Chapter 305: NATURAL RESOURCES PROTECTION ACT PERMIT BY RULE



Section 16-A:

Beach Nourishment and dune restoration or construction activities in coastal sand dunes

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

A. APPLICABILITY

1

This section applies to the following activities in coastal sand dune systems:

- (a) Beach nourishment using upland sources of sand and gravel;
- (b) Dune restoration or construction using upland sources of sand and gravel; and
- (c) Planting of native dune vegetation by hand in excess of 2,000 square feet or on multiple properties.

NOTE: A beach nourishment activity that qualifies under this section may require approval from the U.S. Army Corps of Engineers if the activity will involve work below the mean high water line. Applicants should contact the Army Corps of Engineers Maine Project Office at 207-623-8367.

2



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

NRPA Permit By Rule Section 16-A

B. SUBMISSIONS

Submissions for all sections:



PBR Notification Form



Location Map

Submissions for Section 16-A:

The following items must be submitted with the notification, unless otherwise provided below.





Photographs of the area that will be affected by the activity proposed.





Photographs showing the completed project and the affected area 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.





The following information must be submitted with the notification form:

- (a) The physical address, location of property lines, and names of abutters;
- (b) A copy of the most recent Coastal Sand Dune Geology Map, produced by the Maine Geological Survey that contains the project site and has the project site clearly identified on the map;

NOTE: Maps are available for review and download on the Maine Geological Survey (MGS) website and for purchase from MGS, 93 State House Station, Augusta, ME 04333. https://www.maine.gov/dacf/mgs/pubs/digital/dunes.htm

- (c) A copy of the written review comments from the Department of Inland Fisheries and Wildlife, and a demonstration that any project-specific recommendations on the design, timing, and/or construction of the proposed project received from that agency have been incorporated into the proposed activity;
- (d) For beach nourishment projects:
 - (i) A plan describing the need for the project, the depth of sand and gravel to be placed on each area of the beach, details on how machinery will access the beach, the volume of sand and gravel to be placed, the sources of sand and gravel, and project start and end dates; and
 - (ii) Written confirmation from MGS that it has reviewed the project and finds the plan acceptable and the proposed sand and gravel suitable for beach nourishment;
- (e) For dune reconstruction or construction projects:
 - (i) A plan describing the need for the project, and the depth and location(s) of sand and gravel to be placed on the beach and/or dune. The plan also must include details on how machinery will access the dune area, the volume of sand and gravel to be placed, the sources of sand and gravel, how dune grass will be planted, and project start and end dates; and
 - (ii) Written confirmation from MGS that it has reviewed the project and finds the plan acceptable and the proposed sand and gravel suitable for beach nourishment;
- (f) For planting of native dune vegetation by hand:
 - (i) A plan describing the area to be planted, type(s) of species to be planted, pattern of planting, and project start and end dates.

NRPA Permit By Rule Section 16-A C. STANDARDS

The following measures must be taken during construction and maintenance of the activity.

- An activity occurring on land adjacent to a coastal wetland, freshwater wetland containing over 20,000 square feet of open water or emergent marsh vegetation, great pond, river, stream or brook must meet the erosion control and setback requirements of Section 2 of this chapter, "Activities adjacent to protected natural resources."
- Disturbance of dune vegetation must be avoided, damage to existing dune vegetation must be minimized, and native vegetation must be retained on the project site to the maximum extent possible. Any areas of dune vegetation that are disturbed must be restored as quickly as possible.
- For beach nourishment projects:
 - (a) Beach nourishment projects must utilize sand and gravel from upland sources that have textural and color characteristics consistent with the natural textural and color characteristics of the beach sediment. Dredged sand and gravel may not be used.
 - (b) Beach nourishment activities may not occur between March 15 and September 15 unless written approval from the Department of Inland Fisheries and Wildlife has been obtained to conduct this work during specific time periods within this window.
 - (c) The depth of sand and gravel placed on the beach must be tapered at the perimeter of the nourished area.
 - (d) Beach nourishment may extend up to the frontal dune, including up to the top of an erosional scarp, but may not cover in-place dune vegetation.
 - (e) For a beach nourishment project, the total volume of sand and gravel to be placed on the beach may not exceed a volume of two feet deep over the surface area of the beach or 10,000 cubic yards, whichever is less. The surface area of the beach is measured in width from the normal low tide to the highest astronomical tide and in length along the beach parallel with the shoreline. The sand and gravel does not have to be placed to an even depth across the profile of the beach, nor is it restricted to two feet in depth in any specific place.
 - (f) Beach nourishment activities may not occur more often than once a year in the same location.

NRPA Permit By Rule Section 16-A C. STANDARDS (CONT.)

For dune restoration or construction projects:

(a) An activity involving dune restoration or dune construction must be performed between October 1 and March 15, unless written approval from the Department of Inland Fisheries and Wildlife has been obtained and submitted with the notification. Dune grass must be planted immediately after restoration or construction. Dune grass must be planted with 3 culms per hole. The holes must be spaced 18 inches apart or less. The planted dune grass must be protected from pedestrian traffic until the dune grass is well established. The density of the growing stand of dune grass must be at east 40 plants per 100 square feet.

IFW Timing Approval Form: https://www.maine.gov/dep/land/nrpa/pbrifw.pdf

- (b) A dune restoration/construction activity must use sand and gravel that has textural and color characteristics consistent with the natural textural and color characteristics of the existing dune sediments.
- (c) A dune restoration or dune construction activity must minimize damage to existing dune vegetation and must follow the configuration and alignment of adjacent dunes as closely as possible. No sand and gravel may be placed below the normal high tide line.
- (d) Dune restoration or construction activities may not occur more often than once a year in the same location.
- For planting of native dune vegetation by hand:

 (a) Dune planting activities must be performed between October 1 and March 15, unless written approval from the Department of Inland Fisheries and Wildlife has been obtained.

4

NRPA Permit By Rule Section 16-A **D. DEFINITIONS**

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

- Back dunes. Back dunes consist of sand dunes and eolian sand flats that lie landward of the frontal dune or a low energy beach. Back dunes include those areas containing artificial fill over back dune sands or over wetlands adjacent to the coastal sand dune system.
- **Beach.** The zone of unconsolidated sand or gravel that extends landward from the mean low water line to the seaward toe of a dune. The definition of beach includes the beach face and berm.
- **Beach nourishment.** The artificial addition of sand, gravel or other similar natural material to a beach or subtidal area adjacent to a beach.
- **Dune vegetation.** Dune plant species typically adapted to Maine's coastal sand dune systems including, but not limited to, American beach grass, virginiana rose, bayberry, beach pea, beach heather and pitch pine.
- Frontal dune. The frontal dune is the area consisting of the most seaward ridge of sand and gravel and includes former frontal dune areas modified by development. Where the dune has been altered from a natural condition, the dune position may be inferred from the present beach profile, dune positions along the shore, and regional trends in dune width. The frontal dune may or may not be vegetated with dune vegetation and may consist in part or in whole of artificial fill. In areas where smaller ridges of sand are forming in front of an established dune ridge, the frontal dune may include more than one ridge.
- Land adjacent to a protected natural resource. Any land area within 75 feet, measured horizontally, of the normal high water line of a great pond, river, stream or brook or the upland edge of a coastal wetland or freshwater wetland.

GUIDANCE & RESOURCES



Coastal Sand Dune Geology Online Maps https://www.maine.gov/dacf/mgs/pubs/online/dunes/dunes.htm

Coastal Sand Dune Geology Maps Information

https://www.maine.gov/dacf/mgs/pubs/mapuse/series/dunes/dunes-exp.pdf

Maine Coastal Property Owner's Guide to Erosion, Flooding, and Other Hazards, 2nd edition: https://digitalmaine.com/cgi/viewcontent.cgi?article=1605&context=mgs_publications

Sand Dune Restoration & Living Shoreline Practices:

https://www.conservationgateway.org/ConservationPractices/Marine/crr/Documents/FINAL_CombinedProfilePages_7_12_2017.pdf