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# **PART THREE:**

# **APPENDICES**

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**Appendix A:**  
**GLOSSARY OF TERMS**

## GLOSSARY OF TERMS<sup>1</sup>

Abode: The principal, non-water dependent use of a floating structure as a dwelling or home.

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.

Adverse Visual Impacts: The negative impacts, described by the Connecticut Department of Energy and Environmental Protection's Office of Long Island Sound Programs (DEEP OLISP) in the Fact Sheet "Landscape Protection and Visual Impacts," that occur when the character, quality, or public enjoyment of a visual resource such as the East Lyme Harbor Management Area is diminished or impaired as a result of changes in the appearance of the landscape caused by developments in water and on the shoreline.

Aesthetic Resources: The aesthetic coastal resources described in Sec. 22a-91(5) of the Connecticut Coastal Management Act and which, pursuant to the Act, are to be protected from adverse impacts that include, but are not limited to, actions that would degrade visual quality through significant alteration of the natural features of vistas and viewpoints.

Aids to Navigation: All markers on land or in the water placed for the purpose of enabling navigators in the Harbor Management Area to avoid navigation hazards and/or 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 Coast Guard, Corps of Engineers, and Connecticut DEEP. Private aids include any buoys, signs, and other markers identifying restricted speed areas.

Anchor: a) A heavy device, fastened to a chain or line, and dropped to the bottom of a waterbody to hold a vessel in position; b) To secure a vessel temporarily to the bottom of a waterbody by dropping an anchor or anchors or other mooring tackle from a vessel. (See also "Mooring" and "Mooring Tackle.")

Anchorage: Those water areas designated for anchoring with ground tackle carried on board a vessel.

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

A-Zone: That portion of the coastal floodplain as marked on maps prepared by the Federal Emergency Management Agency that is likely to be inundated by the one-percent ("100-year") flood and is not subject to wave action.

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1 The definitions of terms contained in this Glossary are for the purpose of the East Lyme Harbor Management Plan only. The meaning and use of these terms may differ in Town, state, and federal laws, regulations, and ordinances. Where conflicts may exist between the definitions in this Glossary and the definitions in Town, state, and federal laws, regulations, and ordinances, the definitions in the laws, regulations, and ordinances shall prevail.

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.

Boat Slip: Berthing space for a single vessel alongside a pier, finger float, or walkway.

Breakwater: A structure protecting a shore area, harbor, anchorage, or basin from waves.

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 most generally used to refer to the level of use or extent of modification an environmental or man-made system may bear without experiencing unacceptable resource deterioration or degradation.

Channel: A water area specifically designated for unobstructed movement of vessels and shown on navigation charts, and marked in-water by aids to navigation. The Niantic River navigation channel 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 Energy and 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 Area: East Lyme's coastal area adjoining Long Island Sound and the Niantic River and defined according to criteria established in the Connecticut Coastal Management Act. The inland boundary of the coastal area is known as the coastal boundary and essentially encompasses all land within 1,000 feet of the high tide line or the inland edge of tidal wetlands. The coastal area is subject to the special review and regulatory authorities of the Town's Municipal Coastal Program.

Coastal Jurisdiction Line (CJL): The line defined by the topographical elevation of the highest predicted tide for the period beginning in 1983 and ending in 2001, calculated for each coastal municipality for the purpose of defining the regulatory jurisdiction of the Connecticut Department of Energy and Environmental Protection. Proposed work and structures waterward of the CJL are subject to the DEEP's coastal regulatory authorities, including authorities regulating structures, dredging, and fill. Prior to October 1, 2012, the DEEP's regulatory jurisdiction was marked by the high tide line.

Coastal Resiliency: The measure of the Town's ability to accelerate recovery and reduce the amount of resources, including public expenditures, needed to completely restore Town services, public infrastructure, and community functions damaged by natural hazards, including but not limited to, flooding, erosion, and wind hazards caused by hurricanes, coastal storms, rising sea level, and other weather and climate-related events and phenomena.

Coastal Resources: Resources including coastal waters, beaches, wetlands, intertidal flats, shellfish concentration areas, developed shoreline, and other resources as defined in the Connecticut Coastal Management Act and the East Lyme Municipal Coastal Program.

Coastal Site Plan Review: The process whereby specific development plans proposed within the Town's coastal boundary are reviewed by the Planning and Zoning commissions for consistency with East Lyme's Municipal Coastal Program and 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 a indicator of the sanitary quality of water.

Commercial Mooring: A mooring as defined by the Corps of Engineers for which any type of a fee is charged (excepting a fee charged by the Town for a mooring permit issued by the Harbor Master) and which must be authorized by an individual permit from the Corps of Engineers, the State Department of Energy and 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 Coastal Management Act: The legislation contained within the State of Connecticut General Statutes, Sections 22a-90 through 22a-112, as may be amended from time to time, and which requires, in part, that municipalities review all major activities within their coastal boundaries for consistency with the policies established by the Act, and which also provides for the voluntary development of local Municipal Coastal Programs.

Connecticut Department of Agriculture Bureau of Aquaculture (DA/BA): The principal state agency responsible for shellfish and aquaculture in Connecticut in accordance with powers and duties set forth in the Connecticut General Statutes.

Connecticut Department of Energy and Environmental Protection (DEEP): The principal state agency responsible for management of the state's natural resources. The DEEP's Land and Water Resources Division (LWRD) 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 LWRD also reviews proposed development activities and issues or denies permits for the following activities: placement of structures below the Coastal Jurisdiction 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 non-federal channels.

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 municipal harbor management plans.

Corps of Engineers: The U.S. Army Corps of Engineers (USACE) which is the principal federal agency with roles and responsibilities pertaining to harbor management in East Lyme. These roles and responsibilities include authority to regulate structures and work waterward of the mean high water line as well as responsibility to maintain the Niantic River federal navigation channel in the Niantic River and Niantic Bay.

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.

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 the environment 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.

Depuration: The action of removing impurities or other contaminants from shellfish such as when shellfish contaminated with coliform bacteria cleanse themselves when transplanted in clean waters.

Deputy Harbor Master: The Deputy Harbor Master of the Town of East Lyme who may be appointed by the Governor of Connecticut in accordance with the Connecticut General Statutes, and who shall carry out his or her duties under the direction of the Harbor Master.

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.

Dockminium: A marina development and operation concept whereby the user of a boat slip or berth purchases fee simple title to the use of that slip or berth.

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.

East Lyme Harbor Management Area (HMA): The area of jurisdiction of the East Lyme Harbor Management Commission as defined in the Harbor Management Plan and the East Lyme Harbor Management Ordinance.

East Lyme Harbor Management Commission (HMC): The duly appointed agency of the Town of East Lyme with all of the powers and duties conferred on a municipal harbor management commission by the Connecticut General Statutes, including the power and duty to plan for the most desirable use of the East Lyme Harbor Management Area and otherwise prepare and implement the Town's Harbor Management Plan, and which shall further have all of the powers and duties conferred on a municipal shellfish commission by the General Statutes except in those areas where the Waterford-East Lyme Shellfish Commission has been granted powers and duties by said statutes

East Lyme Harbor Management Plan: A plan for the balanced use of the East Lyme Harbor Management Area for recreational and other purposes and for the protection of environmental resources as prepared by the East Lyme Harbor Management Commission, adopted by the Board of Selectmen and Town Meeting, and approved by the Connecticut commissioners of Energy and Environmental Protection and Transportation in accordance with Sections 22a-113k through 113t of the Connecticut General Statutes and the Town Ordinance establishing the East Lyme Harbor Management Commission.

East Lyme Plan of Conservation and Development (POCD): The Town's master plan of land-use adopted by the East Lyme Planning Commission, most recently amended in 2009 and which includes the Town's goals and policies to guide the future growth and development of East Lyme and conservation of the Town's environmental quality and natural resources.

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 tidal 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. Connecticut estuaries, including the estuaries formed by the Niantic and Patagansett rivers, 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 USACE, 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. In the East Lyme Harbor Management Area, the navigation project consists of a designated channel extending from Niantic Bay upstream in the Niantic 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.

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.

Floodway: The channel of a river or other watercourse plus any adjacent floodplain areas that must be kept free of encroachment so that the “100-year” flood discharge can be conveyed without increasing the water surface elevation more than a designated amount. The floodway is intended to carry the deep and fast-moving water.

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.

General Permit: A type of permit issued by the DEEP and USACE for structures and work subject to state and federal regulatory programs, respectively. DEEP and USACE general permits are issued on a statewide basis for categories of activities judged to be substantially similar in nature and to cause only minimal individual and cumulative adverse environmental impacts. For example, the DEEP has issued a General Permit for Minor Coastal Structures (DEEP-OLISP-GP-2015-01) and the USACE has issued 21 General Permits for activities subject to USACE jurisdiction in navigable waters within the State of Connecticut.

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 Management Consistency Review Process: The process authorized by the Connecticut General Statutes and East Lyme Harbor Management Ordinance and described in the Harbor Management Plan whereby the Harbor Management Commission shall review, for consistency with the Plan, specific development proposals submitted to, or proposed by, Town of East Lyme commissions and departments and state and federal agencies.

Harbor Management Account: A Town account, within the Town’s General Fund as authorized by the Connecticut General Statutes, into which shall be deposited all fees for mooring and anchorage permits and other activities within the scope of the Harbor Management Plan and which shall be used exclusively for the maintenance and improvement of the Harbor Management Area for the public and for expenses for personnel and equipment directly related to the function of the Harbor Management Commission and the Harbor Master or Deputy Harbor Master.

Harbor Management Ordinance: The Town of East Lyme Ordinance establishing Harbor Management Commission and requirements for safe and efficient operation of the Harbor Management Area as recommended by the Commission and adopted by the East Lyme Board of Selectmen.

Harbor Master: The State of Connecticut Harbor Master for East Lyme who is nominated by the Harbor Management Commission for appointment by the Governor of Connecticut in accordance with Sec. 15-1 of the Connecticut General Statutes, and who shall: advise the Commission with respect to matters concerning the waters under the jurisdiction of the Town of East Lyme; serve as an ex-officio member of the Commission; have responsibilities for implementing the Harbor Management Plan subject to the direction of the Commission; and conduct all of his or her duties in a manner consistent with the Plan.

Hazard to Navigation: An obstruction, usually sunken, that presents 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 (HTL): The line or mark left upon tide flats or 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. Prior to establishment of the Coastal Jurisdiction Line, the high tide line marked the landward boundary of the Connecticut DEEP's jurisdiction for coastal regulatory purposes. The high tide line is defined by a higher elevation than the mean high water line.

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

Hypoxia: A condition of degraded water quality characterized by a deficiency of oxygen.

Individual-Private Mooring: A mooring belonging to an individual, partnership, or corporation and authorized for use by a mooring permit issued by the Harbor Master. Individual-private moorings shall not be leased or rented to a third party.

Inspection Service: Any person or business known to the Harbor Master with equipment and knowledge suitable for inspecting mooring tackle.

Intertidal Flats: Coastal resources consisting of very gently sloping or flat areas located in the intertidal area 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. Jetties are typically 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/Riparian Rights: The rights of an owner of land contiguous to a navigable body of water. If the property is subject to the ebb and flow of the tide, the rights are said to be littoral rights. If the water in question is flowing (e.g., river or stream) the rights are said to be riparian. The terms "riparian" and "littoral" are often used interchangeably and may be defined as principally the right of access to the water, the right of accretions and relictions, and the right to other improvements.

Maintenance dredging: The generally periodic and repetitive removal of recurring, naturally deposited bottom sediment from an existing navigation channel or berthing area.

Live-Aboard Vessel: Any berthed, anchored or moored vessel that is used as a temporary residence, secondary to the principal water-dependent recreational or commercial use of that vessel.

Living Shorelines: Shorelines techniques utilizing a variety of structural and organic materials such as tidal wetland plants, submerged aquatic vegetation, coir fiber logs, sand fill and stone to maintain or restore coastal resources and habitat while at the same time providing shoreline protection should be encouraged and supported, where feasible, to: stabilize the shoreline and reduce current rates of shoreline erosion and storm damage; provide ecosystem services (such as habitat for fish and other aquatic species); increase flood storage capacity; and maintain connections between land and water ecosystems to enhance resilience.

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 and located within the Harbor Management Area.

Mean High Water (MHW) Line: The line along the shoreline representing the average height of the maximum elevation reached by each rising tide over a nineteen-year period immediately preceding the current year. Proposed work and structures seaward of the MHW line are subject to federal regulatory authorities carried out by the U.S. Army Corps of Engineers as well as state regulatory authorities. (State regulatory authorities also extend above the MHW line to the coastal jurisdiction line which is defined by a higher elevation than the MHW line.) All land and water areas seaward of the MHW line are subject to the Public Trust Doctrine and held in trust by the State of Connecticut for public use. The MHW line also marks the seaward boundary of the jurisdiction of East Lyme's Planning and Zoning commissions.

Mean Low Water (MLW) Line: The line along the shoreline representing the average height of the minimum elevation reached by each falling tide over a nineteen-year period immediately preceding the current year.

Minimum Standards for Mooring Tackle: Minimum standards to be met by the owners of all mooring tackle placed in the East Lyme HMA as may be prepared and adopted by the Harbor Management Commission.

Moor: To secure a vessel to the bottom of a waterbody by the use of mooring tackle.

Mooring: A mooring shall mean a structure, utilized to secure a vessel, as defined in the most recent version of the Office of Long Island Sound Programs General Permit for Minor Coastal Structures issued October 26, 2015.

Mooring Area: An area designated by the Harbor Management Commission, and including Special Anchorage Areas designated by the U.S. Coast Guard, within which vessels may be moored provided a valid permit for such mooring is obtained from the Harbor Master.

Mooring Location: A place where a buoyant vessel is secured to the bottom of a waterbody by mooring tackle and in accordance with a permit issued by the Harbor Master.

Mooring Tackle: The chain, anchor, buoys, and other equipment used to moor a vessel, including anchoring equipment commonly known as mushroom, dead weight, pyramid, or helical embedment anchors. Specifically excluded from this definition are engine blocks and other devices which, when used as anchors, could result in the degradation of water quality or otherwise damage coastal resources.

Municipal Coastal Program: The program/plan authorized by the Connecticut Coastal Management Act, and which is carried out by the East Lyme Planning and Zoning commissions as an element of the Town's Plan of Conservation and Development. The Municipal Coastal Program establishes Town goals, policies, and zoning regulations for guiding land use and protecting coastal resources in the Town's coastal area.

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).

Natural Shore Protection Measures: Measures, also called nature-based measures, generally considered to involve the creation of natural features through the action of physical, biological, geologic, and chemical processes operating in nature, and including marshes, dunes and oyster reefs created by human design, engineering, and construction to mimic nature.

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.

Niantic River Gateway Conservation Zone: The area designated as a conservation zone by Sec. 109d of the Connecticut General Statutes, including land west and east of the Niantic River in the towns of East Lyme and Waterford, respectively, and including the area known as the Oswegatchie Hill in the Town of East Lyme.

No Discharge Zone: An area designated by the U.S. Environmental Protection Agency (EPA) 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. All of Long Island Sound including the East Lyme Harbor Management Area has been designated a No-Discharge Zone.

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 storm-water 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 shore protection measures: Measures generally considered to include planning, public policy, and regulatory measures intended to discourage or avoid dangerous, uneconomical, or unwise use of floodplains and erosion-prone areas, as distinguished from more traditional structural methods such as revetments, seawalls, groins, and breakwaters used to decrease shoreline erosion, wave damage, and flooding.

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 equaled or exceeded in any given year. The “100-year” flood is the flood that is equaled 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 (typically a 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: As defined by State statute, 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.

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 jettied 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.)

Private Shellfish Grounds: Shellfish grounds, including town-designated grounds and state franchise or leased grounds, which individuals or companies have exclusive rights to work and harvest.

Public Access: Physical and/or visual access to the Harbor Management Area that is available to all members of the general public and is not limited to any particular groups or individuals.

Pump-out Facility: A marine facility for pumping sewage from vessel holding tanks and then containing that waste before proper disposal into a sewage disposal system.

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 waterward of the Mean High Water line as trustee for the public, and must administer the use of these lands in the public interest.

Qualified Inspector: Any person approved as an inspector of mooring tackle by the Harbor Master.

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 including marina and boatyard facilities providing docks, slips, moorings, and launching ramps as well as sales, repair, service, and storage services.

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.

Riparian Rights: (See Littoral/Riparian Rights.)

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.

Sand: Material, larger than silt, consisting of particles with a grain size between 1/16 mm and 2 mm.

Sanitary Sewer: A system of pipes, usually underground, that carry only wastewater, not stormwater.

Scenic Values: The scenic values associated with the East Lyme Harbor Management Area contributing to public enjoyment, inspiration, and scientific study and to the natural and traditional character of the Town, and which therefore should be preserved in the public interest.

Seawall: A wall built parallel to the shore, designed to halt shoreline erosion by absorbing the impact of waves.

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 USACE, 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 USACE 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 United States, 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.

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, razor clams, crabs, shrimp, all kinds of mussels, skimmer or surf clams, periwinkles, and conch.

Shellfish Beds: See shellfish grounds.

Shellfish Concentration Areas: Areas defined in the Connecticut Coastal Management Act for the purpose of that Act as actual, potential, or historic areas in coastal waters in which one or more species of shellfish aggregate. As such, shellfish concentration areas area among a number of coastal resources of the state as defined in the Act.

Shellfish Growing Area Classifications: Classifications for the taking of shellfish established by the DA/BA under Section 26-192e of the Connecticut General Statutes. These classifications are applied to coastal waters, shores, and tidal flats and are based on examinations and surveys, including tests of water quality to determine if coastal waters are suitable for shellfishing. The basic classifications are “Approved,” “Conditionally Approved,” “Restricted,” “Conditionally Restricted,” and “Prohibited.”

Shellfish Grounds: An area where shellfish grow naturally or with cultivation. The terms “shellfish grounds” and “shellfish beds” are often used interchangeably and there is no distinction in law between the terms “grounds” and “beds.”

Shellfish Jurisdiction Line: The jurisdictional line in Long Island Sound established by the Connecticut Public Act of 1881 to distinguish—for shellfish management purposes—between those areas under the jurisdiction of the state and those under the jurisdiction of municipalities. The line runs from headland to headland; south of the line, all shellfish grounds are under the exclusive jurisdiction of the state; north of the line, shellfish grounds are subject to the jurisdiction of municipal shellfish commissions.

Shellfish Relay: The removal of shellfish populations from specific areas and the transplantation (relay) of those populations for depuration in other areas.

Silt: Material of intermediate size between clay and sand material, and consisting of particles with a grain size between 1/16 mm and 1/128 mm.

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.

Special Anchorage Area: A water area designated by the Coast Guard, identified on navigation charts, and where vessels may be anchored or moored. Within such areas, vessels less than 65 feet are not required to display anchorage lights.

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.

Storm Water 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.

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.

Sub-Tidal Area: The submerged land waterward of the mean low water line and not subject to the ebb and flow of the tide.

Tidal Cycle: Elapsed time between successive high and low waters.

Tidal Wetlands: Wetlands subject to the ebb and flood of the tide and defined by state statute. All tidal wetlands mapped by the State of Connecticut, as well as unmapped wetlands, are subject to the regulatory authorities of the DEEP in accordance with Sections 22a-359 through 22a-363f (the “Structures and Dredging” statute) of the Connecticut General Statutes.

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.

“Town” Shellfish Grounds: All shellfish grounds lying north of the Town/state jurisdictional line and subject to municipal jurisdiction for shellfish management purposes.

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 Anchorage: Any area reserved and designated by the Harbor Management Commission for the exclusive short term use of commercial and recreational vessels and any vessels seeking emergency shelter.

Transient Boaters: Persons traveling to the Harbor Management Area 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 of aquatic areas) waterward of the Coastal Jurisdiction Line or Mean High Water line without necessary Town, state, and federal authorizations.

U.S. Army Corps of Engineers (USACE): The U.S. Army Corps of Engineers which is the principal federal agency with roles and responsibilities pertaining to harbor management at East Lyme. These roles and responsibilities include authority to regulate structures and work seaward of the mean high water line as well as responsibility to maintain the Niantic River federal navigation project.

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: As defined by state statute, every description of watercraft, other than a seaplane on water, used or capable of being used as a means of transportation on water, including personal watercraft.

Visual Impacts: The changes in appearance of the landscape, described by the Office of Long Island Sound Programs in the Fact Sheet “Landscape Protection and Visual Impacts,” that are caused by developments and which can be positive or negative, direct or indirect, temporary or permanent, single or cumulative, and which can vary in magnitude and significance.

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-Access Structure: Any dock, float, pier, or other structure, or combination thereof, constructed partly or wholly on, in, or contiguous to the Harbor Management Area for the purpose of temporarily or permanently docking or mooring a vessel or otherwise providing physical and/or visual access to the HMA.

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 DEEP 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 floodwater, maintenance of water quality, and recharge of groundwater.

Waters of the United States: Currently defined by regulation to include all navigable and interstate waters, their tributaries and adjacent wetlands, as well as isolated wetlands and lakes, and intermittent streams

Watershed: A region or area contributing ultimately to the water supply of a particular water course or water body. The Niantic River watershed, for example, is the area within which precipitation drains into the river and ultimately into Long Island Sound.

Wharf: A structure built on the shore of a harbor, channel, or canal so that vessels may be secured alongside to receive and discharge cargo or passengers.

**Appendix B:**

**THE CONNECTICUT HARBOR MANAGEMENT ACT**

# THE CONNECTICUT HARBOR MANAGEMENT ACT

## Chapter 44a\*

### Harbor Management Commissions

\*See chapter 263 (Sec. 15-1 et seq.) re harbors and rivers.

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**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 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. 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) of this section. 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; P.A. 07-217, S. 109.)

*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; P.A. 07-217 made technical changes in Subsec. (c), effective July 12, 2007.*

*Statutory scheme demonstrates state did not intend to fully occupy field of regulating conduct waterward of the mean high water mark because it expressly delegated responsibility of regulation to harbor management commissions it created. 93 CA 314.*

**Sec. 22a-113l. Powers.** Any commission established pursuant to section 22a-113k is authorized to enter into 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) of 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: (Revisor's note: In 1993 an incorrect internal reference to Sec. "22a-133t" was changed editorially by the Revisors to Sec. "22a-113t").*

**Sec. 22a-113m. Harbor management plan. Approval.** The commission, in consultation with the Commissioners of Energy and 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-111, 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 Energy and 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 Energy and Environmental Protection and Transportation.

(P.A. 84-247, S. 3; P.A. 10-106, S. 7; P.A. 11-80, S. 58.)

*History: P.A. 10-106 replaced reference to Sec. 22a-112 with reference to Sec. 22a-111; P.A. 11-80 changed “Commissioner of Environmental Protection” to “Commissioner of Energy and Environmental Protection”, effective July 1, 2011.*

**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 Energy and 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 Energy and 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 section 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; P.A. 95-218, S. 9, 24; P.A. 11-80, S. 1.)

*History: P.A. 95-218 amended Subsec. (b) to replace a reference to “subsection” with a reference to “section”; pursuant to P.A. 11-80, “Commissioner of Environmental Protection” was changed editorially by the Revisors to “Commissioner of Energy and Environmental Protection” in Subsec. (b), effective July 1, 2011.*

*When city has established a harbor management commission which has enacted a harbor management plan, the terms of that plan are binding on commissioner when he issues a permit to construct docks. 93 CA 314.*

**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.

(P.A. 84-247, S. 5.)

**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 the 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 expenses 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 \$100 to \$200.*

**Sec. 22a-113t. Model harbor management.** Not more than six months after October 1, 1984, the Commissioner of Energy and Environmental Protection in consultation with the Commissioner of Transportation shall prepare a model harbor management plan.

(P.A. 84-247, S. 10; P.A. 11-80, S. 1.)

*History: Pursuant to P.A. 11-80, "Commissioner of Environmental Protection" was changed editorially by the Revisors to "Commissioner of Energy and Environmental Protection", effective July 1, 2011.*

## **Appendix C:**

### **TOWN OF EAST LYME HARBOR MANAGEMENT ORDINANCE**

#### **NOTE:**

This appendix is copied from the “Ordinances, Resolutions and Special Laws of the Town of East Lyme” to be consulted as the authoritative document containing the Town of East Lyme Harbor Management Ordinance. See the Town Web Site <http://eltownhall.com/> and search for “Charter, Ordinances, Special Laws.”

**(HARBOR MANAGEMENT ORDINANCE)**  
**ORDINANCE FOR THE USE AND ENJOYMENT OF**  
**EAST LYME HARBOR MANAGEMENT AREA**

Art. I: In General, Sec. 1-7

Art II: Harbor Management Commission, Sec. 8-11

**ARTICLE I: IN GENERAL**

**SECTION 1. PURPOSES**

Whereas, the Town of East Lyme has established a Harbor Management Commission which also acts pursuant to law as the Town Shellfish Commission.

Whereas, the Harbor Management Commission has prepared a Harbor Management Plan pursuant to the requirements of Sections 22a-113k through 22a-113s of the Connecticut General Statutes and other related legislation; and

Whereas, the Town of East Lyme desires to manage its harbor resources in the most effective manner and plan for the most desirable use of the East Lyme Harbor Management Area for conservation, recreation, and development;

Therefore, the Board of Selectmen hereby enacts the following ordinance for the management of the East Lyme Harbor Management Area.

**SECTION 2. BOUNDARIES**

a. Harbor Management Area Boundaries

The overall boundaries of the East Lyme Harbor Management Area include all navigable waters and intertidal areas below the Mean High Water line of the shoreline of East Lyme and bounded on the east by the East Lyme/Waterford town line; on the south by a straight line running from Millstone Point to Black Point and by a straight line running from Black Point to Hatchetts Point; and on the west by the East Lyme/Old Lyme town line.

b. Shellfish Grounds Boundaries

The East Lyme Harbor Management Commission shall have charge of all shellfisheries and shellfish grounds lying in the Town of East Lyme not granted to the Waterford-East Lyme Shellfish Commission by Section 26-287 of the Connecticut General Statutes, Revision of 1958, as amended, and not under the jurisdiction of the commissioner of agriculture, including all

rivers, inland waters and flats adjacent to all beaches and waters within the limits and marine bounds (below the mean high water line) of the Town.

### **SECTION 3. DEFINITIONS**

**Abode:** The principal, non-water dependent use of a structure or vessel as a dwelling or home.

**Aids to Navigation:** All markers on land or in the water placed for the purpose of enabling navigators in the Harbor Management Area to avoid navigation hazards and/or fix their position. Aids to navigation include federal aids placed and maintained by the US Coast Guard, and “private” aids placed and maintained by all other government and private interests under permit from the Coast Guard, Corps of Engineers, and Connecticut Department of Environmental Protection. Private aids include any buoys, signs and other markers identifying restricted speed areas.

**Anchor:** a: A heavy device, fastened to a chain or line, and dropped to the bottom of a waterbody to hold a vessel in position including an anchor used to secure a vessel at a mooring. Specifically excluded from this definition are engine blocks and other devices which, when used as anchors, could result in the degradation of water quality or otherwise damage coastal resources: b: To secure a vessel temporarily to the bottom of a waterbody by dropping an anchor or anchors or other ground tackle from a vessel.

**Anchorage:** Those water areas designated for anchoring with ground tackle carried on board a vessel.

**Channel:** Water areas specifically reserved for unobstructed movement of vessels, shown on navigation charts, and marked in-water by aids to navigation.

**Coastal Site Plan Review:** The process whereby specific development plans proposed within the Town’s coastal boundary are reviewed by the Planning and Zoning commissions for consistency with East Lyme’s Municipal Coastal Program and the Connecticut Coastal Management Act.

**Commercial Mooring:** A mooring as defined by the Corps of Engineers for which any type of a fee is charged (excepting a fee charged by the Town for a mooring permit issued by the Harbor Master) and which must be authorized by an individual permit from the Corps of Engineers, the State Department of Environmental Protection and the Harbor Master. Commercial moorings include moorings offered by marinas for transient or seasonal rental, and moorings controlled by private clubs if the annual membership fee includes a club-controlled mooring.

**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.

**Deputy Harbor Master:** The Deputy Harbor Master appointed by the Governor of Connecticut in accordance with Sections 15-1 through 15-10 of the Connecticut General Statutes, and who shall carry out his duties under the direction of the Harbor Master.

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

**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.

**Floating Home:** Any structure constructed on a raft, barge or hull, moored or docked in any water that is used primarily for single or multiple-family habitation or that is used for the domicile of any individual(s) for a period of more than 2 weeks.

**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.

**Harbor Management Area:** The area of jurisdiction of the East Lyme Harbor Management Commission as defined in the Harbor Management Plan and Section 2 of this Ordinance.

**Harbor Management Commission:** The duly appointed body of the Town of East Lyme with responsibilities for carrying out the Harbor Management Plan as set forth under the Harbor Management Act and any other duties granted by state ordinance including having charge of all shellfisheries and shellfish grounds lying in the town not granted to the Waterford-East Lyme Shellfish Commission and not under the jurisdiction of the state commissioner of agriculture.

**Harbor Management Consistency Review Process:** The process authorized by Section 22a-113p of the Connecticut General Statutes and described in the Harbor Management Plan whereby the Harbor Management Commission shall review for consistency with the Harbor Management Plan, specific development proposals submitted to, or proposed by, Town of East Lyme commissions and departments and state and federal agencies.

**Harbor Management Account:** A Town account, within the Town's General Fund, as authorized by Section 22a-113s of the Connecticut General Statutes into which shall be deposited all fees for mooring and anchorage permits and other activities within the scope of the Harbor Management Plan and which shall be used for the maintenance and improvement of the East Lyme Harbor Management Area for the public and for expenses for personnel and equipment directly related to the function of the Harbor Management Commission and the Harbor Master or Deputy Harbor Master.

**Harbor Management Ordinance:** This Ordinance establishing rules and regulations for the use and enjoyment of the East Lyme Harbor Management Area as recommended by the East Lyme Harbor Management Commission and adopted by the East Lyme Board of Selectmen.

**Harbor Management Plan:** A plan for the balanced use of East Lyme's Harbor Management Area for recreational and other purposes and for the protection of environmental resources as prepared by the Harbor Management Commission, adopted by the Board of Selectmen and approved by

the Connecticut departments of Environmental Protection and Transportation in accordance with Sections 22a-113k through 113t of the Connecticut General Statutes and Article II of this ordinance.

**Harbor Master:** The Harbor Master appointed by the Governor of Connecticut in accordance with Sections 15-1 through 15-10 of the Connecticut General Statutes, and who shall: advise the Harbor Management Commission with respect to matters concerning the waters under the jurisdiction of the Town of East Lyme and have special responsibilities for implementing the Harbor Management Plan.

**Hazard to Navigation:** An obstruction, usually sunken, that presents 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.

**Individual-Private Mooring:** A mooring belonging to an individual, and authorized for use by a mooring permit issued by the Harbor Master.

**Inspection Service:** Any person or business known to the Harbor Master who has equipment and knowledge suitable for making mooring tackle inspections.

**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 and located within the Harbor Management Area.

**Mean High Water Line:** The average height of the maximum elevation reached by each rising tide over a nineteen-year period immediately preceding the current year. 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. (State regulatory authorities also extend above the mean high water line to the high tide line which is defined by a higher elevation than the mean high water line.) 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 East Lyme's Planning and Zoning Commissions.

**Moor:** To secure a vessel to the bottom of a water body by the use of mooring tackle.

**Mooring:** A semi-permanent anchorage installation consisting of a heavy anchor, (usually of the mushroom type), chain, a mooring buoy, and other equipment so designed that, when the attachment of such equipment to a vessel is terminated, some portion of the equipment remains below the surface of the water and is not under the control of the vessel or its operator.

**Mooring Area:** An area designated by the Harbor Management Commission, and including Special Anchorage Areas designated by the U.S. Coast Guard, within which vessels may be moored provided a valid permit for such mooring is obtained from the Harbor Master.

**Mooring Location:** A place where a buoyant vessel is permanently secured to the bottom of a waterbody by mooring tackle and by permit from the Harbor Master.

**Mooring Tackle:** The chain, anchor, buoys, and other equipment used to moor a vessel. Specifically excluded from this definition are engine blocks and other devices which, when used as anchors, could result in the degradation of water quality or otherwise damage coastal resources.

**Obstruction to Navigation:** Anything that restricts, endangers, or interferes with navigation.

**Personal Watercraft:** A vessel propelled by machinery which satisfies one or both of the following criteria: a) has a width not greater than twenty-four inches; 2) is capable of carrying at least one individual who while operating the vessel has no means of steerage other than shifting his or her body weight.

**Persons:** Those, including individuals, corporations, societies, associations and partnerships, using the facilities and areas within the Harbor Management Area and subject to the provisions of this ordinance.

**Qualified Inspector:** Any person approved as an inspector of mooring tackle by the Harbor Master.

**Slip:** Berthing space for a single vessel alongside a pier, finger float, or walkway.

**Shall and May:** "Shall" is mandatory; "May" is permissive.

**Special Anchorage Area:** A water area designated by the Coast Guard, identified on navigation charts, and where vessels may be anchored or moored. Within such areas, vessels less than 65 feet are not required to display anchorage lights.

**State:** The State of Connecticut.

**Stray Vessel:** An abandoned vessel, a vessel with unknown owner, or a vessel underway without a competent person in command.

**Transient:** A person traveling to the Harbor Management Area by boat and staying for a temporary period of time.

**Transient Anchorage:** Any area reserved and designated in the Harbor Management Area for the exclusive short term use (not to exceed seven consecutive days) of commercial and recreational vessels and any vessels seeking emergency shelter.

**Vessel:** As defined by State statute, every description of watercraft, other than a seaplane on water, used or capable of being used as a means of transportation on water, including personal watercraft.

## **SECTION 4. GENERAL PROVISIONS**

### a. Applicability

The provisions of this Ordinance and any rules and regulations adopted pursuant thereto shall be applicable, and shall govern the use of the harbor management lands, waters, and facilities under the jurisdiction of the East Lyme Harbor Management Commission. This Ordinance shall be subordinate to all existing federal and state statutes and regulations affecting the East Lyme Harbor Management Area, and is not intended to preempt any other valid laws.

### b. Invalidity of Provisions

Should any provision or provisions of this Ordinance be held invalid or inoperative, the remainder shall continue in full force and effect.

### c. Authorities and Enforcement

The East Lyme Harbor Master or his designee, under the direction of the East Lyme Harbor Management Commission, shall have the authority to carry out harbor management directives and enforce all provisions of the Harbor Management Plan and, including this ordinance.

The Harbor Master or his designee may cite any alleged violators of this ordinance. Any police officer or constable of the Town of East Lyme shall have authority to enforce the provisions of this ordinance.

### d. Violations and Penalties

Any person who violates any section of this ordinance in any portion of the Harbor Management Area shall be liable to a fine of \$50.00 for each offense. Each day that a violation continues after seven (7) days following notification of the offending party or, if the offending party is not known, after notice has been posted for that time on any vessel, mooring tackle or other object that is the cause of the violation, shall be considered a separate offense. The provisions of this section are in addition to and do not supersede any penalties resulting from simultaneous violations of state or federal laws. Fines levied under the provisions of this ordinance shall be collected by the Town of East Lyme and deposited into the East Lyme Harbor Management Account (See section 4.e.)

Any violation of the provisions of this Ordinance relating to mooring permits may result in revocation of the mooring permit by majority vote of the Harbor Management Commission at a duly held meeting after written notice of the time, place and purpose of such meeting has been given to the permit owner at his or her residence address more than fifteen (15) days before such meeting. At such meeting, the permit owner shall be heard and shall be permitted to present evidence to the Commission. A vote of the Commission to revoke a mooring permit shall be subject to an appeal to the Superior Court for the Judicial District of New London by trial de novo within sixty (60) days after the permit owner receives notice of the vote of the Commission to revoke his or her permit. If no appeal is filed within said sixty (60) days period, the permit

shall be revoked and the Harbor Master may thereafter cause such mooring to be removed from its location.

e. Harbor Management Account

A Harbor Management Account is hereby created in the Town's General Fund to receive and expend monies for harbor management purposes determined by the Harbor Management Commission. All revenues generated by (1) mooring permits, (2) fines levied under the provisions of this Harbor Management Ordinance as it applies to the Harbor Management Area, and (3) fees generated by designation of oyster, clam and shellfish beds pursuant to Connecticut General Statutes, Section 26-240 et seq., shall be deposited into this account. Other funds generated or allocated specifically for harbor management shall also be deposited in this account. Funds shall be disbursed for purposes directly associated with the management of East Lyme's Harbor Management Area and implementation of the East Lyme Harbor Management Plan. Monies from this account may be allocated to the Harbor Master or his designee for the purpose of carrying out the provisions of the East Lyme Harbor Management Plan and/or the Harbor Management Ordinance.

f. Compensation of Harbor Personnel

The Harbor Master, Deputy Harbor Master and administrative personnel may receive compensation to be determined by the Harbor Management Commission. Additionally, monies from the Harbor Management Account may be used to reimburse the Harbor Master, Deputy Harbor Master and administrative personnel for necessary expenses incurred in the performance of their duties. Monies from this account may also be used to compensate contractors hired to perform work as may be deemed necessary by the Harbor Management Commission or the Harbor Master.

g. Coordination with Other Governmental Laws and Regulations

Nothing hereon contained shall bar or prevent the Harbor Master or Deputy Harbor Master from performing those duties which have been assigned to them under the General Statutes of the State.

**SECTION 5. USE OF THE HARBOR MANAGEMENT AREA**

a. Vessel Speed and Wake

The operation of any vessel, including personal watercraft, within the East Lyme Harbor Management Area shall proceed in a manner which protects all persons and property from any damage caused by a wake.

In no event shall any vessel under power exceed a speed limit of 6 mph within: 1) the federal navigation channel; 2) 200 feet of shore in the Upper Niantic River north of the federal navigation channel; 3) the Pattagansett River Estuary Restricted Speed Area as marked by state

speed limit signs; and 4) 100 feet of shore or any dock, pier, float or anchored or moored vessel in any other part of the Harbor Management Area.

b. Obstruction of Channels, Fairways and Berthing Space

No vessel shall be moored or anchored so as to interfere with the free and unobstructed use of any channel, fairway or berthing space within the Harbor Management Area.

c. Swimming and Underwater Diving

Swimming and underwater diving are prohibited in all designated channels except in an emergency or for inspection purposes.

d. Fishing

Fishing from vessels and shellfishing shall not occur in any designated channels, fairways and anchorages in a manner that poses a hazard to navigation. The placement of lobster pot floats and fixed fishing nets is prohibited in all channels marked by U.S. Coast Guard channel markers, within any fairway as designated in the Harbor Management Plan, and within any mooring area designated in the Harbor Management Plan.

e. Waterskiing

Waterskiing is prohibited in all designated channels, and in anchorages and mooring areas in the Harbor Management Area when vessels are anchored or moored therein. Waterskiing is prohibited within 200 feet of shore in the Upper Niantic River north of the federal navigation channel; within the Pottagansett River Restricted Speed Area as marked by state speed limit signs; and within 100 feet of shore or any dock, pier, float or anchored or moored vessel in any other part of the Harbor Management Area.

f. Personal Watercraft

Use of personal watercraft shall be in accordance with all applicable statutes and regulations concerning the operation of vessels. Use of personal watercraft is prohibited in all designated channels except as necessary to reach personal watercraft activity areas, and within designated anchorages and mooring areas when vessels are anchored or moored therein.

g. Board Sailing

Board sailing are prohibited within designated channels, anchorages and mooring areas except as necessary to cross a designated channel, anchorage or mooring area in a manner that does not pose a hazard or inconvenience to navigation.

h. Public Docks and Boat Launch Ramps

The use of any public dock and boat launch ramps shall be in accordance with rules and regulations established by the Harbor Management Commission. No vessel shall remain at a public dock or boat launch ramp for a period longer than the time limit posted at the dock. If a vessel is left unattended for a period of time in violation of the posted limit, then the vessel's owner of record shall be held responsible.

i. Use of Vessels as Abodes or Floating Homes

The use of any vessel in the East Lyme Harbor Management Area as an abode or floating home is prohibited. Sleeping aboard vessels on a temporary basis is allowed as a secondary use to the vessel's principal recreational or commercial use.

j. Identification of Vessels

All vessels moored or tied up to wharves, piers, or docks in the Harbor Management Area, except those on temporary call, shall maintain identification legible without boarding the vessel, in one of the following forms:

- (1) Federal or state registry number as reported to the Harbor Master or Deputy Harbor Master.
- (2) A boat name reported to the Harbor Master or Deputy Harbor Master.
- (3) The name and address or telephone number of the owner.

k. Derelict or Abandoned Vessels and Structures

No vessel, mooring, mooring float or other object within the Harbor Management Area shall be abandoned or sunk or placed where it may constitute a danger to navigation or to the safety of persons or property or where it may prevent optimum use of the area. Any vessel, mooring tackle, or other object abandoned or sunk or so placed may be removed or relocated by direction of the Harbor Master, if corrective action is not taken by the owner, if known, within seven (7) days after notification, or, if not known, after notice has been posted for that period on the vessel, mooring, or object. Nothing herein contained shall prevent the Harbor Master or Deputy Harbor Master from taking measures with or without notice, if, in their judgment, it is necessary in order to provide for the safety of persons or property. The expense of such removal or relocation and any liability arising from injury to person or property incurred thereby shall be the responsibility of the owner.

**SECTION 6. MOORING AND ANCHORING VESSELS**

a. Mooring Permits Required

- (1) In order to provide for adequate access for vessels, for the safety of persons and property, and for the optimum use of the Town's Harbor Management Area, the Harbor Master must approve the location of all mooring within the East Lyme Harbor Management Area. The Harbor Master shall issue a permit for each approved location. It shall be a violation of this

Ordinance for any person to moor place any individual/private or commercial mooring in the Harbor Management Area without a permit from the Harbor Master.

(2) No provision contained in this section shall limit the powers of the Harbor Master to station and remove vessels as provided in Sections 15-8 and 15-9, and Section 22a- 113r of the Connecticut General Statutes.

b. Mooring Records

(1) The Harbor Master shall keep a detailed record of each mooring, its location, and the owner's name, resident and business address, and telephone number; date mooring was set; and name, length, registration number or documentation; and type of vessel to be attached hereto.

(2) The Harbor Master shall maintain in a public place a waiting list for mooring space in the Harbor Management Area, as necessary, and a list of mooring permittees. These lists shall be updated annually or at any more frequent interval that may be appropriate.

c. Allocation of Moorings

(1) The Harbor Master shall establish and post in a public place, an allocation procedure and priority list for moorings in the Harbor Management Area.

(2) In allocating mooring locations, the Harbor Master shall give first priority to those persons applying for the renewal of permits granted in the preceding year, second priority to relocation requests in order of application, and third priority to new applicants in order of application.

(3) In allocating mooring locations, the Harbor Master shall, to the extent possible, assign priority for mooring allocations to shorefront property owners who apply for moorings offshore of their property.

(4) In allocating mooring locations, the Harbor Master shall give consideration to size, draft, and type and use of vessels, including use for commercial purposes.

(5) Within the limits of type and size of vessels, available mooring locations shall be offered to the senior applicant on the mooring waiting list, subject to the requirements of this Ordinance. If an available mooring location is not suitable to accommodate the senior applicant's vessel or specific needs, it shall be offered to the next senior qualified applicant. The senior applicant shall retain his place on the waiting list in this case. The Harbor Master shall continue efforts to provide a suitable mooring location for the senior applicant. If the senior applicant refuses a mooring location which is suitable for his vessel in the opinion of the Harbor Master, that applicant shall be moved to the bottom of the waiting list. In order to obtain the most effective utilization of mooring areas, lists of applicants will be maintained to include date of application and type or size of vessel. These lists will be available for public inspection at a public place during regular office hours.

(6) No one individual shall be allocated more than one mooring location and no one household, partnership, or corporation shall be allocated more than two mooring locations without annual written permission from the Harbor Management Commission. Only one mooring space shall be allocated to any one vessel.

(7) Mooring permits shall be issued by the Harbor Master only to those applicants owning a vessel properly registered in accordance with laws of the State of Connecticut.

d. Application for Mooring Permit

(1) Any person, including associations, corporations, or other group, may apply for a mooring permit by completing in full the application provided for that purpose and submitting the completed application to the Harbor Master.

(2) The Harbor Master shall accept applications for approval or renewal of moorings by 31 March of each year.

e. Mooring Permits Valid for One Year Only

Mooring permits are valid for a period not to exceed one year unless renewed in accordance with the provisions of this ordinance. The permit expiration date shall be entered on the permit.

f. Renewal of Mooring Permits

All renewal applications shall be due on or before March 1 of each calendar year so as to allocate new mooring locations in unrenewed locations. At least thirty days before the renewal due date, notice of such date shall be published in a newspaper having circulation in the town.

g. Annual Mooring Permit Fee

All applications for a new mooring permit or renewal of an existing permit shall be accompanied by an appropriate fee as may be established by the Harbor Management Commission and adopted by the Board of Selectmen. All applications for renewal of moorings shall be accompanied by the appropriate fee payable to the Town of East Lyme before the application shall be processed. In the event an application is not approved or the applicant is placed on a waiting list, the fee shall be returned to the applicant within ten days after notice of denial of such application or placement on a waiting list. New applications may be charged at the time they are granted permission for a mooring. Any fee collected pursuant to this section shall be deposited in the Town's Harbor Management Fund and shall be used exclusively for the purposes directly associated with management of the East Lyme Harbor Management Area.

h. Mooring Permits Non-Transferable

(1) No transferable rights shall be conferred as the result of the approval of a mooring location. Whenever the holder of a mooring permit sells transfers title or interest in or otherwise parts with possession of the vessel identified in the mooring permit to another person, by any

arrangement whatsoever, the mooring permit shall expire. The new possessor, transferee, or owner shall have no right to use the mooring space covered by the mooring permit. The original holder of the mooring permit may, upon written application to and approval by the Harbor Master, retain the mooring space assigned under the mooring permit provided that another vessel owned by the permittee is moved onto the mooring within thirty (30) days (unless the period is extended by the Harbor Master because of special circumstances such as seasonal constraints). If the replacement vessel is significantly smaller, larger or of different draft or type, the Harbor Master shall have the right to relocate the vessel to another, more suitable mooring if one is available.

i. Mooring Locations

(1) Vessels may be moored within the East Lyme Harbor Management Area in designated mooring areas as established by the Harbor Management Commission and identified in the Harbor Management Plan; and other safe and suitable locations. No mooring permits shall be granted for areas in which mooring is prohibited by the Harbor Management Plan, and all permits granted shall be consistent with all provisions of the Harbor Management Plan.

(2) Moorings shall under no circumstances interfere with the free use of channels or fairways.

j. Mooring Placement

When an applicant has been registered for a mooring within the Town's Harbor Management Area, the Harbor Master shall assign a specific location. No moorings shall be placed or maintained in any portion of the Harbor Management Area until the location of such mooring shall have been approved by the Harbor Master or Deputy Harbor Master.

k. Transient Anchoring

(1) The Harbor Management Commission may designate transient anchorage areas free from the placement of any moorings. These areas, reserved for the exclusive, short-term use of recreational vessels shall be available on a first-come, first-served basis for a period not to exceed seven consecutive days.

(2) The Harbor Master may require any person anchoring in the Harbor Management Area to display for inspection for anchors, chains and other equipment used at such anchoring for soundness of condition.

l. Abandonment of Mooring

(1) Any mooring not used in a calendar year may be considered abandoned and subject to removal or relocation. No mooring may be left unused for more than one calendar year without written permission of the Harbor Management Commission.

(2) Any registered owner who owns mooring tackle and is abandoning their mooring space may offer to sell the tackle occupying such space to the next person assigned that space. Failure of the registered owner to remove such tackle shall constitute the abandonment thereof, and such tackle may be removed by the Harbor Master at the expense of such registered owner.

m. Secure Berthing and Anchoring of Vessels

(1) The owner of any vessel moored or anchored within the Harbor Management Area shall be responsible for causing such vessel to be tied and secured or anchored with proper care and equipment and in such manner as may be required to prevent breakaway and resulting damage, and shall thereafter provide for periodic inspection as the Harbor Master deems necessary. Each vessel owner is deemed to be the owner of the mooring tackle he uses.

(2) Utilization of proper mooring tackle is necessary to secure vessels adequately at their moorings. Recommended guidelines for mooring tackle may be provided by the Harbor Management Commission but these guidelines shall be advisory only. Storms, wind, waves, tides, currents, and wash must be considered when selecting appropriate mooring tackle. Each person mooring a vessel within the East Lyme Harbor Management Area is responsible for any damage to that vessel or to any other vessel or property caused by the failure of the mooring tackle used to secure that vessel.

n. Mooring Inspection

(1) The Harbor Master may require that all new moorings, anchors, chains, and other equipment used in connection with such moorings in the Harbor Management Area shall be submitted to the Harbor Master or to an inspector so designated by the Harbor Master or Harbor Management Commission for inspection to determine soundness of condition. An official inspection form shall be filed with the Harbor Master by the owner at least once every three years.

(2) No more than once each calendar year the Harbor Master may require any person who holds a mooring permit in the Harbor Management Area to display for inspection the anchor, chains, and other equipment used at such mooring for soundness of condition. Each mooring shall be subject to inspection by the Harbor Master at the discretion of the Harbor Master. A list of mooring inspection services shall be made available to the mooring permit holder by the Harbor Master. An official inspection form shall be filed with the Harbor Master by the owner once every three years.

(3) The Harbor Master shall maintain a record of each inspection for a period of three years. If, as the result of such inspection it shall be determined that any chain, shackle, swivel or other piece of mooring tackle has become unsafe or otherwise inadequate, all such chain, shackle, swivel or other piece of mooring tackle shall be replaced accordingly. Failure to make such replacement shall be grounds for revocation of the mooring permit by the Harbor Master.

o. Identification of Approved Moorings

The Harbor Master shall establish and maintain reasonable standards for the marking of mooring buoys of all approved moorings in the Harbor Management Area. Notice of such standards shall be provided in writing to all owners of mooring permits at their record resident address.

p. Removal of Moorings

(1) The Harbor Master may require any mooring or vessel to be moved to a new location whenever, in his judgment, the safety of any other vessels or optimum use of the mooring area so requires.

(2) If directions given by the Harbor Master with respect to removing unauthorized moorings, changing the location of existing moorings, for the purpose of ensuring safety and optimum use of the mooring area or replacing mooring tackle determined to be inadequate are not taken by the owner, if known, within fourteen (14) days after notification, or, if not known, after notice has been posted for that period on the vessel or mooring, the Harbor Master may cause such moorings to be removed or changed or may drop the same to the bottom. Nothing herein contained shall prevent the Harbor Master or his designee from taking measures with or without notice, if, in his judgment, it is necessary in order to provide for the safety of persons or property. The expense of such mooring removal or relocation and any liability arising from injury to person or property incurred thereby shall be the responsibility of the mooring permit holder.

q. Designation of Channels or Fairways to be Kept Free of Moorings

For the purpose of this section, and in order to provide safe navigation access to all parts of the Harbor Management Area, the Harbor Management Commission, with the advice of the Harbor Master, is empowered to designate the location of channels or fairways within which approved moorings shall not be located, and to make changes in such designations where conditions or needs require. These channels or fairways shall be identified in the Harbor Management Plan.

r. Suspension of Requirements and Imposition of Emergency Requirements

In order to most effectively respond to any emergency as may be caused by a severe storm or other natural or man-made conditions, the Harbor Master is empowered to suspend the requirements of this section and/or impose additional requirements in the interest of public safety.

**SECTION 7. MARINE SANITATION**

a. Littering and Discharge of Pollutants Prohibited

No person shall place, throw, deposit or discharge or cause to be placed, thrown, deposited, or discharged into the Harbor Management Area any litter or other materials, including but not limited to, any refuse or waste matter, sewage petroleum products or by-products, paint, varnish,

dead animals or debris of any kind which renders the waters unsightly, noxious, unwholesome, or otherwise detrimental to the public health or welfare or to the enjoyment of the water for recreational purposes. The provisions of Section 22a-250 of the Connecticut General Statutes shall be strictly enforced with respect to discharge of refuse.

b. Marine Toilets

No person shall operate a marine toilet at any time so as to cause or permit to pass or be discharged into the Harbor Management Area any untreated sewage or other waste matter or contaminant of any kind. Any discharge shall be in compliance with current federal standards concerning Marine Sanitary Discharge and state and Town Health Code regulations. The provisions of Sections 15-170 through 15-175 of the Connecticut General Statutes shall be strictly enforced. with respect to marine toilets.

c. Responsibility for Sanitation of Facilities

The owner, lessee, agent, manager or person in charge of any waterfront development or facility adjacent to the Harbor Management Area shall at all times, maintain the premises under his charge in a clean, sanitary condition, free from malodorous materials and accumulations of garbage, refuse, debris and other waste materials.

**ARTICLE II: HARBOR MANAGEMENT COMMISSION**

**SECTION 8. ESTABLISHMENT, JURISDICTION AND MEMBERSHIP**

a. Establishment of the Harbor Management Commission

There is constituted a seven-member Harbor Management Commission which shall have the powers and duties conferred on such commissions by Chapter 444a of the Connecticut General Statutes, Revision of 1958, as amended, and the Harbor Management Commission is designated as the East Lyme Shellfish Commission and shall further have all of the authority and responsibility granted to local shellfish commissions by Chapter 492 of the Connecticut General Statutes, Revision of 1958, as amended, except to the extent that the Waterford-East Lyme Shellfish Commission has been granted powers and duties by Section 26-287 of said statutes.

b. Jurisdiction

The Commission shall have jurisdiction over the navigable waters as defined in subsection (b) of Section 15-3a of said Statutes within the East Lyme Harbor Management Area as defined in Section 2 of this ordinance. The Commission shall also have charge of all the shellfisheries and shellfish grounds lying in the town not granted to the Waterford-East Lyme Shellfish Commission by Section 26-287 of the Connecticut General Statutes, Revision of 1958, as amended, and not under the jurisdiction of the commissioner of agriculture, including all river, inland waters and flats adjacent to all beaches and waters within the limits and marine bounds (below the mean high water line) of the Town.

c. Membership and Terms of Service

The members of the Harbor Management Commission shall be appointed by the Board of Selectmen, four for terms to expire on the first Monday of January, 1988, and three for terms to expire on the first Monday of January, 1990. Upon expiration of each of the initial terms, appointment shall be made to fill such terms for four years. Vacancies shall be filled by the Board of Selectmen in accordance with Chapter 4 of the Charter. The Harbor Master shall be a non-voting ex-officio member of the Commission, and if there shall be a vacancy in the office of the Harbor Master, the Deputy Harbor Master shall so serve until the vacancy is filled.

**SECTION 9. POWERS, DUTIES AND RESPONSIBILITIES**

a. Rules and Regulations

The Commission shall adopt and publish such rules and regulations as may be required to implement its responsibilities as herein provided.

(1) Prior to adopting any such rules and regulations, the Commission shall conduct a public hearing for the purpose of considering their adoption. Notice of the time and place of such public hearing, which notice shall include the title and summary of the rules or regulations proposed, shall be published twice in a local newspaper having substantial circulation in the Town of East Lyme at least five (5) days, but not more than fifteen (15) days, prior to the date of said hearing. A copy of the full text of the proposed regulation or rules shall be filed in the Office of the Town Clerk for public inspection at least ten (10) days prior to such hearing.

(2) Following such public hearing, the Commission shall act upon such rules and may make such changes or alterations in the form or content of the proposed rules or regulations as seen appropriate or necessary as a result of the public hearing held in connection therewith. Such changes, additions or alterations shall not require further public notice.

(3) Such rules, if adopted by the Commission and after approval by the Board of Selectmen of the Town of East Lyme, shall become effective after publication once in a local newspaper having substantial circulation in the Town of East Lyme within twenty-one (21) days following Board of Selectmen approval.

b. Harbor Management Plan

The Harbor Management Commission shall implement the East Lyme Harbor Management Plan as adopted by the Harbor Management Commission and Board of Selectmen effective as of May 4, 1994, and approved by the State of Connecticut in accordance with Section 22a-113m of the Connecticut General Statutes. The Commission shall provide for review of the Plan and shall make any additions and/or modifications to the Plan that may be deemed appropriate subject to the process set forth in Sections 22a-113m through 22a-113o of the Connecticut General Statutes or other subsequent harbor management legislation enacted by the Connecticut General Assembly.

c. Harbor Management Ordinance

The commission shall review Town ordinances affecting harbor management and recommend any necessary changes. The Commission shall submit the ordinances required to implement the plan to the Board of Selectmen for adoption.

d. Review of Development Proposals

The Commission shall have the authority to review and make recommendations on proposals affecting real property in and contiguous to the Town's Harbor Management Area as submitted to or proposed by any commission or department of the Town.

d. Operating Budget

The Commission shall prepare and present to the Board of Selectmen an annual operating budget. The operating budget shall include a section reflecting estimated revenues and a section covering requested expenses by project or activity.

**SECTION 10. CONSULTATION AND COORDINATION WITH OTHER TOWN BOARDS AND COMMISSIONS**

a. Harbor Management Plan Consistency Review

A Town "Harbor Management Consistency Review" process shall be carried out by the Harbor Management Commission to ensure effective implementation of the Harbor Management Plan and to provide coordinated, efficient and comprehensive review of the proposed projects and activities affecting the Harbor Management Area.

b. Coordinating With Other Town Boards and Commissions

As authorized 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 the real property on, in or contiguous to the Harbor Management Area as submitted to, or proposed by, all other Town commissions and departments, including, but not limited to:

- Planning Commission
- Zoning Commission
- Zoning Board of Appeals
- Water and Sewer Commission
- Department of Public Works
- Parks & Recreation Commission
- Economic Development Commission
- Conservation Commission

c. Proposals Subject to Consistency Review

The Harbor Management Commission may review for consistency with the Harbor Management Plan: 1) all development proposals subject to the Town's Coastal Site Plan Review process and located on parcels contiguous to the Harbor Management Area, with the exception of one- and two-family dwellings; 2) all proposed uses or activities occurring below the Mean High Water Line; and (3) all proposed revisions and amendments to Town plans, rules and regulations affecting the Harbor Management Area and lands contiguous to the Harbor Management Area, including, but not limited to, proposed revisions and amendments to the Zoning Regulations and Plan of Development, regulations for use of the Town beaches and boat launching facilities, and regulations governing tidal wetlands and flood and erosion control.

d. Referral Schedule

The town boards and commissions identified in subsection b above shall send to the Harbor Management Commission a copy of any proposal subject to the Harbor Management Consistency Review process at the request of the Commission. The Commission shall be notified of any such proposal at least thirty-five (35) days prior to the commencement of any hearings thereon or, where no hearing is held, at least thirty-five (35) days prior to the taking of any final action on the proposal.

e. Determination of Consistency

The Harbor Management Commission shall determine the consistency of proposed projects with the Harbor Management Plan and make recommendations to the appropriate board or commission. 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.

**SECTION 11. PRIOR ORDINANCES RESCINDED AND EFFECTIVE DATE**

a. All prior ordinances relating to the East Lyme Harbor Management Commission and the East Lyme Shellfish Commission are hereby rescinded.

b. This ordinance shall become effective ten (10) days after publication, except Section 6 which shall be effective on January 1, 1995.

## **Appendix D:**

# **LANDSCAPE PROTECTION AND VISUAL IMPACTS MATERIALS FROM THE OFFICE OF LONG ISLAND SOUND PROGRAMS**

### **NOTE:**

Information in this appendix is from the Web Site  
of the Connecticut Department of Energy and Environmental Protection:

<http://www.ct.gov/deep/site/default.asp>



**Office of Long Island Sound Programs**  
**Fact Sheet**  
**for**  
***LANDSCAPE PROTECTION AND***  
***VISUAL IMPACTS***

***Why do we need to protect landscapes?***

The face of coastal Connecticut is often pictured in terms of historic New England fishing villages, beach communities, and quaint villages. However, ongoing development pressures such as skyrocketing real estate values, tear-downs of summer cottages, and rebuilds of much larger permanent residences tend to result in a much different visual landscape. The visual quality of the landscape, in turn, plays a large role in maintaining community identity and quality of life in coastal areas. Though visual resources are statutorily protected, regulators at state and local levels have had difficulty in interpreting and implementing these existing standards in specific cases. This guidance is intended to equip coastal managers and municipalities with tools to discuss, prevent, and mitigate negative impacts to scenic resources.

***What are the statutory policies and authorities that apply?***

The **Connecticut Coastal Management Act (CCMA)**, the foundation upon which the coastal management program is based, contains a general statement in §22a-91(5) that the coast is rich in “aesthetic resources,” and §22a-93(15)(F) defines as an “adverse impact-on coastal resources” the “degrading [of] visual quality through significant alteration of the natural features of vistas and view points.”

The **Connecticut River Gateway Commission** is a state-local compact charged with protecting the scenic and ecological integrity of the lower Connecticut River. The Commission is organized within the Connecticut General Statutes chapter 477a §25-102a through §25-1021. The statutes declare that the “...lower Connecticut River and the towns abutting the river possess “unique scenic, ecological, scientific and historic value contributing to public enjoyment, inspiration and scientific study,...” and charge the Commission with “...prevent[ing] deterioration of the natural and traditional river way scene for the enjoyment of present and future generations of Connecticut citizens...” The Commission accomplishes this through land protection and zoning standards to be enforced by the participating towns in the Gateway Zone.

***What are Visual Impacts?***

Visual impacts include changes in appearance of the landscape as a result of developments. They can be positive or negative, direct or indirect, temporary or permanent, single or cumulative, and can vary in magnitude and significance. Factors to consider include extent of potential visibility of the proposed development, views and viewers affected, quality of views, and magnitude of

visual impact as determined by duration, nature, scale and other criteria.\* Significant negative impacts occur when character, quality, or public enjoyment of a visual resource is diminished or impaired.

### ***Which views does Coastal Management Act policy protect?***

At the state level, DEP coastal programs focus on protecting public views of statewide scenic significance. This may include natural views as well as built views that typify a cultural landscape. The policy is intended to protect views generally accessible to the public, even if they are on private lands, but not private individual views. The types of visual resources this policy protects are:

-  National Wildlife Refuges, and state Wildlife Management Areas, Sanctuaries and Natural Area Preserves (e.g., Stewart B. McKinney National Wildlife Refuge Units, Barn Island Wildlife Management Area, Hammonasset Natural Area Preserve);
-  Trails of National or State significance (e.g., East Coast Greenway, Branford Trolley Trail);
-  Sites of cultural or historical significance including sites on or eligible for inclusion on the National Register of Historic Places (e.g., Avery Point Lighthouse, Mystic Seaport);
-  National, State, or Municipal Parks or Forests (e.g., Harkness Memorial State Park, Cockaponset State Forest, Lighthouse Point Park);
-  Coastal public access sites (most are included in the *Connecticut Coastal Access Guide* available online at <http://www.lisrc.uconn.edu/coastalaccess/index.asp>);
-  All other resources identified as “outstanding scenic assets” in the Long Island Sound Study’s *Shoreline Appearance and Design: A Planning Handbook*, produced by the New England River Basins Commission in April 1975.
-  Public natural resources or public landscapes visited by the general public, in part for the use, observation, enjoyment and appreciation of natural or cultural visual qualities (e.g., Gateway Region of Lower Connecticut River, Long Island Sound).

### ***What can a municipality do to minimize visual impacts?***

Actions at the municipal level may hold the most potential power in determining the visual quality of coastal landscapes in Connecticut. There may be views that are important to local communities that do not necessarily constitute *views of statewide significance*. Local entities, including harbor management commissions and planning and zoning boards, should work together to identify local scenic resources and create protections for those resources.

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\* Institute of Environmental Assessment and The Landscape Institute. *Guidelines for Landscape and Visual Impact Assessment*. 1995

 **Step One** is to identify through a public process the scenic views that a town wishes to protect. This task requires the identification of what *about* those views is worth protecting. Is it the natural landscape? The lack of visible built structures? No structures at all, whether visible or not? If there are dilapidated structures, are they adding scenic character? Consider also the potential threats to the view. For example, what stands out most often is development that is out of character with the surrounding environment.

If community meetings have recently been conducted to create comprehensive planning documents, it may be possible to glean this information from that process. Towns may want to preserve views from or of local public access points or historic structures. They may want to protect views that are "pristine," or alternatively, areas that are more appropriate for development, e.g views that encompass structures similar to the proposed development. As a particular example, towns in the Lower Connecticut River Gateway Region will probably want to protect the views from ridgeline to ridgeline as best as possible along the river. From these evaluative processes, towns may create visual zones to preserve characteristic views.

 **Step Two** is to write into local management plans and municipal zoning regulations measures to protect views identified in Step One. Harbor Management Commissions have a particular responsibility to consider potential upland development that may impact shoreline views. For suggested language for Harbor Management Plans, please see the publication *Old Riverport Harbor Management Plan*, available from OLISP by calling 860-424-3034.

It is essential for local boards and commissions that have overlapping authorities to work together to ensure implementation of a consistent visual resource policy in accordance with the community's overall planning process and goals. Cumulative impacts should be considered in areas suggested for development. Keep in mind that visual impacts are only one factor for consideration and must be balanced with navigational, ecological, and economic considerations in implementing CCMA policies.

### ***How can municipalities evaluate visual impacts in Coastal Site Plan Reviews?***

Based on CCMA visual impact policies, municipal agencies may require applicants to submit, through the Coastal Site Plan Review process, information detailing visual resources, visual public access points and suitable options for mitigation of any adverse impacts on those resources. Views of statewide significance as well as any scenic areas identified in local plans should be considered for inclusion in this analysis.

Factors for considerations during agency review of Coastal Site Plans include:

-  the visual characteristics of the site and surrounding location;
-  the potential effects, both beneficial and adverse, of the proposed activity on the scenic landscape;

-  conflicts between the proposed activity and policies stated in CGS §22a-91(5), §22a-93(15)(F), municipal Plans of Conservation and Development, harbor management plans; or other scenic preservation goals.
-  available alternatives for prevention, minimization, and mitigation of adverse visual impacts.

If the proposed activity impacts a view of statewide significance, a Coastal Site Plan should be forwarded to DEP, if such has not already occurred for other reasons. OLISP staff may request that the applicant demonstrate that the proposed activity does not diminish the quality and public appreciation of the scenic resource. Similarly, local agencies can request such demonstration for views of local significance. An applicant's assertion that the design is in harmony with or does not diminish the values of the listed resource may not be sufficient for the purposes of determining visual impacts. In some cases, an applicant may need to provide a professional assessment of the visual impact of the proposed activity, including viewshed analyses or simulations conducted by a licensed landscape architect or a professional in a related field. A viewshed is an area of land, water and/or other environmental elements that is visible from a fixed vantage point.

***Are there tools that applicants and municipalities can use for visual simulation of project proposals?***

CanVis software, available free of charge through the National Oceanic and Atmospheric Administration's Coastal Services Center (NOAA-CSC), can be used to depict both two-dimensional and three-dimensional coastal development scenarios. Advanced users may create scale-accurate depictions of docks and other coastal development. This software is not intended for the creation of legal evidence but rather as a tool for discussing alternative scenarios. Visual simulations may assist developers, applicants, and decision-makers in deliberations. Tutorials and downloadable files of docks, boats, vegetation, houses, and other structures designed to assist with coastal development simulation are available from NOAA-CSC at <http://www.csc.noaa.gov/canvis>. For more information, please contact the Coastal Services Center at (843) 740-1200.

OLISP has available a sample list of methods for minimizing or mitigating visual impacts. To obtain a copy, call 860-424-3034.

### **Methods for Minimizing or Mitigating Visual Impacts**

*The following sample list of methods for minimizing or mitigating visual impacts was prepared by DEP OLISP to supplement the Fact Sheet for LANDSCAPE PROTECTION AND VISUAL IMPACTS. To obtain a copy of the Fact Sheet or this list, call 860-424-3034.*

Mitigation can be defined as measures taken to reduce adverse impacts on the environment. Visual impact mitigation strategies can be categorized into three general groups:<sup>†</sup>

- 1) Professional design and siting
  - a) Screening
  - b) Relocation
  - c) Camouflage/Disguise
  - d) Low-profile construction
  - e) Downsizing
  - f) Alternate technologies
  - g) Non-specular materials
  - f) Lighting
- 2) Maintenance or removal of derelict or abandoned structures
- 3) Offsets

A discussion of each group follows:

#### **1. Professional design and siting**

A properly sited and designed project is the best way to mitigate potential adverse visual impacts. The best project locations are where there are no significant scenic resources within view of the project site that would be adversely impacted by the project. Where adverse visual impacts would occur, design elements of particular concern may be sited or dimensioned in a way that reduces or eliminates their affects. Sometimes circumstances prevent the realization of optimal siting, and sometimes engineering, economic or other constraints preclude optimal dimensioning or other appropriate design techniques. Under such circumstances, effective mitigation may instead be achieved through utilization of the following design and siting tools:

**a. Screening.** Screens are objects that conceal other objects from view. Screens may be natural (e.g., vegetation) or artificial (e.g., fences and walls). In natural settings it is generally better to employ natural materials, while in urban places a broader range of materials may be appropriate. Though vegetation is not completely opaque, it can function as a screen if a sufficient mass is planted or retained from the original site. For example, existing vegetated ridgelines can serve as effective screening provided measures are taken to prevent clearcutting of those resources.

Artificial screens may be constructed of soil, rocks, bricks, or almost anything opaque. Screens constructed from soil are called berms. Berms may appear natural (e.g., blend with nearby

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<sup>†</sup> The NYSDEC Program Policy “Assessing and Mitigating Visual Impacts” details most acceptable visual impact mitigation strategies. They are adapted here for Connecticut’s context.

topography) or artificial (e.g., geometrical or symmetrical shapes), and may be either vegetated or non-vegetated. Fences and walls may appear natural (e.g., wood, stone) or may appear artificial (e.g., plastic, metal). The type of screening appropriate for the site depends upon functional design intent and the character of the surrounding area.

The type of screening you choose may have unintended impacts. Improperly sized and placed screens may fail to conceal the object of concern. Screens may also block desirable views when improperly placed. Additionally, screens have their own visual qualities. At times, they may have a greater visual impact than the object to be concealed and/or may draw attention to the object to be concealed.

**b. Relocation.** A facility component may be relocated to another place within the site to take advantage of the mitigating effects of topography and vegetation.

**c. Camouflage/Disguise.** Colors and patterns of color may conceal an object or its identity. Disguise may take many forms, and is limited only by the imagination of the project designers.

**d. Low-profile construction.** Reducing the height of an object reduces its viewshed area.

**e. Downsizing.** Reducing the number, area or density of objects may reduce impacts; e.g., creating visual porosity in building mass by separating large buildings into separate units may increase views of waterbodies from public thoroughfares.

**f. Alternate technologies.** Substituting one technology for another in designing sited structures may reduce adverse visual impacts due to the size or height of those structures by enabling more site-appropriate design.

**g. Non-specular materials.** Using building materials that do not shine may reduce visual impacts. This may be particularly useful for projects proposed along waterbodies, hillsides and ridgelines where reflectivity is often increased.

**h. Lighting.** The Federal Aviation Administration (FAA) requires lighting of tall structures such as combustion exhaust stacks and radio towers for purposes of public transportation safety. Resulting impacts, including off-site light migration, glare and “sky glow” light pollution, may be unavoidable unless lower profiles can be achieved. For other structures, lighting should be sufficient for, but not exceed, the function of the structure, for example, decorative dock lighting may be considered excessive.

## **2. Maintenance or Removal of Derelict or Abandoned Structures.**

How a landscape and structures within the landscape are maintained has visual implications. “Eyesores” can result from neglect. A range of options is available for maintaining a structure, or for removing it from the landscape, after its useful life is over, so as to reduce the duration of adverse visual impact. Those options include: 1) the total removal from the site of all structural components and restoration to an acceptable condition, usually with attendant re-vegetation; 2) removal of visually impacting structural components; and 3) actions conducted to maintain an

abandoned structure and site in an acceptable condition that prevents “eyesores” or site and structural deterioration.

**3. Offsets.**

Correction of an existing visual detraction (e.g., by removal, reconstruction or reconfiguration of structures) within the viewshed of a proposed project may partially or wholly qualify to “offset,” or compensate for, visual design conditions which would otherwise be imposed on the project. In some circumstances a net improvement in overall visual quality may be realized. Offsets are appropriate in sensitive locations where significant impacts from the proposed development are unavoidable, and where other mitigation strategies would be uneconomic, or only partially effective. Offsets should be employed when significant improvement can be expected at reasonable cost. An example of an offset might be the removal of an existing abandoned structure that is in disrepair (i.e. an “eyesore”) to offset adverse impacts that would be created by an activity proposed within visual proximity to the same scenic resource.

If significant visual impacts remain after all economic and effective mitigation strategies have been incorporated into the proposed project design, applicants may be able to work with local agencies and/or OLISP staff to manipulate specific design elements to further reduce the visual impact. The applicant may also need to consult with a licensed architect, landscape architect or a professional in a related field to identify specific remedial measures.

## **Appendix E:**

# **CORP OF ENGINEERS GUIDELINES FOR PLACEMENT OF FIXED AND FLOATING STRUCTURES IN WATERS OF THE U.S.**

### **NOTE:**

This appendix is copied from the Web Site of the U.S. Army Corps of Engineers  
New England District:

<http://www.nae.usace.army.mil/>

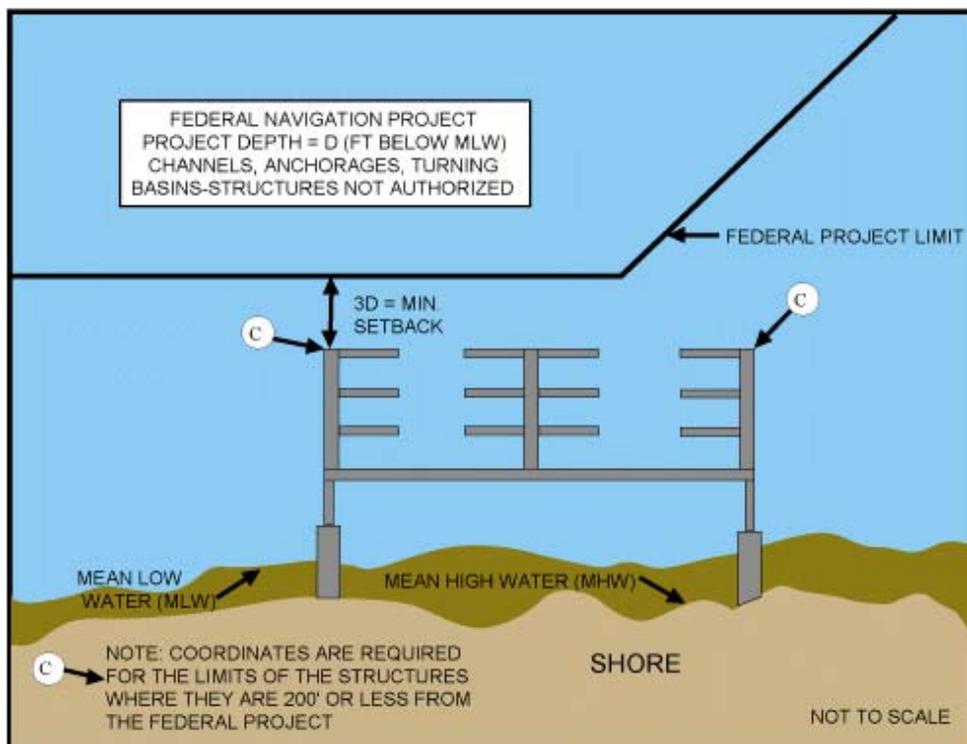


# Guidelines

**US Army Corps  
of Engineers**®  
New England District

*For the placement of fixed and floating structures in navigable waters of the United States by the Regulatory Program of the New England District, U.S. Army Corps of Engineers*

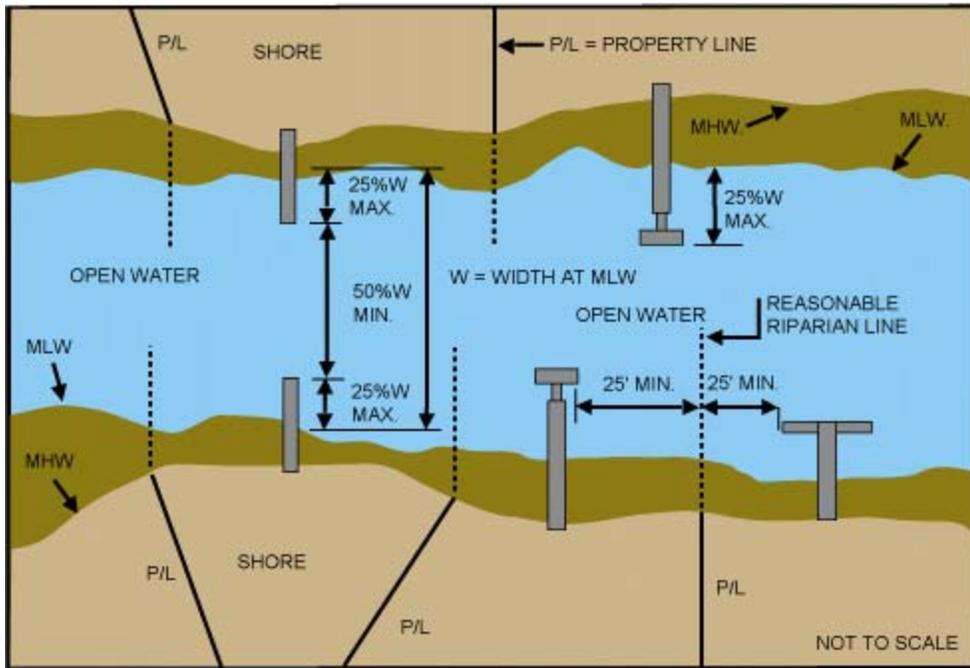
1. These guidelines have been developed due to the intense pressures of development in our coastal waters and on the adjacent land which have led to increasing conflict between users of these resources. They attempt to provide common sense guidance in allocating space for structures in navigable waters, recognizing reasonable use expectations of the general public and waterfront landowners. These guidelines do not constitute policy or regulation. They do, however, provide guidance for project design which typically will not generate adverse public comment or result in permit denial.
2. There is no statutory or regulatory prohibition against the Corps issuing regulatory permits authorizing structures or other work in Federal Navigation Project (FNP). However, the Corps permit regulations require district and division commanders to consider the extent to which that proposed work may be in conflict with the uses (and their respective navigational requirements) at issue when the FNP was authorized as well as with subsequent maintenance dredging activities. In general, the Corps discourages and has not permitted structures in FNPs, except as noted in paragraph 6 below. FNPs are typically channels, turning basins and anchorages.
3. In those cases where a project is proposed within two hundred feet (200') of a FNP the applicant shall determine and show the state plane coordinates for the extreme lateral limits of his project, the point on structures furthest beyond mean high water (MHW), and the point of closest approach of any structure to the FNP (see sketch no. 1).



Sketch No. 1: Illustration of guidelines for structures near federal navigation projects.

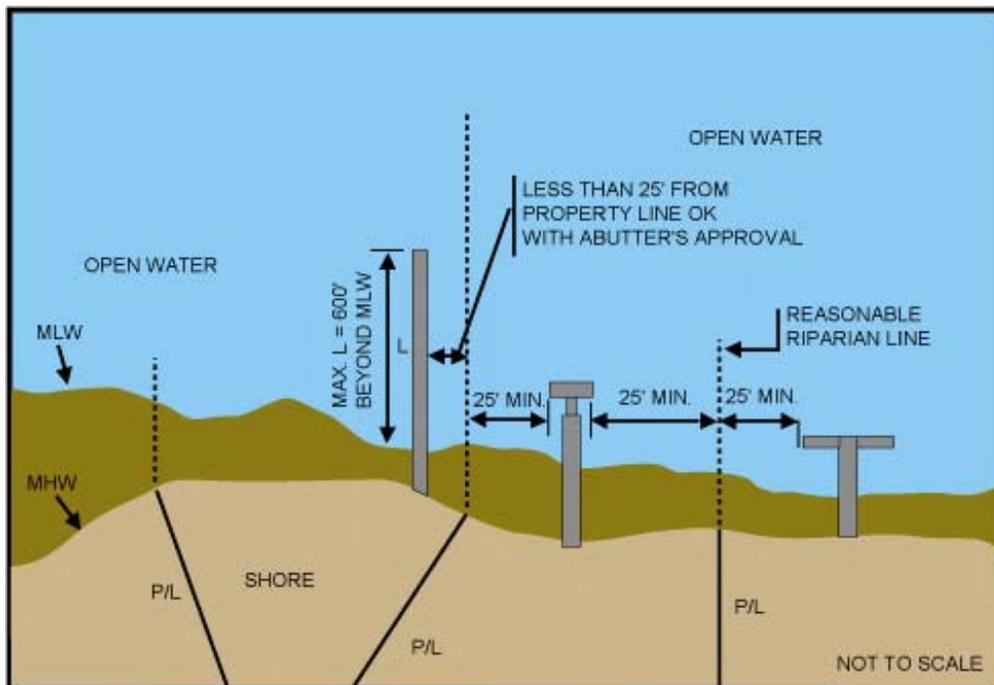
4. Similarly, structures which may cause an intrusion into FNPs will typically not be permitted. FNPs are channels and anchorages created at public expense. Examples of intrusions are permanently moored vessels, fish harvesting devices, etc.
5. To preclude intrusions into FNPs, appropriate setbacks for structures from the project limits may be established on a case by case basis. The setbacks can be determined using appropriate criteria such as:
  - A. Project maintenance requirements. The typical setback shall be a horizontal distance three (3) times the authorized project depth since Corps projects often specify, for dredging purposes, side slopes of 3H: 1V. This will, over the long term, minimize the need, expense, and inconvenience of forcing people to remove structures to dredge (see sketch no. 1).
  - B. Traditional navigation patterns where because of type and size of vessel, channel conditions, fishing or recreational activities, etc. closer approach of structures to a FNP is not in the public interest.
  - C. The configuration and capacity of structures proposed adjacent to FNPs to facilitate intrusion into it. An example would be a pier capable of mooring vessels longer than itself which would extend into the FNP. Such structures would require a greater setback than noted above.
  - D. The presence of adjacent, authorized structures where it would be reasonable for new facilities to conform to their length to provide safe access to the new structure. In some instances this might authorize a smaller setback than noted above.
6. An exception to the guideline regarding FNPs, structures may be favorably considered where the applicant is a state or local government who would place such structures in a Federal Anchorage to provide greater or more effective use to the public, with the condition that such facilities would be available on an equal access basis to all citizens of the U.S.
7. In a linear waterway, i.e., river, canal, narrow estuary, etc., a reasonable area of public water should be maintained in the public interest to sustain activities not specifically related to simply transiting the area in safety. Such activities are cruising, fishing, sail boarding, swimming, water skiing, etc. which require open, unobstructed water and should not be eliminated for private interest.

In such areas, no structure should extend more than 25% of the waterway width at mean low water. This will maintain 50% of the width as open water, an even split, between public and private interest (see sketch no.2).



Sketch No. 2: Guidance on length of structures in linear waterways.

8. A maximum intrusion into a waterway in areas where there is not a physical width constriction is also desirable to preclude excessive loss of public water usage. In general, new structures should conform in length to adjacent structures and customary usage of the surrounding area. In areas where existing structures and usage do not seem applicable, a reasonable maximum authorized distance beyond mean low water of 600 feet (the traditional cable length) will be used. This may be modified if necessary for site specific conditions or public benefit (see sketch no. 3).



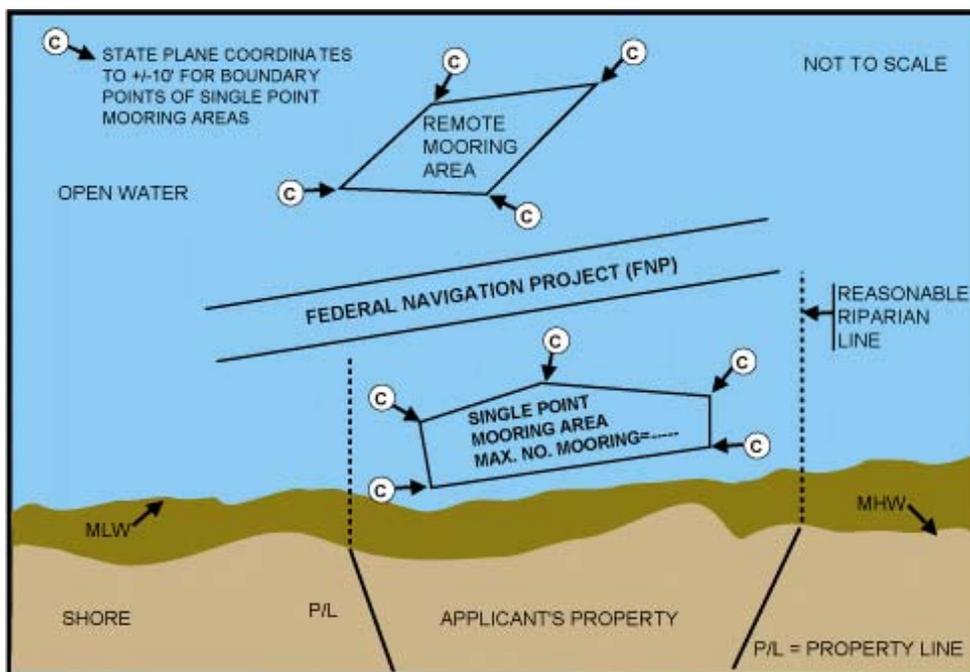
Sketch No. 3: Guidance on spacing structures relative to adjacent properties and maximum length beyond mean low water (MLW).

9. Numerous conflicts between neighboring waterfront property owners have arisen during our permit review process concerning the spacing of projects relative to riparian lines (demarcations of rights in the water associated with owning waterfront property). These conflicts are generally concerned with access to piers and floats for mooring vessels. We typically require a minimum setback from the reasonable riparian boundary of 25 feet. This is based on the fact that a median sized recreational vessel length is in the range of 32 feet. A minimum turning distance for such a vessel is 1.5 times its own length or 48 feet which we have rounded to 50 feet. Each adjacent facility provides half the required turning distance, which is an equitable distribution of the resource (see sketch no. 3).

If abutting property owners reach a mutual agreement regarding structures which has a lesser setback, that setback may be authorized, if the applicant agrees to record any ensuing Corps permit which will have that agreement as a condition and the abutter's letters of no objection, with the Registrar of Deeds, or other appropriate official charged with the responsibility for maintaining records of title to or interest in real property.

10. Fields of individual single point moorings shall be defined by a polygonal area whose angle points are defined by coordinates, to within 10 feet, in the applicable state plane coordinate system and by a maximum number of moorings authorized within it. A rule of thumb for the area needed by a vessel on a single point mooring is a circle with a radius equal to vessel length plus five times the depth of water at high tide. This can be reduced but the minimum should be length plus three times water depth.

These mooring fields should be in reasonably close proximity to the applicant's property and preferably encompassed by his reasonable riparian lines and far enough offshore to keep noise disturbance to other shore owners in reasonable limits and not restrict reasonable future development by these owners. If mooring areas remote from the applicant's property are proposed, a clear description of why this is necessary and what are the potential positive and negative impacts to the public's use of the water may occur (see sketch no. 4).



Sketch No. 4: Illustration of guidelines for single point mooring fields.

**Appendix F:**

**AERIAL PHOTOS OF THE  
EAST LYME HARBOR MANAGEMENT AREA**

Including the Niantic River, Bar and Bridge, Niantic Bay,  
and Pattagansett-Rocky Neck Harbor Management Sub-Areas

Town of East Lyme, Connecticut

Photos © 2015 by Geoffrey Steadman, all rights reserved,  
for the East Lyme Harbor Management Commission

Date of Photos:

June 14, 2015



**Photo 1:** Banning Cove, Golden Spur, and Rt. 1 at the Head of Navigation on the Niantic River



**Photo 2:** Banning Cove, Golden Spur, and Rt. 1



**Photo 3:** Upper Niantic River and Oswegatchie Hills



**Photo 4:** Oswegatchie Hills on the Upper Niantic River



**Photo 5:** Saunders Point (in foreground), Smith Cove, and Pine Grove



**Photo 6:** Smith Cove and Entrance Channel



**Photo 7:** Smith Cove, Three Belles Marina, and Camp Niantic



**Photo 8:** Lower Niantic River



**Photo 9:** Bar and Bridge Area including Cini Memorial Park



**Photo 10:** Niantic River Marine Commercial Area



**Photo 11:** Niantic Marine Commercial District including Grand Street Boat Launching Ramp



**Photo 12:** Railroad Beach on Niantic Bay



**Photo 13:** Niantic Bay



**Photo 14:** McCook Point Park



**Photo 15:** Black Point Shoreline Including Niantic Bay Yacht Club



**Photo 16:** Pattagansett Estuary and Giant's Neck



**Photo 17:** Pattagansett Estuary; Old Black Point Beach and Watts Island



**Photo 18:** Giants Neck and Rocky Neck State Park



**Photo 19:** Bride's Brook at Rocky Neck State Park



**Photo 20:** Four Mile River and East Lyme - Old Lyme Town Boundary

## **Appendix G:**

# **OFFICE OF LONG ISLAND SOUND PROGRAMS FACT SHEET FOR SHORELINE FLOOD AND EROSION CONTROL STRUCTURES**

### **NOTE:**

Information in this appendix is from the Web Site  
of the Connecticut Department of Energy and Environmental Protection:

<http://www.ct.gov/deep/site/default.asp>



**Office of Long Island Sound Programs  
Fact Sheet  
for  
*SHORELINE FLOOD AND EROSION  
CONTROL STRUCTURES***

***What are Shoreline Flood and Erosion Control Structures?***

The Connecticut General Statutes (CGS) define shoreline flood and erosion control structures as:

any structure the purpose or effect of which is to control flooding or erosion from tidal, coastal or navigable waters and includes breakwaters, bulkheads, groins, jetties, revetments, riprap, seawalls and the placement of concrete, rocks or other significant barriers to the flow of flood waters or the movement of sediments along the shoreline [CGS Section 22a-109(c)].

The term does not include any activity (including, but not limited to, living shorelines projects) for which the primary purpose or effect is the restoration or enhancement of tidal wetlands, beaches, dunes, or intertidal flats.

***What are the statutory policies that apply?***

To manage coastal bluffs and escarpments so as to preserve their slope and toe [CGS Section 22a-92(b)(2)(A)].

To discourage uses which do not permit continued natural rates of erosion [CGS Section 22a-92(b)(2)(A)].

To disapprove uses that accelerate slope erosion and alter essential patterns and supply of sediments to the littoral transport system [CGS Section 22a-92(b)(2)(A)].

To preserve the dynamic form and integrity of natural beach systems in order to provide critical wildlife habitats, a reservoir for sand supply, a buffer for coastal flooding and erosion, and valuable recreational opportunities [CGS Section 22a-92(b)(2)(C)].

To ensure that coastal uses are compatible with the capabilities of the beach/dune system and do not unreasonably interfere with natural processes of erosion and sedimentation [CGS Section 22a-92(b)(2)(C)].

To promote nonstructural solutions to flood and erosion problems except in those instances where structural alternatives prove unavoidable and necessary to protect infrastructural facilities, water-dependent uses, commercial and residential structures and

substantial appurtenances attached or integral thereto constructed as of January 1, 1995, or a cemetery or burial grounds [CGS Section 22a-92(b)(2)(F)].

To maintain the natural relationship between eroding and depositional coastal landforms [CGS Section 22a-92(b)(2)(J)].

To minimize the adverse impacts of erosion and sedimentation on coastal land uses through the promotion of nonstructural mitigation measures [CGS Section 22a-92(b)(2)(J)].

Structural solutions are permissible when necessary and unavoidable for the protection of infrastructural facilities, water-dependent uses, commercial and residential structures and substantial appurtenances attached or integral thereto constructed as of January 1, 1995, or a cemetery or burial grounds, 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 [CGS Section 22a-92(b)(2)(J)].

### ***What are the concerns regarding shoreline flood and erosion control structures?***

Shoreline flood and erosion control structures are generally proposed for areas such as beaches and bluffs, which can experience erosion in the presence of significant wave action. However, the placement of these structures in such sensitive and dynamic areas usually causes adverse impacts to adjacent properties, worsens the erosion problem rather than eliminating it, and can cause significant adverse impacts on the resources themselves.

When waves break on a gently sloping sandy beach, their energy is gradually absorbed by the beach. In contrast, when waves encounter a solid structure such as a seawall placed parallel to the shoreline, their energy is not absorbed, but rather it is redirected in all directions along the face of the structure. Energy directed downward can cause erosion or scouring of sediments or wetland vegetation at a structure's base, allowing even greater wave energy to reach the structure because of increased depth of water, eventually undermining the structure and causing its collapse. In addition, waves directed upward over the wall often severely damage or destroy the very structure the wall was placed to protect, and can cause flooding when that water is trapped behind the seawall. Further, wave energy focused by a hardened shoreline can result in faster than-normal erosion of nearby sediments and vegetation, potentially resulting in the rapid loss of neighboring waterfront property.

Shoreline flood and erosion control structures such as groins or jetties placed perpendicular to a beach are intended to interfere with the natural transport of sand along the shoreline. Sand continues to move away from the groin in the downdrift direction but is blocked from passing the groin on the opposite side, resulting in the accretion of sand on one side but also the loss of sand from the opposite side.

In addition, the placement of a flood and erosion control structure in a beach environment eliminates the beach as a source of sediments for other beaches in the system and often accelerates erosion due to a lack of replacement sediment. This results in a narrowing of the beach since currents continue to transport sediment offshore and along the shore. Further, the structure prevents the beach from migrating landward as it would naturally tend to do. The combination of structure-induced scour and the cutting off of the sediment supply can cause dramatic changes in beach contours in a relatively short time.

***What are the adverse impacts associated with shoreline flood and erosion control structures?***

The CCMA defines adverse impacts which must be avoided or, if they can't be avoided, must be minimized in order for a project to be approvable. From a resource perspective, shoreline flood and erosion control structures can have the following adverse impacts on valuable features and functions of shoreline areas and coastal resources:

- eliminate natural buffer for coastal flooding and erosion
- alter natural rates of erosion and sedimentation
- interrupt sand supply
- reduce valuable recreational opportunities
- destroy critical wildlife habitats
- detract from the visual quality of a natural shoreline

Any proposals for shoreline flood and erosion control structures must be carefully evaluated, and non-structural erosion control alternatives such as vegetative stabilization to stop or slow down any erosion and/or flooding problems should be promoted. (For more information, please see the Fact Sheet for Adverse Impacts.)

***When are shoreline flood and erosion control structures generally consistent with the Connecticut Coastal Management Act?***

The Connecticut Coastal Management Act (CCMA) contains strong policies that discourage the placement of shoreline flood and erosion control structures except in those limited instances where they are deemed necessary and unavoidable to protect the following:

- water-dependent uses as defined in CGS Section 22a-93(16);
- infrastructural facilities (e.g., roads and sewer and water lines);
- commercial and residential structures and substantial appurtenances attached or integral thereto constructed as of January 1, 1995;
- a cemetery or burial grounds.

Shoreline flood and erosion control structures are not allowed for commercial and residential structures constructed after January 1, 1995 because any commercial or residential structure built after that date—fully 15 years after passage of the CCMA in 1980—should have been planned and designed to be elevated and/or placed at sufficient distances from coastal waters, thereby

eliminating the need for shoreline flood and erosion control structures. Shoreline flood and erosion control structures are also not allowed to protect appurtenances or accessories such as detached garages, sheds, patios or swimming pools that are not structurally integrated with the primary residential or commercial structure, since appurtenances and accessories can generally be located more easily away from coastal hazards.

There must also be a clear and compelling demonstration that there is a threat to the use or structure from erosion or flooding, and that there are no feasible, less environmentally damaging alternatives, and that all reasonable mitigation measures and techniques have been provided to minimize adverse environmental impacts.

In an effort to help identify feasible, less environmentally damaging alternatives and reasonable mitigation measures and techniques, the CCMA specifically defines these terms. “Feasible, less environmentally damaging alternatives” include, but are not limited to

- relocation of a commercial or residential structure to a landward location,
- elevation of a commercial or residential structure,
- restoration or creation of a dune or vegetated slope, or
- living shorelines techniques that use a variety of structural and organic materials, such as tidal wetland plants, submerged aquatic vegetation (e.g., eelgrass), coir fiber logs, sand fill and stone to provide shoreline protection **and** maintain or restore costal resources and habitat [CGS Section 22a-92(e)].

“Reasonable mitigation measures and techniques” include, but are not limited to,

- providing for the upland migration of on-site tidal wetlands,
- replenishing the littoral system and the public beach with suitable sediment at a frequency and rate equivalent to the sediment removed from the site as a result of the proposed structural solution (also known as beach nourishment), or
- on-site or off-site removal of other existing shoreline flood and erosion control structures from public or private shoreline property to the same or greater extent as the area of shoreline impacted by the proposed structural solution [CGS Section 22a-92(e)].

***What are the requirements for action on a shoreline flood and erosion control coastal site plan application?***

- A copy of each coastal site plan submitted for any shoreline flood and erosion control structure (including those proposed as a component of a larger development project) must be referred to the DEEP within 15 days of its receipt by the municipal land use commission [CGS Section 22a-109(d)].
- The DEEP may comment on such plans; any comments must be submitted to the commission within 35 days of its receipt at the DEEP [CGS Section 22a-109(d)].

- The commission must consider any DEEP comments prior to final action on the application [CGS Section 22a-109(d)].
- If the DEEP does not comment within the 35-day time frame or any extension granted by the municipal land use commission, the commission may take final action [CGS Section 22a-109(d)].
- The commission may hold a hearing on a shoreline flood and erosion control structure, and must hold a hearing upon the request of the Commissioner of Energy and Environmental Protection [CGS Section 22a-109(e)].

A coastal site plan for a shoreline flood and erosion structure must be approved if the record demonstrates and the commission makes specific written findings that:

1. The shoreline flood and erosion control structure is **necessary** and **unavoidable** for the protection of infrastructural facilities, water-dependent uses, commercial and residential structures and substantial appurtenances attached or integral thereto constructed as of January 1, 1995, or a cemetery or burial grounds, **AND**
2. There is no feasible, less environmentally-damaging alternative, **AND**
3. All reasonable mitigation measures and techniques are implemented to minimize adverse environmental impacts [CGS Section 22a-109(a)].

In the case of any application for a shoreline flood and erosion control structure that is denied on the basis of a finding that there may be feasible, less environmentally damaging alternatives to such structure or that reasonable mitigation measures and techniques have not been provided, the municipal commission must propose on the record, in writing, the types of feasible alternatives or mitigation measures and techniques that the applicant may investigate. This requirement does not shift the burden from the applicant to prove that he/she is entitled to approval of the proposed shoreline flood and erosion control structure, or to present alternatives to such structure [CGS Section 22a-92(f)].

A copy of any municipal decision on a coastal site plan for a shoreline flood and erosion control structure shall be sent to the Commissioner of Energy and Environmental Protection within 15 days after such decision is rendered [CGS Section 22a-109(f)].

### ***Does the DEEP regulate shoreline flood and erosion control structures?***

Maybe, depending on the specifics of proposed activities. The Department of Energy and Environmental Protection (DEEP) has direct regulatory jurisdiction over activities occurring in tidal wetlands and/or waterward of the coastal jurisdiction line. If any construction activities or structure(s), in part or in whole, or any incidental work proposed in conjunction with the construction of structure(s) is proposed at or waterward of the coastal jurisdiction line or in tidal wetlands, authorization from the DEEP's Office of Long Island Sound Programs would be required prior to construction in accordance with the Tidal Wetlands Act (CGS Sections 22a-28

through 22a-35) and/or the statutes governing the placement of structures, dredging, and fill in tidal, coastal or navigable waters (CGS Sections 22a-359 through 22a-363g, inclusive).

***What's the difference between DEEP and municipal regulatory areas?***

The DEEP has direct regulatory jurisdiction over activities occurring in tidal wetlands and/or waterward of the coastal jurisdiction line. The municipality regulates upland activities waterward to the mean high water mark. In general, the mean high water mark is lower than (waterward of) the coastal jurisdiction line. Therefore, on gently sloping shorelines, there will be an area of overlapping jurisdictions (because the coastal jurisdiction line will be landward of mean high water). Along steep shorefronts, for instance along a seawall, the coastal jurisdiction line and mean high water mark may be closely aligned or may even coincide in the same vertical plane. The area of overlapping jurisdictions will be minimal in that case. Regardless of whether the DEEP and/or the municipality have jurisdiction, the same statutory policies and standards apply in both jurisdictions (see the fact sheet for State and Municipal Regulatory Jurisdictions).