



NORTH CAROLINA
Environmental Quality

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CRC-18-21

September 4, 2018

MEMORANDUM

TO: Coastal Resources Commission

FROM: Mike Lopazanski

SUBJECT: Public Comment on Proposed Amendments to 15A NCAC 7H .0308 Specific Use Standards 7 7K .0103 Maintenance and Repair (Dune Rules)

Your rules (15A NCAC 7H .0305) include definitions of various landforms associated with the Ocean Hazard Area including Primary Dunes and Frontal Dunes. Frontal Dunes are defined as the first mound of sand located landward of the ocean beach that has stable and natural vegetation present. 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 an additional six feet of elevation. Primary Dunes extend landward to the lowest elevation in the depression or dune trough behind that same mound of sand.

To avoid weakening the protective nature of Primary and Frontal dunes, no development is permitted that involves the removal or relocation of primary or frontal dune sand or vegetation thereon that would adversely affect the integrity of the dune. Other dunes within the ocean hazard area are not to be disturbed unless development of the property is otherwise impracticable. Any disturbance of these other dunes is allowed only to the extent permitted by 15A NCAC 07H .0308(b).

The intent of the dune rules, first enacted in 1981 was to set standards for dune creation that would require following natural dune alignments, and avoid "pushed-up" dikes on the oceanfront. The CRC also intended to prevent the creation of artificial dunes out on the "storm beach" that would create a false sense of security. The CRC also intended to restrict the building of primary and frontal dunes on the beachfront to circumvent oceanfront setbacks. From reviewing the CRC meeting minutes and materials in the early days of the coastal program, there was concern by the CRC that allowing the expansion of dunes out onto the beach (past the frontal dune) would lead to a false sense of security and stability, particularly in inlet areas.



In 1992, DCM staff realized that strict application of rules restricting the pushing of sand oceanward was in some cases impractical, as some degree of this activity was often necessary during the construction of buildings and driveways on oceanfront lots. The rule was amended to allow the redistribution of sand "held in storage" in other (secondary) dunes within the AEC, but no farther oceanward than the crest of the primary dune or landward toe of the frontal dune.

More recently, DCM staff has observed that shifting sand blown by storms and general prevailing winds has been covering decks, driveways, swimming pools, houses and buildings, both on the oceanfront as well as landward of the oceanfront area. The situation has created some problems for property owners trying to remove sand from around their structures while staying in compliance with the dune protection rules. Property owners have also been looking for ways to enhance the barrier dune system while being able to utilize their property, including the redistribution of sand on individual lots. Additionally, Commissioners have expressed an interest in ensuring that sand, particularly in areas associated with beach nourishment projects, remains within the beach and dune systems.

The proposed amendments to the dune-related rules (7H .0308 Specific Use Standards for Ocean Hazard Areas and 7K .0103 Maintenance and Repair), which are up for adoption at the upcoming meeting, address the redistribution of sand and Hatteras Ramps as follows with the intent of adding more flexibility:

Redistribution of Sand

7H .0308

- Sand held in storage in any dune, other than the frontal or primary dune, shall remain on the lot or tract of land to the maximum extent practicable and may be redistributed within the Ocean Hazard AEC provided that it is not placed any farther oceanward than the crest of a primary ~~dune or landward toe~~ dune, if present, or the crest of a frontal dune.

7K .0103

- Redistribution of sand that results from storm overwash or aeolian transport around buildings, pools, roads, parking areas and associated structures is considered maintenance so long as the sand remains within the Ocean Hazard AEC. Individuals proposing either such activities must consult with the Division of Coastal Management or the local permit officer to determine whether the proposed activity qualifies for the exclusion under G.S. 113A-103(5)(b)(5).

Hatteras Ramps

7H .0308

- In order to ~~avoid weakening~~ preserve the protective nature of primary and frontal dunes a structural accessway (such as a "Hatteras ramp") ~~shall~~ may be provided for ~~any~~ off-road vehicle (ORV) or emergency vehicle access. Such accessways shall be no greater than ~~10~~ 15 feet in width and ~~shall may~~ be constructed of wooden sections fastened ~~together~~ together, or other materials approved by the Division, over the length of the affected dune area. Installation of a Hatteras ramp shall be done in a manner that will preserve the dune's function as a protective barrier against flooding and erosion

by not reducing the volume of the dune.

7H .0308

- Structural accessways may be constructed no more than six feet seaward of the waterward toe of the frontal or primary dune, provided they do not interfere with public trust rights and emergency access along the beach. Structural accessways are not restricted by the requirement to be landward of the FLSNV as described in 07H .0309(a).

The Commission approved proposed amendments for public hearing at their July 2017 meeting and the fiscal analysis at their February 2018 meeting. A public hearing was held in April 2018 and the received two comments below:

Steve Smith, Topsail Beach Commissioner and Chairman of Topsail Shoreline Protection Commission, stated some of our communities have started erosion control structure plans and designs, will these amendments stop these plans? If you lose the frontal dune, will these amendments allow the community to come back and restore a frontal dune system in the area? This is unclear. Topsail Beach would like 7H .0308(b)(5), which states that “no new dunes shall be created in inlet hazard areas”, removed or modified. We would also like to see some strengthening of 7H .0308(d)(3) to say it is for all structures in the VE Zone and take into consideration that dune height plays as important of a role as pile depth. Topsail Beach is supportive of the areas in the amendments that address how to build in a dune area.

Cliff Ogburn, Town of Nags Head Town Manager, stated he speaks in support of the dune rules on behalf of the Nags Head Mayor and Board of Commissioners. These amendments as they pertain to allowing Hatteras Ramps to be made out of materials other than wood, allowing them to extend out onto the flat beach, and more dune protection. Nags Head has had a lot of sand that have created some dunes that are difficult to manage when it comes to providing access. We have more than 40 beach accesses and about half of them have vehicle access for the public or public safety workers. Being able to utilize these ramps will keep more of the dune in place and allow vehicle access without altering the dunes.

While the creation of dunes in Inlet Hazard Areas has been a topic of discussion, it would be better addressed as part of the Commission’s current deliberations on the use standards for Inlet Hazard Areas. The creation of dunes could potentially affect development setbacks and should be part of a broader discussion of how to manage these areas.

15A NCAC 7H .0308(d)(3) references building construction standards for the oceanfront and the requirement that pilings have a tip penetration of eight feet below the lowest ground elevation and five feet below sea level for structures sited on or seaward of a primary dune. These construction standards used to also apply to the High Hazard Flood AEC (a sub category of the Ocean Hazard AEC) which corresponded to the VE Zones identified on FEMA Flood Insurance Rate Maps. The High Hazard Flood AEC was repealed by the Commission in 2015 due to its deference to the NC Building Code standards and National Flood Insurance Program (NFIP) standards. A broader application of your construction standards outside of the Ocean Hazard AEC should also be part of a separate discussion that includes the interaction of these rules with the NC Building Code and the NFIP. Staff therefore recommends that the Commission adopt the

proposed amendments without changes, and consider taking up the other issues raised in public comments for discussion at a later meeting.