



# North Carolina Department of Natural Resources & Community Development

James B. Hunt, Jr., Governor

Joseph W. Grimsley, Secretary

OFFICE OF  
COASTAL MANAGEMENT

Kenneth D. Stewart  
Director

Telephone 919/733-2293

## MEMORANDUM

TO: Coastal Resources Commission

FROM: Ralph Cantral *RC*

SUBJECT: Oceanfront Setback for Large Structures

DATE: September 22-23, 1983

On August 16, 1983, a subcommittee of the Implementation and Standards Committee, chaired by Don Bryan, met in Nags Head to discuss possible alternatives to the proposed doubling of the oceanfront setback for large structures. Comments made at the seven public hearings were discussed and the subcommittee felt that some consideration should be given to modifying the rule for high erosion areas.

In addition to examining the technical data relating to the erosion rates, the subcommittee considered the financial impacts on property owners, as well as potential fiscal impacts on local government. The subcommittee concluded that due to the longer planning period involved with larger structures, the economic impact on property owners should be given consideration. In this regard, the subcommittee felt that a cap should be placed on the additional setback for the more erratic areas of the coast.

The data used to determine the long term annual erosion rates is derived from air photos dating back to 1938. The Commission has determined that this is the best method for determining the relative stability of local areas. This is used with the thirty multiplier in an attempt to secure a reasonable setback for a 20-25 year period.

In looking at historical geologic information, it does not appear that areas with very high erosion rates will necessarily continue to have these high erosion rates over a long period of time. Rather, it can be expected that in other areas erosion rates will increase over time. This predictability is especially difficult as we move from a 20 year horizon to a 40-50 year horizon for larger structures. As we have discussed many times, the erosion rates are not intended to be used as predictors of where and how much erosion will take place during the planning period. Instead, this historical data is used to designate areas of risk.

MEMORANDUM

Page Two

September 22-23, 1983

Recommended Alternative

The subcommittee agrees that the concept of doubling the setback for larger structures is a good one but because of the high economic cost of strict adherence, there should be a cap placed on the maximum additional setback. It is therefore recommended that a doubling of the existing setback be used for all parts of the coast which have an average annual erosion rate of equal to or less than the average for the entire coast. The average erosion rate for the coast is 3.5 feet per year. For areas with erosion rates above the coast-wide average, an additional setback of 105' (30 x 3.5') would be added to the existing (small structure) setback. The following table summarizes the impact of this proposed change.

<u>Erosion Rate</u>	<u>Existing Setback (30X)</u>	<u>Proposed Doubling for Large Structures (60X)</u>	<u>Sub-committee Recommendation 30X + 30X or 105'</u>
2'	60'	120'	120'
3'	90'	180'	180'
4'	120'	240'	225'
5'	150'	300'	255'
6'	180'	360'	285'
7'	210'	420'	315'
8'	240'	480'	345'
9'	270'	540'	375'
10'	300'	600'	405'
12'	360'	720'	465'

Staff Discussion

Staff agrees with the conclusion that high erosion areas may not erode at the same high rate over a long period of time. We agree that the concept of the statewide average should be used only for the additional margin of safety/protection needed for large structures and that the existing erosion multiplier should be used in all cases for the small structure setback. Staff is concerned that this proposal may be more complex and difficult for the public to understand than the straight 30X or 60X multipliers. Hopefully, a standardized table similar to the one above may eliminate some of this confusion.

MEMORANDUM

Page Three

September 22-23, 1983

Proposed amendments to 7H section .0300 Ocean Hazard Areas and Section .0100 Introduction and General Comments

The area of the Ocean Erodible Area of Environmental Concern is proposed to be amended as follows:

.0304

(1)(a) AECs Within Ocean Hazard Areas

A distance landward from the first line of stable natural vegetation to the recession line that would be established by multiplying the long-term annual erosion rate, as most recently determined by the Coastal Resources Commission, times 60, provides that where there has been no long-term erosion or where the rate is less than two feet per year, this distance shall be set at 120 feet landward from the first line of stable vegetation; and

A new rule creating use standards for Ocean Hazard Areas is proposed.

.0306 General Use Standards for Ocean Hazard Areas.

(a)(4) In addition to meeting the above criteria for setback behind the primary and/or frontal dune, for all multi-family residential structures (including motels, hotels, condominiums and motel-iminiums) of more than 4 units or 5,000 square feet total floor area, and for any non-residential structure with a total floor area of more than 5,000 square feet, the erosion setback line shall be twice the erosion setback described in .0306(a)(1) above, provided that in no case shall this distance be less than 120 feet. In areas where the rate is more than 3.5 feet per year, this setback line shall be set at a distance of 30 times the long term annual erosion rate plus 105 feet.

A rule to "grandfather" the construction of additional phases of projects for which approval of the initial phase(s) has been obtained is proposed.

Rule 15 NCAC 7H .0104 is amended by designating the current provisions as subsection (a) and adopting the following as subsection (b):

(b) The oceanfront setback provisions specifically applicable to large structures, as set forth by Rule .0306(a)(4) of this Subchapter, shall apply only to development applications received on or after October 1, 1983. Further, Rule .0306(a)(4) of this Subchapter shall only apply to the maximum extent possible without effectively prohibiting the intended use of the property in the following situations:

(1) the completion of projects that had received valid CAMA permits prior to October 1, 1983, provided that permit renewals, modification and transfer requests for these projects made pursuant to 15 NCAC 7J .0404, .0405 and .0406 and 15 NCAC 7E .0105 shall be considered under the setback rules applicable at the time of original permit issuance, and no renewals or extensions of pre-existing permits shall be made beyond the six month

MEMORANDUM

Page Four

September 22-23, 1983

- expiration period unless either there has been substantial progress on construction or no material change in the physical conditions at the project site (as is provided by 15 NCAC 7J .0403 and 15 NCAC 7E .0208(g); and
- (2) the completion of projects that were outside of CAMA permit jurisdiction prior to October 1, 1983, provided that all other required state and local permits had been applied for in accordance with the rules of the agencies responsible for such permits and that the developer has materially changed his or her position in good faith reliance on such development approvals. In all instances, such development must be consistent with all other provisions of this Subchapter.

The exception for construction of structures within the setback area is proposed to be clarified to exclude multi-family structures from the exemption as follows:

.0309 Use Standards for Ocean Hazard Areas: Exceptions

- (b) Where strict application of the oceanfront setback requirements of Rule .0306(a) of this Subchapter would preclude placement of permanent substantial structures on lots existing as of June 1, 1979, single family residential structures may be permitted seaward of the applicable setback line in ocean erodible areas, but not in inlet hazard areas, if each of the following conditions are met:

The density requirement for inlet hazard areas is revised to be consistent with .0306(a)(4) above.

.0310 Use Standards for Inlet Hazard Areas

- (a)(3) Only residential structures of 2 units or less or non-residential structures of less than 4,000 square feet shall be allowed within the inlet hazard area.

RC/cc