



NORTH CAROLINA
Environmental Quality

September 1, 2022

ROY COOPER

Governor

ELIZABETH S. BISER

Secretary

BRAXTON DAVIS

Director

MEMORANDUM

CRC-22-16

TO: Coastal Resources Commission

FROM: Robb Mairs, DCM Minor Permits Coordinator

SUBJECT: Vegetation Line: **15A NCAC 7H .0305(5)**

The vegetation line is used by DCM field staff and Local Permit Officers (LPOs) in making oceanfront setback determinations for proposed development within the Ocean Hazard Area of Environmental Concern (AEC).

The Commission's current rule in 15A NCAC 7H.0305(5) describes the natural and man-made features that are found within the Ocean Hazard AEC. This includes the ocean beaches, the nearshore area, primary dunes, frontal dunes, the vegetation line, and the "pre-project" vegetation line (formerly the Static Line). 7H .0305(5) describes the vegetation line as:

"...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."

With regard to planted vegetation, the rule states:

"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."

In recent years, several oceanfront property owners have attempted to re-establish vegetation through aggressive planting, fertilizing, and watering regimes which can result in a vegetation line significantly oceanward than the adjacent areas. While the planting of vegetation for stabilization of dunes and other areas should be and is encouraged, DCM staff and LPOs have questioned when these newly planted areas are appropriate to use for oceanfront setback determinations.



Staff consulted with Dr. Zachary Long with UNC-W who specializes in dune ecology and Mr. Steve Mercer with Coastal Transplants, Inc. who has extensive agricultural and horticultural experience in constructing and planting dune systems along the North Carolina coast. Dr Long and Mr. Mercer generally agreed that, based on their experiences with oceanfront property owners and beach communities, at least two growing seasons are needed for dune planted grasses to establish. DCM staff are in agreement and are therefore recommending adding a two-year minimum post-planting growth requirement to 15A NCAC 7H .0305(5), as outlined below.

I will make a presentation to illustrate application of the vegetation line rule and discuss the proposed amendments at our upcoming meeting in Wilmington.

15A NCAC 07H .0305(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. Planted vegetation must survive a minimum of two years from the date of initial planting before being assessed by the Division of Coastal Management or Local Permit Officer as stable and natural vegetation.

