ANNOTATION EXPLANATION

BLACK TEXT
Current rule language

RED UNDERLINED TEXT
Proposed additions to current rule language (approved in July 2007 for November 2007 public hearing)

~~RED STRIKEOUT TEXT~~
Proposed deletions to current rule language (approved in July 2007 for November 2007 public hearing)

BOLD RED UNDERLINED TEXT WITH GREEN HIGHLIGHTING
Recommended additions to current rule language (additions recommended by DCM that were not included in rule language approved for public comment period spanning Nov 1 to Dec 31, 2007)

~~**BOLD RED UNDERLINED TEXT WITH STRIKEOUT AND YELLOW HIGHLIGHTING**~~
Recommended deletions to proposed additions to current rule language (original additions were approved in July 2007 for November 2007 public hearing, and subsequent deletions are DCM recommendations following public comment period that ended on December 31, 2007)

15A NCAC 07H .0305 GENERAL IDENTIFICATION AND DESCRIPTION OF LANDFORMS

(a) 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:

(1) the growth of vegetation occurs, or
(2) a distinct change in slope or elevation alters the configuration of the landform, whichever is farther landward.

(b) 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.

(c) 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. The primary dune extends landward to the lowest elevation in the depression behind that same mound of sand (commonly referred to as the dune trough).

(d) Frontal Dunes. The frontal dune is deemed to be the first mound of sand located landward of the ocean beach having sufficient vegetation, height, continuity and configuration to offer protective value.

(e) General Identification. For the purpose of public and administrative notice and convenience, each designated minor development permit-letting agency with ocean hazard areas may designate, subject to CRC approval in accordance with the local implementation and enforcement plan as defined in 15A NCAC 07I .0500, a readily identifiable land area within which the ocean hazard areas occur. This designated notice area must include all of the land areas defined in Rule .0304 of this Section. Natural or man-made landmarks may be considered in delineating this area.

(f) ~~"~~Vegetation Line.~~"~~ The vegetation line ~~means~~ 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 ~~It~~ 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. The 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 natural vegetation present, this line mayshall be established by interpolation between the nearest adjacent stable natural vegetation by on ground observations or by aerial photographic interpretation. connecting or extending the lines from the nearest adjacent vegetation on either side of the site and by extrapolating (by either on ground observation or by aerial photographic interpretation) to establish the line. In areas within the boundaries of a large scale beach nourishment or spoil deposition project, the vegetation line that existed prior to the onset of project construction shall be used as the vegetation line for determining oceanfront setbacks after the project is completed except for those circumstances described under Paragraph (g) of this Rule for projects constructed after September 1, 2000. A project shall be considered large scale when:

(1) it places more than a total volume of 200,000 cubic yards of sand at an average ratio of more than 50 cubic yards of sand per linear foot of shoreline; or

(2) it is a Hurricane Protection project constructed by the U.S. Army Corps of Engineers.

(g) If within three years prior to the award of contract date of a large scale project as defined in Subparagraph (f)(1) or (f)(2) of this Rule, a large storm or series of storms cause the vegetation line to be relocated landward of its normal position relative to other natural features of the beach such as the typical high water or mid-tide line, the affected local government may request that the CRC establish an alternative vegetation line where the storm effect on the vegetation line contained within the boundaries of a large scale beach nourishment or spoil deposition project is mitigated. Once the CRC grants the local government's request to establish an alternative vegetation line the following activities shall be conducted:

(1) A primary vegetation line shall be established prior to the onset of project construction as described in Paragraphs (f) of this Rule;

(2) An alternative vegetation line shall be determined based on a dry sand beach width template (measured from the wet/dry line or other appropriate shoreline indicator to the vegetation line) developed by DCM staff from analysis of historic aerial photographs, a ground reconnaissance survey of the site and adjacent areas, and where available, other historic data such as beach profiles and site specific studies. The template is intended to show the location of the vegetation line relative to the existing shoreline as if no storm had affected the location of the vegetation line. The template will be applied to the existing shoreline immediately prior to the commencement of project construction; and

(3) The storm effect mitigated vegetation line may be used to replace the primary pre-project vegetation line for setback determinations and other appropriate regulatory actions after a minimum time period of eight years from the award of contract date of the large scale project as defined in Subparagraph (f) of this Rule, and the Division of Coastal Management personnel have determined that natural vegetation is reestablished on the large scale project. To be considered as reestablished, natural vegetation shall meet all of the following criteria:

(A) the dune grasses appear the same in terms of species composition and stem density as adjacent non-project dune areas; and

(B) the majority of stems are from continuous rhizomes rather than planted individual rooted sets and, the vegetation is established and stable at least as far seaward as the storm effect mitigated pre-project vegetation line.

(h)(g) Static 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 initial project construction shall be defined as the static vegetation line. A static 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 static 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. Because the impact of Hurricane Floyd (September 1999) caused significant portions of the vegetation line in Oak Island and Ocean Isle Beach to be relocated landward of its pre-storm position, the static line for areas **landward of the beach fill construction in Oak Island and Ocean Isle, 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 orthphotography. A static vegetation line shall not be established where a static vegetation line is already in place, including those established by the Division of Coastal Management prior to the effective date of this Rule. In all locations where the vegetation line as defined in this Rule is landward of the static vegetation line, the vegetation line shall be used as the reference point for measuring oceanfront setbacks. A record of all static 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.

(1) 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.

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

(3) The onset of construction shall be defined as the date sediment placement begins with the exception of projects completed prior to the effective date of this Rule in which case the award of contract date will be considered the onset of construction.

(h) "Erosion Escarpment." ~~means~~The normal vertical drop in the beach profile caused from high tide or storm tide erosion.

(i) Measurement ~~l~~Line. The ~~means the~~ line from which the ocean front 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(4) of this Section. Procedures for determining the measurement line in areas designated pursuant to Rule .0304(4)(a) of this Section shall be adopted by the Commission for each area where such a line is designated pursuant to the provisions of G.S. 150B. These procedures shall be available from any local permit officer or the Division of Coastal Management. In areas designated pursuant to Rule .0304(4)(b) of this Section, the Division of Coastal Management shall establish a measurement line that approximates the location at which the vegetation line is expected to reestablish by:

(1) determining the distance the vegetation line receded at the closest vegetated site to the proposed development site; and

(2) locating the line of stable natural vegetation on the most current pre-storm aerial photography of the proposed development site and moving this line landward the distance determined in Subparagraph (g)(1) of this Rule.

The measurement line established pursuant to this process shall in every case be located landward of the average width of the beach as determined from the most current pre-storm aerial photography.

History Note: *Authority G.S. 113A-107; 113A-113(b)(6); 113A-124;*
Eff. September 9, 1977;
Amended Eff. December 1, 1992; September 1, 1986; December 1, 1985; February 2, 1981;
Temporary Amendment Eff. October 10, 1996;
Amended Eff. January 1, 1997;
Temporary Amendment Eff. October 10, 1996 Expired on July 29, 1997;
Temporary Amendment Eff. October 22, 1997;
Amended Eff. August 1, 2002; August 1, 1998.