# TOWN OF YARMOUTH` WETLAND PROTECTION REGULATIONS

## Contents

PART 1	. GENERAL PROVISIONS	. 3
1.01	General Purpose	. 3
(1)	Introduction	
(2)	Purpose	. 3
1.02	Statement of Jurisdiction	. 3
(1)	Areas subject to Protection Under the By-law	. 3
(2)	Activities Subject to Regulation Under the By-law	. 4
1.03	General Provisions Concerning Burden of Going Forward and Burden of Proo	f 4
1.04	Definitions	. 4
1.05	Procedures	11
(1)	Time Periods.	
(3)	Actions by Conservation Commission	
(4)	Determination of Applicability	12
(5)	Notice of Intent	13
(6)	Public Hearings on Notices of Intent	14
(7)	Permits Regulating the Work	14
(8)	Extensions of Permits	15
(9)	Certificates of Compliance	16
1.06	Emergencies	16
1.07	Severability	17
1.08	Effective Date	17
1.09	Submittal Requirements	17
(1)	Office Requirements	17
(2)	Plans and Drawing Requirements	18
(3)	On-Site Requirements	19
PART 2	REGULATIONS FOR DOCKS, PIERS AND DREDGING	19
	lition to meeting the following requirements proposed projects must also meet erformance standards for specific resource areas in Part 4 and Part 5	19

2.01	Performance Standards for Tidal and Estuarine Docks and Piers	. 19
2.02	Performance Standards for Dredging	. 22
2.03	Performance Standards for Freshwater Docks and Piers	. 23
PART 3	SETBACKS AND BUFFER ZONE REQUIREMENTS	. 25
3.01	Setbacks	. 25
3.02	Mitigation and Restoration	. 26
	REGULATIONS FOR COASTAL WETLANDS	
4.01 L	and Under the Ocean	
4.02	Coastal Beaches and Tidal Flats	
4.03	Coastal Dunes	
4.04	Barrier Beaches	. 31
4.05	Coastal Banks	
4.06	Salt Marshes	. 33
4.07	Land Under, or Within 100 Feet of the Banks of Salt Ponds	. 35
4.08	Land Containing Shellfish	. 36
4.09 that U	Banks of or Land Under the Ocean, Ponds, Streams, Rivers, Lakes or Creek nderlie an Anadromous / Catadromous Fish Run (Fish Run)	
4.10	Land Subject to Coastal Storm Flowage	. 38
4.11	Coastal Watershed Areas	. 40
4.12	Rocky Intertidal Shores	. 41
PART 5	REGULATIONS FOR INLAND WETLANDS	. 43
5.01	Inland Banks and Beaches	. 43
5.02	Vegetated Wetlands, (Wet Meadows, Marshes, Swamps and Bogs)	. 44
5.03 ditch)	Land Under Water Bodies, (under any creek, river, stream pond or lake, flats 46	or
5.04	Land Subject to Flooding, (both Bordering and Isolated areas)	. 47
5.05	Lake and Pond Recharge Areas	. 49
PART 6	. VARIANCE	. 51
6.01	Text	. 51
	REGULATIONS FOR HIRING OUTSIDE CONSULTANTS UNDER M.G.L.	
	§53G	
7.01	Purpose:	
7.02	Special Account:	
7 03	Consultant Services:	51



#### **PART 1. GENERAL PROVISIONS**

#### 1.01 General Purpose

#### (1) Introduction

These regulations are promulgated and may be periodically amended by the Town of Yarmouth Conservation Commission pursuant to the authority granted to it under Chapter 143, Section 2, D of the Town of Yarmouth Wetland By-law, (hereinafter referred to as the "By-law"). These regulations shall complement the By-law, and shall have the force of law upon their effective date.

#### (2) Purpose

The By-law sets forth a public review and decision making process by which activities having an impact or cumulative effect upon Areas Subject to Protection Under the By-law are to be regulated in order to ensure the protection of the following interests:

- Private and Public Water Supply
- Groundwater and Groundwater Quality
- Surface Water Quality
- Flood Control
- Erosion and Sedimentation Control
- Storm Damage Prevention
- Water Pollution Control
- Wildlife and Wildlife Habitat
- Fisheries
- Shellfish and Land Containing Shellfish
- Recreation

The purpose of these regulations is to define and clarify that process by establishing standard definitions and uniform procedures by which the Yarmouth Conservation Commission may carry out its responsibilities under the By-law.

#### 1.02 Statement of Jurisdiction

#### (1) Areas subject to Protection Under the By-law

The following areas are subject to protection under the bylaw:

- (a) Any freshwater or coastal wetlands, marshes, wet meadows, bogs, swamps, banks, lakes, ponds of any size, beaches, dunes, estuaries, the ocean, intermittent streams, brooks and creeks;
- (b) Lands adjoining the resource areas set forth in 1.02 (1)(a) out to a distance of 100 feet, known as the buffer zone;
- (c) Any land under any of the water bodies set forth in section 1.02, (1)(a), above

- (d)) Any perennial rivers, streams, brooks and creeks;
- (e) Lands adjoining the resource areas set forth in 1.02 (1)(d) out to a distance of 200 feet, known as the riverfront area;
- (f) Any lands subject to flooding or inundation by groundwater or surface water;
- (g) Lands subject to tidal action, coastal storm flowage, or flooding.
- (h) Portions of land within Coastal Watershed Areas and Lake and Pond Recharge Areas as mapped by the "Water Resources Protection Study" for the Town of Yarmouth, dated August, 1988 by I.E.P. and Wright Pierce.
- (2) Activities Subject to Regulation Under the By-law
- (a) Any activity proposed or undertaken which will constitute removing, filling, dredging, building upon or altering any area specified in section 1.02, (1) is subject to regulation under the By-law and requires the filing of either a Notice of Intent or a Request for Determination of Applicability.
- (b) Any activity proposed or undertaken outside the areas specified in section 1.02, (1) above shall not be subject to regulation under the By-law unless, in the judgment of the Conservation Commission, said activity will result or has resulted in the removing, filling, dredging, building upon, or altering an area specified in section 1.02, (1) above.
- (c) Any person who wishes to know whether or not a proposed activity or an area is subject to the By-law may in writing request a determination from the Conservation Commission. Such a "Request for Determination of Applicability" shall be submitted pursuant to section 1.05 of these regulations.

## 1.03 General Provisions Concerning Burden of Going Forward and Burden of Proof

- (1) The applicant shall have the burden of going forward by providing at least some credible evidence from a competent source in support of all matters asserted by the applicant in accordance with his or her burden of proof pursuant to section 1.03 (2) below.
- (2) The applicant shall have the burden of proving by a preponderance of the credible evidence that the activities proposed in the application will not harm the interests protected by this By-law. Failure to meet the Burden of Proof shall be cause for the Commission to deny the application along with any work or activity proposed therein.

#### 1.04 **Definitions**

<u>Abutter</u> means any person possessing whole or partial ownership of property directly adjacent to the property for which work is proposed. This shall include property across any private or public way.

Activity means any form of draining, dumping, dredging, damming discharging, excavating, filling or grading; the erection, re-construction or expansion of any buildings or structures; the driving of piles or the construction of seawalls; the construction or improvement of roads and other ways; the changing of runoff characteristics; the intercepting or diverting of ground or surface water; the installation of drainage, sewage and water systems; the discharging of pollutants; the destruction of plant life; and any other changing of the physical characteristics of land, or of the physical, biological or chemical characteristics of water.

Alter means to change the condition of any Area Subject to Protection Under the By-law. The term "alter" shall include, but not be limited to the following activities when undertaken to, upon, within or affecting Resource Areas protected by the By-law:

- (a) Removal, excavation or dredging of soil, sand, gravel, or aggregate materials of any kind;
- (b) Changing of pre-existing drainage characteristics, flushing characteristics, salinity distribution, sedimentation patterns, flow patterns or flooding characteristics;
- (c) Drainage or other disturbance of water level or water table;
- (d) Dumping, discharging or filling with any material;
- (e) Placing of fill or removal of material;
- (f) Driving of piles, erection of buildings or structures of any kind;
- (g) Placing of objects or obstructions in water, (excluding boats, moorings, fish or shellfish traps, pens or trays used in conjunction with aquaculture, or aids to navigation);
- (h) Destruction of plant life including the cutting of trees and removal of existing ground cover. This shall also include aquatic flora;
- (i) Changing the water temperature, biochemical oxygen demand, or other physical, chemical, or biological characteristics of water;
- (j) Any activities, changes, or work which may cause or tend to contribute to pollution of any body of water or ground water.

<u>Aquaculture</u> means the growing of aquatic organisms under controlled conditions including but not limited to finfish, shellfish, amphibians, reptiles and seaweeds.

Bank (Coastal) - see part 4, section 4.05, 2

Bank (Inland) - see Part 5, section 5.01, 2, a

Beach (Barrier) - see Part 4, section 4.04, 2

Beach (Coastal) - see Part 4, section 4.02, 2, a

<u>Beach (Inland)</u> - see Part 5, synonymous with un-vegetated inland bank.

<u>Best Available Measures</u> means the most up to date technology or the best designs, measures or engineering practices that have been developed or that are available.

<u>Best Practical Measures</u> means technologies, designs, measures, or engineering practices that are in general use to protect like or similar interests.

Bog see Part 5, 5.02, 2 a, 1.

Bordering means touching.

Boundary means the boundary of and Area Subject to Protection Under the By-law.

<u>Certificate of Compliance</u> means a written determination by the Conservation Commission that the proposed work or a portion thereof has been completed in accordance with a pertinent Order of Conditions.

<u>Coastal Engineering Structure</u> means any bulkhead, revetment, seawall, Rip-rap, groin, jetty or other structure intended to prevent or alleviate storm damage, tidal action, wave action, littoral flow or erosion caused by any of foregoing.

<u>Commission</u> means the Yarmouth Conservation Commission.

Common "Shared-use" Dock/Pier means a water-dependent structure serving two or more contiguous waterfront properties where each of the contiguous lots would qualify for an individual private dock. An essential element of any common dock shall be a finding by the Commission that the number of potential docks in the immediate area has been permanently reduced. All Common Dock/Pier applicants shall file the appropriate deed restriction allowing for deeded easements and the prohibition of dock construction on the non-host property(s).

<u>Conditions</u> means those requirements set forth in a "Order of Condition" issued by the Conservation Commission for the purpose of permitting, regulating, or prohibiting any activity that removes, fills, dredges, builds upon or alters and Area Subject to Protection Under the By-law.

<u>Conservation Commission</u> means that body comprised of members lawfully appointed pursuant to M.G.L. Chapter 40, section 8c.

Creek means the same as a stream.

<u>Date of Issuance</u> means the date an Order of Conditions, Determination of Applicability, Extension Permit, Enforcement Order, or Certificate of Compliance is mailed, as evidenced by a postmark, or the date it is hand delivered.

<u>Date of Receipt</u> means the date of delivery to an office, home or usual place of business by mail or hand delivery.

Department means Massachusetts Department of Environmental Protection, (D.E.P.).

<u>Determination of Applicability</u> means a written finding by the Commission as to whether a site or the activity proposed thereon is subject to the jurisdiction of the By-law.

<u>Docks & Piers</u> shall be used interchangeably for the purpose of these regulations and shall mean the entire structure of any pier, dock, wharf, walkway, bulkhead, or float, and

any part thereof, including pilings, ramps, walkways, float, tie-off pilings, dolphins and/or outhaul posts.

<u>Draft</u> means the maximum depth of a vessel as measured from the surface of the water to the deepest part when loaded to the manufacturer's maximum load specification. In vessels equipped with outboard and I/O engines, draft shall be measured with its propulsion unit in its lowest operating position.

<u>Dredge</u> means to deepen, widen or excavate, either temporarily or permanently.

<u>Driveway</u> means any means of vehicle access to a parcel of land. Driveways can occur as gravel, crushed stone, seashells, or impervious materials such as cement or bituminous concrete.

Dune means Coastal Dune, see Part 4, section 4.03, 2.

<u>Erosion Control</u> means the prevention or reduction of the detachment or movement of soil or rock fragments by water, wind, ice or gravity.

<u>Estuary</u> means any area where fresh and salt water mix and tidal effects are evident and also any partially enclosed coastal body of water where the tide meets the current of any stream or river.

<u>Extension Permit</u> means a written extension of time within which the authorized activity shall be completed.

<u>Fill</u> means to deposit any material so as to raise an elevation, either temporarily or permanently.

Flat (tidal) - see Part 4, section 4.02, 2, b.

Flood Control means the prevention or reduction of flooding and or flood damage.

<u>Freshwater Pond Average Seasonal Low Water</u> is the present arithmetic mean of low water heights observed over a one year period using the best available data as determined by the DEP.

Freshwater Pond Average Seasonal High Water is the present arithmetic mean of high water heights observed over a one year period using the best available data as determined by the DEP. Indicators include: water marks on vegetation, hydric adventitious roots or hypertrophied lenticels on the stemor trunk, cuts or erosion on banks. Drift lines and rafted debris (fresh water rack line): vegetation, litter, and other natural or manmade material deposited in discrete lines or locations on the ground or against fixed objects or entangled in vegetation is also an indicator. Note: The area between seasonal high and low water is often proven to be a harsh environment for many plants. This is reflected by the denuded band of sand or stone observed around many glacial ponds and lakes.

Freshwater Wetlands, - see Part 5, section 5.02, 2, a.

Ground Water Supply means water below the earth's surface in the zone of saturation.

<u>Interests</u> means the wetland values, (collectively, the "interests" protected by this Bylaw), specified in chapter 143, section 1 of the By-law and section 1.01, 2 of these regulations.

Issuing Authority means the Yarmouth Conservation Commission.

<u>Lake</u> means any open body of fresh water with a surface area of 10 acres or more, and shall include great ponds.

<u>Land Subject to Coastal Storm Flowage</u> means land subject to any inundation caused by coastal storms up to and including that caused by the 100 year storm, surge of record, or storm of record, whichever is greater.

Land Containing Shellfish, - see Part 4, section 4.08, 2, a.

Land Subject to Flooding, - see Part 5, section 5.04, 1, a. and b.

<u>Land Subject to Flooding or Inundation by Tidal Action</u> means land subject to the periodic rise and fall of a coastal water body including spring tides.

<u>Land Under Water Bodies</u> means the bottom of, or land under the surface of the ocean or any lake, river, pond, stream, estuary or watercourse. See Parts 2 and 3 for further definition.

<u>Land Within 300 Feet of a Major Estuary</u> means that portion of land that extends 300 feet landward or up-gradient from the actual river, creek, salt pond, or embayment and is within the 100 year frequency storm elevation as referenced on the latest available Flood Insurance Rate Maps provided by the Federal Emergency Management Agency.

Majority means more than half of the Conservation Commission members then in office.

Major Estuaries include: Bass River, Parkers River, Mill Creek, Chase Garden Creek, Bass Creek, Lone Tree Creek, Clays Creek, Short Wharf Creek, Hallets Mill Pond, Whites Brook, Lewis Bay, Lewis Pond, Swan Pond, Dinah's Pond, Follins Pond, Kelly's Bay, Mill Pond, Crab Creek, Uncle Roberts Cove, Pine Island Creek, Sweetheart Creek, Barnstable Harbor, Cape Cod Bay, and Nantucket Sound.

Marsh, - see Part 4 and 5 for definitions of salt and fresh marshes.

<u>Mean High Water (MHW)</u> is the present arithmetic mean of water heights observed at high tide over a specific 19-year metonic cycle determined by using hydrographic survey data of the National Ocean Survey and the U.S. Department of Commerce.

<u>Mean Low Water (MLW)</u> is the arithmetic mean of water heights observed at low tide over a specific 19-year metonic cycle determined by using hydrographic survey data of the National Ocean Survey and the U.S. Department of Commerce.

Mean Lower Low Water (MLLW) is the average of the lower low water heights of each tidal day as established by the arithmetic mean of water heights observed at low tide over a specific 19-year metonic cycle determined by using hydrographic survey data of the National Ocean Survey and the U.S. Department of Commerce.

Navigation means the ability to traverse a waterway by watercraft.

Notice of Intent means the written notice filed by any person intending to remove, fill, dredge or alter any Area Subject to Protection under the Mass Wetland Protection Act, M.G.L. chapter 131, section 40 and the Town of Yarmouth Wetland By-law.

<u>Obstructions or Objects</u> in water means but is not limited to dams, weirs, sluice gates, jetties, groins, breakwaters, piers, docks, seawalls, bulkheads, pilings, dolphins, marine railways, slips and floats.

Ocean means the Atlantic Ocean and all contiguous waters subject to tidal action.

Order means an Order of Conditions, Superseding Order of Conditions, or Final Order of Conditions, whichever is applicable, issued pursuant to M.G.L., Chapter 131, section 40 and/or the Town of Yarmouth Wetland By-law.

<u>Party</u> to any proceeding means the Applicant, the Conservation Commission and, pursuant to section 1.05, may include the owner of the project location, any abutter, any person aggrieved, any ten residents of the town where the land is located and any ten persons pursuant to M.G.L., chapter 30a, sec. 10a.

Person – see Chapter 143, section 3 of the By-law.

<u>Person Aggrieved</u> means any person who, because of an act or failure to act by the issuing authority, may suffer an injury in fact which is different either in kind or in magnitude from that suffered by the general public and which is within the scope of the interests identified in the By-law. Such person must specify in writing sufficient facts to allow the Conservation Commission to determine whether or not the person is in fact aggrieved.

<u>Plans</u> means such data, maps engineering drawings, calculations, specifications, schedules and other materials, if any, deemed necessary by the Conservation Commission to describe the site and activity; to determine the applicability of the By-law; or to determine the impact of the proposal upon the interests identified in the By-law.

Pond (Coastal) means Salt Pond - see Part 4, 4.07, 2.

<u>Pond (Inland)</u> means any open body of fresh water, either naturally occurring or manmade by impoundment, which is never without standing water due to natural causes, except during periods of extended drought. For purposes of this definition, extended drought shall mean any period of four or more months during which the average rainfall for each month is 50% or less of the ten year average for that same month. Basins or lagoons which are part of waste water treatment plants shall not be considered ponds, nor shall swimming pools or other impervious man-made retention basins and ponds.

Private Dock/Pier means a water-dependent structure accessory to a residential use.

<u>Prevention of Pollution</u> means the prevention or reduction of contamination of surface or ground water.

<u>Private Water Supply</u> means any source or volume of surface water or groundwater demonstrated to be in any private use or demonstrated to have a potential for private use.

<u>Protection of Fisheries</u> means protection of the capacity of an Area Subject to Protection Under the By-law;

- (a) To prevent or reduce contamination or damage to fish; and
- (b) To serve as their habitat and nutrient source.

Fish includes all species of fresh and saltwater finfish and shellfish.

<u>Protection of Land Containing Shellfish</u> means protection of the capacity of an Area Subject to Protection Under the By-law:

- (a) To prevent or reduce contamination or damage to shellfish; and
- (b) To serve as their habitat and nutrient source.

<u>Public Water Supply</u> means any source or volume of surface water or groundwater demonstrated to be in public use or approved for water supply pursuant to M.G.L. chapter 111, section 160 by the Division of Water Supply of the D.E.P., or shown to have potential for public use.

<u>Quorum</u> means the majority of the duly appointed members of the Conservation Commission that when duly assembled is legally empowered to transact business.

<u>Remove</u> means to take away any type of material, thereby changing an elevation, either temporarily or permanently.

Request for Determination of Applicability means a written request made by any person to the Conservation Commission for a determination as to whether a site or the proposed activity thereon is subject to the By-law.

<u>Resource Area</u> is synonymous with Area Subject to Protection Under the By-Law, each one of which is listed in section 1.02, (1) of these regulations.

<u>River</u> means any natural flowing body of water that empties to any ocean, lake or other river and which flows throughout the year.

Salt Marsh – see Part 4, 4.06, (2), a.

<u>Sedimentation Control</u> means the prevention or reduction of the collection or concentrations of sand, soil or rock fragments by the action of water, wind, ice, gravity, or machine.

<u>Significant</u> means plays a role. A resource area is significant to an interest identified in the By-law when it plays a role in the provision or protection, as appropriate, of that interest.

<u>Spring Tides</u> means those tides which occur with new and full moons, and which are perceptibly higher and lower than other tides.

<u>Storm Damage Prevention</u> means the prevention of damage caused by water from storms, including but not limited to; erosion and sedimentation; damage to vegetation, property or buildings; or damage caused by flooding, waterborne debris or waterborne ice.

<u>Stream</u> means a body of running water, including brooks and creeks, which moves in a definite channel in or under the ground due to hydraulic gradient. A portion of a stream may flow through a culvert or beneath a bridge. A stream may be intermittent, (i.e. does not flow throughout the year). A stream may also be man-made.

<u>Structure</u> means any building, shed, deck, driveway, road, septic component, dock, pier, bulkhead, revetment, groin, float, pipeline, fence, guardrail, pool, tennis court or other playing surface, drainage component, storage tank, etc.

<u>Town Ways to Water</u> means unimproved points of access points to the water provided by the town. These access points are not beaches or boat ramps for launching boats on trailers. Access is only available by foot and hand carried boats such as kayaks and canoes

<u>Town Landings means Town Landings</u> means a structure providing a place where boats can land people or goods. Town landings in Yarmouth are located at Bass Hole Beach, Packet Landing, Englewood Beach, Bass River (Smugglers Beach) and Colonial Acres Beach.

Vegetated Wetlands – see Part 5.

Vernal Pools – See part 3.

Water Dependent Use means any structure or activity that relies solely on the presence of a salt or fresh water body to justify its existence. Docks, floats, dredging, and seawalls would be considered water dependent structures and use. Houses, pools, garages and decks would not be considered water dependent structures.

Wet Meadow – see Part 5, 5.02, 2a.

<u>Wildlife Habitat</u> means areas having plant community composition and structure, hydrologic regime, or other characteristics sufficient to provide shelter, nutrients, growing conditions, nesting or breeding sites conducive to the propagation and preservation of wildlife. Migratory and over-wintering areas shall also be included as wildlife habitat.

<u>Wildlife</u> means any non-domesticated mammal, bird, reptile, amphibian, fish, mollusk, plant, arthropod or other invertebrate other than a species of the class Insecta, which has been determined by the Commission to constitute a pest whose protection under the By-law would be a risk to man.

Work means the same as activity.

#### 1.05 Procedures

#### (1) Time Periods.

All time periods of ten days or less specified in the By-law and these regulations shall be computed using business days only. (Saturday, Sunday, and legal holidays excluded). In the case of a Determination of Applicability or Order of Conditions, such period shall commence on the first day after the date of issuance and shall end at the close of business on the tenth business day thereafter. All other time periods specified in the By-law and these regulations shall be computed on the basis of calendar days,

unless the last day falls on a Saturday, Sunday or legal holiday, in which case the last day shall be the next business day following.

#### (3) Actions by Conservation Commission

Where the By-law states that a particular action, (except receipt of a Request for Determination of Applicability or Notice of Intent), is to be taken by the Commission, that action is to be taken by more than half of the members present at a meeting of at least a quorum. Where the By-law states that a permit or notification shall be issued by the Conservation Commission, that action is to be taken by a majority of the members then in office, who need not convene as a body in order to sign said permit or notification, provided they met pursuant to the Open Meeting Law, M.G.L. chapter 30A, sections 18-25 when voting on the matter. Where the By-law states that the Conservation Commission is to receive a Request for Determination of Applicability or a Notice of Intent, Conservation Commission means a member of the Conservation Commission or an individual designated by the Conservation Commission to receive such Request for Determination of Applicability or Notice of Intent.

#### (4) Determination of Applicability

#### (a) Requests for Determination of Applicability

- i. Any person who desires a determination as to whether the By-law applies to a site or an activity that may affect an Area Subject to Protection Under the By-law, may submit to the Commission by certified mail or hand delivery a Request for Determination of Applicability.
- ii. When the person requesting a determination is other than the owner, a copy of the request shall also be sent by the applicant to the current property owner.

#### (b) Determination of Applicability

Within 21 days after the date of receipt of a Request for Determination of Applicability, the Commission shall hold a public hearing on the request. Notice of the time and place of the public hearing at which the Determination will be made shall be given by the Commission, at the expense of the person making the Request, not less than five days prior to such hearing, by publication in a newspaper of general circulation in the town (The legal notice may also be viewed on-line at the Massachusetts Newspaper Publishers Association (MNPA) website at http://masspublicnotices.org/), and by notification to the person making the Request and to the owner. Notice shall also be given in accordance with the Open Meeting Law, M.G.L. chapter 30A, section 20.

- i. At the public hearing the Commission will determine:
  - I. Positively: that the area and the activity proposed thereon are subject to the jurisdiction of the By-law and that the activity is deemed to affect one or more interests protected in the By-law.
- II. Negatively: that the area in which the proposed activity is to take place is not within the jurisdiction of the By-law or that the proposed activity is not deemed to affect one or more of the interests protected under the By-law.

- ii. The Determination shall be signed by a majority of the Commissioners present at the public hearing, and shall be sent by the Commission to the person making the Request and a copy, if not the applicant, to the owner within 21 days of the close of the public hearing or any continuance thereof.
- iii. A Determination shall be valid for three years from date of issuance.
- iv. In the event of a positive Determination, a Notice of Intent shall be filed and all of the procedures set forth in section 1.05, (5) shall apply.

#### (5) Notice of Intent

- (a) Any person who proposes to do work that will remove, fill, dredge, build upon or alter any Area Subject to Protection Under the By-law shall submit a Notice of Intent, and other application materials in accordance with the submittal requirements outlined in section 1.09 of these regulations.
- (b) The Commission in an appropriate case may accept as the application and plans under this By-law, the Notice of Intent and plans filed under the Wetland Protection Act, M.G.L. chapter 131, section 40.
- (c) Any person filing a Notice of Intent with the Commission under the by-law shall at the same time give written notices thereof, by certified mail or hand delivery, to all abutters according to the most recent record of the Yarmouth Assessors Office, and to all other persons as the Commission shall in writing require. Applicants shall postmark such notification at least (10), ten days prior to the public hearing. The most recent record will be dated no more than 30 days prior to the filing date.
- (d) When a person filing is other than the owner, the application, the notice of the hearing, and the findings themselves shall be sent to the owner by the person filing the application, and the applicant shall also supply the Commission with the name and current address of the owner.
- (e) In the event that only a portion of the proposed project or activity lies within an Area Subject to Protection Under the By-law, all aspects of the project must be described in the detail called for by the General Instructions provided, also that in such circumstances the Notice of Intent shall also contain descriptions and calculations of peak flows and estimated water quality characteristics of discharge from a point source (both closed and open channel) when the point of discharge falls within an Area subject to Protection Under the By-law.
- (f) Notwithstanding the foregoing, when the Commission has determined that an activity outside the Areas Subject to Protection Under the By-law has in fact altered an Area Subject to Protection Under the By-law, it may require such plans, supporting calculations and other documentation as are necessary to describe the entire activity.
- (g) A Notice of Intent may be rejected by the Commission if the filing is deemed incomplete.,

#### (6) Public Hearings on Notices of Intent

A public hearing on a Notice of Intent shall be held by the Commission within 21 days of receipt of the minimum submittal requirements set forth in the General Instructions (§.4.01) and shall be advertised at the expense of the applicant at least five working days prior to the hearing in a newspaper of general circulation in the Town (The legal notice may be viewed on-line at the Massachusetts Newspaper Publishers Association (MNPA) website at http://masspublicnotices.org/) and in accordance with the requirements of the Open Meeting Law, M.G.L. ch. 30A, §. 20.

- (a) The Commission in an appropriate case may combine its hearing under the By-law with the hearing conducted under Wetlands Protection Act, M.G.L. 131, §. 40.
- (b) Public Hearings may be continued as follows:
  - i. Without the consent of the applicant to a date certain, for reasons stated at the hearing, which may include receipt of additional information offered by the applicant or others, information and plans required by the applicant, deemed necessary by the Commission in its discretion, or comments and recommendations of other local or state boards and officials.
  - ii. With the consent of the applicant, to an agreed upon date, which shall be announced at the hearing.

#### (7) Permits Regulating the Work

- (a) Within 21 days of the close of the public hearing the Commission shall issue an Order of Conditions, (hereinafter called "Order"), either approving or denying the project.
- (b) If the project is approved, the Order shall impose such conditions as are necessary for the protection of one or more of the interests identified in the By-law. The Order shall prohibit any work or portion thereof that cannot be conditioned to protect such interests. The Order shall impose conditions upon work or the portion thereof that will in the judgment of the Commission, result in the removing, dredging, filling, building upon or altering an area subject to protection of the By-law. The Order shall impose conditions setting limits on the quantity and quality of discharge from a point source, (both closed and open channels) when said limits are necessary to protect the interests identified in the By-law.
- (c) If the project is denied, it shall be for one or more of the following reasons:
  - i. For failure to meet the requirements of the By-law;
  - ii. For failure to submit necessary information or plans requested by the Commission;
  - iii. For failure to meet design specifications, performance standards or other requirements in these regulations;
  - iv. For failure to avoid or prevent unacceptable or cumulative effects upon the wetland values protected under the By-law;

- v. Where no conditions are adequate to safeguard the wetland values protected under the By-law or these regulations.
- (d) An Order shall be valid for three years from the date of issuance.
- (e) The Order shall be signed by a majority of the Commission and shall be mailed or hand delivered to the applicant, his agent or the owner of record.
- (f) A copy of the plans describing the work and the Order shall be kept on file by the Commission and shall be available to the public at reasonable hours.
- (g) Prior to commencement of any work permitted or required by the Order, the Order shall be recorded in the Registry of Deeds or the Land Court for the district in which the land is located within the chain of title of the affected property. In the case of recorded land, the Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work s to be done. In the case of registered land, the Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is to be done. Certification of the recording shall be sent to the Conservation Commission before any work is commenced. If work is undertaken without the applicant first recording the Order, the issuing authority may issue an Enforcement Order or may itself record the Order at the applicant's expense
- (h) For good cause the Commission may revoke or modify an Order under this By-law.
- (i) The Commission, in an appropriate case may combine the Order or other action on an application issued under the by-law with the Order issued under the Mass Wetland Protection Act, M.G.L. Chapter 131, sec. 40.

#### (8) Extensions of Permits

- (a) The Commission may extend an Order for one or more periods of up to 3 years to a maximum permit life of 5 years. Requests for extensions shall be made to the Commission in writing at least thirty days prior to the expiration of the permit.
- (b) A fee shall be paid at the time of the request, as per the Conservation Commission fee schedule.
- (c) The issuing authority may deny the request for an extension and require the filing of a new Notice of Intent for the remaining work in the following circumstances:
  - i. Where no work has begun on the project, except where such failure is due to an unavoidable delay, such as appeals, or in the obtaining of other permits;
  - ii. Where new information, not available at the time Order was issued, has become available and indicates that the Order is not adequate to protect the interests in the By-law;
  - iii. Where incomplete work is causing damage to the interests identified in the By-law; or
  - iv. Where work has been done in violation of the Order or these regulations.

- (d) If issued by the Conservation Commission, the Extension Permit shall be signed by a majority of the commission.
- (e) The Extension Permit shall be recorded in the Land Court or the Registry of Deeds, whichever is appropriate. Certification of recording shall be sent to the issuing authority on the stub provided at the bottom of the Extension Permit. If work is undertaken without the applicant first recording the Extension Permit, the Conservation Commission may issue an Enforcement Order or may itself record the Extension Permit at the applicant's expense.

#### (9) Certificates of Compliance

- (a) Upon completion of the work specified in the Order, it is mandatory for the applicant to request in writing a Certificate of Compliance. A Certificate of Compliance shall be issued by the Conservation Commission within twenty one days of receipt thereof, and shall certify that the activity or portions thereof described in the Notice of Intent and plans has been completed in compliance with the Order. If issued by the Conservation Commission, the Certificate of Compliance shall be signed by a majority of the Commission.
- (b) Prior to the issuance of a Certificate of Compliance, a site inspection shall be made by the Conservation Administrator upon payment of a fee as per the Conservation Commission fee schedule.
- (c) If the Conservation Commission determines non-compliance after review and inspection, it may refuse to issue a Certificate of Compliance. Such refusal shall be issued within twenty one days of receipt of a request for a Certificate of Compliance, and shall be in writing and shall specify the reasons for denial.
- (d) If a project has been completed in accordance with plans stamped by a registered professional engineer, architect, landscape architect or land surveyor, a written statement by such a professional person certifying substantial compliance with the plans and setting forth what deviation, if any, exists from the plans approved in the Order shall accompany the request for a Certificate of Compliance.
- (e) If the Order contains conditions which continue after completion of the work, such as (but not limited to), maintenance and monitoring, the Certificate of Compliance shall specify which, if any, of such conditions shall continue. The Certificate of Compliance shall also specify to what portions of the work it applies, if it does not apply to all the work regulated by the Order.
- (f) The Certificate of Compliance shall be recorded in the Land Court or the Registry of Deeds, whichever is appropriate. Certification of recording shall be sent to the issuing authority on the stub provided at the bottom of the Certificate of Compliance. Upon failure of the applicant to so record, the Conservation Commission may do so at the applicant's expense.

#### 1.06 Emergencies

(1) Any person requesting permission to do an emergency project shall specify why the project is necessary for the protection of the health or safety of the public and what

- agency of the Commonwealth or subdivision thereof is to perform the project or order it to be performed.
- (2) The request may be written or oral, but if oral must be confirmed by written notice within twenty four hours of work commencement.
- (3) A majority of the Commission must certify the work as an emergency project to be performed only for the time and place certified by the Commission for the limited purpose of abating the emergency.
- (4) An emergency certification shall be issued only for the protection of public health or safety.
- (5) The time limit for performance of emergency work shall not exceed thirty days from the day of certification by the Commission.

#### 1.07 Severability

The invalidity of any section of these regulations shall not invalidate any other section or provision thereof, nor shall it invalidate an Order or Determination which has previously been issued.

#### 1.08 Effective Date

The effective date of these regulations shall be December 1 2016 and the provisions of these regulations shall apply to all applications received on or after that date.

#### 1.09 Submittal Requirements

#### (1) Office Requirements

- (a) Filing fees as required by the D.E.P. and the Conservation Commission fee schedule will be required for a "Notice of Intent" or an "Abbreviated Notice of Intent" and will be payable to the Town of Yarmouth.
- (b) A Conservation Commission filing fee only will be required for all other permits and is payable to the Town of Yarmouth. Reference the fee schedule for the applicable fee.
- (c) All filings must be made on Town of Yarmouth forms. These forms will be supplied by the Conservation office.
- (d) A "Notice of Intent" or "Request for a Determination of Applicability" if hand delivered to the Conservation office, must be immediately reviewed by either the office secretary or the Conservation Administrator for substantial completeness. Filings that are missing integral information will not be scheduled for public hearings until all requested information is submitted.
- (e) Filings that are mailed to the Conservation office must be sent by certified mail, return receipt requested. If information is missing, the applicant or his representative will be notified within ten working days by certified mail that the filing will not be scheduled for public hearing.

- (f) All filings must include one full set of documents, 8 plans, an electronic copy, and one list of immediate abutters. Please refer to the administrative checklists for each application for further details or requirements.
- (g) All applications shall be submitted at least two weeks prior to the next scheduled Conservation Commission meeting.
- (h) Coastal projects such as, but not limited to, docks, piers, bulkheads, revetments, dredging and boardwalks shall require submittal of all Notice of Intent, plans and supplemental information to the Town of Yarmouth Waterways/Shellfish Committee via the Natural Resources office by certified mail or hand delivery. The applicant or his representative must provide the Conservation office proof that this has been done or the filing will not be accepted by the Conservation office.
- (i) The Commission and its Staff may choose <u>not to accept new information for review</u> into the Commissioner's packet a week before the meeting.

#### (2) Plans and Drawing Requirements

In order to properly and accurately evaluate the potential or real effects of proposed projects:

- (a) All "Notice of Intent" and "Abbreviated Notice of Intent" applications shall be accompanied by plans prepared and stamped by a professional land surveyor or qualified professional engineer, whichever is applicable. The Commission may waive this requirement at its discretion.
- (b) All "Request for Determination of Applicability" applications shall be accompanied by a sketch or drawing showing as much detail as possible but will not require a professional land surveyor or professional engineer's services unless otherwise deemed necessary by the Conservation Commission or their agent.
- (c) If the plans require a qualified professional engineer, his or her stamp shall include his or her signature and discipline within it.
- (d) Professionally prepared plans must show and label all relevant "Resource Areas" in proximity to the project. Labels shall reference these areas as they appear in Part 2 and Part 3 of these regulations.
- (e) All filings must be accompanied by a Town of Yarmouth locus map.
- (f) All professionally prepared plans shall show the immediate abutters of the project property.
- (g) All professionally prepared plans for projects within or directly adjacent to tidal zones shall utilize NAVD88. benchmarks and indicate mean high and mean low water locations.
- (h) All plans and drawings shall indicate linear measurements depicting setbacks from wetlands to all pertinent structures.
- (i) All revised plans shall show revision date and must indicate the nature of the revision within the notes.

- (j) Topographical variation must be show on all professionally prepared plans.
- (3) On-Site Requirements
- (a) All proposed structures will require staking.
- (b) On-site staking must be in place by noon on the Friday prior to the hearing date.
- (c) Lot numbers must be posted and easily visible on vacant properties.
- (d) If a building currently exists on the property, its identifying number or house number must be easily visible.
- (e) The edge of each "Resource Area" relevant to the project will require staking or flagging. Stakes and flags shall be numbered in sequence and identify in writing "Resource Area" types as they appear in Parts 2 and 3 of these regulations.

#### PART 2 REGULATIONS FOR DOCKS, PIERS AND DREDGING

Many waterbodies in Yarmouth are experiencing tremendous development pressures. The Yarmouth Conservation Commission understands that homeowners that have waterfront property may want to access the water for various forms of recreation. The Commission also has a responsibility to prevent significant and cumulative impacts to resource area values. With the increased human pressure on these very sensitive habitats, the Commission finds it necessary to regulate piers and other structures.

In addition to meeting the following requirements proposed projects must also meet the performance standards for specific resource areas in Part 4 and Part 5

#### 2.01 Performance Standards for Tidal and Estuarine Docks and Piers

- (1) New and rebuilt piers shall be constructed to minimize the blocking of sunlight to shellfish beds and grasses. Piers shall have planks running across the width with minimum spaces of ¾ inches between planks. Alternative materials that maximize light penetration, such as grated decking, are encouraged. Piers shall be a maximum of 4 feet wide, measured inside pile to inside pile for regular docks, and measured by deck width for monopole docks.
- (2) Piers shall not require the elimination of existing public or commercial moorings. Piers and or vessels moored thereto shall not project into or impede navigation to and from a channel, pier/dock, boat ramp, mooring area, town landing, town dock, or commercial marina.
- (3) Piers shall be constructed so as to not interfere with any longstanding public recreational use of the waterway, e.g., an area used by sailboats tacking through a narrow waterway, or an area used by boaters or others because of unique wind or current conditions. Docks and piers shall not interfere with public access to or from a town way to water, nor impact town beaches and swimming areas.
- (4) Public right of passage by foot across the beach in the intertidal zone, where permitted for purposes of fishing and fowling under the Public Trusts Doctrine of the Colonial Ordinance, shall be maintained.

- (5) The base of the pier shall be as close as possible to the center line of the lot, and it shall project outwards at an angle as nearly perpendicular to the shoreline as possible.
- (6) Lights on piers, except lights necessary for safe navigation, shall be at least 12 feet apart, a maximum of 25 watts incandescent, and no greater than two feet above the deck. Lighting, if installed, shall not exceed a 25 watt incandescent bulb, set a minimum of 12 feet apart and a maximum of two feet high from the walking surface. Lights shall be directed downwards and shielded so as not to impair vision of persons navigating in the area, and to avoid disturbing abutting property owners and potentially disrupting wildlife behavior. The lights cannot utilize timers and should be switched at the beginning and end of dock.
- (7) Common "shared-use" docks/piers are encouraged as a way of preserving access by shorefront property owners while reducing the overall number of docks and piers that might be otherwise permitted. A common "shared-use" dock/pier is a water-dependent structure serving two or more contiguous waterfront properties where each of the contiguous lots would qualify for an individual private dock. They may include abutting properties with deeded or trust rights to the waterfront properties. An essential element of any common dock shall be a finding by the Commission that the number of potential docks in the immediate area has been permanently reduced as demonstrated by the legal documentations submitted with the application. Common docks/piers shall include but not be limited to yacht clubs, associations, governmental piers or public marinas and private marinas. All common dock/pier applicants shall file the appropriate deed restriction allowing for deeded easements and the prohibition of dock construction on the non-host property(s).
- (8) The maximum length of dock, pier and float configurations shall not be greater than eighty (80) feet from Mean High Water.
- (9) The water depth at the seaward side of the dock and associated floats shall be no less than three (3) feet at Mean Low Water, and this minimum depth must be available between the proposed structure and navigable channels during Mean Low Water. The depth of water on the landward side of the float shall be no less than two and a half (2 1/2) feet. No new dock/pier with a float shall be located in an area that does not meet the minimum three foot water depth without dredging.
- (10) New proposed docks, piers and floats (as defined in these regulations) shall not be allowed within:
  - a) Seventy-five (75) feet, of adjacent docks, piers and floats, with the exception marinas.
  - b) One hundred (100) feet, of a navigable channel or boat mooring.
  - c) Two hundred fifty (250) feet, from a public boat ramp, public landing, or public swimming beach.
  - d) No new pier or float system shall be located closer at any point than twenty-five (25) feet to a property line, except, for a pier jointly owned and used by two (2) or more contiguous shorefront properties, or written permission from the abutters is obtained in order to minimize environmental impacts such as the need for dredging. The twenty-five (25) foot setback shall be measured from the outermost property lines of the applicable properties.

- (11) Where the project includes the use of floats, the combined size of all floats shall be consistent with the impact of the entire project on the protected values at the site, but not greater than 200 square feet (including jet ski floats and modular floats), with the exception for Common "Shared-use" Dock/Pier proposals that may not exceed three hundred (300) square feet. Standards shall be set for yacht clubs, association marinas, governmental piers or public and private marinas on a case by case basis.
- (12) Jet ski floats shall be included within the 200 sq foot limit. Jet ski floats shall not be attached to the landward side of a float unless it meets the 3 foot depth of water requirement.
- (13) Proposed expansion of existing docks, piers and floats shall only be allowed where there is no encroachment into navigable channels, mooring areas, or public swimming beaches. In addition, proposed expansion shall not occur beyond eighty (80) feet from Mean High Water as outlined above or exceed the 200 square foot float limitation.
- (14) The Commission recommends the use of sustainable materials that offer newer technology and provide an ecological betterment to the Resource Area. Preference will be given to grated decking that maximizes light penetration and mono pole construction. Only non-CCA (Chromated copper arsenate), material may be used in the construction of the dock. Lead caps are not permitted. No creosote treated materials may be used. CCA piles and structural timber three inches or more in thickness may continue to be used until such time as the Commission determines that suitable alternatives exist.
- (15) Notwithstanding these criteria, certain areas shall be designated "No Dock/No Mooring Zones". "No Dock" and "No Mooring Zones" are depicted on Yarmouth GIS maps #'s 1 thru 7 entitled "Yarmouth Conservation Commission, No Dock/No Mooring Areas" and dated November 21st, 2016
- (16) Notwithstanding section 1.09, 4(a), 1 thru 21, public projects that enhance fishing, fowling and navigation may be allowed on a case by case basis when an overriding public benefit has been demonstrated.
- (17) Existing legal docks and piers that are destroyed by natural causes may be reconstructed, provided they meet the current regulations to the greatest extent practicable. Such re-construction must be filed for in the form of a Notice of Intent within three (3) years of the damage in order to qualify for re-construction.
- (18) Existing permitted structures (holding an approved Order of Conditions for which a Certificate of Compliance has been issued, or who's construction pre-dates the promulgation of the relevant regulations) shall not be reconstructed, improved or extended without the approval of the Commission and compliance with the regulations to the greatest extent practicable. Unpermitted structures shall not be reconstructed, improved or extended without the approval of the Commission and compliance with the regulations.
- (19) The project plans and documentation shall include the following:
  - a) Soundings shall be taken within two hundred (200) feet (seaward and lateral boundary) of the dock/pier, to the closest marked or recognized navigable channel. Depth shall be measured to the top surface of soft sediments. Soundings shall be of sufficient density to allow the exact determination of water depths around the proposed pier and floats, and to the closest navigable

- channel. The soundings shall show the MLW and MLLW in the areas where the proposed boat will be berthed.
- b) Eel grass beds (seaward and lateral boundary) within one hundred (100) feet of the project.
- c) Marked or recognized navigation channels within two hundred (200) feet of the pier.
- d) Identify existing public or commercial mooring or navigational aids, within two hundred (200) feet (seaward and/or lateral boundary) of the pier. A recent aerial photograph taken during the summer boating season may be used for this purpose if desired.
- e) Location of existing town, commercial or private piers, Town Landings. Town ways to water, and public or private beaches within two hundred (200) feet of pier.
- f) Shellfish propagation or relay areas within two hundred (200) feet of project, (data to be obtained from Town of Yarmouth Natural Resources Department).
- g) A description of all materials to be used and a narrative describing the implementation of the project including methods of approach by construction equipment, and the method of construction, including the method of pile installation.
- h) When near shellfish habitat, the type of precautions used to insure the barge and equipment used will not damage shellfish habitat.
- i) Where the structure is seasonal or includes seasonal floats, a statement indicating the site for winter storage and the method of hauling.
- j) Data shall be supplied to the Commission showing the time and date of the depth survey, the existing weather conditions, the state of the tide and the actual depths measured from water surface to the bottom. The methodology used to determine MLW, MLLW and MHW shall be given. NAV88 referencing 0 as MLW.
- k) A shellfish survey conducted by a qualified marine or shellfish biologist or other acceptable environmental professional to be approved by the Shellfish Constable including written results, plan and methodology. Survey plots shall be three (3) feet by three (3) feet in area, spaced every 20 feet from the mean high water line, 10 feet off each side of the dock and float
- I) The project shall be clearly identified and staked or marked with a buoy at pier end, at the time of submission, so that town personnel may inspect the site.

#### 2.02 Performance Standards for Dredging

Where any dredging is proposed, the following information regarding the depth, area, volume and quality of material to be removed, and the impact on animal and plant life, shall be provided:

- (a) Supply sediment size and type and direction of littoral drift.
- (b) Location of shellfish beds, (data to be obtained from Town of Yarmouth Natural Resources Department).
- (c) A shellfish survey conducted by a qualified marine or shellfish biologist per 2.01 (s) above
- (d) Location of eel grass beds.
- (e) Effects on wave attack including height, angle and velocity.
- (f) Existing navigation channels within two hundred (200) feet of the area to be dredged.
- (g) Soundings within two hundred (200) feet of the area to be dredged.
- (h) Location of existing public piers, private piers, public landings, public beaches and private beaches within two hundred (200) feet of the area to be dredged.
- (i) Turbidity control plan.
- (j) Proposed time table.
- (k) No dredging to reach depth of water requirements for new permitted structure.

#### 2.03 Performance Standards for Freshwater Docks and Piers

The lakes and ponds in Yarmouth are subject to varying amounts of human activity. While some ponds have no existing docks, piers or floats; others are heavily populated with shore side structures. These regulations apply only to new proposals for new piers or floats. For the purposes of these regulations, pre-existing docks, piers, and floats are defined as being in usable condition as of the effective date of these regulations. These structures will be identified by consulting the most recent Google Earth aerial photos taken during the summer months.

- (1) The overall length of the pier and all accessories may not exceed thirty (30) feet measured from the edge of bordering vegetated wetland, beach or top of bank (whichever is closer to the pond). The length of the structure should be the minimum needed to reach the minimum water depth and to clear emergent aquatic vegetation (see below).
- (2) Piers shall be elevated a minimum of two (2) feet over the existing grade of the BVW, beach and/or the water surface (as determined by the seasonal high water) as measured from the bottom surface of the decking.
- (3) A minimum of two (2) foot of water depth must be achieved at the terminal end of the pier at the average seasonal low water. If the minimum water depth cannot be achieved within the maximum thirty (30) foot length of pier, the project cannot be approved.
- (4) No floats may be attached to an inland dock or pier.
- (5) No pier shall exceed four (4) feet in width.

- (6) Maximum square footage of any pier shall not exceed one hundred and twenty (120) square feet (30'x4').
- (7) Piers should be located a minimum of seventy five (75) feet from any adjacent pier.
- (8) The centerline of the pier shall be a minimum of fifteen (15) feet from any property line.
- (9) Piers shall be a minimum of two hundred and fifty (250) feet from any pre-existing town- or association-owned boat landing or swimming beach.
- (10) At the discretion of the Conservation Commission, setback requirements may vary for proposed Common "Shared-use" Dock/Pier projects as per section 1.09 4(a) 9.
- (11) All new piers will be seasonal and temporary, permanent piles are prohibited. Piers shall consist of pre-fabricated, removable sections with wheel or pad footing supports. Grated decking is preferred for all pier projects in freshwater resources.
- (12) For any pier not oriented North-South, the decking material must be grated.
- (13) For a North-South oriented pier the decking may be made of plastic composite materials or wood, but if made of either of these materials, the spacing between boards shall be a minimum of ¾ inches.
- (14) Aluminum or other lightweight and non-leaching construction materials shall be used. Rot-resistant plastic/wood composite materials or rot-resistant wood such as white cedar are suitable alternatives to aluminum.
- (15) Chromated copper arsenate (CCA), creosote, or other chemically treated woods are prohibited within the regulated resource area.
- (16) No utilities (gas, water, electric) are permitted on piers in freshwater lakes or ponds.
- (17) Lighting of the pier structure is not permitted.
- (18) Storage of gasoline, oil, grease, pollutants or other hazardous materials on the pier is prohibited or within thirty five (35) feet of the resource area.
- (19) All seasonal components of the pier shall be stored and secured at a site approved of by the Conservation Commission that is outside of any resource area. The seasonal pier should be removed by November 1 and may be installed on or after April 1
- (20) The pier shall be identified by SE number issued by the Massachusetts
  Department of Environmental Protection. The label should be located at the end of
  the pier farthest from land and use three (3) inch letters in a contrasting color.
- (21) All swim floats that are anchored/moored to the bottom are required to be permitted and inspected annually by the Division of Natural Resources/Harbormaster and subject to meet the Town of Yarmouth Mooring Regulations and Fees.

- (22) If stairs are proposed to access the dock, the stairs shall be no greater than four(4) foot in width and shall be constructed over the bank in a manner that does not require re-grading or re-contouring.
- (23) Existing docks and piers that are destroyed by natural causes may be reconstructed to their original specifications but with updated materials as approved by the Conservation Commission and/or the D.E.P. Chapter 91 Waterways License requirements. Such re-construction must be filed for in the form of a Notice of Intent within 3 years of the damage in order to qualify for re-construction.

#### PART 3 SETBACKS AND BUFFER ZONE REQUIREMENTS

#### 3.01 Setbacks

- (1) Notwithstanding section 2 below, no new structures, including swimming and spa pools (with the exception of water dependent structures), will be allowed within 50 feet of the following Resource Areas:
  - Coastal Dunes
  - Coastal Banks
  - Coastal Beaches
  - Salt Marshes
  - Inland Banks
  - Vegetated Wetlands
  - Vernal Pools
  - Streams
  - Rivers
  - Ponds
  - Lakes
  - Isolated Land Subject to Flooding
  - Bordering Land Subject to Flooding
- (2) Minor structures (up to 140 square feet) such as sheds, decks, pervious patios and small additions may be allowed closer than 50 feet to a Resource Area but no closer than 35 feet. With the exception of "Vista Pruning" as allowed below, a 35 foot undisturbed natural vegetative buffer shall be maintained between all projects and Resource Areas mentioned in (1), (a) through (I) above to insulate wetland resource areas from adverse impacts stemming from development elsewhere in the buffer zone. In cases where the slope of an undisturbed buffer exceeds 18%, or in any instance where the scope or nature of the project is likely to require a greater spatial offset to wetland resource areas, the Commission reserves the right to increase buffer zone width to a more suitable dimension.
- (3) The following are prohibited within the 35 foot buffer:
  - Lawn grasses
  - Landscaping
  - Fertilizers
  - Pesticides (unless part of an approved invasive species removal program)

- Irrigation with the exception of temporary irrigation for one season to establish buffer plantings
- Mulch, other than for temporary ground stabilization for one growing season.
   Groundcover plantings are to be used for permanent stabilization and weed control.
- (4) "Vista Pruning" may be allowed on a case by case basis subject to the following provisions:
  - i. A discussion with the Conservation Commission or their agent is required.
  - ii. A "Notice of Intent" application may be required.
  - iii. Canopy areas shall not be pruned by more than 50 percent.
  - iv. Portions of dense understory, no more than 20%, may be removed provided it is replaced by other types of suitable vegetation.
  - v. If adverse impacts occur to the adjacent Resource Area(s) as a direct result of the "Vista Pruning", the Commission will require immediate mitigation in order to correct such impacts. This provision shall be noted within the "Order" issued to the applicant.

#### 3.02 Mitigation and Restoration

- (1) At a minimum, a thirty-five foot undisturbed buffer zone shall be retained between the landward-most wetland resource area and the limit of proposed site disturbance. Landward of the 35 foot no-disturb zone, work shall be designed to minimize the area of disturbance, to preserve as much undisturbed vegetation within the one-hundred-foot buffer zone as is practicable for the proposed use.
- (2) Where a thirty-five foot undisturbed buffer zone exists prior to the proposed work, and shall remain intact upon project completion, further buffer zone enhancement shall not be required.
- (3) Where a thirty-five foot undisturbed buffer zone does not exist prior to the proposed work, any work proposed within the one-hundred-foot buffer zone shall be subject to mitigation planting requirements intended to restore, in so far as is possible, both the dimensions of a thirty-five-foot undisturbed buffer and its vegetation. For work proposed within the one-hundred-foot buffer zone, the calculation of mitigation is set forth as follows:
  - (a) For proposed new or replacement hardscape, whether pervious or impervious, within the 50 -100 foot buffer zone, mitigation shall be 1:1
  - (b) For proposed new or replacement hardscape, whether pervious or impervious within the 35-50 foot buffer zone, mitigation shall be 3:1
  - (c) Where a variance is sought for proposed work within the 35 foot buffer, mitigation shall be 4:1.
  - (d) In no case shall the total area of mitigation plantings required be greater than that which is necessary to restore a thirty-five foot undisturbed buffer in its entirety.

#### PART 4. REGULATIONS FOR COASTAL WETLANDS

#### 4.01 Land Under the Ocean

#### (1) Preamble:

Land Under the Ocean is likely to be important to the protection of wildlife, wildlife habitat, marine fisheries and, where there are shellfish, to the protection of land containing shellfish. Nearshore areas of land under the ocean are likely to be important to storm damage prevention and flood control.

Land under the ocean provide feeding areas, spawning and nursery grounds and shelter for many coastal organisms related to marine fisheries.

Nearshore areas of land under the ocean help reduce storm damage and flooding by diminishing and buffering the high energy effects of storms. Submerged sand bars dissipate storm wave energy. Such areas supply a source of sediment for seasonal rebuilding of coastal beaches and dunes.

The bottom topography of nearshore areas of land under the ocean is important to storm damage prevention and flood control.

Water circulation, distribution of sediment grain size, water quality, finfish and shellfish habitat are factors critical to the protection of marine fisheries and wildlife habitat.

#### (2) Definition:

- (a) "Land Under the Ocean" means land extending from the mean low water line to the seaward limit of Yarmouth's jurisdiction.
- (b) "Nearshore Areas" of land under the ocean means that land extending from the mean low water to the seaward limit of Yarmouth's jurisdiction.

## (3) Performance Standards:

- (a) Improvement dredging for navigational purposes affecting land under the ocean shall be designed and carried out using the best available measures so as to minimize adverse effects caused by changes in:
- (b) Bottom topography which will result in increased flooding or erosion caused by an increase in the height or velocity of waves impacting the shore;
- (c) Sediment transport processes which will increase flood or erosion hazards by affecting the natural replenishment of beaches;
- (d) Water circulation which will result in an adverse change in flushing rate, temperature, or turbidity levels; or
- (e) Marine productivity which will result from the suspension or transport of pollutants, the smothering of bottom organisms, the accumulation of pollutants by organisms, or the destruction of habitat or nutrient source areas.
- (f) Maintenance dredging for navigational purposes affecting land under the ocean shall be carried out using the best available measures so as to minimize adverse effects caused by changes in marine productivity which will result from the suspension or transport of pollutants, increases in turbidity, the smothering of bottom organisms,

- the accumulation of pollutants by organisms, or the destruction of habitat or nutrient source areas.
- (g) Projects not included in section 2.01, (3) or 2.01, (4) which affect nearshore areas of land under the ocean shall not cause adverse effects by altering the bottom topography so as to increase storm damage or erosion of coastal beaches, coastal banks, coastal dunes, or salt marshes.
- (h) Projects not included in section 2.01, (3) which affect land under the ocean shall be designed and performed so as to cause no adverse effects on wildlife, marine fisheries or shellfisheries caused by:
  - i.Alterations in water circulation;
  - ii.Destruction of eelgrass beds (Zostera marina);
  - iii. Alterations in the distribution of sediment grain size; or
- iv. Changes in water quality, including, but not limited to, other than natural fluctuations in the level of dissolved oxygen, temperature, turbidity, or the addition of pollutants such as fecal coli, pathogens, etc.

#### 4.02 Coastal Beaches and Tidal Flats

#### (1) Preamble:

Coastal beaches, which are defined to include tidal flats, are significant to wildlife, wildlife habitat, storm damage prevention, flood control, and recreation. In addition, tidal flats are likely to be important to the protection of wildlife, wildlife habitat, marine fisheries, and where there are shellfish, to land containing shellfish.

Coastal beaches dissipate wave energy by their gentle slope, their permeability and their granular nature, which; in turn, permit changes in beach form in response to changes in wave conditions. Coastal beaches serve as a sediment source for dunes and subtidal areas. Steep storm waves cause beach sediment to move offshore, resulting in gentler beach slope and greater energy dissipation. Less steep waves cause an onshore return of beach sediment, where it will be available to provide protection against future storm waves.

A coastal beach at any point serves as a sediment source for coastal areas downdrift from that point. The oblique approach of waves moves beach sediment alongshore in the general direction of wave attack. Thus, a coastal beach is a body of sediment which is continuously moving along the shore.

Coastal beaches serve the purposes of storm damage prevention and flood control by dissipating wave energy, by reducing the height of storm waves, and by providing sediment to supply other coastal features, including coastal dunes, land under the ocean, and other coastal beaches. Interruptions of these natural processes by manmade structures reduce the ability of the coastal beach to perform these functions.

Tidal flats are likely to be important to the protection of marine fisheries because they provide habitats for marine organisms, such as polycheate worms and mollusks, which in turn are food sources for fish.

Tidal flats are also sites where organic and inorganic may become entrapped and then returned to the photosynthetic zone of the water column to support algae and other primary producers of the marine food web.

Land within 100 feet of a coastal beach or tidal flat is likely to be important to the protection and maintenance of coastal beaches and tidal flats, and therefore to the protection of wetland values which these areas contain.

The following characteristics of coastal beaches are critical to the protection of marine fisheries, wildlife, and wildlife habitat:

- (a) Distribution of sediment grain size;
- (b) Water circulation;
- (c) Water quality, and
- (d) Relief and elevation

The following characteristics of coastal beaches are critical to storm damage prevention or flood control:

(a) Volume, (quantity of sediments), form and the ability to respond to wave action.

#### (2) Definition:

- (a) "Coastal Beach" unconsolidated sediment subject to wave, tidal or coastal storm action which forms the gently sloping shore of a body of salt water and includes tidal flats. Coastal beaches extend from the mean low water line landward to the coastal dune line, coastal bank line or the seaward edge of existing man-made structures, when these structures replace one of the above lines, whichever is closest to the ocean.
- (b) "Tidal Flat" means any nearly level part of a coastal beach which usually extends from the mean low water line landward to the more steeply sloping face of the coastal beach or which may be separated from the beach by land under the ocean.

## (3) Performance Standards:

Any activity which is allowed on a coastal beach or tidal flat or within 100 feet of a coastal beach or tidal flat shall not have an adverse effect on the coastal beach or tidal flat by:

- (a) Affecting the ability of the waves to remove sand from the beach or tidal flat;
- (b) Disturbing the vegetative cover, if any, so as to destabilize the beach or tidal flat;
- (c) Causing any modification of the beach or downdrift beach that would increase the potential for storm or flood damage;
- (d) Interfering with the natural movement of the beach or tidal flat;
- (e) Causing artificial removal of sand from the beach or downdrift beach.

#### 4.03 Coastal Dunes

#### (1) Preamble:

All coastal dunes are likely to be important to storm damage prevention and flood control. All coastal dunes on barrier beaches and the coastal dune closest to the coastal beach in any area are significant to storm damage prevention and flood control. Coastal dunes are also often significant to the protection of wildlife and wildlife habitat.

Coastal dunes aid in storm damage prevention and flood control by supplying sand to coastal beaches. Coastal dunes protect inland coastal areas from storm damage and flooding by storm waves and elevated sea levels because such dunes are higher than the coastal beaches which they border. In order to protect this function, coastal dune volume must be maintained while allowing its shape to conform to natural wind and water flow patterns. Vegetative cover contributes to the growth and stability of coastal dunes by providing conditions favorable for sand deposition.

On retreating shorelines, the ability of coastal dunes bordering a coastal beach to move landward at the rate of shoreline retreat allows these dunes to maintain their form and volume.

Land within 100 feet of a coastal dune is likely to be significant to the protection and maintenance of coastal dunes, and therefore to the protection of wetland values which these areas contain.

The following characteristics of coastal dunes are critical to storm damage prevention, flood control, protection of wildlife, and wildlife habitat:

- (a) The ability of the dune to erode in response to coastal beach conditions;
- (b) Dune volume;
- (c) Dune form, which must be allowed to be changed by wind and natural water flow;
- (d) Vegetative cover;
- (e) The ability of the dune to move landward or laterally; and
- (f) The ability to continue serving as a bird nesting habitat.

#### (2) Definition:

"Coastal Dune" means any hill, mound or ridge of sediment landward of a coastal beach, deposited by wind action, storm overwash or artificial means.

## (3) Performance Standards:

Any activity which is allowed on a coastal dune or within 100 feet of a coastal dune shall not have an adverse effect on the coastal dune by:

- (a) Affecting the ability of waves to remove sand from the dune;
- (b) Disturbing the vegetative cover so as to destabilize the dune;

- (c) Causing any modification of the dune form that would increase the potential for storm or flood damage;
- (d) Interfering with the landward or lateral movement of the dune;
- (e) Causing artificial removal of sand from the dune; or
- (f) Interfering with mapped or otherwise identified bird nesting habitat.

The following projects may be permitted, provided they adhere to the provisions of section 4.03, (3):

- (a) Elevated pedestrian walkways, designed to minimize disturbance to vegetative cover, and traditional bird nesting habitat. Walkways shall have a minimum clearance of two feet above any existing vegetation;
- (b) Fencing and other devices designed to increase dune development; and
- (c) Plantings compatible with the natural vegetative cover.

#### 4.04 Barrier Beaches

#### (1) Preamble:

Barrier beaches are important to wildlife, wildlife habitat, storm damage prevention, flood control, recreation and are likely to be significant to the protection of marine fisheries and, where there are shellfish, to the protection of land containing shellfish.

Barrier beaches protect landward areas because they provide a buffer to storm waves and to sea levels elevated by storms.

Barrier beaches protect from wave action such highly productive areas as salt marshes, estuaries, lagoons, salt ponds and fresh water marshes and ponds, which in turn, are important to marine fisheries, wildlife, and wildlife habitat.

Barrier beaches are maintained by the longshore movement of beach sediment caused by wave action. The coastal dunes, beaches and tidal flats are made up of sediment supplied by wave action, storm wave overwash and tidal inlet deposition. Barrier beaches in Massachusetts undergo a landward migration caused by the landward movement of sediment by wind, storm wave overwash and tidal current processes. The continuation of these processes maintains the volume of the landform which is necessary to carry out its storm and flood buffer functions.

Barrier beaches are significant to storm damage prevention, flood control and to the characteristics of coastal beaches, tidal flats and coastal dunes listed in sections 4.02, (1) and 4.03, (1). The ability to respond to wave action including storm overwash sediment transport is critical to the protection of wetlands values of barrier beaches identified above.

#### (2) Definition:

"Barrier Beach" means a narrow, low-lying strip of land generally consisting of coastal beaches and coastal dunes extending roughly parallel to the trend of the coast. It is

separated from the mainland by a narrow body of fresh, brackish or saline water or a marsh system. A barrier beach may be joined to the mainland at one or both ends.

## (3) Performance Standards:

The provisions of sections 4.02, (3) and 4.03, (3) through 4.03, (4) shall apply to the coastal beaches and to all coastal dunes which make up a barrier beach.

#### 4.05 Coastal Banks

#### (1) Preamble:

Coastal banks are likely to be important to storm damage prevention and flood control. Coastal banks that supply sediment to coastal beaches, coastal dunes and barrier beaches are important to storm damage prevention and flood control. Coastal banks that, because of their height, provide a vertical buffer to upland areas from storm waters are significant to storm damage prevention and flood control. A particular coastal bank may serve both as a sediment source and as a vertical buffer, or it may serve only one role.

Coastal banks composed of unconsolidated sediment and exposed to wave action serve as a major source of sediment for other coastal landforms, including beaches, dunes and barrier beaches. The supply of sediment is removed from banks by wave action. It is a naturally occurring process necessary to the continued existence of coastal beaches, coastal dunes and barrier beaches which, in turn, dissipate storm wave energy, thus protecting structures and coastal wetlands landward of them from storm damage and flooding.

Coastal banks, because of their height and stability, may act as a vertical buffer or a natural wall, which protects upland areas from storm damage and flooding. While erosion caused by wave action is an integral part of shoreline processes and furnishes important sediment to downdrift landforms, erosion of a coastal bank by wind and rain runoff, which plays only a minor role in beach nourishment, should not be increased unnecessarily. Therefore, disturbances to a coastal bank which reduce its natural resistance to wind and rain erosion cause cuts and gullies in the bank, increase the risk of its collapse, increase the danger to structures at the top of the bank, and decrease its value as a vertical buffer.

Vegetation tends to stabilize a coastal bank and reduce the rate of erosion due to wind and rain runoff. Any project permitted on a coastal bank should incorporate, when appropriate, elevated walkways.

#### (2) Definition:

"Coastal bank" means the seaward face or side of any elevated landform, other than a coastal dune, which lies at the landward edge of a coastal beach, land subject to tidal action or storm flowage, or other wetland. Any minor discontinuity of the slope notwithstanding, the top of the bank shall be the first significant break in slope that occurs above the relevant 100 year flood plain elevation.

The 100 year flood plain elevation shall be taken from the latest available Flood Insurance Rate Maps, prepared by the Federal Emergency Management Agency for the Town of Yarmouth.

## (3) Performance Standards:

Any activity that is allowed on a coastal bank shall comply with the following provisions:

- (a) No new bulkhead, revetment, seawall, groin or other coastal engineering structure shall be permitted on a coastal bank that provides significant sediment to an adjacent or downdrift coastal beach; except that such a coastal engineering structure shall be permitted when required to prevent storm damage to buildings constructed prior to August 10, 1978, including re-construction of such buildings subsequent to the effective date of these regulations, provided that the following requirements are met:
  - Coastal engineering structures or modifications thereto shall be designed and constructed so as to minimize, using best available measures, adverse effects on adjacent or nearby coastal beaches due tochanges in wave action;
  - ii. The applicant demonstrates that no method of protecting the building other than the proposed coastal engineering structure is feasible;
  - iii. Protective planting designed to reduce erosion may be permitted; and
  - iv. The applicant provides sufficient evidence that the building was constructed pursuant to a Notice of Intent prior filed before August 10, 1978.
- (b) Any project on a coastal bank or within 100 feet of the top of a coastal bank, other than a structure permitted under section 4.05, (3), (a), shall not have an adverse effect due to wave action on the movement of sediment from the coastal bank to coastal beaches or land subject to tidal action or flooding, and shall not have an adverse effect on the stability of a coastal bank.

#### 4.06 Salt Marshes

#### (1) Preamble:

Salt marshes are important to the protection of wildlife, wildlife habitat, marine fisheries, prevention of pollution and are likely to be significant to storm damage prevention, flood control and groundwater supply.

A salt marsh produces large amounts of organic matter. A significant portion of this material is exported as detritus and dissolved organics to estuarine and coastal waters, where it provides the basis for a large food web that supports many marine organisms, including fin and shellfish. Salt marshes also provide a spawning and nursery habitat for several important estuarine forage finfish.

Salt marsh plants and substrate remove pollutants from surrounding waters. The network of salt marsh vegetation roots and rhizomes bind sediments together.

The sediments absorb chlorinated hydrocarbons and heavy metals such as lead, copper and iron. The marsh also retains nitrogen and phosphorus compounds.

The underlying peat also serves as a barrier between fresh groundwater landward of the marsh and the ocean, thus helping to maintain the level of groundwater.

Salt marsh cord grass and underlying peat are resistant to erosion and dissipate wave energy, thereby providing a buffer that reduces wave damage.

Land within 100 feet of a salt marsh is likely to be significant to the protection and maintenance of salt marshes, and therefore to the protection of the wetland values these areas contain.

The following characteristics of salt marshes are critical to one or more of the wetland values above:

- (a) The growth, composition and distribution of salt marsh vegetation;
- (b) The flow and level of tidal and fresh water; and
- (c) The presence and depth of peat.

#### (2) Definition:

- (a) "Salt Marsh" means a coastal wetland that extends landward up to the highest spring tide of the year, and is characterized by a plant community consisting of, but not limited to, 50% or more of any of the following species: SaltMeadow Cord Grass (Spartina patens); Salt Marsh Cord Grass (Spartina alterniflora); Spike Grass (Distichlis spicata); Sea Lavender (Limonium nashii); Seaside plantago (Plantago juncoides); Aster (Aster subulatus); Sea Blite (Suaeda maritima); Black Grass (Juncus gerardi); Samphire (Salicornia europaea); Glasswort (S. bigelovii); Reed Grass (Phragmite communis); Salt Marsh Bulrush (Scirpus robustus); or Narrow Leaf Cattail (Typha spp.).
- (b) "Spring Tide" means the tide of greatest amplitude during the approximately 14 day tidal cycle. It occurs at or near the time when the gravitational forces of the sun and moon are in phase, (new and full moons).

## (3) Performance Standards:

Any activity which is allowed on a salt marsh shall comply with the following provisions:

- (a) A proposed project in a salt marsh, on land within 100 feet from a salt marsh, or in a body of water adjacent to a salt marsh shall not destroy any portion of the salt marsh and shall not have an adverse effect on the productivity of the salt marsh. Alterations in growth, distribution and composition of salt marsh vegetation shall be considered in evaluating adverse effects on productivity.
- (b) Notwithstanding the provisions of section 4.06, (3), (a), a small project within a salt marsh, such as an elevated walkway or other structure which has no adverse effects other than blocking sunlight from the underlying vegetation for a portion of each day, may be permitted if such a project complies with all other applicable requirements of these regulations.

(c) Notwithstanding the provisions of section 4.06, (3), (a), a project which will restore or rehabilitate may be permitted; provided, however, that this section shall not be construed to allow the alteration of one salt marsh on a given site by or contingent upon the creation or restoration of another.

#### 4.07 Land Under, or Within 100 Feet of the Banks of Salt Ponds

#### (1) Preamble:

Land under salt ponds is important to the protection of marine fisheries, wildlife, wildlife habitat, and where there are shellfish, to the protection of land containing shellfish.

Land under salt ponds provides an excellent habitat for marine fisheries. The high productivity of plants in salt ponds provides food for shellfish, crustaceans, and larval and juvenile fish. Salt ponds also provide spawning areas for shellfish and nursery areas for crabs and fish.

Characteristics of salt ponds critical to the protection of wetland values above are as follows:

- (a) water circulation;
- (b) distribution of sediment grain size;
- (c) freshwater inflow;
- (d) productivity of plants, and
- (e) water quality.

#### (2) Definition:

"Salt Pond" means a shallow enclosed or semi-enclosed body of saline water that may be partially or totally restricted by barrier beach formation. Salt ponds may receive fresh water from small streams emptying into their upper reaches and or small springs in the salt pond itself.

## (3) Performance Standards:

Any activity which is allowed on or under a salt pond or within 100 feet of the bank of a salt pond shall comply with the following provisions:

- (1) Any project on land under a salt pond, on land within 100 feet of the mean high water line of a salt pond, or on land under a body of water adjacent to a salt pond shall not have an adverse effect on the wildlife, wildlife habitat, marine fisheries or shellfish habitat of such a salt pond caused by:
  - i.alterations of water circulation;
  - ii.alterations in the distribution of sediment grain size and the relief or elevation of the bottom topography:
  - iii.modifications in the flow of fresh and or salt water;

iv.alterations in the productivity of plants, or

- v.alterations in water quality, including, but not limited to, other than normal fluctuations in the level of dissolved oxygen, nutrients, temperature or turbidity, or the addition of pollutants.
- (2) Notwithstanding the provisions of section 4.07 (3), activities specifically designed and intended to maintain the depth and the opening of a salt pond to the ocean in order to maintain or enhance marine fisheries or for the specific purpose of fisheries management, may be permitted at the sole discretion of the Commission.

# 4.08 Land Containing Shellfish

# (1) Preamble:

Land containing shellfish is found within certain areas under the jurisdiction of the Bylaw. Shellfish are also specifically one of the wetland values in the By-law. The purpose of this section is to identify those areas likely to contain shellfish and to establish regulations for projects which will effect such land. Land containing shellfish is important to the protection of marine fisheries as well as to the protection of the interest of land containing shellfish.

Shellfish are a valuable renewable resource. The maintenance of productive shellfish beds not only assures the continuance of shellfish themselves, but also plays a direct role in supporting fish stocks by providing a major food source.

The following characteristics of land containing shellfish are critical to the protection of wetland values contained by such areas:

- (a) shellfish;
- (b) water quality;
- (c) water circulation; and
- (d) the natural relief, elevation or distribution of sediment grain size of such land.

## (2) Definition:

- (a) "Land Containing Shellfish" means land under the ocean, tidal flats, salt marshes and land under salt ponds when any such land contains shellfish.
- (b) "Shellfish" means the following species: Bay scallop (Aequipecten irradians); Blue mussel (Mytilus edulis); Ocean quahog (Artica islandica); Oyster (Crassostrea virginiica); Quahog (Mercenaria mercenaria); Razor clam (Ensis directus); Sea clam (Spisula solidissima); Sea scallop (Placopecten magellanicus); Soft shell clam (Mya arenaria); Lobster (Homarus americanus); Grass shrimp (Hippolyte spp.) Sand shrimp (Crangon septemspinosa); Blue crab (Callinectes sapidus); Green crab (Carcinides maenas); Fiddler crab (Uca spp.); Rock crab (Cancer irroratus).

# (3) Performance Standards:

Except as provided in section 4.08, (4) and (5) below, any project on land containing shellfish shall not adversely affect such land or marine fisheries by a change in the productivity of such land caused by:

- (a) alterations in water circulation;
- (b) alteration in relief elevation;
- (c) the compacting of sediment by vehicular traffic;
- (d) alterations in the distribution of sediment grain size;
- (e) Alterations in natural drainage from adjacent land, or
- (f) changes in water quality, including, but not limited to, other than natural fluctuations in the levels of salinity, dissolved oxygen, temperature or turbidity, or the addition of pollutants.
- (4) The Conservation Commission may, after consultation with the shellfish constable, permit shellfish to be removed from such an area under the guidelines of and to a suitable location approved by the state Division of Marine Fisheries, (D.M.F.) in order to permit a proposed project on such land. Any such project shall not be commenced until after the moving and replanting of the affected shellfish has been completed.
- (5) Notwithstanding section 4.08, (3), projects approved by said D.M.F. that are specifically intended to increase the productivity of land containing shellfish maybe permitted at the discretion of the Conservation Commission. Aquaculture projects approved by the appropriate local and state authorities may also be permitted at the discretion of the Conservation Commission.
- 4.09 Banks of or Land Under the Ocean, Ponds, Streams, Rivers, Lakes or Creeks that Underlie an Anadromous / Catadromous Fish Run (Fish Run)

### (1) Preamble:

The banks of and land under the ocean, ponds, streams, rivers, lakes or creeks that underlie an anadromous / catadromous fish run are important to the protection of marine fisheries, wildlife, and wildlife habitat. Land within 100 feet of such banks is likely to be significant to the protection and maintenance of these banks, and therefore to the protection of the wetlands values these areas contain. The following characteristics of a fish run, or the land under the ocean or pond, stream, river lake or creek that underlies a fish run are critical to the protection of those areas:

- (a) the fish;
- (b) accessibility of spawning areas;
- (c) the volume or rate of flow of water within spawning areas and migratory routes; and
- (d) spawning and nursery grounds.

# (2) Definition:

- (a) "Anadromous Fish" means fish that enter fresh water from the ocean to spawn, such as alewives, shad and salmon.
- (b) "Catadromous Fish" means fish that enter salt water from fresh water to spawn, such as eels.
- (c) "Anadromous/Catadromous Fish Run" means that area within estuaries, ponds, streams, creeks, rivers, lakes or coastal waters which is the spawning or feeding ground or passageway for anadromous or catadromous fish. Such fish runs shall include those areas which have historically served as fish runs and are either being restored or are planned to be restored at the time of the filing.

# (3) Performance Standards:

Any activity which is allowed on the bank of a fish run, land under a fish run, or land within 100 feet of a fish run shall comply with the following provisions:

- (a) Any project on such land or bank shall not have an adverse effect on the fish run by:
  - (1) Impeding or obstructing the migration of the fish;
  - (2) Impeding the volume or rate of flow of water within the fish run; or
  - (3) Impairing the capacity of spawning or nursery habitats necessary to sustain the various life stages of the fish.
- (b) Filling in a fish run shall be prohibited.

## 4.10 Land Subject to Coastal Storm Flowage

### (1) Preamble:

Land subject to coastal storm flowage are areas subject to coastal flooding during moderate and severe weather conditions. Projects that occur within these areas are likely to have adverse impacts on the following interests:

- (a) Flood Control
- (b) Storm Damage Prevention
- (c) Prevention of Pollution
- (d) Public Water Supply
- (e) Private Water Supply
- (f) Land Containing Shellfish
- (g) Wildlife
- (h) Wildlife Habitat
- (i) Protection of Groundwater Supply and Quality

# (j) Protection of Fisheries

Land subject to coastal storm flowage has the potential to provide Yarmouth a profound service.

When coastal conditions are not the norm during extreme high tides and hurricanes for example, the ability of the land to absorb flood waters and to buffer more inland areas from flood and wave damage is imperative. Since the floodplain contains areas, (as well as other wetland resources), in which the water table is close to the surface, during a coastal storm, pollutants in the floodplain, including the contents of septic systems and fuel tanks, are likely to affect public and private water supply, groundwater quality, wildlife and wildlife habitat, fisheries and shellfish. Storm damage prevention, as one of the interests protected under the By-law, also come into play in the floodplain. Direct and collateral damage can occur to man-made structures in the floodplain area caused by wave impacts and inundation by floodwaters and storm driven debris.

# (2) Definition:

"Land Subject to Coastal Storm Flowage" are areas that extend up-gradient or landward from the ocean and the ocean's estuaries to a point where the maximum lateral extent of floodwater will theoretically terminate based upon the 100 year frequency storm. Said boundary shall be the relevant 100 year storm elevation referenced within the latest available Flood Insurance Rate Maps provided by the Federal Emergency Management Agency.

# (3) Performance Standards:

Any activity within land subject to coastal storm flowage which will result in the building upon, removing, filling or altering land within 300 feet of a major estuary defined in section 1.04 of these regulations shall meet the following requirements. Notwithstanding this section 4.10, (3), beach nourishment and coastal engineering projects such as bulkheads and seawalls may be allowed if they meet all other performance standards in these regulations.

- (a) Existing septic system and cesspool repairs will be allowed provided they meet all Title 5 and local Board of Health thresholds.
- (b) All groundwater elevations shall incorporate seasonable adjustments if test holes and or leaching components are 100 feet or closer from major estuaries.
- (c) Any proposed deck, shed, or other similar structure must be securely anchored to a footing or foundation.
- (d) Fences and privacy walls, including walls separating one property from another, may obstruct or divert flood flow and waves toward buildings and protected areas. Fences with small openings and solid fences and walls may divert flow and waves and can trap debris and are prohibited from areas with the potential for high storm flow and wave energy.

- (e) Any activity shall not have an adverse effect by increasing the elevation or velocity of flood waters, or by redirecting or increasing flows or causing channelization, in each case at the project site, adjacent or nearby properties, or any public or private way.
- (f) Any activity shall avoid or mitigate adverse flooding effects on nearby properties, by ensuring that return flow will not be prevented by confined basins on the site (i.e., ponding).
- (g) Any activity shall preserve existing soils, vegetation, and other natural conditions that serve as buffers to coastal flooding and storm surges.

## 4.11 Coastal Watershed Areas

# (1) Preamble:

- (a) Coastal watershed areas are wetland and upland landforms that contribute surface and subsurface water to the estuaries within the town. The quality of the surface and sub-surface water is deemed to be critical to the following interests:
  - i.Protection of public and private water supply
  - ii. Groundwater and groundwater quality
  - iii. Water quality within the numerous ponds of the town
  - iv.Wildlife and wildlife habitat
  - v.Protection of Land Containing Shellfish
  - vi.Protection of Fisheries
  - vii.Recreation
- (b) There are presently several land use practices that present serious threats to the quality of our Coastal Watershed Areas. These include but are not limited to the following:
  - i.Outdated underground storage tanks
  - ii.Landfills
  - iii.Stump dumps
  - iv.Road salt storage
  - v.Septic package treatment plants
  - vi. Automotive and construction equipment repairs.

### (2) Definition:

"Coastal Watershed Areas" are those areas mapped and delineated specifically within the "Water Resources Protection Study" prepared for the Town of Yarmouth by I.E.P. Inc. and Wright Pierce, dated August, 1988. For the purposes of this section 4.11, (2), Conservation Commission jurisdiction will be restricted to within 300 feet from a major

estuary defined in section 1.04, and such jurisdiction must occur within the mapped area referenced above.

# (3) Performance Standards:

In order to properly protect our Coastal Watershed Areas, no project will be allowed that incorporates any of the practices referenced in section 4.11, (1), (b), 1 thru 6.

# 4.12 Rocky Intertidal Shores

# (1) Preamble:

Rocky intertidal shores are likely to be significant to storm damage prevention, flood control, protection of marine fisheries and wildlife habitat and where there are shellfish, protection to land containing shellfish. Rocky shore environments are habitats for macroalgae and marine invertebrates and provide protection to and food for, larger marine organisms such as crabs, lobsters, and such fish species as winter flounder, as well as a number of birds. Most marine plants and animals found in rocky shore environments are uniquely adapted to survive there and cannot survive elsewhere. Harbor seals also use rocky intertidal shores, such as rock outcroppings or isolated shores of small islands, as haul out areas.

Where a proposed project involves the filling, removing or altering of a rocky intertidal shore, the issuing authority shall presume that such shore is significant to the interests specified above. This presumption may be overcome only upon a clear showing that a rocky intertidal shore does not play a role in storm damage prevention, flood control, protection of marine fisheries or wildlife habitat, and where there are shellfish, protection of land containing shellfish and if the issuing authority makes a written determination to such effect.

When a rocky intertidal shore is determined to be significant to storm damage prevention, flood control, or protection of wildlife habitat, the form and volume of exposed intertidal cobbles and boulders are critical to the protection of those interests.

When a rocky intertidal shore is significant to the protection of marine fisheries or wildlife habitat, water circulation and water quality are critical to the protection of those interests.

## (2) Definition:

Rocky intertidal shores means naturally occurring rocky areas such as cobbles or boulder-strewn areas between the mean high water line and the mean low water line.

# (3) Performance Standards:

When a rocky intertidal shore is determined to be significant to storm damage prevention, flood control, or protection of wildlife habitat, any proposed project shall be designed and constructed using the best practical measures so as to minimize adverse effects on the form and volume of exposed intertidal cobbles and boulders.

When a rocky intertidal shore is determined to be significant to the protection of marine fisheries or wildlife habitat, any proposed project shall, if water dependent, be designed

and constructed using the best available measures, so as to minimize adverse effects, and if non-water dependent, have no adverse effects on water circulation and water quality. Water quality impacts include, but are not limited to, other than natural fluctuations in the levels of dissolved oxygen, temperature or turbidity, or the addition of pollutants.



### PART 5. REGULATIONS FOR INLAND WETLANDS

### 5.01 Inland Banks and Beaches

### (1) Preamble:

Banks are likely to be significant to wildlife, wildlife habitat, public or private water supply, groundwater supply, flood control, storm damage prevention, prevention of pollution and protection of fisheries. Where banks are composed of concrete, asphalt, or other artificial impervious material, said banks are likely to be significant to flood control and storm damage prevention.

Banks are areas where groundwater discharges to the surface and where, under some circumstances, surface water recharges to the groundwater.

Where banks are partially or totally vegetated, the vegetation serves to maintain the bank's stability, which in turn protects water quality by reducing erosion and siltation.

Banks act to confine floodwaters during most storms, preventing the spread of water to adjacent land.

Land within 100 feet of a bank is likely to be significant to the protection and maintenance of the bank, and therefore to the protection of the interests which these resource areas protect.

## (2) Definition, Critical Characteristics and Boundary

- (a) A bank is that portion of land surface which normally abuts and confines a water body. A bank may be partially or totally vegetated, or it may be comprised of exposed soil, gravel, stone or sand.
- (b) The physical characteristics of a bank, as well as its location, in the foregoing section, 5.01, (2), (a), are critical to the protection of the interests specified in section 5.01, (1).
- (c) The upper boundary of a bank is the first observable break in slope above the mean annual flood level. The lower boundary of a bank is the mean annual low flow level.

### (3) Performance Standards:

Any proposed work permitted by the Commission on a bank, or within 100 feet of the upper boundary of a bank, shall not impair the following:

- (a) the physical stability of the bank;
- (b) the water carrying capacity of the existing channel within the bank;
- (c) groundwater and surface water quality; and
- (d) the capacity of the bank to provide breeding habitat, escape cover and food for fisheries and wildlife.

No more than 50 linear feet of a bank may be altered if it is providing breeding habitat, escape cover and food for fisheries and wildlife.

# 5.02 Vegetated Wetlands, (Wet Meadows, Marshes, Swamps and Bogs)

## (1) Preamble:

Vegetated Wetlands are likely to be significant to wildlife, wildlife habitat, public or private water supply, groundwater supply, flood control, storm damage prevention, prevention of pollution, protection of fisheries, and protection of shellfish.

The plant communities, soils and associated low, flat topography of vegetated wetlands remove or detain sediments, nutrients such as nitrogen and phosphorous and toxic substances such as heavy metal compounds that occur in runoff and flood waters.

Some nutrients and toxic substances are detained for years in plant root systems or in the soils. Others are held by plants during the growing season and released as the plants decay in the fall and winter. This later phenomenon delays the impacts of nutrients and toxins until the cold weather periods, when such impacts are less likely to reduce water quality.

Vegetated wetlands are areas where groundwater discharges to the surface and where, under some circumstances, surface water discharges to the groundwater.

The profusion of vegetation and the low, flat topography of vegetated wetlands slow down and reduce the passage of flood waters during peak flows by providing temporary flood water storage, and by facilitating water removal through evaporation and transpiration. This reduces downstream flood crests and resulting damage to private and public property. During dry periods, the water retained in vegetated wetlands is essential to the maintenance of base flow levels in the rivers and streams, which in turn is important to the protection of water quality and water supplies.

Wetland vegetation provides shade that moderates water temperatures important to fish life. Vegetated wetlands flooded by adjacent water bodies and waterways provide food, breeding habitat and cover for fish. Fish populations in the larval stage are particularly dependent upon food provided by over the bank flooding which occurs during peak flow periods, (extreme storms), because most river and stream channels do not provide quantities of the microscopic plant and animal life required for survival.

Wetland vegetation supports a wide variety of insects, reptiles, amphibians, mammals, and birds which are a source of food for important game fish. Bluegills (Lepomis macrochirus), pumpkinseeds (Lepomis gibbosus), yellow perch (Perca flavescens), rock bass (Ambloplites rupestris) and all trout species feed upon non-aquatic insects. Largemouth bass (Micropterus salmoides), chain pickerel (Esox niger) and northern pike (Esox lucius) feed upon small mammals, snakes, non-aquatic insects, birds and amphibians.

Vegetated wetlands, together with land within 100 feet of a vegetated wetland, serve to moderate and alleviate thermal shock and pollution resulting from runoff which may be detrimental to wildlife, fisheries and shellfish downstream of the vegetated wetland.

The maintenance of base flows by vegetated wetlands is likely to be significant to the maintenance of proper salinity ratios in estuarine areas downstream of the vegetated wetland. A proper salinity ratio, in turn, is essential to the ability of shellfish to spawn successfully, and therefore to provide for the continuing propagation of shellfisheries.

Land within 100 feet of a vegetated wetland is likely to be significant to the protection and maintenance of vegetated wetlands, and therefore to the protection of the interests which these resource areas serve to protect.

# (2) <u>Definition</u>, <u>Critical Characteristics and Boundary</u>

- (a) Vegetated wetlands are brackish and freshwater wetlands. The types of brackish and freshwater wetland are wet meadows, marshes, swamps and bogs. They are areas where the topography is low and flat, and where soils are annually saturated. The ground and surface water regime and the vegetational community which occur in each type of freshwater wetland are specified in section 5.02, (2), (c).
- (b) The physical characteristics of vegetated wetlands, as described in the foregoing section 5.02, (2), (a), are critical to the protection of the interests specified in section 5.02, (1), above.
- (c) The boundary of a vegetated wetland is the line within which 50% or more of vegetational community consists of the wetland plant species identified in sections 5.02, (1) thru 5.02, (2), (c), (4), below. A minimum size of 3000 square feet is required for jurisdiction under these regulation.
  - i. The term "bogs" in this section shall mean areas where standing or slowly running water is near or at the surface during the normal growing season and where a vegetational community has a significant portion of the ground water or surface covered with sphagnum moss, (Sphagnum), and where the vegetational community is made up of a significant portion of one or more of, but not limited to nor necessarily all, of the following plants or groups of plants: aster (Aster nemoralis), azaleas (Rhododendron canadense and R. viscosum), black spruce (Picea mariana), bog cotton (Eriophorum), cranberry (Vaccinium macrocarpon), high bush blueberry (Vaccinium corymbosum), larch (Larix laricina), laurels (Kalmia augustifolia and K. polifolia), leatherleaf (Chamaedaphne calyculata), orchids (Arethusa, Calopogon, Pogonia spp.) pitcher plants (Sarracenia purpurea), sedges (Cyperaceae), sundews (Droseracaea), sweet gale (Myrica gale), white cedar (Chamaecyparis thyoides).
  - ii. The term "swamps" as used in this section shall mean areas where ground water is at or near the surface of the ground for a significant part of the growing season or where runoff water from surface drainage frequently collects above the soil surface, and where a significant part of the vegetational community is made up of, but notlimited to, nor necessarily include all of the following plants or groups of plants: alders (Alnus), ashes, (Fraxinus), azaleas (Rhododendron canadense and R. viscosum), black alder (Ilex verticillata), black spruce (Picea mariana), button bush (Cephalanthus occidentalis), American or white elm (Ulmus americana), white hellebore (Veratrum viride), hemlock (Tsuga canadensis), high bush blueberry (Vaccinium corymbosum), larch (Larix larcinia),

- cowslip (Caltha palustris), poison sumac (Vernix toxicodendron), red maple (Acer rubrum), skunk cabbage (Symplocarpus foetidus), sphagnum moss (Sphagnum), spicebush (Lindera benzoin), tupelo (Nyssa sylvatica), sweet pepper bush (Clethra alnifolia), white cedar (Chamaecyparis thyoides), willow (Salicaceae), common reed (Phragmite communis).
- iii. The term "wet meadows" as used in this section is where groundwater is at the surface for a significant part of the growing season and near the surface throughout the year and where a significant part of the vegetational community is comprised of various grasses, sedges and rushes; made up of, but not limited to nor necessarily including all of the following plants or groups of plants: blue flag (Iris), vervain (Verbena), throughwort (Eupatorium), dock (Rumex), false loosestrife (Ludwigia), hyodrophytic grasses (Gramineae), loosestrife (Lythrium), marsh fern (Dryopteris thelypteris), rushes (Juncaceae), sedges (Cyperaceae), sensitive fern (Onclea sensibilis), smartweeds (Polygonum), jewelweed (Impatiens capensis).
- iv. The term "marshes" as used in this section shall mean areas where a vegetational community exists in standing or running water during the growing season and where a significant part of the vegetational community is comprised of, but not limited to nor necessarily including all of the following plants or groups of plants: arums (Araceae), bladder-worts (Utricularia), bur-reeds (Sparganiaceae), button bush, (Cephalanthus occidentalis), cattails (Typha), duck weeds (Lemnaceae), eelgrass (Vallisneria), frog's bit (Hydrocharitaceae), horsetails (Equisetaceae), hydrophytic grasses (Gramineae), leather-leaf (Chamaedaphne calyculata), pickerel weeds (Pontederiaceae), pipeworts (Eriocaulon), pond weeds (Potamogeton), rushes (Juncaceae), sedges (Cyperaceae), smartweeds (Polygonum), sweet gale (Myrica gale), water milfoil (Halograceae), water lilies (Nymphaeaceae), water startworts (Callitrichaceae), water willow (Decodon verticillatus).

# (3) Performance Standards:

Any proposed work, permitted by the Commission, in a vegetated wetland or within 100 feet of a vegetated wetland shall not destroy any portions of said vegetated wetland, nor shall the proposed work impair in any way the vegetated wetland's ability to perform any of the functions in section 5.02, (1).

# 5.03 Land Under Water Bodies, (under any creek, river, stream pond or lake, flats or ditch)

### (1) Preamble:

Land Under Water Bodies and Waterways is likely to be significant to wildlife, wildlife habitat, public and private water supply, groundwater supply, flood control, storm damage prevention, prevention of pollution and protection of fisheries. Where Land Under Water Bodies and Waterways is composed of pervious material, such land represents a point of exchange between surface and groundwater.

The physical nature of Land Under Water Bodies and Waterways is highly variable, ranging from deep organic and fine sedimentary deposits to rocks and boulders. The organic soils and sediments play an important role in the process of detaining and removing dissolved and particulate nutrients, (such as nitrogen and phosphorous), from the surface water above. They also serve as traps for toxic substances (such as heavy metal compounds). Land Under Water Bodies and Waterways, in conjunction with banks, serves to confine flood water within a definite channel during the most frequent storms. Filling within this channel blocks flows which in turn causes backwater and over bank flooding during such storms. An alteration of Land Under Water Bodies and Waterways that causes water to frequently spread out over a larger area at a lower depth increases the amount of property which is routinely flooded. Additionally, it results in an elevation of water temperature and a decrease of habitat in the main channel, both of which are detrimental to fisheries, particularly during periods of warm weather and low flows.

Land under ponds and lakes is vital to a large assortment of warm water fish during spawning periods. Species such as largemouth bass, bluegills, pumpkinseeds, black crappie and rock bass build their nests on the lake bottom substrates within which they shed and fertilize their eggs.

Land within 100 feet of any bank abutting land under a water body is likely to be significant to the protection and maintenance of land under a water body, and therefore to the protection of the interests which these water bodies serve to protect.

# (2) Definition, Critical Characteristics and Boundary

- (a) Land Under Water Bodies is the land beneath any creek, river, stream, pond, lake or ditch. Said land may be composed of muck or peat, fine sediments, gravel or rock.
- (b) The physical characteristics and location of Land Under Water Bodies and Waterways specified in the foregoing subsection 5.03, (2), (a) are critical to The protection of the interests specified in section 5.03, (1) above.
- (c) The upper boundary of Land Under Water Bodies is the mean annual low water level.

### (3) Performance Standards:

Any proposed work, permitted by the Commission, on land under a water body shall not impair the following:

- (a) The water carrying capacity within the defined channel, which is provided by said land in conjunction with adjacent banks;
- (b) Ground and surface water quality; and
- (c) The capacity of said land to provide breeding habitat, escape cover and food for fisheries and wildlife.

## 5.04 Land Subject to Flooding, (both Bordering and Isolated areas)

### (1) Preamble:

## (a) Bordering Land Subject to Flooding:

Bordering Land Subject to Flooding is an area which floods from a rise in a bordering waterway or water body. Such areas are likely to be significant to flood control, storm damage prevention, wildlife and wildlife habitat.

Bordering Land Subject to Flooding provides a temporary storage area for flood water which has overtopped the bank of the main channel of a creek, river or stream or the basin of a pond or lake. During periods of peak runoff, flood waters are retained, (e.g., slowly released through surface discharge) by Bordering Land Subject to Flooding. Over time, incremental filling of these areas causes increases in the extent and level of flooding by eliminating flood storage volume or by restricting flows, thereby causing increases in damage to public and private properties.

## (b) Isolated Land Subject to Flooding:

Isolated Land Subject to Flooding is an isolated depression or a closed basin which serves as a ponding area for runoff or high groundwater which has risen above the ground surface. Such areas are likely to be locally significant to flood control, storm damage prevention, wildlife and wildlife habitat. In addition, where such areas are underlain by pervious materials, they are likely to be significant to public or private water supply. Finally, where such areas are underlain by pervious material covered by a mat of organic peat and muck, they are also likely to be significant to the prevention of pollution.

Isolated Land Subject to Flooding provides a temporary storage area where runoff and high ground water pond and slowly evaporate or percolate into the substrate. Filling causes lateral displacement of the ponded water onto contiguous properties, which may in turn result in damage to said properties.

Isolated Land Subject to Flooding, where it is underlain by pervious material, provides appoint of exchange between ground and surface waters. Contaminates introduced into said area, such as septic system discharges and road salts, find easy access into the ground water and neighboring wells. Where these conditions occur and a mat of organic peat or muck covers the substrate of the area, said mat serves to detain and remove contaminates which might otherwise enter the ground water and neighboring wells.

## (2) Definition, Critical Characteristics and Boundaries

### (a) Bordering Land Subject to Flooding

- (1) "Bordering Land Subject to Flooding" is an area with low, flat topography adjacent to an inundated by flood waters rising from creeks, rivers, streams, ponds, lakes or water courses. It extends from the banks of these waterways and water bodies; where a vegetated wetland occurs, it extends from said wetland.
- (2) The topography and location of Bordering Land Subject to Flooding specified in the foregoing section 5.04, (2), (a), (1) are critical to the protection of the interests specified in section 5.04, (1), (a).
- (3) The boundary of Bordering Land Subject to Flooding is the estimated maximum lateral extent of flood water which will theoretically result from the statistical 100 year

frequency storm. Said boundary shall be that determined by reference to the most recently available flood profile data prepared for the community within which the work is proposed under the National Flood Insurance Program, (NFIP, currently administered by the Federal Emergency Management Agency, successor to the U. S. Department of Housing and Urban Development. Said boundary, so determined, shall be presumed accurate. This presumption may be overcome only by credible evidence from a registered professional engineer or other professional competent in such matters. Where NFIP profile data is unavailable, the boundary of Bordering Land Subject to Flooding shall be the maximum lateral extent of flood water which has been observed or recorded.

### (b) <u>Isolated Land Subject to Flooding:</u>

- (1) Isolated Land Subject to Flooding is an isolated depression or closed basin without an inlet or an outlet. It is an area which at least once a year confines standing water. Isolated Land Subject to Flooding may be underlain by pervious material, which in turn may be covered by a mat of organic peat or muck.
- (2) The characteristics specified in the foregoing section, 5.04, (2), (b), (1) are critical to the protection of the interests specified in 5.04, (1), (b) above.
- (3) The boundary of Isolated Land Subject to Flooding is the perimeter of the largest observed or recorded volume of water confined in said area. A minimum size of 3000 square feet is required for jurisdiction under these regulations.

## (3) Performance Standards:

Any proposed work, permitted by the Commission, on land subject to flooding shall not result in the following:

- (a) Flood damage due to filling which causes lateral displacement of water that would otherwise be confined within said area.
- (b) An adverse effect on public and private water supply or ground water supply, where said area is underlain by pervious material.
- (c) An adverse effect on the capacity of said area to prevent pollution of the ground water, where the area is underlain by pervious material, which in turn is covered by a mat of organic peat or muck.
- (d) An adverse effect on wildlife or wildlife habitat.
- (e) An adverse effect on state listed rare and endangered vertebrates and invertebrates as identified by M.D.F.W., (Mass Division of Fisheries and Wildlife.

### 5.05 Lake and Pond Recharge Areas

### (1) Preamble:

- (a) Lake and Pond Recharge Areas are wetland and upland landforms that contribute surface and subsurface water to the lakes and ponds of the Town. The Quality of the surface and subsurface water is deemed to be critical to the following interests:
  - (1) Protection of public and private water supply;
  - (2) Ground water and ground water quality;
  - (3) Water quality within the numerous ponds and lakes of the Town;
  - (4) Wildlife and wildlife habitat;
  - (5) Protection of land containing shellfish;
  - (6) Protection of fisheries; and
  - (7) Recreation
- (b) There are presently several land use practices that present serious threats to the quality of our lake and pond recharge areas. These include but are not limited to the following:
  - (1) Outdated underground storage tanks;
  - (2) Landfills;
  - (3) Stump dumps;
  - 4) Road salt storage;
  - (5) Package treatments plants, (septage); and
  - (6) Automotive and construction equipment repairs.

### (2) Definition:

- (a) Lake and Pond Recharge Areas are those areas specifically delineated and mapped by the "Water Resources Protection Study" prepared for the Town of Yarmouth by I.E.P. Inc. and Wright Pierce, dated August, 1988. For purposes of this section, 5.05, (2), (a), Conservation Commission jurisdiction will be restricted to within 300 feet from any lake or pond and such jurisdiction must occur within the mapped area referenced above.
- (b) Performance Standards: In order to properly protect our Lake and Pond Recharge Areas, no project will be allowed that incorporates any of the practices referenced in section 5.05, (1), (b), (1 thru 6) of these regulations.

### **PART 6. VARIANCE**

### **6.01** Text

The Conservation Commission may at its discretion, waive one or more of these regulations when the proposed work potentially represents a significant ecological improvement when compared to existing conditions, or will not adversely affect any areas subject to the protection of these regulations. In addition, the Conservation Commission may, at its discretion, waive one or more of these regulations when there is an overriding public benefit or safety issue at hand and there is no feasible alternative to the proposed work.

# PART 7. REGULATIONS FOR HIRING OUTSIDE CONSULTANTS UNDER M.G.L. CH. 44 §53G

# 7.01 Purpose:

As provided by M.G.L. Ch. 44 §53G, the Yarmouth Conservation Commission may impose reasonable fees for the employment of outside consultants, engaged by the Conservation Commission, for specific expert services. Such services shall be deemed necessary by the Commission to come to a final decision on an application submitted to the Conservation Commission pursuant to the requirements of: the Wetlands Protection Act (M.G.L. Ch. 131 §40 and 310 CMR 10.00), the Town of Yarmouth Wetland By-law (Chapter 143), the Town of Yarmouth Wetland Protection Regulations, Conservation Commission Act (M.G.L. Ch. 40 §8C), Town of Yarmouth Conservation Commission Stormwater Management Regulations, or any other state or municipal statute, bylaw or regulation, as they may be amended or enacted from time to time. The Conservation Commission may also impose fees for other consultant services, related to application review, or permit conditioning or monitoring, under any of the above-referenced laws or regulations.

# 7.02 Special Account:

Funds received pursuant to these rules shall be deposited with the Town of Yarmouth treasurer who shall establish a special account for this purpose. Expenditures from this special account may be made at the direction of the Conservation Commission without further appropriation as provided in M.G.L. Ch. 44 §53G. Expenditures from this account shall be made only in connection with a specific project or projects for which a consultant fee has been collected from the applicant. Expenditures of accrued interest may also be made for these purposes.

### 7.03 Consultant Services:

Specific consultant services may include but are not limited to resource area survey and delineation, analysis of resource area values, hydrogeologic and drainage analysis, impacts on municipal conservation lands, and environmental or land use law. Services may also include on-site monitoring during construction, or other services related to the project deemed necessary by the Commission. The consultant shall be chosen by, and report only to, the Commission and/or its administrator.

## **7.04** Notice:

The Conservation Commission shall give written notice to the applicant of the selection of an outside consultant. Such notice shall state the identity of the consultant, the amount of the fee to be charged to the applicant, and a request for payment of said fee in its entirety. Such notice shall be deemed to have been given on the date it is mailed or delivered. No such costs or expenses shall be incurred by the applicant if the application or request is withdrawn within five days of the date notice is given.

### 7.05 Payment of Fee:

The fee must be received prior to the initiation of consulting services. The Commission may request additional consultant fees if necessary review requires a larger expenditure than originally anticipated or new information requires additional consultant services. Failure by the applicant to pay the consultant fee specified by the Commission within ten (10) business days of the request for payment, or refusal of payment, shall be cause for the Commission to deny the application based on lack of sufficient information to evaluate whether the project meets applicable performance standards in 310 CMR 10.00 and the Town of Yarmouth Wetland Bylaw or its regulations. An appeal stops the clock on the above deadline; the countdown resumes on the first business day after the appeal is either denied or upheld. A denial for lack of information may be based solely on the lack of the third party consultant review identified as necessary by the Commission. The Commission shall specify in its denial the nature of the information lacking which its chosen consultant would provide, e.g. the questions it needs answered.

### 7.06 Appeals:

The applicant may appeal the selection of the outside consultant to the Yarmouth Board of Selectmen, who may only disqualify the outside consultant selected on the grounds that the consultant has a conflict of interest or does not possess the minimum required qualifications. The minimum qualifications shall consist of either an educational degree or three or more years of practice in the field at issue or a related field. Such an appeal must be in writing and received by the Yarmouth Board of Selectmen and a copy received by the Conservation Commission, so as to be received within ten (10) days of the date consultant fees were requested by the Conservation Commission. The required time limits for action upon the application shall be extended by the duration of the administrative appeal.

### 7.07 Return of Unspent Fees:

When the Commission's review of a project is completed and an Order of Conditions issued, any balance in the special account attributable to that project shall be returned within 30 days. The excess amount, including interest, shall be repaid to the applicant or the applicant's successor in interest. For the purpose of this regulation, any person or

entity claiming to be an applicant's successor in interest shall provide the Commission with appropriate documentation. A final report of said account shall be made available to the applicant or applicant's successor in interest.

