels.

Marine Sanitation Device (MSD): Any equipment installed on board a vessel to receive, retain, treat, or discharge sewage.

Mean High Water: A tidal datum. The arithmetic mean of the high water heights observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). Proposed work and structures seaward of the mean high water line are subject to federal regulatory authorities carried out by the U.S. Army Corps of Engineers as well as State regulatory authorities. All land and water areas seaward of the mean high water line are subject to the Public Trust Doctrine and held in trust by the State of Connecticut for public use. The mean high water line also marks the seaward boundary of the jurisdiction of the Fenwick Planning and Zoning Commission.

Mean Low Water: A tidal datum. The arithmetic mean of the low water heights observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch).

Mean Lower Low Water: A tidal datum. The arithmetic mean of the lower low water heights of a mixed tide observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). Only the lower low water of each pair of low waters, or the only low water of a tidal day is included in the mean. Federal navigation projects now reference the Mean Lower Low Water.

Mitigation: An action to lessen the severity of impact of another action, either natural or human. Mitigation may refer to an action taken to reduce or eliminate the risk to human life and property and the negative impacts that can be caused by flooding and other natural and technological hazards. Mitigation may also refer to actions designed to lessen the adverse impacts of proposed development activities on natural and cultural resources, including wetlands and water resources.

Moor: To secure a vessel to the bottom of a waterbody by the use of mooring tackle.

Mooring: The place where, or the object to which, a vessel can be made fast by means of mooring tackle so designed that, when such attachment is terminated, some portion of the tackle remains below the surface of the water and is not under the control of the vessel or its operator.

Mooring Area: A designated water area within which vessels may moor.

Mooring Tackle: The hardware (e.g., chain, line, and anchor) used to secure a vessel at a mooring.

National Flood Insurance Program (NFIP): A program established by the National Flood Insurance Act of 1968 to provide relief from the impacts of flood damages in the form of Federally subsidized flood insurance available to participating communities; such insurance is contingent on the incorporation of nonstructural flood loss reduction measures into local floodplain management regulations.

Natural Resource Values: The qualities of or functions served by natural resources (such as wetlands, floodplains, and water resources) which include but are not limited to: a) water resource values (including natural moderation of floods and water quality maintenance); b) living resource values (fish, wildlife and plant habitats); and c) cultural resource values (open space, natural beauty, scientific study, outdoor education, archaeological and historic sites, and recreation).

Nautical Mile: A unit of nautical measurement accepted as 6,076.115 feet, approximately 1.15 times as long as the U.S. statute mile of 5,280 feet.

Navigable: Capable of being navigated or passed over by ships or vessels.

Navigable In Fact: A body of water navigable in its natural or unimproved condition, affording a channel for useful commerce of a substantial and permanent character conducted in the customary mode of trade and travel on water.

Navigable Waters of the United States: Those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Navigate: To go from one place to another by water by sailing or managing a boat; to use a waterbody as a highway for commercial, recreational, educational, or other purposes.

Navigation: The act, science, or business of traversing the sea or other navigable waters in vessels.

Navigation Servitude: The public right of navigation for the use of the people at large. Any property right dependent for its exercise or value on the presence of navigable waters is subject to a defect of title, called a servitude, originating from an ancient common law principle whereby there is a right of way of the public to use a stream or other water body for navigation despite the private ownership of the bed or bank. Hence, in exercise of Congress' power over navigation stemming from the Commerce clause of the Constitution, no further Federal real estate interest is required for navigation projects in navigable waters below the ordinary high water mark.

Neap Tide: A tide of minimum extent occurring at the first and third quarters of the moon (compare with Spring Tide).

No Discharge Zone: An area designated by the U.S. Environmental Protection Agency within which no sewage, untreated or treated, may be discharged from any vessel. An area particularly sensitive to contamination and that will benefit from a complete prohibition of all vessel sewage discharges may be designated by the EPA upon application by a state, contingent upon the certification by the state that adequate and reasonably available pump-out facilities exist for boaters to use.

Nonpoint Source (NPS) Pollution: Pollution that does not originate from a specific identifiable source such as a sewage discharge pipe. Types of nonpoint pollution include stormwater runoff from roads, parking lots, and backyards, as well as wet and dry atmospheric deposition. Precipitation can carry pollutants from the air to the ground and then gather more pollutants as the water runs off pavement and land to the nearest waterway.

Nonstructural Flood Protection Measures: Planning, regulatory, and other techniques intended to discourage or avoid dangerous, uneconomic, or unwise use of floodplains and erosion prone areas, as distinguished from the more traditional "structural" measures (such as dams, levees, and seawalls) used to control flooding and erosion.

Nutrient: Any substance assimilated by living things that promotes growth, including any number of organic or inorganic compounds (nitrogen and phosphorous are important examples) used by plants in primary production.

Obstruction to Navigation: Anything that restricts, endangers, or interferes with navigation.

"100-year" Flood: A term commonly used to refer to a flood of the magnitude that has a one-percent chance of being equalled or exceeded in any given year. The "100-year" flood is the flood that is equalled or exceeded once in 100 years on the average, but the term should not be taken literally as there is no guarantee that the "100-year" flood will occur at all within the 100-year period or that it will not recur several times. The "100-year" flood is the standard most

commonly used for floodplain management and regulatory purposes in the United States, and is therefore often referred to as the “base flood” for floodplain management purposes.

Outfall: A structure (e.g., pipe) extending into a body of water for the purpose of discharging wastewater, stormwater runoff, or cooling water.

Passive Recreational Use: Recreational activities, such as hiking, walking, picnicking, canoeing, and fishing, generally not requiring facilities and organization for participation and/or having little significant impact on the natural environment.

Pathogen: Microorganisms that can cause disease in other organisms or in humans, animals, and plants. Pathogens may be bacteria, viruses, or parasites transported in sewage and runoff from agricultural and other areas.

Personal Watercraft: Any inboard powered vessel less than sixteen feet in length which has an internal combustion engine powering a water-jet pump as its primary source of motor propulsion and which is designed to be operated by a person sitting, standing, or kneeling on the vessel, rather than the conventional manner of sitting or standing inside the vessel.

Phragmites communis: A grass known as common reed that grows to a height of 5 to 15 feet, depending on salinity, is usually found along the upper ridges of salt marshes and in areas cut off from the ebb and flood of the tide, and which may present a serious fire hazard and associated threat to life and property.

Pier: Generally, a structure, usually of open construction, extending out into the water from the shore to serve as a vessel landing place or recreational facility rather than to afford coastal protection; generally defined as a wharf or portion of a wharf extending from the shoreline with water on both sides.

Pile: A long, heavy timber or section of concrete or metal to be driven or jetted into the earth or seabed to serve as a support or protection.

Point Source Pollution: Any discernable confined or discreet conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, vessel or other floating craft, from which pollutants are or may be discharged.

Pollutant: Generally, any substance introduced into the environment that adversely affects the health of plants and animals or the usefulness of a resource, and including toxic substances, nutrients, and pathogens which adversely affect water quality.

Pollution: The man-made or man-induced alteration of the chemical, physical, biological, or radiological integrity of an aquatic ecosystem. (See Contaminant.)

Public Access: Physical and/or visual access to marine or tidal waters that is available to all members of the public.

Public Trust Doctrine: The doctrine based on the common law principle that certain lands and waters are so important to the public that private ownership or other impediments to public uses should not be permitted. Under the Public Trust Doctrine, the State of Connecticut holds title to

the foreshore, open tidal waters, and submerged land under tidal waters seaward of the mean high water line as trustee for the public and must administer the use of these lands in the public interest.

Pump-out Station: A marine facility for pumping sewage from vessel holding tanks and then containing that waste before proper disposal into a sewage disposal system.

Ramp: A structure used to gain access from a bulkhead, fixed dock, or platform to a float; also, a uniformly sloping surface used for launching small craft.

Recreational Boating Facilities: Facilities for the support of recreational boating activities, including marina and boatyard facilities providing docks, slips, moorings, and launching ramps as well as sales, repair, service, and storage facilities, and private docking facilities constructed by waterfront property owners.

Revetment: A facing of stone, concrete, or other hard material, built to protect a scarp, embankment, or shore structure against erosion by wave action or currents.

Risk: The probability of being flooded.

Riparian: Of or relating to or living or located on the bank of a watercourse.

Riparian/Littoral Rights: The rights of an owner of land contiguous to a navigable body of water. If the water in question is flowing (e.g., river or stream) the rights are said to be riparian. If the property is subject to the ebb and flow of the tide, the rights are said to be littoral rights. The terms “riparian” and “littoral” are commonly used interchangeably. Riparian rights may be defined as principally the right of access to the water, the right of accretions, and the right to other improvements. Littoral rights are usually concerned with the use and enjoyment of the shore.

Runoff: That part of precipitation, snow melt, or irrigation water that runs off the land into streams or other surface water and can carry pollutants from the air and land into the receiving body of water.

Salinity: the measure of the quantity of dissolved salts in seawater; defined as the total amount of dissolved solids in seawater once the organic matter has been completely oxidized.

Sanitary Sewer: A system of pipes, usually underground, that carry only wastewater, not stormwater.

Section 10 and 404 Regulatory Programs: The principal Federal regulatory programs, carried out by the U.S. Army Corps of Engineers, affecting structures and work below the mean high water line. The Corps, under Section 10 of the River and Harbor Act of 1899, regulates structures in, or affecting, navigable waters of the United States, as well as excavation or deposition of materials (e.g., dredging or filling) in navigable waters. Under Section 404 of the Federal Water Pollution Control Act Amendments (Clean Water Act of 1977), the Corps is also responsible for evaluating applications for Department of the Army permits for any activities that involve the placement of dredged or fill material into waters of the U.S., including adjacent wetlands.

Sediment: Particulate material, both mineral and organic, that is in suspension, being transported, or has been moved from its site of origin by the forces of air, water, gravity, or ice, including material deposited in a loose, unconsolidated form on the bottom of a water body. The term dredged material refers to material that has been dredged from a water body, while the term sediment refers to material in a water body prior to dredging.

Sedimentation: The process of transportation and deposition of particles onto the bottom of a body of water.

Semidiurnal tide: A tide with two high and two low waters in a tidal day with comparatively little diurnal inequality.

Sewage: The combination of human and household waste with water which is discharged to the home plumbing system including the waste from a flush toilet, bath, sink, lavatory, dishwashing, or laundry machine, or the water-carried waste from any other fixture, equipment, or machine, together with such groundwater infiltration and surface water as may be present.

Sewer: A system of pipes, usually underground, that carries wastewater and/or stormwater runoff from the source to a treatment plant or receiving body of water. Sanitary sewers carry household, industrial, and commercial waste; storm sewers carry runoff from rain and melting snow; combined sewers are used for both purposes.

Sheet Pile: A pile with a generally slender, flat cross section to be driven into the ground or seabed and meshed or interlocked with like members to form a bulkhead or seawall.

Shellfish: An invertebrate having a rigid outer covering, such as a shell or exoskeleton; includes oysters, scallops, hard clams, soft clams, crabs, shrimp, all kinds of mussels, skimmer or surf clams, periwinkles, and conch.

Shellfish Grounds: Areas where shellfish grow naturally or with cultivation.

Shoal: A shallow place in a river or sea, comprised of material that is not rock, that may endanger surface navigation. Also, to become shallow gradually; to cause to become shallow; to proceed from a greater to a lesser depth.

Slack Tide: The state of a tidal current when its velocity is near zero, especially the moment when a reversing current changes direction and its velocity is zero; sometimes considered the intermediate period between ebb and flood currents.

Slip: Berthing space for a single vessel alongside a pier, finger float or walkway.

Spartina alterniflora: A saltwater plant known as saltwater cordgrass, usually present in the regularly flooded low marsh zone of salt and brackish marshes.

Spartina patens: A saltwater plant known as saltmeadow cordgrass or Salt hay, often forming "cow-lick" mats in the irregularly flooded high marsh zones of salt and brackish marshes.

Spring Tide: A tide that occurs at or near the time of new or full moon and which rises highest and falls lowest from the mean sea level (compare with Neap Tide).

Storm Sewer: A system of pipes, generally underground, carrying only stormwater runoff from building and land surfaces; as distinguished from a sanitary sewer.

Storm Surge: A rise above normal water level on the open coast due to the action of wind stress on the water surface. Storm surge resulting from a hurricane also includes that rise in water level due to atmospheric pressure reduction and wind stress.

Stormwater Runoff: The rainwater, melting snow, and associated material draining into storm drains and water bodies.

Structural Flood Protection Measures: Engineered measures such as dams, dikes, levees, seawalls, and channel alterations designed to modify the volume and location of flooding and extent of erosion, intended to help protect lives and properties from the impacts of floods and erosion.

Sub-tidal Area: The coastal waters and submerged land seaward of the mean low water line.

Submerged Lands: Lands covered by water at any stage of the tide, as distinguished from tidelands which are attached to the mainland or an island and are covered and uncovered by the tide.

Tidal Cycle: Elapsed time between successive high and low waters.

Tidal Current: The alternating horizontal movement of water associated with the rise and fall of the tide caused by the astronomical tide-producing forces.

Tidal Prism: The volume of water entering an estuary during an incoming tide; in other words, the difference between the volume of water in an estuary at high tide and the volume of water at low tide.

Tidal Wetlands: Wetlands subject to the ebb and flow of the tide, defined by State statute, and subject to the regulatory authorities of the Connecticut Department of Environmental Protection in accordance with Sections 22a-359 through 22a-363f (the "Structures and Dredging" statute) of the Connecticut General Statutes.

Tidal Wetland Restoration: Restoration of tidal wetlands (and their associated ecological values) including wetlands previously cut off from tidal exchange by flood protection dikes and wetlands historically filled for development and other purposes. Wetland restoration may involve removal of dikes to reintroduce the tide and excavation of fill to re-establish intertidal elevations.

Tide: Periodic rise and fall of the ocean surface and connecting bodies of water resulting from the gravitational attraction of the moon and sun acting upon the rotating earth.

Tide Lands: Land between the lines of the ordinary high and low tides, covered and uncovered successively by the ebb and flood thereof; land covered and uncovered by the ordinary tides.

Tidewater: Waters, whether salt or fresh and usually of coves, bays, and rivers and not the open sea, wherever the ebb and flood of the tide from the sea is felt.

Toxic Substances: Substances, both naturally occurring and derived from human sources, that cause adverse biological effects or health risks when their concentrations exceed a certain level in the environment. Toxic substances include heavy metals and organic chemicals such as chlorine, polychlorinated biphenyls (PCBs), polyaromatic hydrocarbons (PAHs), and pesticides.

Transient Boaters: Persons traveling to a harbor or marine facility by boat and staying for a temporary period of time.

Turbidity: A state of reduced clarity in a fluid caused by the presence of suspended matter.

Unauthorized Encroachment: Any structure (including docks, piers, floats, pilings, moorings and other structures) and any other work (including dredging and filling) extending into a Federal navigation project or into any other areas below the high tide line without necessary municipal, State, and/or Federal approvals.

Underwater Lands: Land seaward of the last known location (prior to the placement of any fill) of the mean high water line and administered in the public interest in accordance with the Public Trust Doctrine.

Underway: The condition of a vessel not at anchor and not made fast to the shore or aground.

Upland: Land lying above the ordinary high water mark.

Upland Disposal: Disposal of dredged material on upland sites where the material is contained in a manner such that it is isolated from the environment.

V-Zone: The "velocity zone" or the portion of the coastal floodplain as marked on maps prepared by the Federal Emergency Management Agency that is subject to high velocity waters from wave action associated with the one-percent annual chance flood. Also called the coastal high hazard area, the V-Zone is usually determined by the area subject to wave heights of three feet or greater. (See A-Zone.)

Vessel: Every description of watercraft, other than a seaplane on water, used or capable of being used as a means of transportation on water. Specifically excluded by this definition are floating homes.

Vulnerability: Characterization of the nature and extent of damage that may occur during flooding.

Wastewater: Water that carries treated or untreated wastes, including dissolved or suspended solids, from homes, businesses, and industries.

Water Column: The water located vertically over a specific location on the floor of a water body.

Water-Dependent Uses: Those uses and facilities as defined in the Connecticut Coastal Management Act that require direct access to or location in marine or tidal waters and which therefore cannot be located inland.

Water Quality Standards: Standards established by the Connecticut Department of Environmental Protection for all of the State's waters to provide clear and objective statements for existing and projected water quality and the State's general program to improve Connecticut's water resources.

Water Resources Values: Natural values including those related to natural storage and conveyance of flood water, maintenance of water quality, and recharge of groundwater.

Waters of the United States: This term, as it applies to the jurisdictional limits of the authority of the Corps of Engineers under the Clean Water Act, includes all navigable and interstate waters, their tributaries and adjacent wetlands, as well as isolated wetlands and lakes, and intermittent streams.

Watershed: A drainage area; the region or area contributing ultimately to the water supply of a particular water course or water body. The Connecticut River watershed, for example, is the area within which precipitation drains into the Connecticut River and ultimately into Long Island Sound.

APPENDIX B: SELECTED REFERENCES

Studies, Reports, and Publications

Bachman, Ben. *Upstream. A Voyage on the Connecticut River.* Houghton Mifflin Company. Boston, Massachusetts. 1985.

Borton, Mark C., Ellsworth S. Grant, and Gene Mitchell, Editors. *The Complete Boating Guide to Long Island Sound.* Embassy Marine Publishing. Essex, Connecticut. 1989.

Borough of Fenwick Planning and Zoning Commission. *1996 Amendment to the Plan of Conservation and Development.* Borough of Fenwick, Old Saybrook, Connecticut. 1996.

Brawerman, Jane and Geoff Dates. "Connecticut River Watch Program 1994 Final Report." Lower Connecticut River Study: Mattabesset River, Coginchaug River, Connecticut River. Middlesex County Soil and Water Conservation District. Haddam, Connecticut. December 1995.

City of Middletown Harbor Improvement Agency. "City of Middletown Harbor Management Plan, Draft for City Review." Middletown, Connecticut. September 2000.

City of Middletown Harbor Improvement Agency. *City of Middletown Harbor Management Plan.* Middletown, Connecticut. June 2003.

City of Middletown Harbor Improvement Agency. "Middletown Waterfront and Harbor Management Study: Background Information for Preparation of a Municipal Harbor Management Plan. Volume II: Full Report." Middletown, Connecticut. January 1998.

City of Norwalk Harbor Management Commission. *Norwalk Harbor Management Plan.* Norwalk, Connecticut. Adopted 1990; amended 1993.

City of Norwalk Harbor Management Commission. *Norwalk Harbor Management Plan. 1997 Plan Addendum.* Norwalk, Connecticut. November 1997.

City of Norwich Harbor Management Commission. *City of Norwich Harbor Management Plan.* City of Norwich, Connecticut. July 1996.

- The Connecticut River Watershed Council, Inc. *The Complete Boating Guide to the Connecticut River*. Embassy Marine Publishing. Essex, Connecticut. 1990.
- The Connecticut River Watershed Council, Inc. "Connecticut River Fact Sheet." Easthampton, Massachusetts. 1997.
- Grant, Marion Hepburn. *The Fenwick Story*. Connecticut Historical Society. 1974.
- The Nature Conservancy. "Tidelands of the Connecticut River" (a pamphlet). Middletown, Connecticut. (undated).
- Roth, David M., Editor. *Connecticut History and Culture: An Historical Overview and Resource Guide for Teachers*. Connecticut Historical Commission. Hartford, Connecticut. 1985.
- State of Connecticut Department of Environmental Protection and Long Island Sound Councils, Assembly and Foundation. "Connecticut Coastal Access Guide." Hartford, Connecticut. May 1999.
- State of Connecticut Department of Environmental Protection. Office of Long Island Sound Programs. "Connecticut's Coastal Program: Residential Dock Guidelines." Hartford, Connecticut. September 2002.
- State of Connecticut Department of Environmental Protection, Office of Long Island Sound Programs. "Public Trust Fact Sheet." Hartford, Connecticut. (undated).
- State of Connecticut Department of Environmental Protection, Water Compliance Unit. *Water Quality Standards*. Adopted January 1992, Effective Date May 15, 1992.
- State of Connecticut Department of Environmental Protection, U.S. Fish and Wildlife Service, and The Nature Conservancy. "Nomination Report to the Convention on Wetlands of International Importance; Connecticut River Estuary and Tidal River Wetlands Complex." September 1994.
- Town of Chester Harbor Management Commission. *The Chester Harbor Management Plan*. Chester, Connecticut. April 1994.
- Town of East Lyme Harbor Management Commission. *East Lyme Harbor Management Plan*. East Lyme, Connecticut. June 1991.
- Town of Essex Harbor Management Commission. *Town of Essex, Connecticut Harbor Management Plan*. Essex, Connecticut. As amended through July 9, 1990 and adopted September 18, 1990.
- Town of Fairfield Harbor Management Commission. *The Management Plan for Southport Harbor*. Fairfield, Connecticut. March 1995.

- Town of Old Lyme Harbor Management Commission. *Harbor Management Plan. Town of Old Lyme, Connecticut.* Old Lyme, Connecticut. March 1993.
- Town of Old Saybrook Harbor Management Commission. ``Town of Old Saybrook Harbor Management Plan, Draft for Town Review." Old Saybrook, Connecticut. September 2000.
- Town of Old Saybrook Harbor Management Commission. *Town of Old Saybrook Harbor Management Plan.* Old Saybrook, Connecticut. June 2003.
- Town of Old Saybrook Planning Commission. *Plan of Development for the Town of Old Saybrook, Connecticut.* Old Saybrook, Connecticut. June 1990.
- Town of Old Saybrook Planning Commission. *Plan of Development for the Town of Old Saybrook, Connecticut. Development Program No. 4.13: Municipal Coastal Program.* Old Saybrook, Connecticut. Adopted January 5, 1983.
- Town of Stratford Waterfront and Harbor Management Commission. *Stratford Harbor Management Plan.* Town of Stratford, Connecticut. April 1994.
- Town of Stratford Waterfront and Harbor Management Commission. *Stratford Harbor Management Plan. 1999 Plan Addendum.* Town of Stratford, Connecticut. April 1999.
- U.S. Army Corps of Engineers, New England District. ``Guidelines for Placement of Fixed and Floating Structures in Navigable Waters of the United States Regulated by the New England District U.S. Army Corps of Engineers." Concord, Massachusetts. July 1996.
- U.S. Army Corps of Engineers, New England Division. ``Navigation and Beach Erosion Control Projects. Volume 3 - Rhode Island and Connecticut." Revised September 30, 1988.
- U.S. Army Corps of Engineers, New England Division. *Water Resources Development in Connecticut 1987.* U.S. Government Printing Office. 1988.
- U.S. Department of Transportation, Coast Guard. *Light List, Volume I Atlantic Coast.* U.S. Government Printing Office. 1986.
- U.S. Fish and Wildlife Service. ``Enhancing the Connecticut River Watershed's Fish and Wildlife Through Partnerships; The Silvio O. Conte National Fish and Wildlife Refuge Action Plan." Turner's Falls, Massachusetts. February 1996.

U.S. Fish and Wildlife Service. "Summary Final Action Plan and Environmental Impact Statement for Implementing the Silvio O. Conte National Fish and Wildlife Refuge Act in the Connecticut River Watershed of Connecticut, Massachusetts, Vermont and New Hampshire." Turner's Falls, Massachusetts. October 1995.

Legislation and Regulations

Borough of Fenwick Special Acts and Ordinances. 1993. Including: State of Connecticut Special Acts 1899, No. 271 as amended 1943, "Incorporating the Borough of Fenwick"; "An Ordinance Establishing a Park Commission"; "An Ordinance Establishing an Historic District in the Borough of Fenwick"; "An Ordinance Establishing a Harbor Management Commission"; "An Ordinance Establishing a Planning and Zoning Commission"; and "Borough of Fenwick Zoning Regulations."

Connecticut Boating Safety Enforcement Manual. Statutes and Regulations. 1999. Old Lyme, Connecticut. 1999.

General Statutes of Connecticut. Sections 15-1 through 15-26a (Harbors and Rivers).

General Statutes of Connecticut. Sections 15-121 through 15-126 (Boating).

General Statutes of Connecticut. Sections 15-127 through 15-140 (Safety Regulation).

General Statutes of Connecticut. Sections 15-141 through 15-169 (Numbering and Registration of Vessels).

General Statutes of Connecticut. Sections 15-170 through 15-176 (Discharge of Sewage from Vessels).

General Statutes of Connecticut. Sections 22a-28 through 22a-35 (Tidal Wetlands Act).

General Statutes of Connecticut. Sections 22a-90 through 22a-112 (Connecticut Coastal Management Act.)

General Statutes of Connecticut. Sections 22a-113k through 22a-113t (Connecticut Harbor Management Act).

General Statutes of Connecticut. Sections 22a-359 through 363f (Structures, Dredging and Fill in Tidal, Coastal or Navigable Waters).

Maps, Charts, and Photographs

Steadman, Geoffrey. Aerial photo survey of the Old Saybrook and Fenwick Harbor Management Areas (color slides). July 1998.

Town of Old Saybrook Planning Commission. Town of Old Saybrook base map. Scale 1 in. = 1,000 ft. Old Saybrook, Connecticut. May 1988.

Town of Old Saybrook Zoning Commission. "Zoning Map of the Town of Old Saybrook, Connecticut." Old Saybrook, Connecticut. Amended through December 18, 1990.

U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service. "Nautical Chart 12375 (Connecticut River, Long Island Sound to Deep River)." May 1995.

U.S. Department of the Interior, Geological Survey. State of Connecticut map. Scale 1:125,000. Revised 1974.

U.S. Department of the Interior, Geological Survey. Topographic Map (7.5 Minute Series). *Essex Quadrangle*. 1958, Photorevised 1970.

U.S. Department of the Interior, Geological Survey. Topographic Map (7.5 Minute Series). *Old Lyme Quadrangle*. 1958, Photorevised 1970.

APPENDIX C: THE CONNECTICUT HARBOR MANAGEMENT ACT

Effective October 1, 1984;

Codified in Chapter 444a, Sections 22a-113k through 22a-113t of the Connecticut General Statutes.

CHAPTER 444a*

HARBOR MANAGEMENT COMMISSIONS

* See Chapter 262 (Sec. 15-1 et. seq.) re harbors and rivers.

Sec. 22a-113k. Harbor management commissions. (a) Any municipality having within its limits navigable waters as defined in subsection (b) of section 15-3a may establish by ordinance one or more harbor management commissions or may designate any existing board, commission, council, committee or other agency as a harbor management commission. Any harbor management commission established under this section may include one member representing the following: The planning commission, the zoning commission, or the combined planning and zoning commission, the conservation commission, shellfish commission and flood control board. The harbor master or deputy harbor master for the municipality shall be a nonvoting ex-officio member of any harbor management commission. The ordinance shall designate the area within the territorial limits of the municipality and below the mean high water that shall be within the jurisdiction of a commission and shall set forth the number of members of a commission, their method of selection, terms of office and procedure for filling any vacancy.

(b) Notwithstanding the provisions of the general statutes or any special act, if an existing municipal waterfront authority, municipal shellfish commission or municipal port authority is designated as a harbor management commission, the municipality may by ordinance increase the membership of such authority, commission or agency and may include one member representing each of the following: The planning commission, the zoning commission, or the combined planning and zoning commission, the conservation commission, shellfish commission and flood control board.

(c) Any two or more municipalities whose common boundaries lie within navigable waters as defined in subsection (b) of section 15-3a may by concurrent ordinances of their legislative bodies establish one or more harbor management commissions. Each such commission shall consist of an equal number of members from each municipality constituted pursuant to subsection (a). Any municipality that is a member of a commission may, by vote of its legislative body, elect to withdraw from a commission.

(P.A. 84-247, S. 1; P.A. 88-336, S. 3, 5; P.A. 90-269, S. 5, 8.)

History: P.A. 88-336 inserted new Subsec. (b) concerning membership of existing authorities designated as commissions and relettered former Subsec. (b) as Subsec. (c): P.A. 90-269 authorized a municipality to have one or more harbor management commissions.

Sec. 22a-113l. Powers. Any commission established pursuant to section 22a-113k is authorized to enter in contracts, employ consultants and other assistants and receive and expend funds for equipment, supplies and staff to carry out the purposes of section 15-1, subsection (a) or section 15-7 and sections 22a-113k to 22a-113t, inclusive. Any municipality may appropriate funds to such commission.

(P.A. 84-247, S. 2.)

History: An incorrect internal reference to Sec. "22a-133t" was corrected editorially to Sec. "22a-113t" in 1993.

Sec. 22a-113m. Harbor management plan. Approval. The commission, in consultation with the commissioners of environmental protection and transportation, shall prepare or cause to be prepared a management plan for the most desirable use of the harbor for recreational, commercial, industrial and other purposes. For those towns in the coastal area as defined in section 22a-94, the plan shall provide for the preservation and use of the coastal resources of the harbor in a manner consistent with the provisions of sections 22a-90 to 22a-112, inclusive, and any municipal coastal plan adopted pursuant to section 22a-101 by any municipality that is a member of the commission. A copy of the plan shall be forwarded to the U.S. Army Corps of Engineers for review, comments and recommendations. Such plan shall be submitted for approval to the commissioners of environmental protection and transportation. Said commissioners shall act on the plan not more than sixty days after submission of such plan. Upon approval by said commissioners, the plan may be adopted by ordinance by the legislative body of each municipality establishing the commission. The ordinance shall specify the effective date of the plan. A modification to the plan may be proposed at any time and shall be approved in the same manner as the plan. The plan shall be reviewed annually by the commission and the commissioners of environmental protection and transportation.

(P.A. 84-247, S. 3.)

Sec. 22a-113n. Content of plan. (a.) The plan shall identify existing and potential harbor problems, establish goals and make recommendations for the use, development and preservation of the harbor. Such recommendations shall identify officials responsible for enforcement of the plan and propose ordinances to implement the plan. The plan shall include, but not be limited to, provisions for the orderly, safe and efficient allocation of the harbor for boating by establishing (1) the location and distribution of seasonal moorings and anchorages, (2) unobstructed access to and around federal navigation channels, anchorage areas and harbor facilities, and (3) space for moorings and anchorages for transient vessels.

(b) The plan may recommend: (1) Boundaries for development areas to be approved and established by the commissioner of environmental protection in accordance with the provisions of section 22a-360; (2) designations for channels and boat basins for approval and adoption by the commissioner of environmental protection in accordance with the provisions of section 22a-340; (3) lines designating the limits of areas for the location of vessels with persons living aboard to be approved and adopted by the director of health in

accordance with section 19a-227; (4) pump-out facilities, including the designation of no discharge zones in accordance with Section 312 of the federal Clean Water Act; and (5) regulations for the operation of vessels on the harbor pursuant to the provisions of section 15-136. Upon adoption of the plan, any recommendation made pursuant to this subsection shall be binding on any official of the state, municipality or any other political subdivision when making regulatory decisions or undertaking or sponsoring development affecting the area within the commission's jurisdiction, unless such official shows cause why a different action should be taken.

(P.A. 84-247, S. 4.)

Sec. 22a-113o. Factors considered in preparation of plan. In preparing the plan, the commission shall consider the following factors: (1) Recreational and commercial boating; (2) recreational and commercial fisheries and shellfisheries; (3) fish and shellfish resources, including leased or designated shellfish beds; (4) conservation of natural resources; (5) areas subject to high velocity waters, including but not limited to hurricanes, wave washes or tsunamis, that are designated as V-zones on a flood insurance rate map published by the National Flood Insurance Program; (6) exposed areas subject to flooding and erosion as defined in section 25-70; (7) commercial and industrial uses that are water dependent as defined in subdivision (16) of section 22a-93; (8) water quality and public health; (9) recreational uses other than boating and fisheries; (10) water dependent educational uses; (11) public access; and (12) tidal wetlands, beaches and dunes, bluffs and escarpments and intertidal flats as defined in section 22a-93.

Sec. 22a-113p. Action on applications to municipal agencies referred to commission. The commission may review and make recommendations, consistent with the plan, on any proposal affecting the real property on, in or contiguous to the harbor that is received by any zoning commission, planning commission or combined planning and zoning commission, zoning board of appeals, historic district commissions, flood and erosion control board, harbor improvement agency, port authority, redevelopment agency, shellfish commission, sewer commission, water pollution control authority or special district with zoning or other land use authority. Such agencies shall send a copy of any such proposal to the commission upon the request of such commission. The commission shall be notified of any such proposal at least thirty-five days prior to the commencement of the hearing thereon or where no hearing is held, at least thirty-five days prior to the taking of any final action on the proposal. The local agency authorized to act on the proposal shall consider the recommendations of the commission. A two-thirds vote of all the members of the local 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 shall be deemed to be approval of the proposal.

(P.A. 84-247, S. 6.)

Sec. 22a-113q. Request for general permit and delegation of enforcement authority. Upon adoption of the plan, the commission may request a general permit from the United States Army Corps of Engineers and delegation of enforcement authority pursuant to section 22a-2a.

(P.A. 84-247, S. 7.)

Sec. 22a-113r. Mooring or anchorage permit. Enforcement of ordinances implementing plan. Upon adoption of the plan, no mooring or anchorage shall be placed in the harbor without a permit from the harbor master or deputy harbor master for the municipality. Any permit granted by harbor master or deputy harbor master shall be consistent with the plan and shall expire on the thirty-first day of December next following its issuance. The harbor master or deputy harbor master shall keep a record of the location of each mooring and anchorage for which a permit has been issued, the name and address of the owner and a description of the vessel to be moored. Such information shall be made available to any officer authorized to enforce the provisions of chapter 268. The harbor master or deputy harbor master shall enforce any ordinance adopted by a municipality to implement the plan.

(P.A. 84-247, S. 8.)

See Secs. 15-1 and 15-7 re duties of harbor masters.

Sec. 22a-113s. Permit fee. The commission may propose a fee schedule for a permit for a mooring or anchorage or any other activity within the scope of the plan to be adopted by vote of the legislative body of each town establishing the commission. The maximum annual fee for a mooring or anchorage shall be two hundred dollars. The harbor master or deputy harbor master for the municipality shall collect such fee. Any fee collected pursuant to this section shall be deposited into a fund maintained by the municipality in which such fee was collected and shall be used for the maintenance and improvement of the harbor for the public and for expensed for personnel and equipment directly related to the function of the commission and the harbor master or deputy harbor master.

(P.A. 84-247, S. 9; P.A. 94-108, S. 3.)

History: P.A. 94-108 increased the maximum mooring fee from one hundred to two hundred dollars.

Sec. 22a-113t. Model harbor management. Not more than six months after October 1, 1984, the commissioner of environmental protection in consultant with the commission of transportation shall prepare a model harbor management plan.

(P.A. 84-247, S. 10.)

**APPENDIX D:
AN ORDINANCE ESTABLISHING
THE BOROUGH OF FENWICK
HARBOR MANAGEMENT COMMISSION**

Section 1.

CREATION AND PURPOSE

The Borough of Fenwick, hereby establishes a HARBOR MANAGEMENT COMMISSION under the Connecticut Harbor Management Act (Sections 22a-113k to t) for the purposes set forth therein and for ensuring the safe, proper and responsible use of the navigable waters comprising the waterfront of the Borough of Fenwick; to protect its marine resources and sensitive natural resource areas found along its nearshore coastal waters; to provide greater public opportunities for water based recreational activities; to maintain and enhance navigational facilities for the benefit of all harbor users; and to allocate the waterside resources in an economically sound manner. The area of the Borough of Fenwick within the jurisdiction of the Harbor Management Commission shall be all waters within the territorial boundaries of the Borough of Fenwick below mean high water described as follows: a line running northerly and perpendicular to the shore from the northwest corner of the Borough to the centerline of South Cove, thence easterly along the centerline of South Cove to the west side of the Connecticut River channel, thence southerly along the channel to the south end of the breakwaters, thence westerly maintaining the same distance from the shore to a point of intersection with a line perpendicular to the shore from the southwest corner of the Borough, and thence to the northwest corner of the Borough.

Section 2.

COMMISSION MEMBERSHIP

The FENWICK HARBOR MANAGEMENT COMMISSION shall consist of five (5) members and three (3) alternate members, all of whom shall be electors of the Borough of Fenwick. They shall be appointed by the Board of Warden and Burgesses. The Harbor Master shall be an ex-officio member, without vote. Terms of members and alternate members shall run for five (5) years, except that the terms shall be staggered so that no more than one (1) member's term and one alternate member's term shall terminate in any one year. Vacancies shall be filled by the Board of Warden and Burgesses for the unexpired portion of the term.

Section 3.

COMMISSION DUTIES, POWERS AND RESPONSIBILITIES

A. The BOROUGH OF FENWICK HARBOR MANAGEMENT COMMISSION shall prepare, and after public hearing adopt a Harbor Management Plan. The Plan will:

- 1) Identify existing and potential waterfront problems.
- 2) Establish recommendations for the use, development and preservation of the waterfront areas.
- 3) Recommend the required ordinances necessary to implement the Plan and identify the officials responsible for enforcement of the ordinances.

B. The Commission shall receive and review all proposals for dredging, filling and constructing or altering any structure within or contiguous to the waterfront for their consistency with the Harbor Management Plan.

C. The Commission shall assist and guide the Harbor Master in the assignment of moorings, the management of mooring and anchorage areas, and the collection of mooring fees.

D. The Commission shall assist in the coordination of all public and private agencies, commissions, and other organizations, including State and Federal agencies that have an interest or jurisdiction within the waterfront areas.

E. The Commission shall recommend ordinances for adoption by the Borough required to implement the Harbor Management Plan.

F. The Commission in association with the Warden and Board of Burgesses may employ and supervise such employees as authorized.

Section 4.

COMMISSION ORGANIZATION AND MEETINGS

The BOROUGH OF FENWICK HARBOR MANAGEMENT COMMISSION shall annually elect a Chairman, Vice-Chairman, and a Clerk by a majority of its membership. It will hold regular meetings and keep minutes of all meetings. The Chairman may call special meetings of the Commission with no less than two (2) days prior notice of the commissioners. The Commission shall submit an annual report on its activities to the Board of Warden and Burgesses as well as other reports as may be required.

The foregoing ordinance shall become effective within 15 days of publication in THE HARTFORD COURANT newspaper, being a newspaper of general circulation in the Borough of Fenwick.

Adopted January 23, 1990

Amended July 9, 1990