CHAPTER 355: COASTAL SAND DUNE RULES

SUMMARY: This chapter applies to an activity that is located in a coastal sand dune system and requires an individual permit pursuant to the *Natural Resources Protection Act*.

1. Introduction. Coastal sand dune systems are fragile, dynamic resources that comprise only about two percent of Maine's overall coastline. These sandy stretches are considered resources of state significance since they act as natural barriers that protect the shoreline from storm events. In addition, they have great scenic beauty and unique characteristics. They provide vital habitat for a variety of wildlife and they provide unsurpassed recreational opportunities. Many of the sandy beaches and dunes along Maine's coastline are eroding, in part, due to a scientifically documented rise in relative sea level. In addition, attempts to prevent erosion and flooding through the construction or enlargement of seawalls harm the beach and dune system. Seawalls reflect waves onto the beach causing sand to be scoured away and they cut off the natural supply of sand to the beach from the sand dune behind the wall.

The department recognizes the dynamic nature of coastal sand dune systems in response to the changing conditions of water levels, waves, and winds. The extent to which sea level will change in the future is uncertain. However, the department anticipates that sea level will rise approximately two feet in the next 100 years. Under any scenario of increasing sea level, the extensive development of sand dune areas and the construction of structures increase the risk of harm, to both the coastal sand dune system and the structures themselves.

In 38 M.R.S.A. §480-A, the Legislature stated that the State's coastal sand dunes systems are resources of state significance and that "there is a need to facilitate research, develop management programs and establish sound environmental standards that will prevent the degradation of and encourage the enhancement of these resources". In order to protect valuable coastal sand dune systems, the department will evaluate proposed developments with consideration given to future sea level rise and will impose restrictions on the density and location of development and on the size of structures.

Proposed activities in a coastal sand dune system must meet the standards set forth in this chapter and 38 M.R.S.A. §480-D. As a term or condition of a permit, additional requirements may be established by the department to ensure that the proposed activity will meet the statutory criteria. The department will deny a permit if the proposed activity does not meet the statutory criteria and standards contained in this chapter.

2. Applicability

A. **Activity requiring individual permit**. This chapter applies to an activity that is located in a coastal sand dune system and requires an individual permit pursuant to the *Natural Resources Protection Act* (NRPA). Certain activities taking place in a coastal sand dune system may also be in a coastal wetland, as defined in 38 M.R.S.A. §480-B, and be subject to both this chapter and Chapter 310, the *Wetland Protection Rules*.

B. **Activity for which this chapter is not applicable**. This chapter does not apply to an activity that is exempt from permit requirements under the NRPA or that qualifies for a NRPA Permit By Rule (PBR).

3. Definitions

A. A-Zone. That land area of special flood hazard subject to a one percent or greater chance of flooding in any given year. These areas are designated as Zones A, A1-A99, AH or AO on a town's Flood Insurance Rate Map (FIRM). The flood elevation or depth of flooding is usually shown on the map.

Note: AO-Zones involve more sand transport and hazard to property than other A-Zones. FEMA recommends Coastal AO-Zones be treated as V-Zones for design and risk analysis. In terms of sand transport and flooding, AO-Zones act more like V-Zones, with only a foot of sea-level rise (or lowering of the beach and dune profile) an AO-Zone will become a V-Zone.

B. 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.

C. 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.

D. Beach nourishment. The artificial addition of sand, gravel or other similar natural material to a beach or subtidal area adjacent to a beach.

E. Berm. The flat or gently sloping area between the high tide limit and the frontal dune. A berm is formed by deposition of sand transported to shore by tides, waves, wind, and currents.

F. Building. 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.

G. Building's value. The building's value may be determined in one of two ways: (1) the assessed value of a building as established by the town and adjusted by the state's certified ratio as applied to the town on the date that the application is accepted for processing by the department or, if the application is received after the work has begun, the date the activity was started; or (2) the appraised value of a building as established by an appraised market value assessment completed by a state certified appraiser within 5 years prior to the date that the application is accepted for processing by the department or, if the application is received after the work has begun, the date the activity was started.

H. Coastal sand dune systems. (Also referred to as coastal sand dune system in this chapter). "Coastal sand dune systems" means sand and gravel deposits within a marine beach system, including, but not limited to, beach berms, frontal dunes, dune ridges, back dunes and other sand and gravel areas deposited by wave or wind action. Coastal sand dune systems may extend into coastal wetlands. Coastal sand dune systems include dunes that may have been artificially created, dunes that may have been altered by development activity, and dunes supported by sand fencing or stabilization structures. Coastal sand dune systems naturally migrate landward through the process of overwash. For the purposes of this definition, a small windblown accumulation of sand within a street is not considered a dune.

Most coastal sand dune systems have been identified by the Maine Geological Survey (MGS) and are shown on photos entitled *Beach and Dune Geology Aerial Photos* dated 2001. *Coastal Sand*

Dune Maps, previously produced by MGS and dated 1990, have been discontinued. Photos are available for review at town offices and regional department offices. The photos are also available for purchase through MGS.

I. Coastal wetlands. "Coastal wetlands" means all tidal and subtidal lands; all areas with vegetation present that is tolerant of salt water and occurs primarily in 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 tide level for each year in which an activity is proposed as identified in tide tables published by the National Ocean Service. Coastal wetlands may include portions of coastal sand dunes.

J. Closed fence. A fence that effectively blocks the movement of wind, water, or sand, such as a stockade fence or snow fence.

K. Department. The Department of Environmental Protection.

L. Development. The alteration of property for human-related use including, but not limited to: buildings, decks, driveways, parking areas, lawns, landscaped areas, and areas of non-native vegetation, and any other appurtenant facilities, but excluding temporary structures.

M. Dune grass. A grass species native to coastal sand dune systems with the scientific name *Ammophila breviligulata* and commonly referred to as American beach grass.

N. Dune restoration. Restoration of a natural or artificially constructed dune through the addition of sand and planting of native dune vegetation.

O. Dune vegetation. Dune plant species typically adapted to Maine's coastal sand dune systems including, but not limited to, American beach grass, rugosa rose, bayberry, beach pea, beach heather and pitch pine.

P. Erosion hazard area. Any portion of the coastal sand dune system that can reasonably be expected to become part of a coastal wetland in the next 100 years due to cumulative and collective changes in the shoreline from:

(1) Historical long-term erosion;

(2) Short-term erosion resulting from a 100-year storm; or

(3) Flooding in a 100-year storm after a two-foot rise in sea level,

or any portion of the coastal sand dune system that is mapped as an AO flood zone by the effective FEMA Flood Insurance Rate Map, which is presumed to be located in an Erosion Hazard Area unless the applicant demonstrates based upon site-specific information, as determined by the department, that a coastal wetland will not result from either (1), (2), or (3) occurring on an applicant's lot given the expectation that an AO-Zone, particularly if located immediately behind a frontal dune, is likely to become a V-Zone after 2 feet of sea level rise in 100 years.

Q. Essential habitat. Areas currently or historically providing physical or biological features essential to the conservation of an Endangered or Threatened Species in Maine and that may require special management considerations.

R. FEMA. The United States Federal Emergency Management Agency. This agency administers the National Flood Insurance Program (NFIP) and produces the Flood Insurance Rate Maps and Flood Insurance Studies.

S. Footprint. The outline that would be created on the ground by extending the exterior walls of the building to the ground surface. For the purposes of Sections 6(D), 6(E) and 6(F), a porch is not considered when determining the building's footprint.

T. Foundation. The portion of a structure that transmits the loads of the structure to the ground, including but not limited to: spread footings, foundation walls, posts, piers, piles, beams, girders, structural slabs, bracings, and associated connectors.

U. 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.

V. Lot. Also referred to as a lot of record, all contiguous areas under a single present ownership as indicated by a deed and recorded in the registry of deeds constituting a piece of land measured and marked by metes and bounds descriptions or by some other approved surveying technique.

W. Maintenance and repair. Work done to less than 50% of a structure to prevent decline, to hold or preserve it in an existing state or condition, or restore it to sound condition after damage or decay. For work to qualify as maintenance and repair, the dimensions (height, width and length) of the repaired structure may not exceed the dimensions of the structure as it existed 24 months prior to the repair and the structure to be repaired must have been existence and in use for a period of at least one year prior to the maintenance and repair activity. To qualify as maintenance and repair under this chapter, the cost (including the value of labor and materials) of a building's maintenance and repair is limited to less than 50% of the building's value. A closed fence may not be reconstructed in a frontal dune or erosion hazard area after being damaged by wave action from an ocean storm.

X. NGVD. National Geodetic Vertical Datum (NGVD). The base (0.00) elevation point from which land measurements are derived. This elevation was established by the National Ocean Service in 1929 and was formerly called "sea level datum of 1929" or "mean sea level". It generally marks the intersection of the sea with the land.

Y. Ocean storm. A low-pressure system often accompanied by flooding or erosion of the coastal sand dune system.

Z. Open fence. A fence through which water, wind and sand can easily move, for example, a split rail.

AA. Permanent structure (also referred to as a "structure" in this chapter)**.** Permanent structure means any structure constructed or erected with a fixed location or attached to a structure with a fixed location for a period exceeding 7 months each year. Permanent structures include, but are not limited to: causeways, piers, docks, concrete slabs, piles, marinas, retaining walls,

buildings, swimming pools, fences, seawalls, roads, driveways, parking areas, and walkways. Natural features, such as frontal dunes, are not considered permanent structures. For the purposes of this chapter, open decks and storage sheds that comply with the criteria outlined below are not considered to be structures.

(1) Open decks that: do not exceed a total of 200 square feet, including any existing decks on the property, are not located in a V-Zone, are supported by posts, and are elevated at least 3 feet above existing grade to allow unobstructed flow of sand, wind and water. One set of outside stairs, attached to the deck, will be considered part of the open deck but not included when determining the 200 square foot area.

(2) One storage shed per lot that does not exceed 100 square feet, provided that it is not located in a V-Zone and that it is not converted to a habitable structure.

BB. Posts. Any pilings or column support that allows water and sand to move freely underneath the structure, and that is adequate to provide a foundation for the structure it supports. The term "posts" does not include frost walls or breakaway foundation construction.

CC. Practicable. Available and feasible considering cost, existing technology and logistics based on the overall purpose of the project.

DD. Project. Any activity that is regulated pursuant to the NRPA and is located in a coastal sand dune system. To determine compliance with the standards in this chapter, the department will take into consideration topography and potential shoreline changes in its review of any activity.

EE. Reconstruction. Any rehabilitation, replacement or other improvement to a building the cost of which equals or exceeds 50% of the building's value prior to the start of the reconstruction.

FF. Seawall. Vertical wall, or other sloped barrier that separates land from water areas, commonly constructed out of rocks, wood, concrete or other similar materials, generally built for the purpose of protecting structures or property from shoreline erosion caused by wave or current action. A seawall is presumed to be a permanent structure.

GG. Severe damage. Damage that exceeds 50% of a building's value.

HH. Significant wildlife habitat. "Significant wildlife habitat" means:

(1) The following areas to the extent that they have been mapped by the Department of Inland Fisheries and Wildlife or are within any other protected natural resource: habitat, as defined by the Department of Inland Fisheries and Wildlife, for species appearing on the official state or federal lists of endangered or threatened animal species; high and moderate value deer wintering areas and travel corridors as defined by the Department of Inland Fisheries and Wildlife; seabird nesting islands as defined by the Department of Inland Fisheries and Wildlife; and critical spawning and nursery areas for Atlantic salmon as defined by the Atlantic Salmon Commission; and

(2) Except for solely forest management activities, for which "significant wildlife habitat" is as defined and mapped in accordance with 38 M.R.S.A. §480-I by the Department of Inland Fisheries and Wildlife, the following areas that are defined by the Department of Inland Fisheries and Wildlife and are in conformance with criteria adopted by the Department of Environmental Protection or are within any other protected natural resource:

(a) Significant vernal pool habitat;

(b) High and moderate value waterfowl and wading bird habitat, including nesting and feeding areas; and

(c) Shorebird nesting, feeding and staging areas.

II. Temporary structure. A structure intended for seasonal use and in place for 7 months or less each year.

JJ. V- Zone. That land area of special flood hazard subject to a one- percent or greater chance of flooding in any given year, and subject to additional hazard from high velocity water due to wave action. Wave heights or wave run-up depths are equal to or greater than 3 feet in V-Zones. V-Zones are as identified on the effective Flood Insurance Rate Maps and any subsequent Letters of Map Changes issued by FEMA.

4. Review not required. This section clarifies when certain activities in coastal sand dune systems do not require approval pursuant to the NRPA. Permits are required for all other projects.

A. *De minimis* activity. The following activities have minimal impacts and are not considered to be included in the listed activities requiring a permit at 38 M.R.S.A. §480-C(2).

(1) Construction of a walkway or path on an area of the lot that has already been developed.

(2) Removal of debris from a beach, provided that little or no sand is removed with the debris.

(3) The addition of loam to maintain an existing lawn, provided that the total depth of loam supporting the lawn does not exceed 3 inches.

(4) Removal of sand from lawns, walkways, roads, driveways, parking areas, and buildings, provided the sand is placed back into the coastal sand dune system without disturbing dune vegetation. Sand placed on the beach must be spread out to a height no greater than 3 inches above the existing beach grade.

(5) The placement of an open fence in the coastal sand dune system that is used to keep pedestrian traffic off dune vegetation or away from Designated Essential Habitat or significant wildlife habitat areas.

(6) The replacement of an existing partial or full foundation with a post or piling foundation that complies with the requirements of 5(D) and 6(G), that allows for the free movement of sand and water and that remains in the existing footprint.

(7) Construction of a municipal sewer or stormwater outfall pipe that is buried and that has received approval from the department under Chapter 310, *Wetlands and Waterbodies Protection Rule*, including appurtenant structures that might be located in an upland area.

(8) Removal of seaweed from the beach by hand or mechanical means provided the seaweed is not removed from the coastal sand dune system and does not disturb dune vegetation.

B. Temporary structure. Construction of a temporary structure does not require a permit. Construction of a permanent structure requires a permit, as set forth at 38 M.R.S.A. §480C(2)(D).

C. Maintenance and repair. A permit is not required for maintenance and repair activity as set forth in the statutory exemption at 38 M.R.S.A. 480-Q(2).

(1) The maintenance and repair exemption does not apply if:

(a) The repair is to more than 50% of a structure located in a coastal sand dune system;

(b) The repair would result in an additional intrusion into the coastal sand dune system;

(c) The dimensions of the repaired structure would exceed the dimensions of the structure as it existed 24 months prior to the repair; or

(d) The structure has been officially included in or is considered by the Maine Historical Preservation Commission as eligible for listing in the National Registrar of Historic Places and the dimensions of the repaired structure would exceed the dimensions of the historic structure.

(2) The following specific activities are considered to come within the maintenance and repair exemption.

(a) Maintenance and repair of an existing building's foundation provided the foundation type and the dimensions of the foundation remain the same.

(b) Maintenance and repair of an underground storage tank.

(3) The maintenance and repair exemption may not be used to reconstruct a structure. The Department may consider changes made to the structure within a 5 year period to determine whether this exemption applies.

5. Standards for all projects

Note: Selected activities may be eligible under Chapter 305, *Permit By Rule*.

A. **Timeframe for building reconstruction**. All building reconstruction that does not qualify as maintenance and repair (Sections 3(X) and 4(C)) requires a permit. The building to be reconstructed must exist on the date an application is accepted for processing by the department or have lawfully existed within one year of the date an application is accepted for processing by the department.

B. **Development on individual lots.** Development on an individual lot is restricted as follows:

(1) No more than 40% of a lot may be covered by development, including land area previously developed. Lawns and other areas filled for landscaping are considered development and must be included in the development calculations.

(2) If development exceeds 40% of the total lot area on the date that an application is accepted for processing by the department or did exceed 40% of the total lot area within one year of

the date that an application is accepted for processing by the department, the percentage of lot area covered by development may not be increased.

(3) Land area within the V-zone may not be included as part of a lot for the purposes of this subsection.

(4) No building may be constructed such that any part extends seaward of a line drawn between the seaward-most point of buildings on adjacent properties where such construction would significantly obstruct the view from an adjacent building.

(5) No additional land may be covered by development or buildings as a result of lot subdivisions created after August 1, 1983.

C. Shoreline changes within 100 years. A project may not be permitted if, within 100 years, the property may reasonably be expected to be eroded as a result of changes in the shoreline such that the project is likely to be severely damaged after allowing for a two foot rise in sea level over 100 years. Beach nourishment and dune restoration projects are excluded from this requirement.

D. Building size restrictions. No building greater than 35 feet in height or covering a ground area greater than 2,500 square feet may be constructed in a coastal sand dune system unless the applicant demonstrates by clear and convincing evidence that:

(1) The site will remain stable after allowing for a two foot rise in sea level over 100 years, and

(2) The increased height will not have an unreasonable adverse effect on existing uses that rely on access to direct sunlight including, but not limited to: native dune vegetation and recreational beach use.

Reliance upon an existing seawall is not sufficient as evidence of site stability. An existing building may be elevated on a post or pile foundation to exceed 35 feet for the sole purpose of meeting the elevation requirements in Sections 6(G) and 7(C) without the need to demonstrate that the site will remain stable after allowing for sea level rise.

When determining the height of the building, the measurement is taken from the existing, lowest natural elevation within the building's footprint if the lot is undeveloped, the lowest natural elevation measured 5 feet from the corners of an existing building's foundation, or the elevation used by the municipality when determining compliance with local ordinances.

E. Seawalls and similar structures. No new seawall or similar structure may be constructed. No existing seawall or similar structure may be altered or replaced except as provided below, and as allowed under Chapter 305, *Permit By Rule* and 38 M.R.S.A. §480-W.

(1) **Permanent alteration of different dimensions or location**. With a permit from the department, a seawall or similar structure may be replaced with a structure of different dimensions or in a different location that is farther landward if the department determines that the replacement structure would be less damaging to the coastal sand dune system, existing wildlife habitat and adjacent properties than replacing the existing structure with a structure of the same dimensions and in the same location.

Note: The department encourages landowners to consider removing a seawall or similar structure and covering the area with sand and dune vegetation, or replacing the structure in a more landward position to reduce its influence on the beach and sand dune system.

F. **Designated essential habitat and significant wildlife habitat**. A project may not unreasonably harm Designated Essential Habitat and significant wildlife habitat within the coastal sand dune system. A project located partially or wholly within an area designated as Essential Habitat must obtain an Essential Habitat evaluation from the Department of Inland Fisheries & Wildlife (IF&W). Essential Habitat maps are available in affected town offices, IF&W offices, and department offices.

Note: IF&W has identified nesting areas for piping plovers and least terns as Essential Habitat under the *Maine Endangered Species Act* (12 M.R.S.A. §§ 7751-7756).

G. **Fences**. To allow for the movement of sand and water, no closed fence may be placed in any frontal dune or erosion hazard area.

H. **Legal access**. A project may not unreasonably interfere with legal access to or use of the public resources.

I. Mitigation and enhancement. To mitigate for on site project impacts that interfere with the natural supply or movement of sand or gravel or may increase the erosion hazard to the sand dune system, the department may require sand dune mitigation and enhancement measures, including: restoring the dune topography and elevating the crest of the sand dune to at least one foot above the 100 year flood/wave run up level; and provisions to enhance with native vegetation the portions of the lot not covered by buildings or parking areas.

6. Standards for frontal dune projects

A. **General standards**. Each frontal dune project must meet the standards for all projects contained in Section 5.

B. **New construction in frontal dunes**. A new structure or addition to an existing structure may not be constructed on or seaward of a frontal dune with the exception of the following.

(1) Elevated boardwalks constructed perpendicular to the beach face, open fences, walkways, and driveways.

(2) Fire escapes constructed on existing buildings or structures as required by local fire codes.

(3) Ramps and elevators providing handicap access to a building or a beach, provided that:

(a) The ramps and elevators providing handicap access to a building are designed and constructed to minimize intrusion on the frontal dune by locating the ramps and elevators to the rear of the building or within already-developed areas of the lot, such as a parking area, to the extent practicable; or

(b) The ramp or elevator is a public ramp or elevator providing access to a beach.

(4) The construction of vertical building additions and the addition of dormers provided that:

(a) The addition does not extend horizontally beyond the footprint covered by the existing building;

(b) The addition does not increase the building's total height to greater than 35 feet above the lowest natural elevation measured 5 feet from the corners of the existing building foundation or the elevation used by the municipality when determining compliance with local ordinances; and

(c) The building is not a garage or a storage shed.

(5) The construction of a new building or buildings on an undeveloped lot provided that the following requirements are met. These provisions do not apply to a lot vacant due to demolition or destruction of buildings after August 1, 1983 or to a lot that includes back dune area of sufficient size to allow the construction of a building and development as outlined in (f), below.

(a) The undeveloped lot was a deeded lot of record as of August 1, 1983.

(b) The adjacent lot on both sides of the undeveloped lot, along the length of the frontal dune, contains a residential building that is located within 100 feet of the lot line of the vacant lot. In order to qualify for this exception, the residential buildings on the adjacent lots must have been in existence on January 1, 2003.

(c) The undeveloped lot is not precluded from development by any other federal, state, or local requirements.

(d) All available variances of municipal regulations that would allow an alternative to the project to proceed in compliance with the standards in Section 5 have been ruled upon and rejected by the municipality.

(e) Any building on the undeveloped lot will be constructed at the greatest distance practicable from the beach, as determined by the department.

(f) The total area to be covered by the footprint(s) of a building or buildings may not exceed 20% of the total area of the undeveloped lot. Land area within the V-zone may not be included as part of a lot for the purposes of this subsection. Up to 500 square feet of additional development may occur on the undeveloped lot in order to provide parking and access, including handicap access.

(g) Any building or buildings will be elevated on posts as described in Section 6(G).

(6) The reconstruction of an existing residential building whose entire footprint is in a back dune may be relocated in a frontal dune on the same lot on which the building is located if:

(a) The existing residential building:

(i) Is a permanent structure;

(ii) Existed in a back dune on the lot and was landward of an existing seawall prior to June 8, 2006;

(iii) Was originally constructed in a back dune after August 1, 1983, in accordance with a permit issued by the department under the Natural Resources Protection Act; and

(iv) Is not severely damaged by wave action from an ocean storm;

(b) The entire residential building when reconstructed:

(i) Is landward of an existing seawall;

(ii) Has a footprint that is 2,500 square feet or less, that is not located in a V-zone as identified on the effective Flood Insurance Rate Maps issued by the Federal Emergency Management Agency and that does not exceed 20% of the total area of the lot. The land area within the V-zone may not be included as part of the lot for purposes of this paragraph and up to 500 square feet of additional development may occur on the lot in order to provide parking and access, including handicap access;

(iii) Is elevated on posts as required in this chapter regarding sand and water movement; and

(iv) Is no more than 35 feet in height, except that it may exceed 35 feet for the sole purpose of meeting the elevation requirements in this chapter regarding sand and water movement;

(c) The lot on which the residential building is reconstructed:

(i) Was a deeded lot of record as of August 1, 1983;

(ii) Is not precluded from development by any other federal, state or local requirements; and

(iii) Has an adjacent lot on each of its sides, along the length of the frontal dune, that contains a residential building that is located within 100 feet of the lot line and that existed on January 1, 2003; and

(d) Relocation of the residential building on the frontal dune is minimized to the extent practicable, as determined by the department.

(e) When approving reconstruction or relocation under this section, the Department may require sand dune mitigation and enhancement measures, including, but not limited to, restoring the dune topography and elevating the crest of the sand dune to at least one foot above the 100-year floodplain or wave run-up level and enhancing with native vegetation the portions of the lot that are not covered by buildings or parking areas.

C. **Construction in V-Zone**. No new structure or addition to an existing structure, including but not limited to vertical additions may be constructed in a V-zone except for ramps and elevators providing handicap access as outlined in Section 6(B)(3), open fences and fire escapes constructed on existing buildings or similar structures as required by local fire codes. A building in a V-Zone may only be reconstructed under Section 6(D) if it was involuntarily severely

damaged by fire or some other force majeure not to include wave action from an ocean storm. If only a portion of a building is located in a V-Zone, this section applies to the portion of the building that is in the V-Zone.

D. Reconstruction of buildings not severely damaged by wave action from an ocean storm. Reconstruction of a building not severely damaged by wave action from an ocean storm must meet the following standards.

(1) The building must be moved back from the beach to the extent practicable, as determined by the department given setback requirements and site limitations. If it is not practicable to move the building farther back from the beach, then the building's footprint must be reconstructed in the same location or a location no farther seaward than the previously existing building.

(2) The area and dimensions of the footprint of the building may not exceed the area and dimensions of the footprint of the previously existing building when the building is reconstructed in the same location. The area of the footprint of the building may not exceed the area of the footprint of the previously existing building if the building is moved farther back from the beach.

(3) The height of the building may not exceed the height of the previously existing building unless the project proposes a vertical addition that meets all the requirements of Section 6(B)(4) or to elevate the building to meet the requirements of Section 6(G).

Nothing in this subsection prohibits the reconstruction of a porch that does not exceed the dimensions of the previously existing porch.

Note: An alternative option to rebuilding may be available in the form of funding from state and federal programs that acquire storm-damaged properties from willing sellers. Information on current programs may be obtained by contacting the Maine Emergency Management Agency.

E. Reconstruction of buildings severely damaged by wave action from an ocean storm. Buildings that are severely damaged by wave action from an ocean storm and that are being reconstructed must meet the standards outlined in subsections 1-5 below. A building may not be reconstructed more than once in accordance with this section if the building is located in a V-Zone. A building located outside a V-Zone may not be reconstructed more than once without complying with the standards outlined in Section 6(F).

(1) The building must be moved back from the beach to the extent practicable, as determined by the department given setback requirements and site limitations. If it is not practicable to move the building farther back from the beach, then the building's footprint must be reconstructed in the same location or a location no farther seaward than the previously existing building.

(2) The area and dimensions of the footprint of the building may not exceed the area and dimensions of the footprint of the previously existing building when the building is reconstructed in the same location. The area of the footprint of the building may not exceed the area of the footprint of the previously existing building if the building is moved farther back from the beach.

(3) The height of the building may not exceed the height of the previously existing building except as necessary to elevate the building to meet the requirements of Section 6(G).

(4) If any part of the previously existing building was located in a V-Zone, then the building must be designed and configured to minimize or eliminate the building footprint's intrusion into the V-Zone to the extent practicable, as determined by the department given setbacks and site limitations.

(5) A severely damaged building located within the V-Zone that is reconstructed completely outside of the V-Zone pursuant to this section is eligible for further reconstructions pursuant to Section 6(F) after subsequent severe damage by wave action from an ocean storm, should it occur.

F. Reconstruction of buildings severely damaged by wave action from an ocean storm that have already been reconstructed once. Buildings in the frontal dune, but outside of the V-Zone that are severely damaged by wave action from an ocean storm must meet the following minimization and mitigation standards.

(1) The building must be moved back from the beach to the extent practicable, as determined by the department given setback requirements and site limitations. To determine whether the building is moved back to the extent practicable, the department may consider, but is not limited to:

(a) Whether the applicant has applied for a variance to reduce the setback required by the municipality; and

(b) Whether the applicant has attempted to buy additional land from abutters that would allow the building to be moved farther back.

(2) The total area to be covered by the footprint of the reconstructed building or buildings may not exceed 20% of the total area of the lot. Land area within the V-Zone may not be included as part of a lot for the purposes of this subsection. No more than 500 square feet of additional development may occur on the lot.

(3) The applicant must mitigate, to the extent practicable, for impacts to the coastal sand dune system caused by structures on the applicant's lot, as determined by the department. To determine whether the applicant has mitigated to the extent practicable, the department may consider, but is not limited to:

(a) Whether areas of the lot not covered by development are being restored to the lot's natural dune topography and planted with native vegetation.

(b) Whether an existing vertical seawall on the lot is being removed and replaced with a structure that would be less damaging to the coastal sand dune system, wildlife habitat and adjacent properties.

G. Sand and water movement. To allow for the movement of sand and water and future shoreline changes, all buildings modified or reconstructed pursuant to Sections 6(B)(4), 6(D), 6(E) or 6(F) and all new buildings constructed pursuant to Sections 6(B)(5), 7(C) or 9(A), except for detached buildings that are used as storage sheds, public bathhouses and garages, must have the lowest portion of the structural members of the lowest floor constructed on a post or piling foundation,

and be elevated either 1) on undeveloped lots, three feet above the highest existing elevation, within the building's footprint; or, on developed lots, the highest natural elevation measured 5 feet from the corners of the existing building foundation; or 2) the elevation required in the local municipal floodplain ordinance, whichever elevation is higher when choosing between 1 or 2 above. The post or piling foundation may be enclosed with latticework or other similar material through which water, wind and sand can easily move.

Note: The department recommends that projects be constructed according to the Coastal Construction Manual, published by FEMA, which describes the best practices for residential construction in coastal areas, and which can be used to help create sustainable and livable coastal communities. The Coastal Construction Manual is available for review at Town Offices and regional department offices.

7. Standards for back dune projects

A. General standards. Each back dune project must meet the standards for all projects contained in Section 5.

B. Development on individual lots. No more than 20% of the total area of a lot may be covered by the footprint of a building(s). If total building coverage exceeds 20% of the total lot area on the date that an application is accepted for processing by the department or did exceed 20% of the total lot area within one year of the date that an application is accepted for processing by the department, the percentage of lot area covered by buildings may not be increased.

C. Unstable back dune areas. Certain back dune areas may be identified as erosion hazard areas. New buildings, additions to existing buildings, and reconstructed buildings located in those areas must meet the standards of Section 6(G).

8. Standards for beach nourishment projects

A. Beach nourishment material. Only material that has texture and color characteristics consistent with the natural beach material's texture and color characteristics, and that has a similar particle size may be utilized for beach nourishment, unless a different grain size is more compatible with the natural sand dune system. Material for beach nourishment may be obtained from, but is not limited to, the following sources. The first two listed sources of material are presumed to be preferable to the third listed source of material.

(1) Beneficial reuse of material dredged from Maine's federal channels and harbors by the United States Army Corps of Engineers (ACOE);

(2) Material excavated from upland sources; and

(3) Material dredged from near shore and offshore waters provided that the dredging complies with the standards in Chapter 310, *Wetlands and Waterbodies Protection Rules* and 38 M.R.S.A. §§ 480-A to 480-Z.

B. Beach area profile. The profile of the new nourished beach area must be compatible with the elevation, width, slope and shape of any adjacent beach and sand dune, or other natural beach profile to the extent practicable.

C. Timing restriction. The department may restrict the time of year during which material for a beach nourishment project may be placed on the beach to minimize impacts on existing wildlife habitat.

D. Monitoring. To ensure that the beach nourishment project does not have an unreasonable adverse impact on the coastal sand dune system, the coastal wetland on or adjacent to the project site and wildlife habitat, the department may require pre-construction monitoring to establish a baseline and post-construction monitoring after project completion.

E. Public access and no development. If beach nourishment is funded, in whole or in part with State funds, the portions of the beach nourished with State funds must be placed either into permanent public ownership or under legally binding agreements, such as but not limited to easements that preclude any development and that allow public access for recreational activities. This section does not apply to use of dredged material from projects conducted by the Army Corps of Engineers.

F. Wildlife habitat management. Owners of property on a beach that will be nourished must agree to enter a legally binding agreement, such as but not limited to an easement, concerning the property that allows for the management of significant wildlife habitat on the beach portion of their property.

9. Variances

A. Variance from Sections 5(B)(3), 6(B) and 6(C). The department may grant a variance from Sections 5(B)3, 6(B) and 6(C) in whole or in part for the construction of a building on a previously undeveloped lot under single ownership

(1) An applicant is eligible for a variance pursuant to this section if the applicant meets one of the two qualifying conditions below.

(a) A court has determined that the denial of a permit under this chapter would constitute an unconstitutional taking of property after an appeal, if any, or

(b) The department finds that strict application of the standard(s) from which a variance is sought would result in undue hardship. The department may find that undue hardship exists only when:

(i) The undeveloped lot was a deeded lot of record as of August 1, 1983;

(ii) The property cannot be put to a practical economic use unless a variance is granted. In making this determination, the department shall consider evidence of the value of the property when it was purchased or acquired, the reasonable expectations of the applicant for use of the property when it was purchased or acquired, and the value and possible uses of the property without the requested variance;

(iii) The hardship is not the result of action taken by the applicant or a prior owner; and

(iv) There are no practicable measures or alternatives that would allow the project to proceed in compliance with the standard(s) from which a variance is sought. The applicant shall demonstrate that the applicant has explored all alternatives that would allow the project to proceed in compliance with the standard(s) from which a

variance is sought, and shall explain to the satisfaction of the department why each such alternative is unavailable or unreasonable.

(2) After an applicant has demonstrated that the applicant is eligible for a variance under Section 9(A)(1), the applicant shall also demonstrate that the proposed project meets both the applicable standards of Sections 5 and 6 of this chapter, for which a variance is not being granted, and the following standards. The following standards are intended to help minimize impacts on protected natural resources.

(a) The proposed building must be constructed at the location on the lot that is the greatest distance practicable from the beach, as determined by the department given setback requirements and site limitations;

(b) The proposed building must be elevated on posts as described in Section 6(G);

(c) The total area to be covered by the footprint of a building may not exceed 20% of the total area of the undeveloped lot. Land area within the V-zone may not be included as part of a lot for the purposes of this subsection. Up to 500 square feet of additional development may occur on the undeveloped lot in order to provide parking and access, including handicap access.

(d) As a condition for the issuance of a variance, the department may require sand dune mitigation and enhancement measures. Sand dune mitigation and enhancement measures include activities such as restoration of the dune topography, including the elevation of the crestline to at least one foot above the 100 year flood/wave run up level and provisions to enhance with native vegetation the remaining portions of the lot not covered by buildings or parking areas. Sand dune mitigation and enhancement measures must be completed and adequately maintained if required by the department.

(3) A variance may not be granted under Section 9 when a permit has been granted under this variance provision for the same deeded lot if the previously permitted building on the lot was destroyed by the encroachment of water or wave action from an ocean storm. A variance may not be granted under Section 9 if the building was previously reconstructed as provided for in Sections 6(E) and 6(F).

(4) In addition to the notice requirements in Chapter 2 of the Department's Rules, *Rules Concerning the Processing of Applications*, any person applying for a variance under Section 9(A) must send a Notice of Intent to file the application by certified mail to any person who owns land located within 150 feet of the boundary of the property to be developed.

B. Variance from Section 6(G). The department may grant a variance from Section 6(G) of this chapter if the department determines that the following condition has been met.

(1) The department finds that strict application of the standard contained in Section 6(G) would result in undue hardship. The department may find that undue hardship exists only when:

(a) The hardship is not the result of action taken by the applicant or a prior owner; and

(b) There are no practicable measures or alternatives that would allow the project to proceed in compliance with Section 6(G). The applicant must demonstrate that the applicant has

explored all alternatives that would allow the project to proceed in compliance with Section 6(G), and must explain to the satisfaction of the department why each such alternative is unavailable or unreasonable.

10. Standard conditions of permits. The following standard conditions apply to all permits granted under this chapter, unless otherwise specifically stated in the permit.

A. **Shoreline recession**. If the shoreline recedes such that a coastal wetland, as defined under 38 M.R.S.A. §480-B(2), extends to any part of the structure, including support posts, but excluding seawalls, for a period of six months or more, then the approved structure along with appurtenant facilities must be removed and the site must be restored to natural conditions within one year.

B. **Removing debris**. Any debris or other remains from damaged structures on the property must be removed from the coastal sand dune system.

C. **Dune restoration**. Within one year after completion of construction, the applicant shall restore any areas of dune vegetation and topography that are disturbed during construction on the lot and that exceed the size of the development area permitted by the department in accordance with Sections 5(B), 6(B)(5) and 9(A)(2). Dune vegetation includes, but is not limited to American beach grass, rugosa rose, bayberry, beach pea, beach heather and pitch pine.

D. **Approval of variations from plans**. The granting of this permit is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted by the applicant. Any variation from these plans, proposals and supported documents is subject to review and approval prior to implementation.

E. Compliance with all applicable laws. The applicant shall secure and comply with all applicable federal, state and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.

Note: Applicants should obtain and incorporate into their proposed project any standards or limitations contained in local floodplain ordinances.

F. **Compliance with all permit terms and conditions**. The applicant shall submit all reports and information requested by the department demonstrating that the applicant has complied or will comply with all terms and conditions of this permit. All preconstruction terms and conditions must be met before construction begins.

G. **Time frame for approvals**. If construction or operation of the activity is not begun within four years, this permit shall lapse and the applicant must reapply for a new permit. The applicant may not begin construction or operation of the activity until a new permit is granted. Reapplications for permits must state the reasons why the activity was not begun within four years from the granting of the initial permit and the reasons why the applicant will be able to begin the activity within four years from the granting of a new permit, if so granted. Reapplication for permits may include information submitted in the initial application by reference, but must include documentation of any changes on the site. If construction is begun within the four-year time frame, this approval is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.

H. **Permit included in contract bids**. A copy of this permit must be included in or attached to all contract bid specifications for the approved activity.

I. **Permit shown to contractor**. Work done by a contractor pursuant to this permit may not begin before the applicant has shown the contractor a copy of this permit.

STATUTORY AUTHORITY: 38 MRSA §§ 341-D(1-B) and 480-A-480-Z

EFFECTIVE DATE:
August 1, 1983
Amended (Section 4I): October 23, 1984
Amended: January 4, 1988.
Amended: June 16, 1993

EFFECTIVE DATE (ELECTRONIC CONVERSION):
May 4, 1996

REPEALED AND REPLACED:
July 15, 2004 - filing 2004-220 (major substantive)

REPEALED, EFFECTIVE DATE APRIL 1, 2006, PURSUANT TO PUBLIC LAW 2003, CHAPTER 130 (EFFECTIVE APRIL 14, 2004.)

EFFECTIVE DATE:
June 8, 2006 – filing 2006-197 (major substantive)
December 18, 2012 – filing 2012-344 (routine technical)

AMENDED:
October 26, 2014 – Sections 6(B)(6), 10(H to J), filing 2014-261 (routine technical)