

Section 7-1

Natural Resource Districts/Shoreland Performance Standards (Amended 6/29/09; 10/24/16)

7.1-1. Purposes

The purposes of this Article are to further the maintenance of safe and healthful conditions; to prevent and control water pollution; to protect fish spawning grounds, aquatic life, bird and other wildlife habitat; to protect buildings and lands from flooding and accelerated erosion; to protect archaeological and historic resources; to protect commercial fishing and maritime industries; to protect freshwater and coastal wetlands; to manage building sites, placement of structures and land uses; to conserve shore cover, and visual as well as actual points of access to inland and coastal waters; to conserve natural beauty and open space; and to anticipate and respond to the impacts of development in shoreland areas.

7.1-2. a. Applicability

The provisions of this Article apply to all land areas within 250 feet, horizontal distance, of the:

- Normal high water line of any great pond or river,
- Upland edge of a coastal wetland, including all areas affected by tidal action, or
- Upland edge of a freshwater wetland, and

All land areas within 75 feet, horizontal distance, of the normal high-water line of a stream.

b. Official Shoreland Zoning Map

The areas to which this Article is applicable are divided into the following districts as shown on the Zoning Map of the City of Saco, which is a part of this Ordinance:

- a. Resource Protection
- b. Saco River Overlay District
- c. Shoreland Overlay District
- d. Coastal Development Overlay District

Resource Protection

The RP District shall include the areas shown as RP on the Official Zoning Map and the following areas when they occur within the limits of the shoreland zone as mandated by the State of Maine Mandatory Shoreland Zoning Act 38 M.R.S.A. § 435 et. seq., except that areas which are currently developed need not be included within the Resource Protection District:

1. Areas within 250 feet, horizontal distance, of the upland edge of salt marshes and salt meadows that are rated “moderate” or “high” value by Maine Department of Inland Fisheries and Wildlife (MDIF&W) as of January 1, 1973; and areas within 250 feet, horizontal distance, of the upland edge of freshwater wetlands and wetlands associated with rivers, which are rated "moderate" or "high" value waterfowl and wading bird habitat, including nesting and feeding areas, by the MDIF&W, that are depicted on a GIS data layer maintained by either MDIF&W or the DEP as of December 31, 2008; and the area within one hundred (100) feet, horizontal distance, of the upland edge of the unrated mapped freshwater wetlands along Stackpole Creek and the Nonesuch River.
2. Land areas within the 100 year flood plains adjacent to tidal waters as shown on FEMA's Flood Insurance Rate Maps or Flood Hazard Boundary Maps.
3. Areas of two or more contiguous acres with sustained slopes of 20% or greater.
4. Areas of two (2) or more contiguous acres with hydric soils and supporting wetland vegetation that are not part of a freshwater or coastal wetland as defined, and that are not surficially connected to a water body during the period of normal high water.
5. Land areas adjacent to tidal waters that are subject to severe erosion or mass movement, such as steep coastal bluffs.
6. All land areas within seventy-five (75) feet, horizontal distance, of the normal high-water line of a stream.
7. All land area within 250', horizontal distance, from the following natural features:
 - Cascade Brook Falls
 - Nonesuch River Fault
 - Saco Heath
8. All land area known as Stratton Island, Bluff Island, Ram Island and Eagle Island.
9. All land area currently being used as general public access to tidal beaches or the Saco River.
10. All land area within one hundred (100) feet, horizontal distance, of Philips Spring, Seal Rock Spring, Heath Road Spring and Jenkins Road Spring.
11. Areas designated by federal, state or municipal government as natural areas of significance to be protected from development, including:
 - Ferry Beach State Park
 - Rachel Carson Wildlife Preserve.

Saco River Overlay District

The Saco River Overlay District includes all lands subject to the jurisdiction of the Saco River Corridor Commission. The Overlay District includes all lands adjacent to the Saco River to a distance of five hundred (500) feet as measured on a horizontal plane from the mean high water line of the river or to the edge of the 100-year flood plain if the flood plain extends beyond five hundred (500) feet, up to a maximum of one thousand (1,000) feet from the mean high water line.

Shoreland Overlay District

The Shoreland Overlay District includes all lands subject to Shoreland Zoning as mandated by the State of Maine Mandatory Shoreland Zoning Act 38 M.R.S.A. § 435 et. seq. that are not included in the Resource Protection District or the Saco River Overlay District.

This Section also applies to any structure built on, over or abutting a dock, wharf or pier, or other structure extending beyond the normal high-water line of a water body or within a wetland. In addition, this Section applies to various areas listed on the State Register of Critical Areas. The provisions of this Article are in addition to the provisions of the underlying zone.

Coastal Development Overlay District

The Coastal Development Overlay District includes all lands subject to Shoreland Zoning as mandated by the State of Maine Mandatory Shoreland Zoning Act 38 M.R.S.A. § 435 et. seq. that are not included in the Resource Protection District, the Shoreland Overlay Zone or the Saco River Overlay District.

This Section also applies to any structure built on, over or abutting a dock, wharf or pier, or other structure extending beyond the normal high-water line of a water body or within a wetland. In addition, this Section applies to various areas listed on the State Register of Critical Areas. The provisions of this Article are in addition to the provisions of the underlying zone.

c. Effective Date

1. Effective Date of Ordinance and Ordinance Amendments. This Article, which was amended by the municipal legislative body on October 24, 2016, shall not be effective unless approved by the Commissioner of the Department of Environmental Protection. A certified copy of the Article as amended, attested and signed by the Municipal Clerk, shall be forwarded to the Commissioner for approval. If the Commissioner fails to act on this Article amendment within forty-five (45) days of his/her receipt of the amendment, it shall be automatically approved.

Any application for a permit submitted to the municipality within the forty-five (45) day period shall be governed by the terms of this Article as amended if the amendment is approved by the Commissioner.

7.1-3. Land Use Standards

Activities within the districts subject to these requirements shall conform with the following additional dimensional requirements.

7.1-3.1 Minimum Lot Requirements

1. The minimum lot size and lot area per dwelling unit for uses in the Resource Protection District are set forth in Table 412-1.
2. The minimum lot size and minimum lot area per dwelling unit in the Saco River Overlay District shall be the requirements of the underlying district unless a larger lot is required by the Corridor Commission's requirements.
3. The minimum lot size and minimum lot area per dwelling unit in the Shoreland Overlay District and the Coastal Development Overlay District shall be the requirements of the underlying district.
4. If more than one residential dwelling unit, principal governmental, institutional, commercial or industrial structure or use, or combination thereof, is constructed or established on a single parcel, all dimensional requirements shall be met for each additional dwelling unit, principal structure, or use.

7.1-3.2 Minimum Shorefront Requirements

1. Lots in the Resource Protection District shall have a minimum shore frontage of two hundred (200) feet.
2. Lots in the C-1 or R-1a Districts subject to the Saco River, Coastal Development Overlay or Shoreland Overlay provisions shall have a minimum shore frontage of one hundred fifty (150) feet.
3. Lots in all other districts subject to the Saco River, Coastal Development Overlay or Shoreland Overlay provisions shall have a minimum shore frontage of one hundred (100) feet.
4. If more than one residential dwelling unit, principal governmental, institutional, commercial or industrial structure or use, or combination thereof, is constructed or established on a single parcel, all dimensional requirements shall be met for each additional dwelling unit, principal structure, or use.

7.1-3.3 Minimum Lot Width

Within one hundred (100) feet, horizontal distance, of the normal high water line of a water body or upland edge of a wetland, the minimum width of any portion of any lot shall be equal to or greater than the required shore frontage for the proposed use.

7.1-3.4 Maximum Height

Principal or accessory structures and expansions of existing structures which are permitted in the Resource Protection, Saco River Overlay, Shoreland Overlay, and Coastal Development Overlay Districts, shall not exceed thirty-five (35) feet in height. This provision shall not apply to structures such as transmission towers, windmills, antennas, and similar structures having no floor area. Cupolas, domes, widow's walks or similar features shall be exempt.

7.1-4 Principal and Accessory Structures

1. All new principal and accessory structures shall be set back from the normal high-water line of freshwater bodies, the Maximum Spring High Tide Level (MHHW) of tidal waters, and the upland edge of a wetland, depending upon the district in which they are located as shown in Table 412-1.
2. The water body or wetland setback provision shall neither apply to structures which require direct access to the water as an operational necessity, such as piers, docks and retaining walls, nor to other functionally water-dependent uses.
3. The lowest floor elevation or openings of all buildings and structures including basements shall be elevated at least one foot above the elevation of the 100 year flood, the flood of record, or in the absence of these, the flood as defined by soil types identified as recent flood plain soils. Accessory structures may be placed in accordance with City Code Chapter 106. Floodplain Management, and need not meet the elevation requirements of this paragraph.
4. With the exception of the B-4 and B-5 districts, non-vegetated surfaces shall not exceed a total of twenty (20) percent of the portion of the lot located within the shoreland zone. This limitation does not apply to public boat launching facilities regardless of the district in which the facility is located.

In the B-4 and B-5 districts located adjacent to coastal wetlands, or rivers that do not flow to great ponds, non-vegetated surfaces shall not exceed a total of seventy (70) percent of the portion of the lot located within the shoreland zone. The total non-vegetated surface shall not exceed forty (40) percent of a lot or a portion thereof located within the Coastal Development Overlay District.

For the purposes of calculating lot coverage, non-vegetated surfaces include, but are not limited to the following: structures, driveways, parking areas, and other areas from which vegetation has been removed. Naturally occurring ledge and rock outcroppings

are not counted as nonvegetated surfaces when calculating lot coverage for lots of record on March 24, 1990 and in continuous existence since that date.

For the purposes of this Article, a building is a structure designed for habitation, shelter, storage, or as a gathering place that has a roof. For the purposes of this rule, the foundation is considered to be a part of the building. A porch with a roof, attached to the exterior walls of a building, is considered part of the building.

5. Notwithstanding the requirements stated above, stairways or similar structures may be allowed with a permit from the Code Enforcement Officer, to provide shoreline access in areas of steep slopes or unstable soils provided that the structure is limited to a maximum of four (4) feet in width; that the structure does not extend below or over the normal high-water line of a water body or upland edge of a wetland, (unless permitted by the Department of Environmental Protection pursuant to the Natural Resources Protection Act, 38 M.R.S.A. section 480-C); and that the applicant demonstrates that no reasonable access alternative exists on the property.
6. For principal structures, water and wetland setback measurements shall be taken from the top of a coastal bluff that has been identified on Coastal Bluff maps as being “highly unstable” or “unstable” by the Maine Geological Survey pursuant to its “Classification of Coastal Bluffs” and published on the most recent Coastal Bluff map. If the applicant and the permitting official(s) are in disagreement as to the specific location of a “highly unstable” or “unstable” bluff, or where the top of the bluff is located, the applicant may at his or her expense, employ a Maine Registered Professional Engineer, a Maine Certified Soil Scientist, a Maine State Geologist, or other qualified individual to make a determination. If agreement is still not reached, the applicant may appeal the matter to the Board of Appeals.
7. On a non-conforming lot of record on which only a residential structure exists, and on which it is not possible to place an accessory structure meeting the required setbacks whether from water body, tributary stream or wetlands, the Code Enforcement Officer may issue a permit to place a single accessory structure not to exceed eighty (80) square feet in area nor eight (8) feet in height, with no utilities, for the storage of yard tools and similar equipment. The accessory structure shall be located as far from the shoreline or tributary stream or wetland as practical and shall meet all other applicable standards, including lot coverage and vegetation clearing standards. The accessory structure shall not be located closer to the shoreline, tributary stream or wetland than the principal structure.
8. Retaining walls that are not necessary for erosion control shall meet the structure setback requirement, except for low retaining walls and associated fill, provided each of the following conditions are met:
 - a) The site has been previously altered and an effective vegetated buffer does not exist;
 - b) The wall is at least 25 feet, horizontal distance, from the normal high-water line of a water body, tributary stream, or upland edge of a wetland;

- c) The site where the retaining wall will be constructed is legally existing lawn or is a site eroding from lack of naturally occurring vegetation, and which cannot be stabilized with vegetative plantings;
- d) The total height of the wall, in the aggregate, is not more than 24 inches;
- e) Location is outside the 100-year floodplain on rivers, streams, coastal wetlands, and tributary streams, as designated on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps or Flood Hazard Boundary Maps;
- f) The area behind the wall is revegetated with grass, shrubs, trees, or a combination thereof, and no further structural development will occur within the setback area, including patios and decks; and
- g) A vegetated buffer area is established within 25 feet, horizontal distance, of the normal high-water line of a water body, tributary stream, or upland edge of a wetland when a natural buffer area does not exist. The buffer area must meet the following characteristics:
 - (i) The buffer must include shrubs and other woody and herbaceous vegetation. Where natural ground cover is lacking, leaf or bark mulch or an equivalent alternative acceptable to the Code Enforcement Officer shall be utilized;
 - (ii) Plantings, native species only, shall be installed to retard erosion and provide for effective infiltration of stormwater runoff;
 - (iii) A minimum buffer width of 15 feet, horizontal distance, is required, measured perpendicular to the normal high-water line or upland edge of a wetland
 - (iv) A footpath no greater than four feet in width may traverse the buffer at a right angle.
- (h) All permits required by the Maine DEP and/or other regional, state or federal agencies shall have been issued prior to the start of work.

Piers, Docks, Wharves, And Other Marine Structures Extending Over Or Below The Normal High-Water Line Of A Water Body, Or Within A Wetland

1. PERFORMANCE STANDARDS

All applications for temporary piers, docks, wharves and other marine structures shall be reviewed by the Code Enforcement Officer, and all applications for permanent piers, docks, wharves and other marine structures shall be reviewed by the Planning Board. All such applications shall be reviewed for conformance with the following standards listed below.

If the reviewing authority is unable to reach a decision using the criteria below due to either inconclusive or conflicting information, the reviewing authority will require the applicant to submit an environmental impact analysis assessing the proposal's impact on natural areas, including impacts of the proposed structure in conjunction with other adjacent or abutting structures.

The reviewing authority may also require that the proposal be modified to ensure conformance with the standards set forth below. Mitigation measures may include, but are not limited to, changes in the design and construction of the marine structure, or changes in magnitude, duration, and location of activities carried out at the marine structure.

An application shall be approved by the reviewing authority if there is a finding that:

- a) No more than one pier, dock, wharf or similar structure extending or located below the normal high-water line of a water body or within a wetland is allowed on a single lot; except that when a single lot contains at least twice the minimum shore frontage as specified in Section 7.1-3.2, a second structure may be allowed and may remain as long as the lot is not further divided.
- b) Access from the shore shall be developed on soils appropriate for such use, as determined through consultation with the local Soil and Water Conservation District Office. Whenever possible, access from the shore to the marine structure shall be placed on bedrock. Measures shall be taken to minimize soil erosion both during and after construction.
- c) The proposed location of the marine structure shall not unreasonably interfere with access to existing marine structures or points of public access, nor shall it unreasonably interfere with existing developed or natural beach areas.
- d) The marine structure shall be designed, sited, and constructed to mitigate unreasonable adverse impacts on significant wildlife habitats or unique natural areas including, but not limited to: fin fish and shellfish fisheries, salt marshes, eel grass beds, shorebird feeding and nesting habitats, critical fish spawning and nursery areas, etc.
- e) Unreasonable interference with the natural flow of any surface or subsurface waters, or impedance of the flow of the current of any river or channel shall be minimized during the construction and subsequent use of the marine structure.
- f) The marine structure shall be designed, sited, and constructed so as not to encroach upon Federally designated navigation channels or mooring areas or otherwise obstruct by any means whatsoever the free use of piers, docks, and other common landing places.
- g) The marine structure shall be no larger than necessary to accomplish the purposes for which it is designed, notwithstanding the dimensional limits listed below. Its size and construction shall not change the intensity of the adjoining land use, and by no means shall exceed a total distance of more than 1/3 the width of the water body, when proposed for coastal or inland waterways. The applicant may request a variance from the dimensional requirements due to the additional requirement of handicap access or unusual wind or wave conditions.

	Max. Width	Max. Length
Private Piers	Six (6) ft.	100 ft.*
Commercial Piers	Twelve (12) ft.	100 ft.*
Ramps	Four (4) ft.	As appropriate
Docks, Floats	200 sq. ft	

* *landward of the mean low water line*

- h) New subdivisions that propose docks as part of the subdivision, shall provide a community dock in lieu of the development of docks on individual lots. The applicant may request a variance for additional community docks provided a demonstrated need can be shown for the additional facilities.
- i) No new structure shall be built on, over or abutting a pier, wharf, dock or other structure extending beyond the normal high-water line of a water body or within a wetland unless the structure requires direct access to the water as an operational necessity.
- j) No existing structures built on, over or abutting a pier, dock, wharf or other structure extending beyond the normal high-water line of a water body or within a wetland shall be converted to residential dwelling units in any district.
- k) Except in business districts including the Marine Business and Residential District, structures built on, over or abutting a pier, wharf, dock or other structures extending beyond the normal high-water line of a water body or within a wetland shall not exceed twenty (20) feet in height above the pier, wharf, dock or other structure.
- l) New permanent piers and docks on non-tidal waters shall not be permitted unless it is clearly demonstrated to the Planning Board that a temporary pier or dock is not feasible, and a permit has been obtained from the Department of Environmental Protection, pursuant to the Natural Resources Protection Act.
- m) Vegetation may be removed in excess of the standards in Section 7.1-13 of this ordinance in order to conduct shoreline stabilization of an eroding shoreline, provided that a permit is obtained from the Planning Board. Construction equipment must access the shoreline by barge when feasible as determined by the Planning Board.
 - (i) When necessary, the removal of trees and other vegetation to allow for construction equipment access to the stabilization site via land must be limited to no more than 12 feet in width. When the stabilization project is complete the construction equipment accessway must be restored.
 - (ii) Revegetation must occur in accordance with Section 7.1-13.
 - (iii) A permit pursuant to the Natural Resource Protection Act is required from the Department of Environmental Protection for Shoreline Stabilization activities.

- n) A deck over a river may be exempted from the shoreland setback requirements if it is part of a downtown revitalization project that is defined in a project plan approved by the legislative body of the municipality, and may include the revitalization of structures formerly used as mills that do not meet the structure setback requirements, if the deck meets the following requirements:
 - (a) The total deck area attached to the structure does not exceed 700 square feet;
 - (b) The deck is cantilevered over a segment of a river that is located within the boundaries of the downtown revitalization project;
 - (c) The deck is attached to or accessory to an allowed commercial use in a structure that was constructed prior to 1971 and is located within the downtown revitalization project;
 - (d) The construction of the deck complies with all other applicable standards, except the shoreline setback requirements in Section 7.1-4; and
 - (e) The construction of the deck complies with all other state and federal laws. New permanent structures, and expansions thereof, projecting into or over water bodies shall require a permit from the Department of Environmental Protection pursuant to the Natural Resources Protection Act, 38 M.R.S.A. section 480-C. Permits may also be required from the Army Corps of Engineers if located in navigable waters.

2. **APPLICATION SUBMISSION REQUIREMENTS**

In addition to the information listed in Article XI of this Ordinance, Site Plan Review, all applications shall contain the following information:

- a) A photocopy of relevant locational maps indicating the site of the project;
- b) Site plan, plan and section drawings (to scale) of the proposed structure, including an indication on separate scale drawings of any shoreline stabilization or other modification required by the project;
- c) A complete list of materials to be used, including a list of all intended coatings (paint, etc) for all proposed marine structures.

7.1- 6. **Campgrounds**

Campgrounds shall conform to the minimum requirements imposed under State Licensing procedures, Section 703 of this Ordinance, and the following:

- 1. Campgrounds shall contain a minimum of five thousand (5,000) square feet of land, not including roads and driveways, for each site. Land supporting wetland vegetation, and land below the normal high-water line of a water body shall not be included in calculating land area per site.
- 2. The areas intended for placement of a recreational vehicle, tent or shelter, and utility and service buildings shall be set back a minimum of seventy-five (75) feet, horizontal

distance, from the normal high-water line of water bodies, tributary streams, or the upland edge of a wetland.

7.1- 7. Parking Areas

1. In addition to the requirements of Section 708 of this Ordinance, parking areas shall meet the shoreline and tributary stream setback requirements for structures for the district in which such areas are located, except that in the Marine Business and Residential District parking areas shall be set back at least twenty-five (25) feet from the normal high-water line or the upland edge of a wetland. The setback requirement for parking areas serving public boat launching facilities in other districts may be reduced to no less than fifty (50) feet from the normal high-water line or upland edge of a wetland if the Planning Board finds that no other reasonable alternative exists.
2. Parking areas shall be designed to prevent stormwater runoff from flowing directly into a water body, and where feasible, to retain all runoff on-site.
3. All parking spaces shall be nine (9) feet wide and eighteen (18) feet long, except that parking spaces for a vehicle and boat trailer shall be forty (40) feet long.

7.1-9. Roads And Driveways

The following standards shall apply to the construction of roads and/or driveways and drainage systems, culverts and other related features.

1. Roads and driveways shall be set back at least seventy-five (75) feet, horizontal distance, from the normal high-water line of water bodies, tributary streams, or the upland edge of a wetland unless no reasonable alternative exists as determined by the Planning Board. If no other reasonable alternative exists, the road and/or driveway setback requirement shall be no less than fifty (50) feet, horizontal distance, upon clear showing by the applicant that appropriate techniques will be used to prevent sedimentation of the water body. Such techniques may include, but are not limited to, the installation of settling basins, and/or the effective use of additional ditch relief culverts and turnouts placed so as to avoid sedimentation of the water body, tributary stream, or wetland.
On slopes of greater than twenty (20) percent the road and/or driveway setback shall be increased by ten (10) feet, horizontal distance, for each five (5) percent increase in slope above twenty (20) percent.
This paragraph shall neither apply to approaches to water crossings nor to roads or driveways that provide access to permitted structures, and facilities located nearer to the shoreline due to an operational necessity.
2. Existing public roads may be expanded within the legal road right-of-way regardless of its setback from a water body, tributary stream or wetland.
3. New roads and driveways are prohibited in a Resource Protection District except to provide access to permitted uses within the district, or as approved by the Planning Board upon a finding that no reasonable alternative route or location is available outside the district, in which case the road and/or driveway shall be set back as far as practicable

from the normal high-water line of a water body, tributary stream, or upland edge of a wetland.

4. Road and driveway banks shall be no steeper than a slope of two (2) horizontal to one (1) vertical, and shall be graded and stabilized in accordance with the provisions for erosion and sedimentation control contained in Section 7.1-13.
5. Road and driveway grades shall be no greater than ten (10) percent except for short segments of less than two hundred (200) feet.
6. In order to prevent road and driveway surface drainage from directly entering water bodies, tributary streams or wetlands, roads and driveways shall be designed, constructed, and maintained to empty onto an unscarified buffer strip at least (50) feet plus two times the average slope, in width between the outflow point of the ditch or culvert and the normal high-water line of a water body, tributary stream, or upland edge of a wetland. Surface drainage which is directed to an unscarified buffer strip shall be diffused or spread out to promote infiltration of the runoff and to minimize channelized flow of the drainage through the buffer strip.
7. Ditch relief (cross drainage) culverts, drainage dips and water turnouts shall be installed in a manner effective in directing drainage onto unscarified buffer strips before the flow gains sufficient volume or head to erode the road, driveway or ditch. To accomplish this, the following shall apply:

- a. Ditch relief culverts, drainage dips and associated water turnouts shall be spaced along the road or driveway at intervals no greater than indicated in the following table:

Grade (Percent)	Spacing (Feet)
0-2	250
3-5	200-135
6-10	100-80
11-15	80-60
16-20	60-45
21+	40

- b. Drainage dips may be used in place of ditch relief culverts only where the grade is ten (10) percent or less.
- c. On sections having slopes greater than ten (10) percent, ditch relief culverts shall be placed at approximately a thirty (30) degree angle down slope from a line perpendicular to the centerline of the road or driveway.

- d. Ditch relief culverts shall be sufficiently sized and properly installed in order to allow for effective functioning, and their inlet and outlet ends shall be established with appropriate materials.
8. Ditches, culverts, bridges, dips, water turnouts and other storm water runoff control installations associated with roads and driveways shall be maintained on a regular basis to assure effective functioning.

7.1-10 Mineral Exploration and Extraction

Mineral exploration to determine the nature or extent of mineral resources shall be accomplished by hand sampling, test boring, or other methods which create minimal disturbance of less than one hundred (100) square feet of ground surface. A permit from the Code Enforcement Officer shall be required for mineral exploration which exceeds the above limitation. All excavations, including test pits and holes shall be immediately capped, filled or secured by other equally effective measures, so as to restore disturbed areas and to protect the public health and safety.

Mineral extraction may be permitted under the following conditions:

1. A reclamation plan shall be filed with, and approved by the Planning Board before a permit is granted. Such plan shall describe in detail procedures to be undertaken to fulfill the requirements of paragraph 4 below.
2. No part of any extraction operation, including drainage and runoff control features shall be permitted within seventy-five (75) feet, horizontal distance, of the normal high-water line of any water body, tributary stream, or the upland edge of a wetland. Extraction operations shall not be permitted within one hundred and fifty (150) feet, horizontal distance, of any property line.
3. Gravel pits within the shoreland zone shall be set back as far as practicable from the normal high-water line and no less than seventy-five (75) feet and screened from the river by existing or planted landscaping vegetation.
4. Within twelve (12) months following the completion of extraction operations at any extraction site, which operations shall be deemed complete when less than one hundred (100) cubic yards of materials are removed in any consecutive twelve (12) month period, ground levels and grades shall be established in accordance with the following:
 - a. All debris, stumps, and similar material shall be removed for disposal in an approved location, or shall be buried on-site. Only materials generated on-site may be buried or covered on-site.
 - b. The final graded slope shall be two to one (2:1) slope or flatter.
 - c. Top soil or loam shall be retained to cover all disturbed land areas, which shall be reseeded and stabilized with vegetation native to the area.

Additional topsoil or loam shall be obtained from off-site sources if necessary to complete the stabilization project.

5. In keeping with the purposes of this Ordinance, the Planning Board may impose such conditions as are necessary to minimize the adverse impacts associated with mineral extraction operations on surrounding uses and resources.

7.1-11. Agriculture

1. All spreading of manure shall be accomplished in conformance with the *Manure Utilization Guidelines* published by the former Maine Department of Agriculture on November 1, 2001, and the Nutrient Management Law (7 M.R.S.A. sections 4201-4209).
2. Manure shall not be stored or stockpiled within three hundred (300) feet horizontal distance, of a water body, tributary stream, or wetland. All manure storage areas within the shoreland zone must be constructed or modified such that the facility produces no discharge of effluent or contaminated storm water.
3. Agricultural activities involving tillage of soil greater than forty thousand (40,000) square feet in surface area, within the shoreland zone shall require a Conservation Plan to be filed with the Planning Board. Non-conformance with the provisions of said plan shall be considered to be a violation of this Ordinance.
4. There shall be no new tilling of soil within seventy-five (75) feet, horizontal distance, from water bodies; nor within twenty-five (25) feet, horizontal distance, of tributary streams, and wetlands. Operations in existence on the effective date of this ordinance and not in conformance with this provision may be maintained, provided that such tilling is conducted in accordance with a Soil and Water Conservation Plan.
5. Newly established livestock grazing areas shall not be permitted within seventy-five (75) feet, horizontal distance, of water bodies, nor within twenty-five (25) feet, horizontal distance of tributary streams, and wetlands. Livestock grazing associated with on-going farm activities, and which are not in conformance with the above setback provisions may continue, provided that such grazing is conducted in accordance with a Conservation Plan that has been filed with the planning board.

7.1-12. Reserved.

7.1-13. Clearing or Removal of Vegetation for Activities Other Than Timber Harvesting

1. Within a Resource Protection District, the cutting or removal of vegetation shall be limited to that which is necessary for uses expressly authorized in that district and shall be demonstrated on a lot clearing plan to be presented to the CEO or Planning Board as appropriate.

2. In areas that are not in RP, within seventy-five (75) feet, horizontal distance, from any water body, tributary stream, or the upland edge of a wetland, a buffer strip of vegetation shall be preserved as follows:

- a. There shall be no cleared opening greater than two hundred fifty (250) square feet in the forest canopy (or other existing woody vegetation if a forested canopy is not present) as measured from the outer limits of the tree or shrub crown. However, a single footpath not to exceed six (6) feet in width as measured between tree trunks and/or shrub stems is allowed for accessing the shoreline provided that a cleared line of sight to the water through the buffer strip is not created.
- b. Selective cutting of trees within the buffer strip is allowed provided that a well distributed stand of trees and other natural vegetation is maintained. For the purposes of this section, a "well-distributed stand of trees" adjacent to water bodies, tributary streams, and wetlands, is defined as maintaining a minimum rating score of 16 or more per 25-foot by 50-foot rectangular area (1250 square feet) as determined by the following rating system.

Diameter of Tree at 4-1/2 feet Above Ground Level (inches)	Points
2 - <4 in.	1
4 - <8 in.	2
8 - <12 in.	4
12 in. or greater	8

- c. For the purposes of Section 7.1-13.2.b “other natural vegetation” is defined as retaining existing vegetation under three (3) feet in height and other ground cover and retaining at least five (5) saplings less than two (2) inches in diameter at four and one-half (4 ½) feet above ground level for each 25-foot by 50-foot rectangular area. If five (5) saplings do not exist, no woody stems less than two (2) inches in diameter can be removed until 5 saplings have been recruited into the plot.

Notwithstanding the above provisions, no more than forty (40) percent of the total volume of trees four (4) inches or more in diameter, measured at 4 1/2 feet above ground level may be removed in any ten (10) year period.

- d. Pruning of tree branches, on the bottom 1/3 of the tree is allowed.
- e. In order to maintain a buffer strip of vegetation, when the removal of storm-damaged, dead or hazard trees results in the creation of cleared openings, these openings shall be replanted with native tree species unless existing new tree growth is present.
- f. In order to protect water quality and wildlife habitat, existing vegetation under three (3) feet in height and other ground cover, including leaf litter and the forest

duff layer, shall not be cut, covered, or removed, except to provide for a footpath or other permitted uses as described above.

- g. In order to maintain the vegetation in the shoreline buffer, clearing or removal of vegetation for allowed activities, including associated construction and related equipment operation, within or outside the shoreline buffer, must comply with the requirements of Section 7.1-13.

The provisions contained in paragraph 2 above shall not apply to those portions of public recreational facilities adjacent to public swimming areas. Cleared areas, however, shall be limited to the minimum area necessary.

- 3. At distances greater than seventy-five (75) feet, horizontal distance, from the normal high-water line of any water body, tributary stream, or the upland edge of a wetland, there shall be allowed on any lot, in any ten (10) year period, selective cutting of not more than forty (40) percent of the volume of trees four (4) inches or more in diameter, measured 4 1/2 feet above ground level. Tree removal in conjunction with the development of permitted uses shall be included in the forty (40) percent calculation. For the purposes of these standards, volume may be considered to be equivalent to basal area.

In no event shall cleared openings for any purpose, including but not limited to, principal and accessory structures, driveways, lawns and sewage disposal areas, exceed in the aggregate, 25% of the lot area within the shoreland zone or ten thousand (10,000) square feet, whichever is greater, including land previously cleared. This provision applies to the portion of a lot within the shoreland zone, including the buffer area, but shall not apply to industrial or business districts including the Marine Business and Residential District (B-5).

- 4. Legally existing nonconforming cleared openings may be maintained, but shall not be enlarged, except as allowed by this Section.
- 5. Fields and other cleared openings which have reverted to primarily shrubs, trees, or other woody vegetation shall be regulated under the provisions of this section.

7.1-14. Hazard Trees, Storm-Damaged Trees, and Dead Tree Removal.

- (1) Hazard trees in the shoreland zone may be removed without a permit after consultation with the Code Enforcement Officer if the following requirements are met:
 - (a) Within the shoreline buffer, if the removal of a hazard tree results in a cleared opening in the tree canopy greater than two hundred and fifty (250) square feet, replacement with native tree species is required, unless there is new tree growth already present. New tree growth must be as near as practicable to where the hazard tree was removed and be at least two (2) inches in diameter, measured at four and one half (4.5) feet above the ground level. If new growth is not present,

then replacement trees shall consist of native species and be at least four (4) feet in height, and be no less than two (2) inches in diameter. Stumps may not be removed.

- (b) Outside of the shoreline buffer, when the removal of hazard trees exceeds forty (40) percent of the volume of trees four (4) inches or more in diameter, measured at four and one half (4.5) feet above ground level in any ten (10) year period, and/or results in cleared openings exceeding twenty-five (25) percent of the lot area within the shoreland zone, or ten thousand (10,000) square feet, whichever is greater, replacement with native tree species is required, unless there is new tree growth already present. New tree growth must be as near as practicable to where the hazard tree was removed and be at least two (2) inches in diameter, measured at four and one half (4.5) feet above the ground level. If new growth is not present, then replacement trees shall consist of native species and be at least two (2) inches in diameter, measured at four and one half (4.5) feet above the ground level.
 - (c) The removal of standing dead trees, resulting from natural causes, is permissible without the need for replanting or a permit, as long as the removal does not result in the creation of new lawn areas, or other permanently cleared areas, and stumps are not removed. For the purposes of this provision dead trees are those trees that contain no foliage during the growing season.
 - (d) The Code Enforcement Officer may require the property owner to submit an evaluation from a licensed forester or arborist before any hazard tree can be removed within the shoreland zone.
 - (e) The Code Enforcement Officer may require more than a one-for-one replacement for hazard trees removed that exceed eight (8) inches in diameter measured at four and one half (4.5) feet above the ground level.
- (2) Storm-damaged trees in the shoreland zone may be removed without a permit after consultation with the Code Enforcement Officer if the following requirements are met:
- (a) Within the shoreline buffer, when the removal of storm-damaged trees results in a cleared opening in the tree canopy greater than two hundred and fifty (250) square feet, replanting is not required, but the area shall be required to naturally revegetate, and the following requirements must be met:
 - (i) The area from which a storm-damaged tree is removed does not result in new lawn areas, or other permanently cleared areas;
 - (ii) Stumps from the storm-damaged trees may not be removed;

- (iii) Limbs damaged from a storm event may be pruned even if they extend beyond the bottom one-third (1/3) of the tree; and
 - (iv) If after one growing season, no natural regeneration or regrowth is present, replanting of native tree seedlings or saplings is required at a density of one seedling per every eighty (80) square feet of lost canopy.
- (b) Outside of the shoreline buffer, if the removal of storm damaged trees exceeds 40% of the volume of trees four (4) inches or more in diameter, measured at four and one half (4.5) feet above the ground level in any ten (10) year period, or results, in the aggregate, in cleared openings exceeding 25% of the lot area within the shoreland zone or ten thousand (10,000) square feet, whichever is greater, and no natural regeneration occurs within one growing season, then native tree seedlings or saplings shall be replanted on a one-for-one basis.

7.1-15. Exemptions to Clearing and Vegetation Removal Requirements

The following activities are exempt from the clearing and vegetation removal standards set forth in Section 7.1-13 provided that all other applicable requirements of this chapter are complied with, and the removal of vegetation is limited to that which is necessary:

- (1) The removal of vegetation that occurs at least once every two (2) years for the maintenance of legally existing areas that do not comply with the vegetation standards in this chapter, such as but not limited to cleared openings in the canopy or fields. Such areas shall not be enlarged, except as allowed by this section. If any of these areas, due to lack of removal of vegetation every two (2) years, reverts back to primarily woody vegetation, the requirements of Section 7.1-13 apply;
- (2) The removal of vegetation from the location of allowed structures or allowed uses, when the shoreline setback requirements of Table 412-1 are not applicable;
- (3) The removal of vegetation from the location of public swimming areas associated with an allowed public recreational facility;
- (4) The removal of vegetation associated with allowed agricultural uses, provided best management practices are utilized, and provided all requirements of section 7.1-11 are complied with;
- (5) The removal of vegetation associated with brownfields or voluntary response action program (VRAP) projects provided that the removal of vegetation is necessary for remediation activities to clean-up contamination on a site in a general development district, commercial fisheries and maritime activities district or other equivalent zoning district approved by the Commissioner that is part of a state or federal brownfields program or a voluntary response action program pursuant 38 M.R.S.A section 343-E, and that is located along:

- (a) A coastal wetland; or
 - (b) A river that does not flow to a great pond classified as GPA pursuant to 38 M.R.S.A section 465-A.
- (6) The removal of non-native invasive vegetation species, provided the following minimum requirements are met:
- (a) If removal of vegetation occurs via wheeled or tracked motorized equipment, the wheeled or tracked motorized equipment is operated and stored at least twenty-five (25) feet, horizontal distance, from the shoreline, except that wheeled or tracked equipment may be operated or stored on existing structural surfaces, such as pavement or gravel;
 - (b) Removal of vegetation within twenty-five (25) feet, horizontal distance, from the shoreline occurs via hand tools; and
 - (c) If applicable clearing and vegetation removal standards are exceeded due to the removal of non-native invasive species vegetation, the area shall be revegetated with native species to achieve compliance.
- (7) The removal of vegetation associated with emergency response activities conducted by the Department, the U.S. Environmental Protection Agency, the U.S. Coast Guard, and their agents.

7.1-16. Revegetation Requirements.

When revegetation is required in response to violations of the vegetation standards set forth in Section 7.1-13 to address the removal of non- native invasive species of vegetation, or as a mechanism to allow for development that may otherwise not be permissible due to the vegetation standards, including removal of vegetation in conjunction with a shoreline stabilization project, the revegetation must comply with the following requirements.

- (1) The property owner must submit a revegetation plan, prepared with and signed by a qualified professional, that describes revegetation activities and maintenance. The plan must include a scaled site plan, depicting where vegetation was, or is to be removed, where existing vegetation is to remain, and where vegetation is to be planted, including a list of all vegetation to be planted.
- (2) Revegetation must occur along the same segment of shoreline and in the same area where vegetation was removed and at a density comparable to the pre-existing vegetation, except where a shoreline stabilization activity does not allow revegetation to occur in the same area and at a density comparable to the pre-existing vegetation, in which case revegetation must occur along the same segment of shoreline and as close as possible to the area where vegetation was removed:

- (3) If part of a permitted activity, revegetation shall occur before the expiration of the permit. If the activity or revegetation is not completed before the expiration of the permit, a new revegetation plan shall be submitted with any renewal or new permit application.
- (4) Revegetation activities must meet the following requirements for trees and saplings:
 - (a) All trees and saplings removed must be replaced with native noninvasive species;
 - (b) Replacement vegetation must at a minimum consist of saplings;
 - (c) If more than three (3) trees or saplings are planted, then at least three (3) different species shall be used;
 - (d) No one species shall make up 50% or more of the number of trees and saplings planted;
 - (e) If revegetation is required for a shoreline stabilization project, and it is not possible to plant trees and saplings in the same area where trees or saplings were removed, then trees or sapling must be planted in a location that effectively reestablishes the screening between the shoreline and structures; and
 - (f) A survival rate of at least eighty (80) percent of planted trees or saplings is required for a minimum five (5) years period.
- (5) Revegetation activities must meet the following requirements for woody vegetation and other vegetation under three (3) feet in height:
 - (a) All woody vegetation and vegetation under three (3) feet in height must be replaced with native noninvasive species of woody vegetation and vegetation under three (3) feet in height as applicable;
 - (b) Woody vegetation and vegetation under three (3) feet in height shall be planted in quantities and variety sufficient to prevent erosion and provide for effective infiltration of stormwater;
 - (c) If more than three (3) woody vegetation plants are to be planted, then at least three (3) different species shall be planted;
 - (d) No one species shall make up 50% or more of the number of planted woody vegetation plants; and
 - (e) Survival of planted woody vegetation and vegetation under three feet in height must be sufficient to remain in compliance with the standards contained within this chapter for minimum of five (5) years

- (6) Revegetation activities must meet the following requirements for ground vegetation and ground cover:
- (a) All ground vegetation and ground cover removed must be replaced with native herbaceous vegetation, in quantities and variety sufficient to prevent erosion and provide for effective infiltration of stormwater;
 - (b) Where necessary due to a lack of sufficient ground cover, an area must be supplemented with a minimum four (4) inch depth of leaf mulch and/or bark mulch to prevent erosion and provide for effective infiltration of stormwater; and
 - (c) Survival and functionality of ground vegetation and ground cover must be sufficient to remain in compliance with the standards contained within this chapter for minimum of five (5) years.

7.1-17. Erosion and Sedimentation Control

1. All activities which involve filling, grading, excavation or other similar activities which result in unstabilized soil conditions and which require a permit shall also require a written soil erosion and sedimentation control plan. The plan shall be submitted to the permitting authority for approval and shall include, where applicable, provisions for:
 - a. Mulching and re-vegetation of disturbed soil.
 - b. Temporary runoff control features such as hay bales, silt fencing or diversion ditches.
 - c. Permanent stabilization structures such as retaining walls or riprap.
2. In order to create the least potential for erosion, development shall be designed to fit with the topography and soils of the site. Areas of steep slopes where high cuts and fills may be required shall be avoided wherever possible, and natural contours shall be followed as closely as possible.
3. Erosion and sedimentation control measures shall apply to all aspects of a proposed project involving land disturbance, and shall be in operation during all stages of the activity. The amount of exposed soil at every phase of construction shall be minimized to reduce the potential for erosion.
4. Any exposed ground area shall be temporarily or permanently stabilized within one (1) week from the time it was last actively worked, by use of riprap, sod, seed, and mulch, or other effective measures. In all cases permanent stabilization shall occur within nine (9) months of the initial date of exposure. In addition:
 - a. Where mulch is used, it shall be applied at a rate of at least one (1) bale per five hundred (500) square feet and shall be maintained until a catch of vegetation is established.

- b. Anchoring the mulch with netting, peg and twine or other suitable method may be required to maintain the mulch cover.
 - c. Additional measures shall be taken where necessary in order to avoid siltation into the water. Such measures may include the use of staked hay bales and/or silt fences.
5. Natural and man-made drainage ways and drainage outlets shall be protected from erosion from water flowing through them. Drainage ways shall be designed and constructed in order to carry water from twenty-five (25) year storm or greater, and shall be stabilized with vegetation or lined with riprap. (Amended 4/3/02)

7.1-18. Septic Waste Disposal

All subsurface sewage disposal systems shall be installed in conformance with the State of Maine Subsurface Wastewater Disposal Rules, and the following:

- a) Clearing or removal of woody vegetation necessary to site a new system and any associated fill extension, shall not extend closer than seventy-five (75) feet, horizontal distance, from the normal high water line of a water body or the upland edge of a wetland;
- b) A holding tank is not allowed for a first-time residential use in the shoreland zone.

7.1-19 Soils

All land uses shall be located on soils in or upon which the proposed uses or structures can be established or maintained without causing adverse environmental impacts, including severe erosion, mass soil movement, improper drainage, and water pollution, whether during or after construction. Proposes uses requiring subsurface wastewater disposal, and commercial or industrial development and other similar intensive land uses, shall require a soils report based on an on-site investigation and be prepared by state-certified professionals. Certified persons may include Maine Certified Soils Scientists, Maine Registered Professional Engineers, Maine State Certified Geologists and other persons who have training and experience in the recognition and evaluation of soil properties. The report shall be based upon the analysis of the characteristics of the soil and surrounding land and water areas, maximum ground water elevation, presence of ledge, drainage conditions, and other pertinent data which the evaluator deems appropriate. The soils report shall include recommendations for a proposed use to counteract soil limitations where they exist.

7.1-20 Water Quality

No activity shall deposit on or into the ground or discharge to the water of the State any pollutant that, by itself or in combination with other activities or substances, will impair designated uses of the water classification of the water body, tributary stream or wetland.

7.1-21 Archaeological Site

Any proposed land use activity involving structural development or soil disturbance on or adjacent to sites listed on, or eligible to be listed on the National Register of Historic Places, as determined by the permitting authority, shall be submitted by the applicant to the Maine Historic Preservation Commission for review and comment, at least twenty (20) days prior to action being taken by the permitting authority. The permitting authority shall consider comments received from the Authority prior to rendering a decision on the application.