**Oak Bluffs Wetlands Bylaw PIER REGULATIONS – Updated/Adopted 11/21/06** 1

Interests Protected:

Presumption of Significance: Piers are one of the few activities which come before the Commission for regulation which occur entirely within Resource Areas.

All Interests to be Protected under the Act (WPA 310 CMR 10.01(2) and Bylaw (1.01(2) regulations are presumed to be significant to pier, walkway and stair projects relative to the specific Resource Areas and Buffer Zones located at each site. Act and Bylaw General Regulations for Coastal and Inland Wetlands apply to this section. Except as noted these regulations pertain to private, non-commercial piers.

**Definitions**

**Dock/Pier:** Any structure extending out from the shore to the water, used to access boats and other recreational purposes. Includes: fixed or floating structures, both permanent and seasonal, and all appendages linking such structures to the adjacent land. Does not include: bulkheads, boardwalks, and other filled structures used to access boats.

**H****arbor:**  Oak Bluffs Harbor\*; Hart’s Harbor, A natural or manmade embayment of a large body of water that is a safe place for boats or ships to dock or rest while they are loaded or unloaded; good harbors are usually well-protected from strong winds and currents and are sufficiently deep to allow boats to safely approach landing sites, docks, or anchorage points. \*Oak Bluffs Harbor serves many functions; it is a transportation hub for passenger ferries and cruise ships, supports recreational boating and fishing, commercial enterprises including parasailing, jet ski rentals, and fishing charters, and both recreational and commercial fishing and shellfishing.

**Salt Pond** - Brush Pond, Farm Pond, Lagoon Pond, Sengekontacket Pond, Sunset Lake: 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 freshwater from small streams emptying into their upper reaches and/or springs in the salt pond itself, thereby making the water brackish.

**Fresh Pond** – Duarte’s Pond, Crystal Lake, Fresh/Wiggie’s Pond,

Ice House/Hamlin Pond, Pond at Pecoy Point, Upper Lagoon Pond:

Any open body of freshwater. Ponds may be naturally occurring or manmade by impoundment, excavation, or otherwise. Ponds shall contain standing water except for periods of extended drought. The following man-made bodies of open water shall not be considered ponds: basins or lagoons part of a wastewater treatment plant, swimming pools, stormwater retention basins, & wetlands that may have seasonal surface water.

##### Preamble: General Pier Regulations 2

Water dependent structures (piers, docks, float systems) are for water access and often provide private access to public resources.

(Under MGL, C91 the state owns the coastal waters and the land under the water below the historic low water mark.)

The construction and use of private piers may have adverse impacts

on the public resources.

Having a pier in a public resource is a privilege, not a right.

Coastal structures should enhance the environs, rather than damage them.

Piers are one of the few activities which come before the Commission for regulation which occur entirely within resource areas, i.e., beaches, flats, salt and freshwater wetlands, land under both salt and fresh water bodies, land subject to tidal action, to flooding and to coastal storm flowage. Collectively, these resource areas are presumed significant to the interests protected under both the MA Wetlands Protection Act and the Oak Bluffs Wetlands Bylaw.

Cumulative impacts of pier proliferation threaten to decrease the overall productivity of the resource areas and reduce their contribution to groundwater and surface water quality.

The plant community composition and structure, hydrologic regime, topography, soil composition and water quality of land under fresh and salt water bodies provide important food, shelter, migratory and overwintering areas, and breeding areas for fisheries and wildlife.

* Plants adapted to high ambient light intensity are ill-adapted to shaded conditions created by structures in the water.
* Displacement of wetland vegetation by pier pilings and access ways, and the area immediately surrounding them, can result in wetland vegetation loss. This can be substantial when the number of pilings is great as well as when the cumulative impact of increasing numbers of docks is considered.
* Propeller turbulence in or near areas of submerged aquatic vegetation increases turbidity levels, blocks sunlight, and damages vegetation.
* Prop scouring in near shore areas destroys shellfish habitat.
* Construction of piers and subsequent boat activity causes resuspension of nutrient-laden sediment particles which may cause a release of sediment-bound nutrients to the water column resulting in a “bloom” of vegetation. Release of nutrients to the water column leads to eutrophication and anoxic bottom conditions. Anoxic sediments and anoxic bottom conditions create adverse impacts on benthic resources, including shellfish and fisheries.
* 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.

3.

Salt ponds also provide spawning areas for shellfish and are nursery areas for crabs and fish. In addition to many birds which feed on fish found in salt ponds, waterfowl also eat invertebrates such as mollusks and crustaceans, which in turn depend on bottom sediment and vegetation. Some bird species also eat rupia, eel grass and other aquatic plants which may be rooted in land under salt ponds.

Access to the shoreline can disturb banks and wetlands and cause erosion and sediment runoff into ponds.

* Piers may precipitate increased lawn areas and landscaping adjacent to the pond edge which may potentially contribute to excess nutrients within the pond.
* Boat traffic generated from piers can cause erosion and degradation of resource areas and buffer zones from wakes and propeller wash.
* Pier access may disturb the vegetative cover and thus destabilize the beach, dune, tidal flat or coastal bank, increasing the possibility of coastal flooding and damage.
* Proposed structures may interfere with the natural movement of the beach, dune or tidal flat, affecting the interruption of sediment transport.
* Piers destroyed by storms pose a threat to nearby properties by increasing water-borne debris.

Piers impact recreational interests

* Not properly designed, piers can interfere with intertidal access for recreational fishing and fowling.
* The placement, length and size of the pier can interfere with the harvesting of quahogs and scallops.
* May restrict areas where boating may freely occur

Piers can create adverse impacts to the aesthetics of the area by interfering with the objective of protecting and retaining the natural open character and scenic vistas of the seacoast and water.

* Their compatibility with surrounding environs and overall visibility is dependent on their height, length & proliferation
* Excessive lighting on piers can cause temporary night blindness in boaters, interfere with recreational activities, and have an adverse impact on the aesthetics of the night sky.

4.

**Pier Filing Requirements**

A Notice of Intent (NOI) is required for any new pier or dock, fixed or floating, permanent or seasonal. All plans shall be stamped by a Professional Land Engineer, Registered Civil Engineer, Land Surveyor or Architect as applicable.

The NOI shall include at least:

 Topographic Plan(s), minimum scale- 1:20:

* Locus shown on assessor’s map
* Soundings within 100 feet of the pier and a record of the time and date when these measurements were made and the state of the tide during the survey.
* Presence of shellfish areas and eel grass beds within

 100 feet of the pier; this pertains to both seeded and

 naturally occurring beds

* Boundaries of resource areas: beach, dunes, banks, all wetlands and the buffer zones
* Navigation channels within 100 feet of the pier; and nearest channel outside 100 feet
* Boundary of any existing mooring area within 110 feet of pier and nearest area outside of 100 feet
* Location of existing piers and landings within 300 feet

 Structural plans, minimum scale - 1/4” = 1’ 0”:

* Design specifications: plan view, elevations

 and cross-sections where applicable

* Specifications of all materials to be used

 Narrative supporting material:

* Description of construction process
* Description of off-season storage location

 and means of transport, if applicable.

 Please note:

The project shall be clearly identified, and staked or marked with buoys at the time the NOI is submitted

 All other standard NOI filing requirements

Additional supporting material required –

A resource assessment performed by the

Oak Bluffs Shellfish Dept

 A MA Dept of Marine Fisheries assessment

 5.

**General Pier Performance Standards/Regulations**

**Basic Standards**:

1. Not every boat is guaranteed pier space; in many cases a mooring accessible by a dinghy can be used.
2. A pier is an accessory structure and will only be considered for a lot that has a primary structure on it. A pier may be permitted only on land and over water contiguous to the dwelling served.
3. The project is the least intrusive structure which will meet the applicant’s goals but will also be the most protective of the wetland resources and values. Applicant must demonstrate that proposed structure will have no significant adverse impact, including significant cumulative adverse impact on the values protected by this bylaw.
4. Alternatives Analysis: The applicant must show that all alternatives to the proposed structure have been thoroughly investigated . These include but are not limited to pier sharing, use of Town pier, reduction in size of structure, use of haul-off rope, and the no build alternative.
5. Multiple use piers are encouraged as a means to reduce adverse impacts. Use of one pier by more than one waterfront lot may be permitted, in otherwise permittable areas, provided that, in any such multiple use, the right to use the pier shall—by deed, covenant or otherwise—be forever granted to the multiple-use lots, which lots shall, by recorded covenant, forever waive their rights to build and maintain separate, individual piers.

**Re-establishment, Repair, Expansion & Maintenance:**

1. All existing piers, whether permanent or seasonal, must be issued a valid Order of Conditions. No maintenance or repair will be allowed for any pier that does not have a valid Order of Conditions.
2. The re-establishment of a lawful, pre-existing pier which has been destroyed or damaged by fire, acts of nature or other catastrophe, shall be permitted. The structure must have a valid Order of Conditions. The structure will be permitted, re-constructed in exact conformance to the filed plan, but use of modern materials and construction methods, as set forth herein, will be required. Applicant must file re-construction plan with Commission.
3. A pier may be maintained without refiling for a period not to exceed the term of the Chapter 91 Waterways License currently in force or forthcoming if none exists. All maintenance and use shall confirm with the Order of Conditions and all Oak Bluffs Wetlands Bylaw Pier

6.

Regulations. The Commission shall be given two weeks notice of further maintenance.

1. A Notice of Intent is required for any change or repair which alters any dimension, shape or function of an existing pier. Minor changes above mean high water may be permitted by Administrative Review or by filing a Request for Determination of Applicability.

**Marine Resource Assessments**:

1. For every proposed water dependent structure in a salt water body the Commission shall obtain a written Shellfish Resource Assessment from the Oak Bluffs Shellfish Department.

and MA Department of Marine Fisheries.

The assessment shall take into account the following: the density of shellfish, the size of the area of habitat, the historical use of the area, current importance of the area, and potential use of the area to recreational or commercial shellfishing. The assessment shall also consider the impacts to anadromous fishways and historical and existing eelgrass beds within a distance of 100 (100) feet of the pier.

1. The Commissions shall also take into consideration available mapping of shellfish habitat, local, state or federal.
2. The Commission shall provide the Harbor Master with a copy of every proposed pier plan and where appropriate shall request an assessment of the proposal.

**Protection of Shore Resources:**

1. To mitigate nutrient release the Commission may condition upland activities which may supply nutrients to the water body. For example, the Commission may require landscape modifications in the area of upland up to the first 50 feet inland of 100’ buffer zone across the entire water/wetland frontage of the property. Such landscaping modifications may include removal of sod lawn and planting of appropriate indigenous, salt tolerant plants such as native grasses, bayberry, rosa rugosa, beach grass or other species in order to create a buffer strip along the wetland edge to reduce nutrient loading.
2. The landward approach to a pier shall not harm vegetation on a coastal wetland, freshwater wetland or coastal or inland bank. Cutting into the bank to install a ramp should not be allowed, as the cut will provide an avenue for wave run-up and rainfall to erode the bank.

7.

1. Ramps and walkways leading to piers must be designed and sited to avoid erosion and to maintain the  volume and form of the beach or downdrift beach.
2. All areas disturbed by construction must be revegetated .

No ancillary activities around the pier or walkway will be allowed, including the storage of boats and other equipment associated with the use of the pier.

**Location:**

1. A pier for a single shorefront property must be as close to centerline of said property as feasible. Minimum setbacks to be 25’ from sideline; property must have sufficient shoreline frontage to accommodate both setbacks and structure.
2. A pier jointly used by two or more contiguous shoreline properties may be situated adjacent to property sideline.
3. No pier may be located with fifty feet (50’) of eelgrass beds.
4. Piers are prohibited from state and federally designated barrier beaches.
5. No new pier or float system shall be located closer than 100 feet to a public swimming area.
6. No pier or float system shall impede navigation or project into waters normally used for navigation, including small boat navigation.
7. All floating structures must be seasonal, with six months maximum use. Off season storage plans shall be submitted for review and approval by the Commission.
8. No structure shall impede fishing & fowling; sufficient open water shall be maintained to sustain a variety of activities including but not limited to fishing, swimming and sailing.
9. At the end of pier or float system there shall be, without benefit of dredging, at least two and a half foot (2 1/2’) of water.

At all times there must be a minimum of one foot (1 ‘) between the bottom of any boat using the pier and submerged land; this includes propellers.

 8.

1. Piers shall be located at or as close as possible to a north/south orientation to allow for maximum sunlight penetration underneath the structure.
2. No new pier, or expansion of existing pier, shall be permitted within wildlife habitat of species that are considered endangered, threatened, potentially extirpated, or of special concern according to current state and federal listings.

**Structural Requirements:**

1. All piers, stairs and walkways shall conform to state building codes as applicable. They must also conform to the Walkway & Stairway regulations of this document.
2. Float systems are limited to a width of 10 feet; maximum size to be no greater than 100 square feet. There must be a minimum of

one foot ( 1’ ) of water beneath the structure at all tidal points.

1. Planks on piers shall have a minimum spacing of 1 inch, plank width maximum 6”, so as to allow sunlight penetration. Fiberglass grating is preferred for walkway decking; if covering significant vegetation or an area suitable or eelgrass establishment, grating will be required, with a minimum 50% light penetration.
2. The maximum width of a pier shall not exceed five feet.
3. The length of a pier shall be kept to a minimum.

The maximum length to be either: Sixty feet (60 ‘ ) or length at

two and one half foot (2.5’) water depth at Mean Low Water,

whichever comes first.

1. No T’s or L’s will be allowed.
2. Height of deck (walkway) shall not exceed four feet (4’)

Above MHW (mean high water).

1. A single tie-off pile will be allowed, not to be placed beyond seaward end of pier.
2. All lumber used for construction, including pilings, shall be untreated. (e.g. greenheart)
3. The use of composite materials for decking is preferred.

Any lumber decking material must be untreated.

 9.

1. Protection of lateral access along the shoreline: structure must be designed to allow foot traffic over or around the structure. If obstruction is unavoidable, alternate lateral passage above high water mark must be provided.
2. No permanently installed electricity or lighting is allowed on any pier .

**Construction:**

1. In no case may any dredging, filling, or other shore alterations be performed in conjunction with any pier construction and/or maintenance without a valid Order of Conditions.
2. During construction turbidity shall be minimized using best available measures.
3. Where applicable construction shall be done from floating barges; mechanical pile driving is required. Advancements in construction technology may allow for newer methods of pile driving; these will be allowed if it can be demonstrated that they will have no greater adverse impact upon the resource than mechanical pile driving.
4. Piers are to be pre-fabricated on the upland potion of the property to prevent residue and sawdust from entering the wetland and water body wherever possible.

**Use:**

1. Any vessel to be docked at a pier or float system shall be demonstrated to maintain a minimum of one foot (1’) clearance between the vessel and the vessel propeller or skeg to the seabed at MLW.
2. Boats at the pier shall not be allowed to leak oil or other pollutants into water, nor shall oil or fuel be stored on the pier; there shall be no waste discharge at the pier.
3. If the use of the pier causes actual damage to any resource areas through prop dredging, bottom scouring or other significant disturbance of the land under the water body, oil or hazardous discharge, or destruction of shellfish resources, the dock may be ordered removed at the owner’s expense. The owner shall be responsible for any legal or other costs to include attorney’s fees incurred by the Conservation Commission in enforcing this regulation.

10.

**NOTE:**

**The following sections** address the specific regulations required to protect the wetland resources and values found in the specialized, distinct water bodies of Oak Bluffs.

Where noted, specific site conditions endemic to the specialized water bodies and resource areas may generate site specific regulations. Where noted, these regulations will supersede the general regulations. If not noted, all general regulations will apply.

(Specific wording awaiting legal review.)

**SALT PONDS & MARSHES:**

**Lagoon Pond, Sengekontacket Pond, Farm Pond, Brush Pond, Sunset Lake**

## FRESH WATER PONDS:

**Fresh/Wiggie’s Pond, Pond at Pecoy Point, Duarte’s Pond, Upper Lagoon Pond, Ice House/Hamlin Pond, Crystal Lake.**

**New England Coastal Plain Pond Shore Communities:**

at this time those ponds identified as such are Fresh Pond, Duarte’s Pond, and the pond at Pecoy Point

(MA Natural Heritage & Endangered Species Program, MA Department of Environmental Protection, Martha’s Vineyard Land Bank Commission, Pleasant Bay Resource Management Alliance,)

HARBORS:

**Oak Bluffs Harbor, Hart’s Harbor**

**NANTUCKET SOUND**

**WALKWAYS AND STAIRWAYS:**

**In fresh and Marine Resource Areas**

 11.

**SALT PONDS & MARSHES**

**Lagoon Pond, Sengekontacket Pond, Farm Pond, Brush Pond, Sunset Lake**

# PREAMBLE: Piers in Salt Ponds

Salt ponds and the area around them provide the public with many **recreational** opportunities including but not limited to: shellfishing, fishing, sailing, swimming, hunting and wildlife observation.

**Because of their enclosed nature, salt ponds are highly sensitive to pollution and uncontrolled nutrient input.** These impacts can change the plant and animal species composition of the pond, and thus can be detrimental to fish, shellfish, wildlife and recreation. The productivity of salt ponds and the food web they support provides an ideal habitat for many types of **wildlife,** particularly various ducks and shore birds. The enclosed nature of the pond also provides shelter for wildlife.

**Shellfish** are a valuable renewable resource important for both recreational, commercial and economic resources. 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 young shellfish in the planktonic larval stage that are produced in large quantities during spring and summer are an important source of food for the young stages of marine fisheries and many crustaceans.

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, function as nursery areas for crabs and finfish, and provide shelter for migratory birds. These estuarine ponds have been called the “nursery of the sea” due to the number of species that inhabit these areas for at least part of their life cycle. Eel grass meadows are considered “essential habit” for fish and shellfish by the army corps of engineers and the scientific community.

**Land within 100 feet of the bank of a salt pond,** the buffer zone, is likely to be significant to the protection and maintenance of land under salt ponds, and therefore to the protection of the interests which these resource areas serve to protect. These buffers protect the resource area from the negative impacts resulting from human shoreside development.

**Piers in Salt Ponds may contribute to the following Adverse Impacts:**

Excess nutrients are the major pollutants that diminish the water quality in the salt ponds.  The major cause of water quality degradation is excess of nitrogen from on-site septic systems, acid rain and non-point source pollution such as road runoff that includes fertilizers, oil, gas antifreeze from vehicles,

 12.

animal waste, soil sediments, hazardous waste, and plastics. In the salt ponds nitrogen diminishes the quality of critical habitats by causing algae blooms and stimulating the growth of slime algae and wrack algae that degrade the eel grass and hasten eutrophication.

Stormwater runoff contaminates shellfish and other aquatic species and damages the quality of water for swimming and other recreational activities.

Resuspension of bottom sediments causes redistribution of sediments, alterations in sediment grain size distribution, and causes changes in bottom topography relief, elevation and grade, including creation of depressions in the bottom. Resuspension of sediments into depressions creates deep pockets of sediment which may not be able to physically support shellfish or which can become anoxic and therefore not support shellfish. Resuspension of sediments during the period of shellfish larval settlement hinders or prevents the effective settlement (spatfall) of shellfish larvae.

Propeller turbulence near or in areas of submerged aquatic vegetation, such as eel grass or salt marsh, damages vegetation, thereby increasing the rate at which organic detritus is produced. If this organic detritus does not completely decompose aerobically, then anoxic bottom conditions will ensue, which adversely impact shellfish and fisheries.

**Adverse Impacts upon the Marsh Ecosystem:**

Cumulative impacts of pier proliferation threaten to decrease the overall productivity of the marsh ecosystem, to reduce its ability to absorb wave energy, and to reduce its contribution to groundwater and surface water quality.

\*Displacement of marsh areas by pier pilings and the areas immediately surrounding those results in marsh loss. This loss can be substantial when the cumulative impact of increasing numbers of piers is considered. Reductions in plant density result in loss of sediment normally trapped by roots and culms; tidal washouts and localized depressions then result which concentrate salt through evaporation of trapped water preventing recolonization by the original vegetation.

\*While pier construction is typically the least environmentally

destructive method of crossing a marsh, it may adversely affect the physical characteristic and functional value of a marsh. The shaded conditions piers produce can cause a decrease in plant height, population density and leaf thickness as well as alteration of species composition.

\*Marsh plants provide the major energy flow (detritus food chain) between

autotrophic and heterotrophic levels in a marsh- estuarine system. Many species of sport and commercial fish and shellfish are dependent upon this.

 13.

**PIER REGULATIONS for SALT PONDS**

#### Areas where piers are prohibited

The construction of any new dock or pier is prohibited in the following areas:

In Lagoon Pond, from Lagoon Road to the Drawbridge.

This section of the pond is being managed by the Oak Bluffs Shellfish Department to provide all licensed shellfishermen easier access to the resources. Bay scallop habitat is of special concern due to a population decline in the mid-1980’s from which the shellfishery has not yet recovered; broad, open areas of land under the water are critical to maintaining and improving shellfish populations.

**Piers in Salt Ponds: Performance Standards/Regulations**

1. Notwithstanding any other provisions hereof, no new pier shall be permitted within an area specified as land containing shellfish which is identified as significant shellfish habitat.
2. There shall be no relocation or replanting of shellfish allowed and no monetary compensation of any kind allowed to mitigate removal or disturbance of shellfish or for any other purpose.
3. No new pier or float shall be located closer than 100 feet of any areas designated for aquaculture. However piers which meet the other requirements of this bylaw may be permitted for use of the holder of an aquaculture grant for the area.
4. No new pier shall be permitted within 100 feet of the ladder or man-made structures of an anadromous or catadromous fish run which is significant to the protection of fisheries.
5. No new pier or float shall be located closer than 35 feet from a defined publicly maintained channel.
6. The height of the deck (walkway) shall not exceed four feet (4') above Mean High Water (MHW) unless in the interest of preserving marsh growth, a greater height is required; in which case the height above the marsh shall not exceed 1.5 times the width of the dock.
7. Notwithstanding any other provisions hereof, no new, replacement or substantial repair of an existing dock or pier shall be permitted within fifty feet (50 ft.) of an area of eel grass.

14.

**FRESH WATER PONDS**

Fresh/Wiggie’s Pond, Pond at Pecoy Point, Duarte’s Pond, Upper Lagoon Pond, Ice House/Hamlin Pond, Crystal Lake. (See additional regs for New England Coastal Plain Pond Shore Communities below.)

## PREAMBLE: Piers in Fresh Ponds

In addition to the effect upon wetland resources previously detailed, land under fresh water ponds and land within 100 feet of fresh water ponds, pond shores, wetlands and their buffer zones, are likely to be significant to the protection of groundwater and groundwater quality, water quality in the ponds, and varied upland wildlife and wildlife habitat.

* In land under freshwater ponds the soils and sediments play an important role in the process of detaining and removing dissolved and particulate nutrients (such as nitrogen and phosphorus) from the surface water above. They also serve as traps for toxic substances (such as heavy metal compounds).
* Activities that will stir up bottom sediments can become a source of phosphorus from re-suspended sediment and organic matter. These activities include pier installation, sandy bottom construction with fill and any dredging or deepening.
* Land under fresh water ponds is vital to a large assortment of warm water fish during spawning periods. Species such as largemouth bass, and other sunfish such as blue gills, pumpkinseeds & black crappie build nests on the lake and bottom substrates within which they deposit and fertilize their eggs.
* The plant community composition and structure under fresh water bodies and waterways provide important food, shelter, migratory and over wintering areas, and breeding areas for wildlife. Certain submerged, rooted vegetation is eaten by water fowl and some mammals. Some amphibians (as well as some invertebrate species eaten by vertebrate wildlife) attach their eggs to such vegetation. Emergent vegetation is also used for nesting, and many species use dead vegetation resting on land under water but protruding above the surface for feeding and basking. Soil composition is also important for hibernation and for animals which begin to burrow their nesting tunnels under water.
* In ‘kettle’ ponds and vernal pools pond levels fluctuate from year to year depending on the hydrologic cycle.
* The loss of one or two sites for rare species can have long-lasting impacts on local populations. A disjunct species that has a localized, fragmented habitat range may not be able to recover because local sources of seeds and propagules may be geographically too distant to allow for recolonization of the lost or impacted site. Piers may interfere with the lateral movement of species, thus impacting their success.

15.

Major causes of short and long term disturbance:

* Nutrient loading from septic systems, lawn fertilizers, and stormwater runoff containing nitrogen, phosphorous and other nutrient
* Erosion and sedimentation
* Development and recreational impacts to the physical substrate
* Impacting the hydroperiod by prolonged groundwater withdrawal and drawdown of the water table. Even small differences in the hydrologic regime potentially could have a major influence on the wetland plant community.

Regulations:

1. Water access structures shall consist of seasonal, grated floats unless the Commission determines that an alternative design would have less impact to the shoreline, water body, and/or land under the water body at a particular site.
2. Seasonal means the float shall be installed no earlier than May 15 and shall be removed on or before October 15 of each year, unless otherwise specified by the Commission.
3. All such water access structures (herein referred to as ‘floats’) shall be designed in a manner that will not disturb the pond shore or pond shore vegetation (banks, wetlands, sand, etc.), the buffer zones or the land under the water body, or cause any increase in erosion.
4. Float must be located in a spot where activity (swimming, diving) will not impact the land under the pond.
5. The landward approach to a float shall not harm the pond shore, pond shore vegetation or cause erosion. All water access paths require an Order of Conditions.
6. The native vegetation at the pond shore and buffer zone shall not be removed, and no planting of any vegetation is allowed without an Order of Conditions. The establishment of native shoreline vegetation to filter nutrients and other water-borne sediments will be required when replanting disturbed areas.
7. Removal of invasive flora such as purple loosestrife, common reed, bush-honeysuckle, multiflora rose, and Oriental bittersweet, is allowed; invasive plant species management plans should be developed in accordance with Commission guidelines.

16.

1. Vegetated Buffer Zone: the establishment of an undisturbed naturally vegetated buffer zone of at least twenty-five (25) feet to all water bodies will be required. The distance may vary with the steepness of the slope; over 8% slope, zone may be 50 feet.
2. There shall be no storage of boats or equipment of any kind on the shoreline or shoreline vegetation, banks or vegetated wetlands; the Commission shall approve an upland storage site. The off-seasonal storage of the float itself will be at a similar approved upland storage site.
3. There shall be no floats allowed within 100 feet of wildlife habitat of species that are considered endangered, threatened, potentially extirpated, of special concern, and/or in an area identified in the latest Estimated Habitat Map.
4. No motorized boats allowed. Use shall be limited to passive recreation, such as swimming, tubing, and floating.
5. All floats must be located at least 25 feet from each of the property boundaries and the imaginary extension of those boundaries into the water.
6. All construction material used for float must be untreated & non-pollutant. (man-made, composite preferred)
7. It must be a seasonal structure in every sense, installed and removed with minimal adverse impact to the resource.

E.G. – a float with an easily removed anchoring system;

modular aluminum walkway supported by slender aluminum poles, widely spaced.

1. No float may be larger than four (4) feet in width.

The length may be no longer than twenty (20) feet.

The use of adjoining floats connected in such a way as to further extend the 20’ limitation is prohibited without a special

Order of Conditions.

 17.

**New England Coastal Plain Pond Shore Communities:**

at this time those ponds identified as such are Fresh Pond, Duarte’s Pond, and the pond at Pecoy Point

New England Coastal Plain Pond Shore Communities are unique to southeastern MA, RI and parts of Long Island. These communities are globally and state imperiled, with only six to twenty occurrences statewide. A total of 43 rare plant and animal species have been documented within this community type. These species are specially adapted to wide year-to-year variations in the shoreline location and the resulting seasonal

desiccation -inundation effects of seasonal hydrologic cycles evident in the yearly rise and fall of the water table. Even small differences in the hydrologic regime potentially could have a major influence on the wetland plant community. Providing a buffer from all causes of disturbance to the pondshore water regime is of primary important.

**Additional regulations for New England Coastal Plain Pond Shore Communities:**

\* A species inventory, undertaken by a specialist approved by the Conservation Commission, must be included in the application.

\*If any threatened, endangered, etc. species are located at the site of the property, the Commission may elect to restrict activity.

\* Where there are nearby or potentially could be rare species suited to the coastal plain pond habitat, floats may not be situated in shoal areas in a depth of water where they are likely to rest on the bottom during dry periods.

 18.

**Pier Regulations for Harbors—Oak Bluffs Harbor, Hart’s Harbor**

**Preamble:**

The primary function of a harbor is to provide mooring, anchorage and refuge for boats. In addition, Oak Bluffs Harbor and Hart’s Harbor currently support or have the potential to support recreational and commercial shellfishing.

**Regulations:**

1. Piers shall not exceed over one hundred (100) feet in length beyond mean low tide, or one hundred (100) feet in length beyond the landward edge of salt marsh, or otherwise prohibit or unreasonably impede legitimate passage along a beach, or navigation over the waters, for recreational, shellfishing or aquacultural purposes.
2. To keep disturbance of the bottom minimal at all times during both construction and use, the water depth at the end of the dock shall be a minimum of three (3) feet at the time of mean low water, a maximum of four (4’) feet.
3. A terminal “L” or “T” will be permitted in harbors if it is demonstrated that this will reduce the pier length or impact upon the resource.

The area of the terminal “L” or “T” shape in a fixed pier, or the float, or combination thereof, shall not exceed one hundred (100) square feet.

1. An area where the float(s), if any, will be stored, if seasonal, shall be designated on the plan.
2. The Commission may, after consultation with the Shellfish Constable and/or MA Division of Marine Fisheries, require that the applicant submit to the shellfish department mitigating funds for the purpose of adding seed from an approved hatchery to the resource area. The shellfish department shall determine the amount of mitigating funds required based upon site specifications. The Commission may also require the applicant to remove and relocate as many shellfish from the site as is reasonably possible.
3. For every proposed pier the Commission shall obtain a written assessment from the Harbor Master detailing any and all potential impacts of said proposal. No new pier shall be permitted if such pier would be inconsistent with any harbor management plan approved by the Office of Coastal Zone Management (CZM), or any other general area-wide harbor management plan or policy adopted by the selectmen or town council.

19.

**Commercial Piers – Oak Bluffs Harbor:**

1. Piers shall be constructed in proportion to vessel(s) that the pier will serve. No pier may be constructed of a length that interferes with the recreational interests protected under the Bylaw.(F)
2. To keep disturbance of the bottom minimal at all times during both construction and use, the water depth at the end of the pier shall be a minimum of four (4) feet at the time of mean low water or three (3) feet greater than the draft of vessels served by the pier, whichever is the greatest depth.

## NANTUCKET SOUND

**Pier Regulations:**

Note: Piers are prohibited from state and federally designated

barrier beaches.

1. Piers shall not exceed over one hundred (100) feet in length beyond mean low tide, or one hundred (100) feet in length beyond the landward edge of resource area, or otherwise prohibit or unreasonably impede legitimate passage along a beach, or navigation over the waters, for recreational, shellfishing or aquacultural purposes.
2. To keep disturbance of the bottom minimal at all times during both construction and use, the water depth at the end of the pier shall be, at the time of mean low water, a maximum of four (4) feet.
3. Pier length will thus be maximum one hundred (100’), or length required to reach four (4’) foot depth at MLW, whichever comes first.
4. Piers shall not have floats, “L’s” or “T’s”.
5. Piers shall be placed as close to the centerline of the property as possible; there will be a minimum of one hundred (100) feet between neighboring pier structures.
6. Pier should be located to minimize threat to nearby properties by water-borne debris if pier is damaged or destroyed by a storm.

20.

**WALKWAYS AND STAIRWAYS**

**(in fresh and marine resource areas)**

## DEFINITION: Walkway & Stairway

A walkway is an elevated or at-grade structure used as a walkway to traverse a fresh or salt meadow, marsh, bank, dune or beach.

A walkway differs from a pier in that it begins and terminates above mean high water, even though it may cross over a point that is below mean high water (e.g. a creek).

A stairway or stairs is considered any single or set of steps, and any platform or landing connected thereto, connecting different levels to traverse a dune, bluff or coastal bank or other slope*.*

**PERFORMANCE CONSIDERATIONS:**

A walkway or stairway may be permitted in cases where it can be demonstrated that irreparable erosion and destabilization of a resource would result from informal access.

**Filing an NOI:** Application must include consideration of the following potential resource impacts:

* + 1. The extent or potential of erosion or degradation of vegetation or substrate (underlying soils) resulting from foot traffic must be evaluated.
		2. Presence and delineation of habitat: there should be no loss or degradation of habitat for shellfish, finfish, birds, reptiles or other animals, or of fish runs resulting from the proposed structure.
		3. There should be no significant alteration in wind patterns and littoral processes resulting from the proposed structure.
		4. There should be no undue detriment to public views resulting from the proposed structure.
		5. There should be no loss or degradation of public access opportunities resulting from the proposed structure.
		6. The frequency, volume and intensity of use must justify the need for the structure.
		7. Shared use structures are to be encouraged as a means to provide access to the shore while minimizing the number of structures that might otherwise be permitted.

21.

**DESIGN STANDARDS FOR WALKWAYS**

**Location:**

* + 1. A walkway should be located where it will have the least impact on or can improve the condition of a resource area. A setback of fifty feet (50’) is preferred, but the setback may be no less than twenty-five feet (25’) from the property boundaries.
		2. When structure will be owned and used by two or more contiguous property owners, the setback requirement may apply to the outermost boundaries of the two or more contiguous properties so that the structure may be placed on a shared property line.
		3. A north to south orientation of the structure results in

maximum sunlight penetration to underlying vegetation, and is preferred wherever feasible.

**Structural Requirements:**

11. All Walkways shall conform to state & local building codes as applicable, and must be in compliance with the applicable Order of Conditions issued by the Commission.

A ‘Conservation Permitted’ Building Permit issued by the Oak Bluffs building official must be obtained.

12. Fiberglass grating is preferred for walkway **decking;** if covering significant vegetation, grating will be required, with a minimum 50% light penetration. If planks are permitted they shall have a minimum spacing of 1 inch, plank width maximum 6”.

 Maximum width for decking to be four feet (4’ 0”).

13. **Height** shall be measured from the marsh surface to the bottom of the longitudinal support beam. The height of a structure is determined to allow sufficient light penetration to underlying vegetation**,** and to prevent storm damage. The height shall not go above 3 feet or below one foot as measured from the substrate.

 14. The laying of planks directly on the ground or surface

 is prohibited.

15. **Piles** shall not exceed four inches x four inches (4”) and should be spaced a minimum of eight feet apart to minimize the impact of installation to the substrate. The use of helical or other alternate technology pilings, or seasonal stub piles, that can be demonstrated to minimize impacts on the substrate, will be encouraged.

22.

16.The use of **railings** should be avoided unless a need can be demonstrated, or to conform to the applicable building code.

 17.Use of non-leaching **materials,** such as composite lumber and other such building materials that do not leach pollutants is required. Piles may be aluminum or metallic material as they will not degrade easily. Any lumber used must be untreated.

 **Installation & Maintenance**:

1. Installation should be accomplished with minimal disturbance to surrounding soils or vegetation, using methods outlined in the applicable order of conditions, as determined on a case-by-case basis. A design and installation plan approved by a licensed engineer or surveyor is required.
2. **Seasonal** installation of structures is encouraged. Permanent 4x4 stub piles with removable planks (or alternate technology) are preferred to prevent storm damage to the structure and potential impacts from storm debris on the adjacent marsh area.
3. Seasonal is defined as May 1 through October 30, each year, or any time segment within those dates.
4. All removable portions of seasonal structures must be removed using practices that minimize impacts on the resource, and be stored outside the resource area unless otherwise specified in the applicable Order of Conditions.
5. Permanent structures may be permitted in cases where the structure will be used consistently year-round, or in cases where more than one property owner is sharing use of the structure.

23.

**DESIGN STANDARDS FOR STAIRWAYS**

**Performance Considerations:**

* The choice of whether stairs are to be designed to be “dug into the ground” or elevated is site specific and depends on factors such as the grade of slope, composition of the substrate, and nature of vegetation.
* Elevated stairs may at times be preferred to protect vegetation, or due to the steep slope of a bank.
* The benefits of “dug-in” stairs include their ability to allow vegetative cover, minimal visual impact, tendency to slow the erosion

effects of rainfall, and their durability.

 **Structure:**

1. All Stairways shall conform to state & local building codes as applicable, and must be in compliance with the applicable Order of Conditions issued by the Commission.

A ‘Conservation Permitted’ Building Permit issued by the Oak Bluffs building official must be obtained.

1. The stair structure shall be no more than four feet in overall width, including the supporting posts and railing or handrail (all structures over 30” total ht.)
2. The structure shall remain unpainted in order to preserve as far as possible the natural appearance of the bank. If non-wood materials are used they should be of a color that will blend in with the natural surroundings.
3. Use of non-leaching **materials,** such as composite lumber and other such building materials that do not leach pollutants is required. Any lumber used must be untreated.
4. Where the permitting authority finds, due to height or steepness of the bank, building codes, or other factors, that a landing is justified or required, that landing shall be no larger than twenty (20) square ft.
5. Installation should be accomplished with minimal disturbance to surrounding soils or vegetation, using methods outlined in the applicable Order of Conditions, as determined on a case-by-case basis. A design and installation plan approved by a licensed engineer or surveyor is required.

24.

**Stairs ‘Dug Into’ the Ground:**

1. A staircase that is dug into the ground shall follow the slope profile. Treads or risers must be level to prevent erosion. The stairway may be straight or serpentine.
2. Treads or risers that are not tied into stairway side supports may be permitted with adequate switchbacks to prevent erosion.
3. Vegetative restoration plan, repairing degradation from construction process, must be filed & implemented.

**Elevated Stairways:**

1. A stairway shall follow the slope profile as closely as possible. With the exception of the supporting posts, no portion of the proposed stairway shall be closer than one foot (1’) from the ground. Plans submitted must show the contours and how compliance will be accomplished.
2. The stairway shall have no risers and there shall be a minimum of one inch spacing between deck planks in order to permit light penetration and encourage vegetation.

**Pier Regulations, adopted 11/21/06: per Oak Bluffs Wetlands Bylaw.**