

Chapter 305: NATURAL RESOURCES PROTECTION ACT

PERMIT BY RULE



Section 8: Shoreline stabilization

NOTE: This Section-by Section version of Permit By Rule is re-formatted to increase usability and includes additional guidance, annotations, and addendum. The entire rule, as published, is available below.

Official Chapter 305 Rule (all sections):

<http://www.maine.gov/sos/cec/rules/06/096/096c305.docx>

AMENDED:

May 25, 2005 – filing 2005-174 December 5, 2006 – filing 2006-496

February 25, 2008 – Section 20 only, filing 2008-88

July 15, 2009 – filing 2009-339

July 30, 2011 – Section 16 only, filing 2011-211 (Final adoption, major substantive)





June 8, 2012 – filing 2012-146 (Final adoption, major substantive)

December 27, 2022 – Section 16-A only, filing 2022-256

NRPA Permit By Rule Section 8

A. APPLICABILITY



- 1** This section applies to the establishment of vegetation adjacent to any protected natural resource and the installation of riprap along the shoreline of a great pond, freshwater wetland with over 20,000 square feet of open water, stream or brook.
- 2** This section applies only to areas where erosion exists and vegetation is not present, as demonstrated by photographs submitted with the notification form.
- 3**  This section does not apply to riprap on any river as defined by [38 M.R.S.A. Section 436-A\(11\)](#), the Mandatory Shoreland Zoning Act (information is available at the Town Office).
- 4**  This section does not apply to a riprap project that affects more than 100 feet of shoreline.
- 5**  This section does not apply to areas within any portion of a coastal sand dune system even if portions of these systems extend into the coastal wetland.
- 6**  This section does not apply to an activity that will not conform to the local shoreland zoning ordinance.
NOTE :Contact the local Code Enforcement Officer for information on local shoreland zoning requirements.

B. SUBMISSIONS

Submissions for all sections:



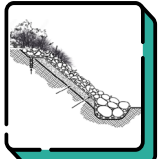


PBR Notification Form



Location Map

Submissions for Section 8:

- 1**  The applicant is required to submit photographs of the entire shoreline area where this activity is proposed.
- 2**  Photographs showing the finished activity must be submitted within 20 days of the activity's completion. The photographs must be sent with a copy of the notification form or labeled with the applicant's name and the town in which the activity took place.
- 3**  A scaled drawing, including a cross section, of the proposed riprap installation. The drawing must clearly depict the extent of riprap proposed to be installed, such as the length along shore and height above the normal high water line.
It is not necessary to have the plan professionally prepared. However, it must be legible and drawn to a scale that provides a clear representation
- 4** Professional design plans for riprap on streams and brooks when required pursuant to paragraph C(12) of this section.

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C. STANDARDS

1

Riprap may be utilized only where eroded slopes exceed 3 horizontal feet to 1 vertical foot (approximately 33% slope), or where riprap is used to stabilize an existing stormwater outfall. Where eroded slopes are shallower than 3 horizontal to 1 vertical, vegetation must be used to control erosion.

2

Riprap installed on the shoreline of a great pond or open water wetland may not extend higher than 2 feet above the normal high water line.

Riprap installed on a river, stream or brook may not extend higher than 2 feet above the normal high water line, or to the elevation of the 100-year flood where mapped by the Federal Emergency Management Agency, whichever is higher.

3

The following measures must be taken to prevent erosion of soil or fill material from disturbed areas into the resource:

- Staked hay bales or silt fence must be properly installed between the area of soil disturbance and the resource before the activity begins;
- Hay bales or silt fence barriers must be maintained until the disturbed area is permanently stabilized;
- Within 7 calendar days following the completion of any soil disturbance, and prior to any storm event, mulch must be spread on any exposed soils;
- All disturbed soils must be permanently stabilized; and
- Within 30 days of final stabilization of the site, any silt fence must be removed.

4

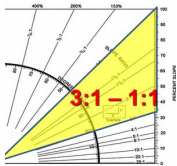
New soil may be brought to the site and soil amendments, such as fertilizer or lime, may be used to increase soil fertility provided:

- Slopes do not exceed 3 horizontal to 1 vertical;
- Existing vegetation is not permanently removed;
- Water bars or diversions are used to divert stormwater runoff away from the loam;
- Depth of new soil is less than 2 inches;
- The amendment is worked into the underlying soils;
- Disturbed areas are immediately mulched and seeded; and
- Final vegetation consists of native trees and shrubs, or matches existing vegetation immediately adjacent to the treated area.

5

Rocks used for riprap may not be obtained from the shoreline (because they help prevent erosion) or below the normal high water line (because they provide habitat for aquatic life).

6



The slope of the riprap may not be steeper than 1 horizontal to 1 vertical, nor shallower than 3 horizontal to 1 vertical.

7

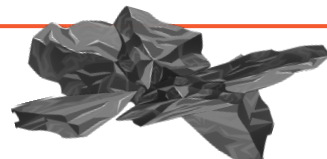
Riprap must be anchored at the base of the existing bank by placing the bottom row of rock in a trench excavated at least to a depth equal to the height of the largest rock, or the riprap must be pinned to underlying ledge.

8

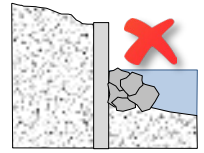
A layer of filter fabric and crushed stone must be placed under the riprap to prevent the washing of soil particles into the water.

9

No fill material other than the riprap and crushed stone may be placed below the normal high water line.



NRPA Permit By Rule Section 8 C. STANDARDS (CONT.)



10 Riprap may not be placed in front of a retaining wall such that it extends further into the water.

11 A buffer strip of undisturbed vegetation at least 25 feet wide must be established and maintained along the upland edge of any riprap placed for the protection of agricultural land.

12 Design of riprap on stream or brook banks must be approved by either a Maine Registered Professional Engineer, the United States Natural Resources Conservation Service, or the local Soil and Water Conservation District. Evidence of this approval or plans stamped by a professional engineer must be submitted along with the Notification Form. With prior written agreement, the DEP may waive this standard for minor riprap activities on small streams.

13 When riprap is necessary along a river, stream or brook, it must be combined with tree and shrub plantings to provide bank stabilization, shading of the water and cover for wildlife.




If work is performed in a river, stream or brook that is less than three feet deep at the time of the activity and at the location of the activity, the applicant must provide for temporary diversion of flow to the opposite side of the channel while work is in progress.

14 (a) Diversion may be accomplished by placing sandbags, timbers, sheet steel, concrete blocks, 6+ mil polyethylene or geotextiles from the bank to midstream on the upstream side of the activity. No more than two-thirds (2/3) or 25 feet of stream width, whichever is less, may be diverted at one time.

(b) Any material used to divert water flow must be completely removed upon completion of the activity, and the stream substrate must be restored to its original condition.

(c) A pump may be operated, where necessary, for a temporary diversion. The pump outlet shall be located and operated such that erosion or the discharge of sediment to the water is prevented.


15  Wheeled or tracked equipment **may not** operate in the water. Equipment operating on the shore may reach into the water with a bucket or similar extension. Equipment may cross streams on rock, gravel or ledge bottom.

16 Work below the high water line of a great pond, river, stream or brook must be done at low water except as required for emergency flood control work.

17 All excavated material must be stockpiled either outside the protected natural resource or on mats or platforms. Hay bales or silt fence must be used, where necessary, to prevent sedimentation.



All excavated material must be removed to a location more than 75 feet from the protected natural resource, unless otherwise approved by the DEP, and properly stabilized with vegetation upon project completion.

18  Disturbance of vegetation must be avoided if possible. If vegetation must be disturbed during the activity, similar types and amounts of vegetation must be re-established immediately upon completion of the activity and must be maintained.

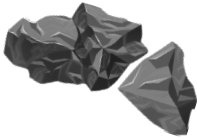
19 Riprap projects must be constructed in accordance with the plans or drawings submitted pursuant to subsections B(3) and (4) of this section, as applicable.

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D. DEFINITIONS

The following terms, as used in this chapter, have the following meanings, unless the context indicates otherwise:

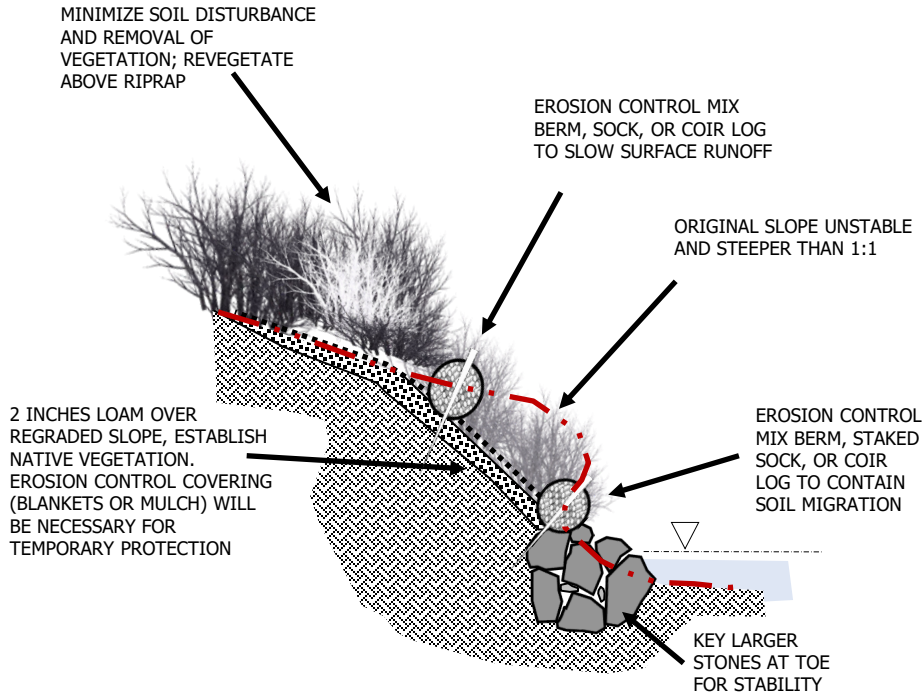
1 **Fill.** a. (verb) To put into or upon, supply to, or allow to enter a water body or wetland any earth, rock, gravel, sand, silt, clay, peat, or debris; b. (noun) Material, other than structures, placed in or adjacent to a water body or wetland.

2  **Riprap.** Heavy, irregularly-shaped rocks that are fit into place, without mortar, on a slope. Square or rectangular rocks with flat faces, such as quarry stone or manufactured blocks, do not qualify as “irregularly-shaped”.

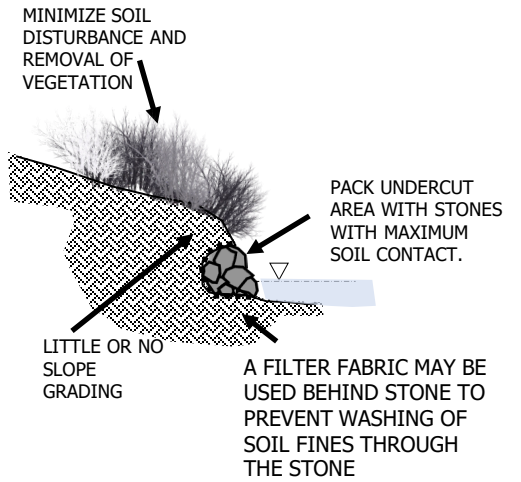
3 **Structure.** Anything built for the support, shelter or enclosure of persons, animals, goods or property of any kind, together with anything constructed or erected with a fixed location on or in the ground. Examples of structures include buildings, utility lines and roads.

Sample Stabilization Cross Sections for Section 8

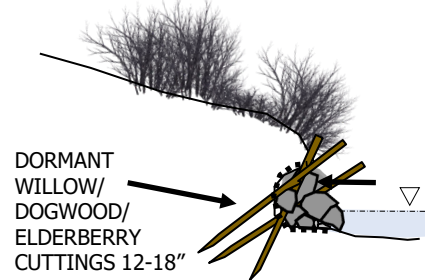
Riprap Toe Protection & Regrading



Riprap Toe Protection



Riprap Toe Protection variation with live stakes



Riprap with Vegetation

