

## 15A NCAC 07H .0305 DEFINITION AND DESCRIPTION OF LANDFORMS

This Rule describes natural and man-made features that are found within the ocean hazard area of environmental concern.

- (1) Ocean Beaches. Ocean beaches are lands consisting of unconsolidated soil materials that extend from the mean low water line landward to a point where either:
  - (a) the growth of vegetation occurs; or
  - (b) a distinct change in slope or elevation alters the configuration of the landform, whichever is farther landward.
- (2) Nearshore. The nearshore is the portion of the beach seaward of mean low water that is characterized by dynamic changes both in space and time as a result of storms.
- (3) Primary Dunes. Primary dunes are the first mounds of sand located landward of the ocean beaches having an elevation equal to the mean flood level (in a storm having a one percent chance of being equaled or exceeded in any given year) for the area plus six feet. Primary dunes extend landward to the lowest elevation in the depression behind that same mound of sand commonly referred to as the "dune trough".
- (4) Frontal Dunes. The frontal dune is the first mound of sand located landward of ocean beaches that has stable and natural vegetation present.
- (5) Vegetation Line. The vegetation line refers to the first line of stable and natural vegetation, which shall be used as the reference point for measuring oceanfront setbacks. This line represents the boundary between the normal dry-sand beach, which is subject to constant flux due to waves, tides, storms and wind, and the more stable upland areas. The vegetation line is generally located at or immediately oceanward of the seaward toe of the frontal dune or erosion escarpment. The Division of Coastal Management or Local Permit Officer shall determine the location of the stable and natural vegetation line based on visual observations of plant composition and density. If the vegetation has been planted, it may be considered stable when the majority of the plant stems are from continuous rhizomes rather than planted individual rooted sets. Planted vegetation may be considered natural when the majority of the plants are mature and additional species native to the region have been recruited, providing stem and rhizome densities that are similar to adjacent areas that are naturally occurring. In areas where there is no stable and natural vegetation present, this line may be established by interpolation between the nearest adjacent stable natural vegetation by on-ground observations or by aerial photographic interpretation.
- (6) Pre-project Vegetation Line. In areas within the boundaries of a large-scale beach fill project, the vegetation line that existed within one year prior to the onset of project construction shall be defined as the "pre-project vegetation line". The "onset of project construction" shall be defined as the date sediment placement begins, with the exception of projects completed prior to the original effective date of this Rule, in which case the award of the contract date will be considered the onset of construction. A pre-project vegetation line shall be established in coordination with the Division of Coastal Management using on-ground observation and survey or aerial imagery for all areas of oceanfront that undergo a large-scale beach fill project. Once a pre-project vegetation line is established, and after the onset of project construction, this line shall be used as the reference point for measuring oceanfront setbacks in all locations where it is landward of the vegetation line. In all locations where the vegetation line as defined in this Rule is landward of the pre-project vegetation line, the vegetation line shall be used as the reference point for measuring oceanfront setbacks. A pre-project vegetation line shall not be established where a pre-project vegetation line is already in place, including those established by the Division of Coastal Management prior to the effective date of this Rule. A record of all pre-project vegetation lines, including those established by the Division of Coastal Management prior to the effective date of this Rule, shall be maintained by the Division of Coastal Management for determining development standards as set forth in Rule .0306 of this Section. Because the impact of Hurricane Floyd in September 1999 caused significant portions of the vegetation line in the Town of Oak Island and the Town of Ocean Isle Beach to be relocated landward of its pre-storm position, the pre-project line for areas landward of the beach fill construction in the Town of Oak Island and the Town of Ocean Isle Beach, the onset of which occurred in 2000, shall be defined by the general trend of the vegetation line established by the Division of Coastal Management from June 1998 aerial orthophotography.
- (7) Beach Fill. Beach fill refers to the placement of sediment along the oceanfront shoreline. Sediment used solely to establish or strengthen dunes shall not be considered a beach fill project under this

Rule. A "large-scale beach fill project" shall be defined as any volume of sediment greater than 300,000 cubic yards or any storm protection project constructed by the U.S. Army Corps of Engineers.

- (8) Erosion Escarpment. The normal vertical drop in the beach profile caused from high tide or storm tide erosion.
- (9) Measurement Line. The line from which the ocean hazard setback as described in Rule .0306(a) of this Section is measured in the unvegetated beach area of environmental concern as described in Rule .0304(3) of this Section. In areas designated pursuant to Rule .0304(3)(b) of this Section, the Division of Coastal Management shall establish a measurement line by:
  - (a) determining the average distance the pre-storm vegetation line receded at the closest vegetated site adjacent to the area designated by the Commission as the unvegetated beach AEC; and
  - (b) mapping a line equal to the average recession determination in Part (a) of this Subparagraph, measured in a landward direction from the first line of stable and natural vegetation line on the most recent pre-storm aerial photography in the area designated as an unvegetated beach AEC.

*History Note: Authority G.S. 113A-107; 113A-113(b)(6); 113A-124;  
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