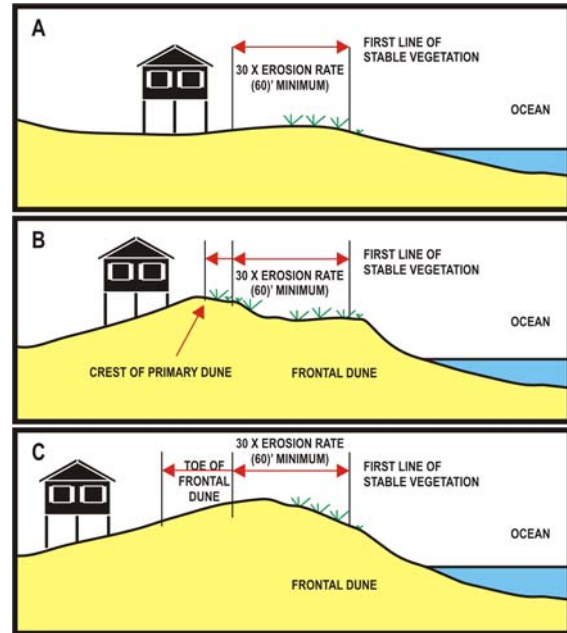


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Changes Underway? – Setbacks, Static Vegetation Lines, and Beach Nourishment.

Many oceanfront property owners and island residents alike are keenly aware of the erosion setback line, which essentially demarcates the most seaward extent where a structure can be built, not withstanding decks, pools, etc. The setback line extends inland from the first line of stable vegetation at a distance of 30 times the annual erosion rate at a particular site. In areas where erosion is determined by the N.C. Division of Coastal Management to be 2 foot or less per year, the minimum setback is 60 foot. Also the construction of the structure must not include the removal or relocation of the primary or frontal dunes (see accompanying figure modified from the N.C. Division of Coastal Management).



Provisions also exist for structures larger than 5,000 square feet including a setback from the first line of stable vegetation at 60 times the annual erosion rate or in areas where erosion is greater than 3.5 feet per year, the setback line shall be established at a distance of 30 times the annual erosion rate plus 105 feet. These additional setback requirements were emplaced because of unique physical, financial, and legal problems associated with relocating these large structures. Of course the intent of the rules guiding building along the oceanfront is to protect life and property from long-term and event-driven erosion associated with storms, prevent structures from encroaching on public beaches, and to reduce the need for disaster relief aid.

The vegetation line in addition to local government-based side, front, and rear setbacks is the building envelope for oceanfront properties and associated infrastructure, such as septic systems. If a structure cannot “fit” in the building envelope, then the property is considered as unbuildable or if the property currently holds a structure, then the lot is considered as non-conforming (existing structure cannot be replaced or expanded because new development would not meet the erosion rate setback). A non-conforming structure can not be repaired or reconstructed if the structure on the lot is destroyed by more than 50% by fire or storm. Although not encouraged, if the first line of stable vegetation migrates seaward, hence the setback as well, structures can accordingly be built seaward. The State’s rules do not address this particular scenario (seaward migration), but adhering to the rule language regarding the vegetation line and setbacks makes this a viable option.

The State’s rule-making body for the coast, the Coastal Resource Commission (CRC), currently allows erosion response by two means; beach nourishment and relocation. For communities electing to utilize beach nourishment as an erosion response measure, the vegetation line that existed prior to the nourishment project is used for future setback determinations, i.e., the pre-project vegetation line becomes *static*, or fixed, in perpetuity. This static line rule is only applied for large scale beach nourishment projects, which are defined as those projects where; **(1)** the total volume of sand includes more than 200,000 cubic yards (roughly 13,500 dump trucks loads of sand) at an average rate of more than 50 cubic yards per linear foot (cy/ft) of shoreline, or **(2)** the effort is a Hurricane Protection

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project constructed by the U.S. Army Corps of Engineers. In previous rulings, the CRC has recognized that beach nourishment should not be utilized as a stimulus for development at otherwise unsuitable sites.

A static vegetation line in accordance with the parameters mentioned above has been established for the entire shoreline or portion of; Ocean Isle Beach, Oak Island, Kure Beach, Carolina Beach, Wrightsville Beach, ***Emerald Isle, Indian Beach, Salter Path, Pine Knoll Shores, and Atlantic Beach.*** Thus in the spirit of the rules, all of the unbuildable and non-conforming lots along Bogue Banks shall remain in this status in perpetuity regardless of the actual position of the vegetation line as it exists months, years, or decades after a beach nourishment project has been constructed.

In the past several years, the CRC has considered variance requests from property owners who do not meet development setbacks from pre-project vegetation lines (static line) associated with large-scale beach nourishment projects. Some of these variances have been based upon hardship claims levied by property owners who meet the building setback from the post-project natural vegetation line but do not meet the setback from the pre-project static line. As the Division of Coastal Management has noted, the number of variance requests for development on unbuildable lots, as well as re-development on those lots (non-conforming), is predicted to rise as property values continue to increase and structures age as well.

Also, because current CRC rules establish a pre-project vegetation line and require it to remain static in perpetuity, beach fill projects have been designed just below the 50 cy/ft threshold so a static line would not be required. Conversely, Oak Island received oceanfront placement of dredged material with an average fill rate of 50.1 cy/ft and therefore property located behind this project must adhere to the line representing pre-project vegetation (the static line). Based on this small volume of fill overage, one Oak Island property received a variance from the CRC in January 2006 to build in this location because his proposed development, while nonconforming to the pre-project static line, was in accordance with setback guidelines if measured from the present-day vegetation line.

There is a conceptual debate now occurring that argues nourished beaches, regardless of the fill rate, should be able to claim "credit" when the vegetation line migrates seaward, understanding that some timeframe needs to elapse before the "new" vegetation line is established. The projected longevity of a project also comes into play, i.e., 5 years of protection?, 10 years?, etc. Also, there is more of a technical/rule-making argument that has also surfaced based upon recent variance requests and other nourishment project implications.

The setback rule was first established in 1979, notwithstanding static vegetation lines and beach nourishment. As mentioned earlier, the setback line extends inland from the first line of stable vegetation at a distance of 30 times the annual erosion rate at a particular site for single-family residences (e.g., less than 5,000 square foot). The multiplier of 30 was designed to coincide with a typical 30-year mortgage term and interestingly, we are approaching the 30-year management window – 1979 plus 30 years is **2009**.

In their June 2006 meeting, the CRC agreed it was time to not only assess the effectiveness and practicality of the static vegetation line related to beach nourishment, but the setback rule as a whole. Issues such as definitions of large-scale structures, the appropriateness of the 30-year multiplier, how vegetation lines and setbacks are

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determined, and other core principles of the setback rule are apparently all open for discussion.

The end result of this sweeping evaluation may indeed lead to some very good management tools for coastal North Carolina, but expect contentious debates to develop within the next several months and years with property rights, beach nourishment, sustainable development, and a host of other issues weaved into the dialogue concerning potential changes to the static vegetation line and setback rule language. Stay tuned...