

**Conservation Commission Approved Draft 1.24.24
Amended 2.28.24**

SECTION XXXX. ENVIRONMENTAL STANDARDS – NATURAL RESOURCE PROTECTIONS

A. PURPOSE

The Scarborough Marsh is central to the Town's identity, creating a special awareness by our residents of the importance of all of the Town's natural resources. Future land use will follow a pattern of development that is sensitive to protecting our beaches, dunes, rivers, open spaces, farmlands, and other elements that comprise our unique ecosystem.

Natural resource protections are established to:

- Maintain, and where possible improve, the quality of surface waters and ground water by controlling the rate and volume of stormwater runoff and preserving the ability of wetlands to filter pollution, trap sediment, retain and absorb chemicals and nutrients, and produce oxygen.
- Protect, and where possible improve, potential water supplies and aquifers and aquifer recharge areas.
- Protect, and where possible improve, wildlife habitats and maintain ecological balance.
- Protect, and where possible improve, unique or unusual natural areas and rare and endangered plant and animal species.
- Protect, and where possible improve, shellfish and fisheries.
- Prevent the destruction of, or significant changes to, wetlands, related water bodies and adjoining land which provide flood protection, and to protect persons and property against the hazards of flood inundation by assuring the continuation of the natural or existing flow patterns of streams and other water courses within the Town.
- Prevent the expenditure of municipal funds for the purpose of providing and/or maintaining essential services and utilities which might be required as a result of misuse or abuse of wetlands.

The provisions and criteria set forth in this Section are in addition to the provisions of applicable state and federal laws and regulations, other sections of this Site Plan Ordinance, Zoning Ordinance, and other local ordinances and regulations.

Where any provision of this Section conflicts with a state or federal law or regulation, another section of this Site Plan Ordinance, Zoning Ordinance, or another local ordinance or regulation, the more restrictive provision shall apply.

Nothing in this Section shall permit a use or activity which is contrary to any other provision of the Zoning Ordinance.

B. APPLICABILITY

These requirements shall apply to all **new development requiring site plan or subdivision approval** affecting any of the following natural resources:

- All vernal pools.
- All wetlands.
- All non-tidal perennial river, stream, or brook.
- All tidally influenced waterways.
- All coastal bluffs.

C. DEFINITIONS

Coastal Bluff:

Defined as a steep shoreline slope formed in sediment (loose material such as clay, sand, and gravel) that has three feet or more of vertical elevation just above the high tide line. Cliffs or slopes in bedrock (ledge) surfaces are not bluffs and are not subject to significant erosion in a century or more. Beaches and dunes do not form bluffs, except along the seaward dune edge as a result of erosion.

Coastal Wetlands:

Coastal Wetland means all tidal and subtidal lands; all areas with vegetation present that is tolerant of salt water and occurs primarily in a salt water or estuarine habitat; and any swamp, marsh, bog, beach, flat, or other contiguous lowland that is subject to tidal action during the highest astronomical in which an activity is proposed. Coastal wetlands may include portions of coastal sand dunes.

Diameter at Breast Height (DBH):

DBH is the diameter of a tree measured 4.5 feet above the ground.

Forested Wetland:

Forested wetland means a regulated wetland with at least 20 percent of the surface area covered by woody vegetation greater than 20 feet in height.

Fresh Water Wetland:

Freshwater wetland means freshwater swamps, marshes, bogs, and similar areas that are inundated or saturated by surface or groundwater at a frequency and for a duration sufficient to support, and which under normal circumstances do support, a prevalence of wetland vegetation typically adapted for life in saturated soils; and not considered part of a great pond, coastal wetland, river, stream, or brook.

Highest Astronomical Tide (HAT):

Highest Astronomical Tide is the elevation of the highest predicted astronomical tide expected to occur at a specific tide station over the National Tidal Datum Epoch (NTDE). The NTDE is a specific 19-year period adopted by the National Ocean Service as the official time segment over which tide observations are taken and reduced to obtain mean values for tidal datums. The Maine Geological Survey has defined the HAT, and approximated its extent along the Maine coastline.

Marsh Migration Area:

Marsh migration area are inland areas where salt marsh vegetation will likely expand into as a result of sea level rise.

Natural Resource Setback:

A natural resource setback is a defined distance between a river, stream, or brook; wetland; or vernal pool, and any upland development and may include a vegetated buffer as required.

River, Stream or Brook:

River, stream or brook means a channel between defined banks. A channel is created by the action of surface water and has two or more of the following characteristics:

- It is depicted as a solid or broken blue line on the most recent edition of the U.S. Geological Survey 7.5-minute series topographic map or, if that is not available, a 15-minute series topographic map.
- It contains or is known to contain flowing water continuously for a period of at least 6 months of the year in most years.
- The channel bed is primarily composed of mineral material such as sand and gravel, parent material, or bedrock that has been deposited or scoured by water.
- The channel contains aquatic animals such as fish, aquatic insects, or mollusks in the water or, if no surface water is present, within the stream bed.
- The channel contains aquatic vegetation and is essentially devoid of upland vegetation.

"River, stream or brook" does not mean a ditch, grassy swale, or other drainage way constructed, or constructed and maintained, solely for the purpose of draining stormwater.

Vegetated Buffer:

A vegetated buffer is part of the natural resource setback area that maintains the natural vegetation cover from the natural resource for a specified distance. Limited activity may take place in the vegetated buffer.

Vernal Pool:

Vernal pools or "spring pools" are shallow depressions that usually contain water for only part of the year. "Significant vernal pools" are a subset of vernal pools with particularly valuable habitat. Vernal pools must be identified between April 10 and May 10 by a qualified wetland scientist.

D. NATURAL RESOURCE SETBACKS AND BUFFERS REQUIRED

A natural resource setback is a defined distance between a river, stream, or brook; wetland; or vernal pool, and any upland development. Depending upon the type of resource, the natural resource setback may also contain a vegetated buffer. The required minimum vegetated buffer is a portion of the natural resource setback area directly adjacent to the resource and maintains the natural vegetation cover from the natural resource for a specified distance. Minimum vegetated buffers must include appropriate native vegetation. Lawn areas are not permitted.

If the required vegetated buffer area contains an area that has a slope of 10% or more for at least 10 feet in a direction perpendicular to the edge of the jurisdictional area, the required width of the natural resource setback and vegetated buffer shall be increased by 10 feet respectively.

All natural resource setbacks and vegetated buffers shall be marked with permanent pins every 50-100' and signage as determined by the Planning Board. All required boundary markers shall be installed before project construction commences.

The following required natural resource setbacks and minimum vegetated buffer width standards apply in accordance with the type of resource identified as follows:

Environmental Resource	Natural Resource Setback	Vegetated Buffer
Contiguous Wetlands \leq 1,000 SF	25'	15'
Contiguous Wetlands \geq 1,000 SF \leq 10,000 SF	50'	25'
Contiguous Wetlands \geq 10,000 SF	100'	75'
Vernal Pools	250'	100% of Natural Resource Setback
Coastal Bluff Zone (unstable or unmapped)	HAT + 4' + 150'	35'
Coastal Bluff Zone (stable)	HAT + 4' + 100'	25'
River, stream or brook	100'	75'
Marsh Migration Zone	HAT + 4' or HAT + 250' (whichever is greater)	100% of Natural Resource Setback

*Where any provision of this Section conflicts with a state or federal law or regulation, another section of this Site Plan Ordinance, Zoning Ordinance, or another local ordinance or regulation, the more restrictive provision shall apply.

The starting point for measuring setbacks for stream and rivers shall be the normal high water line.

The starting point for measuring setbacks for vernal pools shall be the outer depression edge of the vernal pool as identified by a qualified wetland scientist.

The starting point for measuring setbacks for coastal bluffs shall be the highest point of the bluff.

E. PERMITTED ACTIVITIES

Activities that do not involve the erection or construction of any structure or impervious surface, will not alter the natural surface configuration by the addition of fill or by dredging, will not result in site alterations, and is otherwise permitted by the Zoning Ordinance are permitted as shown in the following table. Uses not specifically identified shall be prohibited.

Standards and Permitted Activity use table abbreviations are as follows:

P – Permitted by Right
 NO – Not a Permitted Activity
 NA – Not Applicable

Permitted Activity	Natural Resource Setback Area – Inside of Vegetated Buffer	Natural Resource Setback Area - Outside of Vegetated Buffer
Pesticides Permitted	NO	NO
Fertilizer Permitted	NO	P
Forest Management Activities	NO	P
Invasive Species Control	P	P
Planting/establishment of Non-invasive species	P	P
Outdoor Lighting	NO	P
Fences	NO	P
Stormwater Retention or Detention Basin	NO	NO
Stormwater Conveyance Structures	NO	P
Sewage Disposal Facilities	NO	NO
Soil Erosion and Sediment Control Measures	NO	P
Shoreline Stabilization	NO	NO
Living Shorelines	P	P
Maintenance to existing structures and improvements within existing footprint	P	P
Repair, maintenance and improvements to existing public rights-of-way, utilities and sidewalks	P	P
Installation of piers or docks, provided that all required local, state, and federal approvals have been granted	P	P
Wildlife refuges, parks and recreational uses, conservation nature trails, and open spaces as permitted or required by the Zoning Ordinance or Subdivision Regulations	P	P
Trailhead Parking	NO	P
Grading, Fill or Excavation Activities	Only for permitted activities listed above	Only for permitted activities listed above

Permitted fertilizers must be low phosphate slow release in areas of fresh water impact and slow release nitrogen in areas of coastal water impacts, both at a rate recommended from a soil test

Depending on the buffer type, revegetation of buffers must use appropriate native plants.

Invasive species control shall be completed under the guidance and approval of a Licensed Forester, ISA Certified Arborist, Registered landscape Architect, or Qualified Resource Buffer Professional.

When forest management activities are permitted, harvesting up to 20% of the total volume of each acre of trees 4.5 inches DBH or greater in any 10-year period is allowed.

Reconstruction and modifications of existing structures is permitted; however, footprint expansion must move landward to the greatest extent practical.

Fences may be constructed along the vegetated buffer line; however, they must have no footings and no ground disturbance within five feet (5') of the vegetated buffer.

F. NATURAL RESOURCE PROTECTION PLAN REQUIRED

When natural resources exist on a site proposed for development, a Natural Resource Protection Plan shall be submitted as part of the Site Plan Application and/or Subdivision Application and include the following information:

- Written narrative to accompany plans on how impacts to natural resources have been minimized through the project design to the maximum extent possible and how the resource and resource buffers will be maintained and/or improved.
- Location of protected resource(s) and wetland delineation (completed in the last five years), if applicable. The exact location of a wetlands boundary shall be determined through a field investigation by a qualified professional.
- Location of all required setbacks, buffer areas and associated easements required for access for long term maintenance and management needs.
- Location of all existing and proposed buildings, structures, streets, driveways, and other site improvements.
- Location and type of permanent resource boundary markers shall be shown on the plan.
- A note stating the limits of fertilizer application required.
- A note stating no pesticides shall be used.

G. WAIVERS – NATURAL RESOURCE PROTECTIONS

The Planning Board may review waivers to natural resource protection standards for the following:

- 1.