



NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

MICHAEL S. REGAN  
Secretary

BRAXTON C. DAVIS  
Director

CRC-18-27

November 15, 2018

## MEMORANDUM

**TO:** Coastal Resources Commission

**FROM:** Heather Coats

**SUBJECT:** Fiscal Analysis 15A 7H .0304, 7H .0309 & 7H .0313 – State Ports Inlet Management AEC

At the April 2018 CRC meeting, the Commission approved for public hearing rule amendments that would create management objectives and use standards for a new State Ports Inlet Management AEC category. The new AEC category would be associated with the two inlets in North Carolina that include federally maintained shipping channels: Beaufort Inlet and the Cape Fear River Inlet. The new AEC category was a result of recommended priorities set in the CRC's Inlet Management Study.

The State Ports Inlet Management AEC proposed boundaries adjacent to the Cape Fear River Inlet consist of the entire oceanfront shoreline of the Town of Caswell Beach and the areas known as West Beach and South Beach within the Village of Bald Head Island. The proposed AEC boundaries adjacent to Beaufort Inlet are confined to the state and federal properties with Fort Macon State Park to the west and the westernmost portion of Cape Lookout National Seashore to the east.

The proposed rules create a new Area of Environmental Concern (AEC) for lands adjacent to the Cape Fear River Inlet and Beaufort Inlet which would allow greater flexibility to local and state agencies in the use of sandbags to protect threatened frontal and primary dunes, structures and infrastructure. The State Ports Inlet Management Area of Environmental Concern would be included within the Ocean Hazard category of AECs, as defined in 15A NCAC 07H .0304. The Ocean Hazard category currently includes the Ocean Erodible AEC, Inlet Hazard AEC and the Unvegetated Beach AEC.

The most significant proposed changes are as follows:

- Formalize removal of the Inlet Hazard Area designation for the lands adjacent to the mouth of the Cape Fear River and Beaufort Inlet, in accordance with legislation;
- Create a new AEC designation (State Ports Inlet Management AEC) for lands adjacent to the two inlets;



- Allow frontal and primary dunes to be classified as “imminently threatened” in the State Ports Inlet Management AEC;
- Broaden the definition of how a frontal or primary dune, structure or infrastructure may qualify as being imminently threatened in the State Ports Inlet Management AEC and to allow local governments or state agencies to apply for permits to protect threatened frontal or primary dunes with sandbags;
- Allow for the use of a larger size sandbag (i.e. “geotubes”) in the State Ports Inlet Management AEC;
- Allow for small scale development throughout the State Ports Inlet Management AEC that is consistent with an exception utilized in the former Inlet Hazard AEC;
- And maintain all other Ocean Hazard Use Standards in the State Ports Inlet Management AEC.

### Summary of Fiscal Analysis

The group most affected by these changes will be the two local governments, the Village of Bald Head Island and Town of Caswell Beach, within the State Ports Inlet Management Areas of Environmental Concern (AEC). The NC Baptist Assembly and the NC Division of Parks and Recreation at Fort Macon State Park may also benefit from the new designation. The AEC is not expected to affect the federal property at Cape Lookout National Seashore due to the undeveloped nature of the area.

Private land owners adjacent to the Cape Fear River Inlet in Caswell Beach and Bald Head Island may also indirectly benefit from the ability of their local governments to protect frontal dunes, which could in turn protect their property at reduced or no cost to them.

The NC Department of Transportation could potentially benefit should Caswell Beach Road again become threatened by erosion in the future.

DCM estimates that there is a potential cost savings for local governments of up to \$35,000 for a typical length revetment. These cost savings are derived from the cost difference between a geotextile tube estimated at \$325-975 per linear foot (dependent on the number of geotextile tubes used and diameter of the tube) vs. a standard sandbag revetment at \$425 per linear foot.

It is also estimated that there is a potential cost savings to property owners resulting from this action that could amount to \$31,875-\$42,500 per individual property. This estimate is based on varying average oceanfront property widths averaging from 75'-100' with a cost of \$425 per linear foot for the installation of sandbags that may in some cases be unneeded if the local government opted to protect the frontal dune oceanward of their property without assessing the property owner.

DCM anticipates the effective date of these rule amendments to be September 1, 2019. The fiscal analysis has been approved by DEQ and is under review by OSBM. Staff recommends that the Commission conditionally approve the fiscal analysis provided there are no significant revisions requested by OSBM.

**Fiscal Analysis**

**State Ports Inlet Management Area of Concern**

15A NCAC 07H .0304

15A NCAC 07H .0309

15A NCAC 07H .0313

Prepared by  
Heather Coats

NC Division of Coastal Management  
910-796-7302

November 15, 2018

Summary

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Agency	DEQ, Division of Coastal Management (DCM) Coastal Resources Commission (CRC)
Title of the Proposed Rules	AECs Within Ocean Hazard Areas Citation 15A NCAC 07H .0304 Use Standards for Ocean Hazard Areas: Exceptions 15A NCAC 07H .0309 Use Standards for State Ports Inlet Management Areas 15A NCAC 07H .0313
Description of the Proposed Rule	7H .0304 contains the CRC’s definitions of the Ocean Hazard Areas of Environmental Concern (AECs). The 7H .0309 rule contains the setback exceptions to the for Coastal Area Management Act permits in the Ocean Hazard AECs. The 7H .0313 Rule establishes the creation of a new AEC for lands adjacent to the two deep draft inlets providing access to the State’s ports.
Agency Contact	Heather Coats Beach and Inlet Management Project Coordinator Heather.Coats@ncdenr.gov (910) 796-7302
Authority	G.S. 113-229(cl); G.S. 113A-107; 113A-113; 113A-115; 113A-118; 113A-124
Necessity	The Coastal Resources Commission proposes to amend its administrative rules in order to comply with a legislative mandate (S.L. 2015-241) related to the removal of specific areas from the Inlet Hazard AEC. The amendments also include changes to create a new AEC. The amendments will provide greater flexibility to local governments and state agencies protecting life and property from the hazardous forces inherent to the oceanfront shoreline.
Impact Summary	State government: Yes Local government: Yes Substantial impact: No Federal government: No Private citizens: Yes

**Introduction and Purpose**

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In 2012, Section 4 of The Act to Study and Modify Certain Coastal Management Policies (S.L. 2012-202) directed the Coastal Resources Commission (CRC) to study the feasibility of creating a new Area of Environmental Concern (AEC) for the lands adjacent to the mouth of the Cape Fear River. The intent of the study was to consider the unique coastal morphologies and hydrographic conditions of the Cape Fear River region, and to determine if action was necessary to preserve, protect, and balance the economic and natural resources of this region through the elimination of overlapping AECs and by incorporating appropriate development standards into one single AEC unique to this location. The legislation specified

that the region studied should include Caswell Beach and the Village of Bald Head Island at a minimum. The CRC's findings on the Cape Fear River AEC Feasibility study acknowledged that the circumstances in the area may not be unique to only the Cape Fear area. The Commission recommended development of a more inclusive study of all the inlet areas, rather than limiting the creation of a new AEC to the Cape Fear region. The Inlet Management Study was then undertaken, which established numerous short and long-term priorities and recommendations, one of which was to create a new AEC designation for the areas adjacent to the state's two deep draft inlets (i.e. Cape Fear River and Beaufort Inlets).

Additional legislation entitled "An Act To Provide Further Regulatory Relief To The Citizens Of North Carolina By Providing For Various Administrative Reforms, By Eliminating Certain Unnecessary Burdens Or Outdated Statutes And Regulations and Modernizing Or Simplifying Cumbersome Or Outdated Regulations, And By Making Various Other Statutory Changes" (S.L. 2014-120) was also passed in the 2014 legislative session. Part 35.(c)(3) of the Act directed the CRC to repeal the Inlet Hazard Area designation for any locations including an inlet providing access to a State Port via a channel maintained by the United States Army Corps of Engineers (i.e. Cape Fear River and Beaufort Inlets). While these areas were thereby removed from the Inlet Hazard AEC designation, they remained within the Ocean Erodible AEC.

The CRC is therefore proposing the following changes as a result of the legislative mandate and discussions with the local governments and affected parties. The most significant proposed changes are as follows:

- Formalize removal of the Inlet Hazard Area designation for the lands adjacent to the mouth of the Cape Fear River and Beaufort Inlet, in accordance with legislation;
- Create a new AEC designation (State Ports Inlet Management AEC) for lands adjacent to the two inlets;
- Allow frontal and primary dunes to be classified as "imminently threatened" in the State Ports Inlet Management AEC;
- Broaden the definition of how a frontal or primary dune, structure or infrastructure may qualify as being imminently threatened in the State Ports Inlet Management AEC and to allow local governments or state agencies to apply for permits to protect threatened frontal or primary dunes with sandbags;
- Allow for the use of a larger size sandbag (i.e. "geotubes") in the State Ports Inlet Management AEC;
- Allow for small scale development throughout the State Ports Inlet Management AEC that is consistent with an exception utilized in the former Inlet Hazard AEC;
- And maintain all other Ocean Hazard Use Standards in the State Ports Inlet Management AEC.

The State Ports Inlet Management AEC proposed boundaries adjacent to the Cape Fear River Inlet consist of the entire oceanfront shoreline of the Town of Caswell Beach and the areas known as West Beach and South Beach within the Village of Bald Head Island. The proposed AEC boundaries adjacent to Beaufort Inlet are confined to the state and federal properties with Fort Macon State Park to the west and the westernmost portion of Cape Lookout National Seashore to the east.

The group most affected by these changes will be the two local governments, the Village of Bald Head Island and Town of Caswell Beach, within the State Ports Inlet Management Areas of Environmental Concern (AEC). The NC Baptist Assembly and the NC Division of Parks and Recreation at Fort Macon State Park may also benefit from the new designation. The AEC is not expected to affect the federal

property at Cape Lookout National Seashore due to the undeveloped nature of the area. Private land owners adjacent to the Cape Fear River Inlet in Caswell Beach and Bald Head Island may also indirectly benefit from the ability of their local governments to protect frontal dunes, which could in turn protect their property at reduced or no cost to them. The NC Department of Transportation could potentially benefit should Caswell Beach Road again become threatened by erosion in the future. DCM estimates that there is a potential **cost savings** for local governments of up to \$35,000 for a typical length revetment. These cost savings are derived from the cost difference between a geotextile tube estimated at \$325-975 per linear foot (dependent on the number of geotextile tubes used and diameter of the tube) vs. a standard sandbag revetment at \$425 per linear foot. It is also estimated that there is a potential cost savings to property owners resulting from this action that could amount to \$31,875-\$42,500 per individual property. This estimate is based on varying average oceanfront property widths averaging from 75'-100' with a cost of \$425 per linear foot for the installation of sandbags that may in some cases be unneeded if the local government opted to protect the frontal dune oceanward of their property without assessing the property owner. Given the unknowns related to future benefits, and limited historic need for sandbags at Caswell Beach, it would be difficult for DCM to estimate this savings. Other savings include the value of protecting property and dune habitat, which remains unquantified due to the complexity and variables involved. There are additional changes to the rules that are simply clarifications, and have no impact. These proposed rule changes are in the public interest and conform to the principles of G.S. 150B-19.1 and Executive Order 70.

DCM anticipates the effective date of these rule amendments to be September 1, 2019.

### **Description of the Proposed Rules**

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The proposed rules create a new Area of Environmental Concern (AEC) for lands adjacent to the Cape Fear River Inlet and Beaufort Inlet which would allow greater flexibility to local and state agencies in the use of sandbags to protect threatened frontal and primary dunes, structures and infrastructure. The State Ports Inlet Management Area of Environmental Concern would be included within the Ocean Hazard category of AECs, as defined in 15A NCAC 07H .0304. The Ocean Hazard category currently includes the Ocean Erodible AEC, Inlet Hazard AEC and the Unvegetated Beach AEC.

The proposed new AEC boundaries adjacent to the Cape Fear River Inlet would include the entire oceanfront shoreline of Caswell Beach, the oceanfront shoreline property owned by the North Carolina Baptist Assembly/Ft. Caswell, and the areas known as West Beach and South Beach within the Village of Bald Head Island. The AEC limits adjacent to Beaufort Inlet would be confined to the oceanfront and inlet shorelines of state property within Fort Macon State Park to the west and part of the federally-owned Cape Lookout National Seashore to the east (Figures 2-5). As previously stated, it should be noted that these areas currently fall within the Ocean Erodible AEC designation and will not result in an increase in CRC jurisdiction.

DCM currently issues permits for temporary erosion control structures pursuant to use standards described in 15A NCAC 7H .0308(a)(2) and 15A NCAC 7H .1700, which limits sandbags to protection of imminently threatened structures (buildings, roads and septic systems). Sandbags are not currently allowed to protect dunes or habitat. The CRC is proposing the following amendments, based upon a prior legislative mandate, Commission study recommendations, and discussions with stakeholders:

- Allowing local governments or state agencies to apply for permits to protect frontal or primary dunes as well as structures and infrastructure within the new AEC by changing the definition of what can be classified as imminently threatened within the State Ports Inlet Management AEC. The revised definition of “imminently threatened” would expand to allow a qualified person meeting applicable State occupational licensing requirements to certify that a frontal or primary dune, structure or

infrastructure would be threatened within six months due to erosion, based on specified rates of erosion within a 30-day time period.

- The use standards within the new AEC would also allow local governments and state agencies to utilize larger geotextile sand tubes rather than smaller individual sandbags (see Figure 1).

Figure 1. A single geotextile tube vs. a standard sandbag revetment.



Image sources: [www.tencategeotube.com](http://www.tencategeotube.com) & DCM

- Finally, the use standards for the new AEC designation would allow small-scale non-essential development that was also allowed under the former Inlet Hazard Area designation prior to the removal of these areas from the Inlet Hazard AEC via legislation.
- The overall sandbag structure size limit, other structure setbacks and all other use standards currently in place would still apply.

Figure 2.

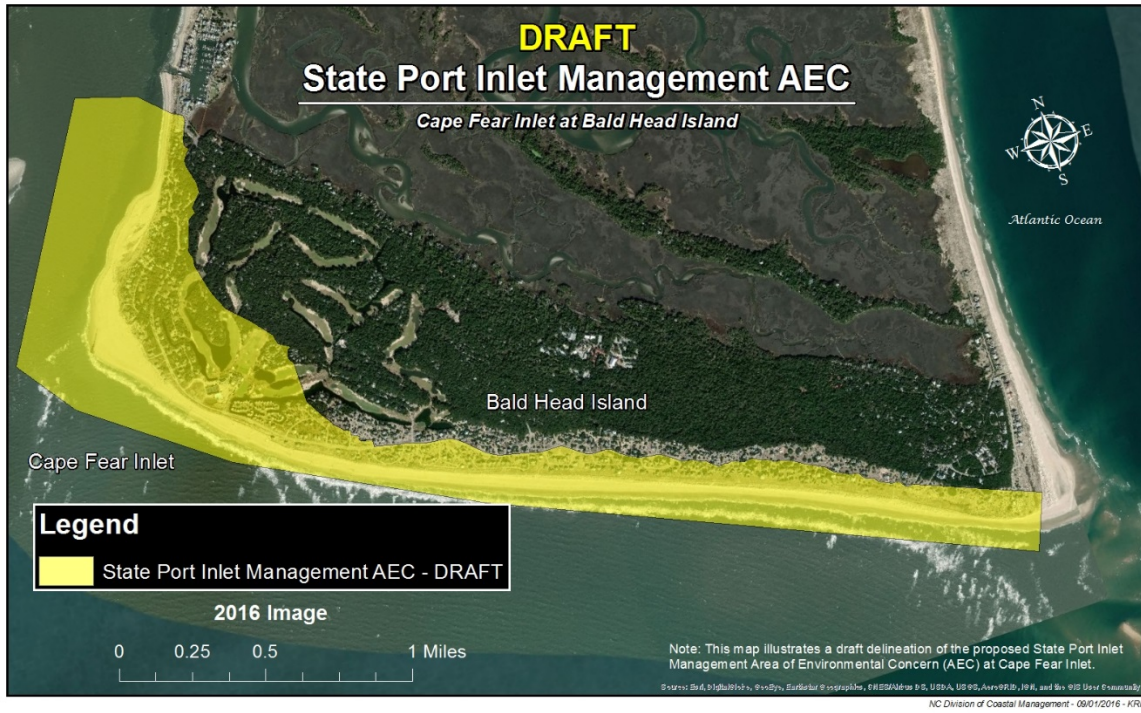




Figure 3.

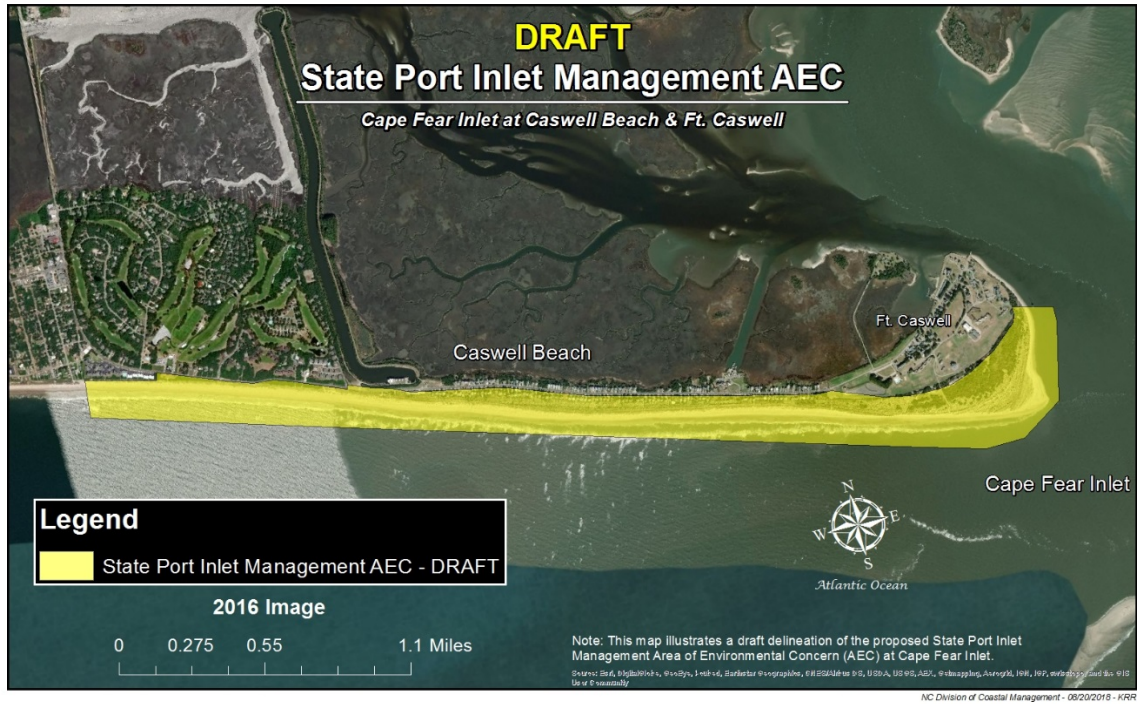
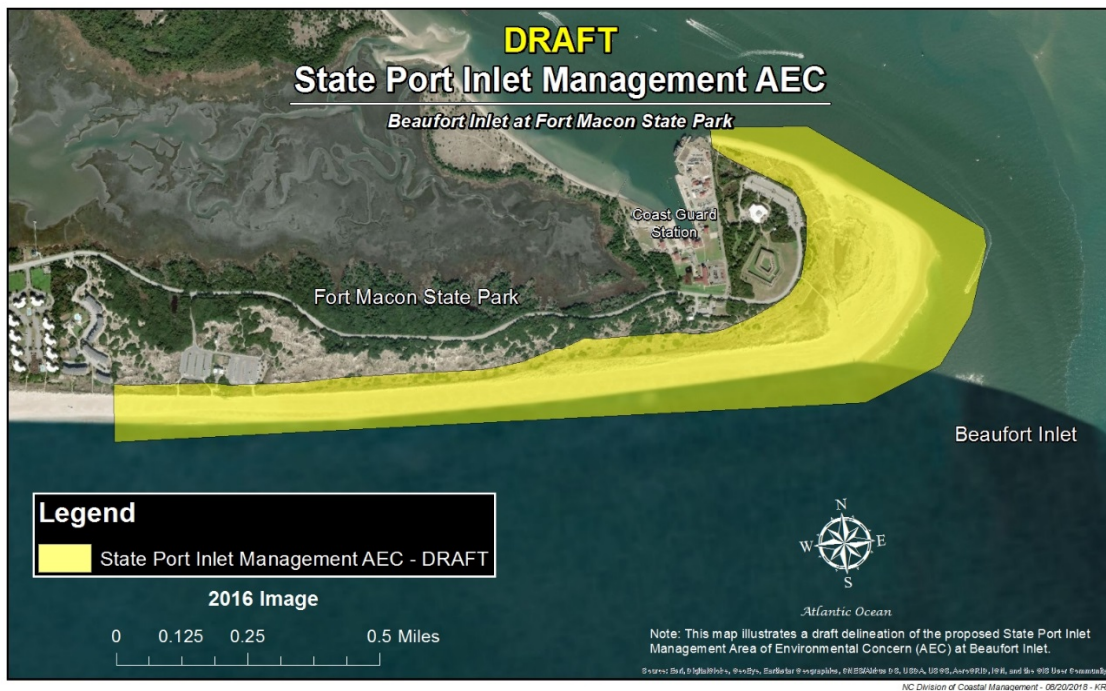


Figure .





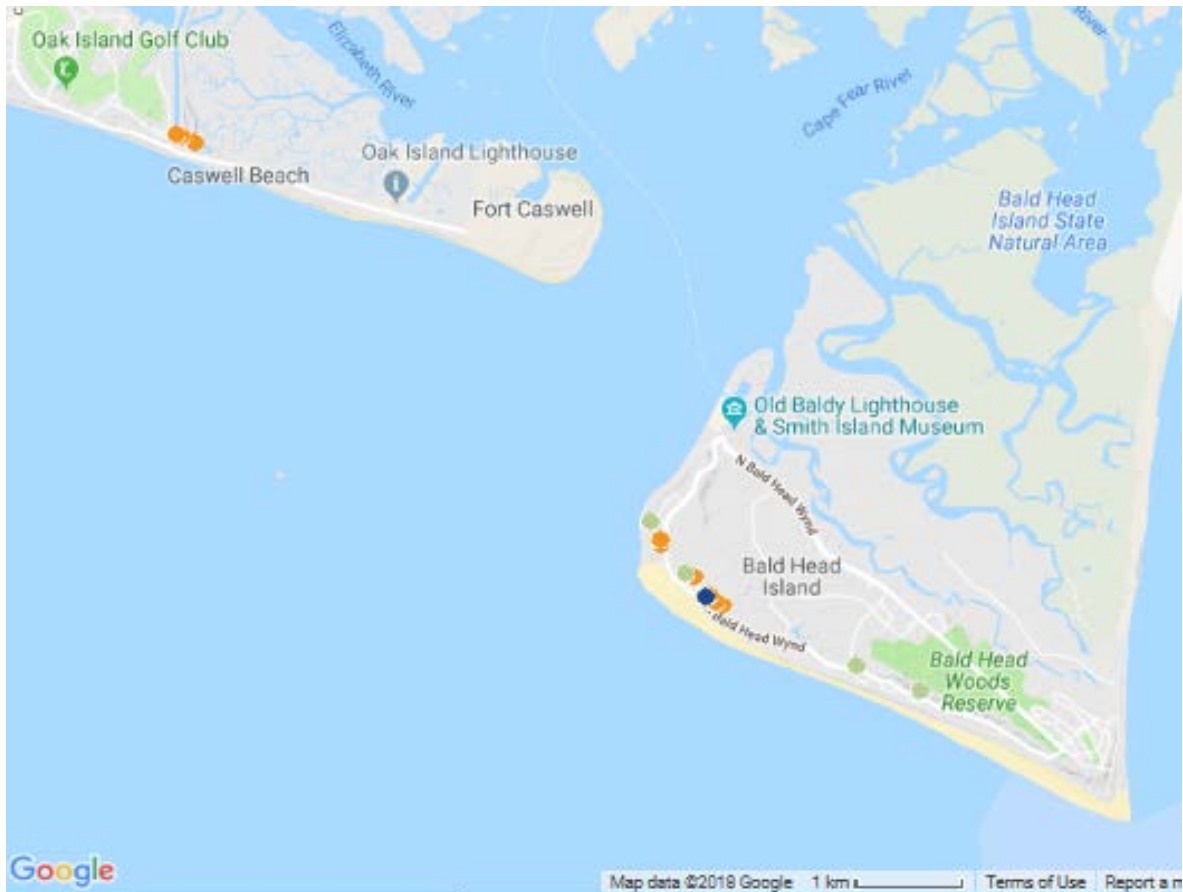


Figure 6. Sandbag structures adjacent to Cape Fear River Inlet. Some structures were permitted prior to 1996. Only one permit authorization for sandbags has been issued since 2008.

Department of Transportation

Pursuant to G.S. 150B-21.4, the agency reports that the proposed amendments to 7H.0304 and 7H .0309 & 7H .0313 will not significantly affect environmental permitting for the NC Department of Transportation (NCDOT). The primary benefit applicable to NCDOT is greater flexibility in protecting the roadway (through the use of “geotubes”) in Caswell Beach should it again become threatened by erosion. NCDOT therefore is not expected to experience any negative fiscal impacts associated with the proposed rule amendments and may benefit to an unquantified extent.



## Local Government

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Local governments within the AEC limits are expected to benefit from the increased flexibility in protecting structures and infrastructure through the use of “geotubes”, expanded definition of imminently threatened and the ability to use sandbags to protect dunes. While the proposed amendments are not expected to affect local government revenues or expenditures significantly, the ability to protect frontal and primary dunes prior to infrastructure being directly threatened will allow them to act more proactively to protect property and dune habitat, which may in turn serve to reduce damage to infrastructure. However, any attempt to quantify the benefit would be speculative since the action would be dependent upon erosion events and the intentions of local governments.

## Private Property Owners

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It is not anticipated that the proposed action will result in direct costs to private property owners as the ability to receive permits for the construction of “geotube” revetments will be limited to local governments and state agencies.

## Division of Coastal Management

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DCM does not anticipate that the proposed action will significantly increase operating cost over what is currently required for permitting, inspecting, and ensuring compliance of sandbag structures. The DCM does not anticipate any significant changes in permitting receipts due to the proposed action. The State Ports Inlet Management AEC boundaries fall within the current Ocean Hazard designation and therefore will not result in an increase in jurisdictional areas.

# BENEFITS

## Local Governments

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The cost to install a standard sandbag structure at a height of 6’ and maximum base width of 20’ is approximately \$425 per linear foot utilizing individual bags (standard size of 5’ x 15’). A single 6’-8’ diameter geotextile tube is estimated to cost approximately \$325/linear foot. The estimated cost to install a similarly sized structure out of larger geotextile tubes (i.e. “geotubes”) at similar dimensions is approximately \$975/linear foot, assuming a structure composed of three geotextile tubes. A single 6-8’ diameter tube could feasibly be used to provide some level of shoreline protection. However, geotubes can also be constructed to client-specified dimensions, so the estimate of \$975/linear foot for a larger revetment could be reduced through construction of one or two larger geotubes with a greater base width. Ultimately, the geotube revetment design would be left to the local government, provided they fell within the overall allowable size limits, and cost therefore cost is variable with the design. For purposes of this analysis, any reference to a single geotube assumes a 6’-8’ diameter structure at a cost of \$325/linear foot.

	Standard Sandbags	A single geotube	Three geotubes
170’ revetment length	\$72,250	\$55,250	\$165,750
350’ revetment length	\$148,750	\$113,750	\$341,250
750’ revetment length	\$318,750	\$243,750	\$731,250
950’ revetment length	\$403,750	\$308,750	\$926,250

Table 1. Estimated costs of standard revetment lengths based on length and structure composition.

Based on historical permits issued to local governments in the Cape Fear area- the length of permitted sandbag revetments ranged from 170' to 950' in length, with an average length of 350'. Using these dimensions, the cost savings to local governments could range from \$17,000- \$95,000 if a single span of geotubes were used instead of typical individual sandbags and would amount to approximately \$35,000 for the average size revetment length. While the cost escalates over that of a standard sandbag revetment if three geotubes are used, there is no mandate in the proposed rules requiring a larger geotube structure, nor to use geotubes over the smaller, standard-sized sandbags.

#### Private Property Owners

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Assuming the typical width of a privately-owned oceanfront lot to be 75-100 feet, if sandbag structures were to span the entire width of the lot, the typical installation cost will be about \$31,875-\$42,500. Because the proposed use standards would allow local and state agencies to protect dunes, structures and infrastructure, these costs, if entirely born by the local government, could in turn result in savings to individual property owners by also serving protection of their properties. While property owners may not recognize the full extent of these savings if the full costs were assessed to the property owners by the local government, the property owner could still experience a savings of \$7,500-\$1,000 if a single geotube were used instead of standard-sized sandbags.

#### NC Department of Transportation

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Pursuant to G.S. 150B-21.4, the agency reports that the proposed amendments to 7H .0304, 7H .0309 and 7H .0313 will not significantly affect environmental permitting for NCDOT. Again, the changes primarily allow NCDOT greater flexibility to use geotextile tubes to protect Caswell Beach Road, should it become threatened, or protect the adjacent frontal dunes, which could thereby result in an unquantified cost savings.

#### Division of Coastal Management

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The proposed rules are not expected to significantly affect the Division of Coastal Management. DCM could potentially benefit by the ability to spend less time on sandbag compliance and enforcement, and more time on other agency tasks. However, the fiscal benefit of this rule change to DCM cannot be quantified and is expected to be negligible.

#### State Government

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The proposed rules are not expected to significantly affect other state agencies. The Department of Natural and Cultural Resources could potentially benefit by the ability to utilize geotextile tubes instead of sandbags should they want to protect the Ft. Macon State Park property. However, due to numerous unknown factors, the fiscal benefit of this rule change to DCM cannot be quantified and is expected to be negligible.

Other potential cost benefits that might result from the proposed changes include the reduced loss of property and protection of dune habitat. These types of costs are not readily quantifiable.

### **COST/BENEFIT SUMMARY**

The greatest benefit of the proposed rule changes would be the greater flexibility allowed to local governments and state agencies in protecting frontal and primary dunes, structures, and infrastructure.

The quantified costs and benefits from these proposed rule changes do not exceed \$1,000,000 annually. Table 2 summarizes the range of estimated costs and benefits of this action. Benefits conferred to local governments are due to the lower cost of geotextile tube sandbag revetments compared to construction using traditional individual sandbags. Private property owners may benefit if local governments construct sandbag revetments to protect the frontal dune and thereby eliminate the need for private property owners to protect their property.

	<b>Benefit</b>	<b>Cost</b>	<b>Substantial Impact</b>
Private Citizens	\$7,500-\$42,500	None Known.	No
Local Government	\$17,000- \$95,000		No
NCDOT	Unquantified		No
State Government	Unquantified		No
Federal Government	Unquantified		No
<b>TOTAL</b>	<b>\$24,500-\$137,500</b>		No

Table 2. Estimated benefits of proposed rule changes.

There are no quantified costs or substantial impacts attributed to the proposed new AEC and rule changes.

**15A NCAC 07H .0304 AECs WITHIN OCEAN HAZARD AREAS**

The ocean hazard AECs contain all of the following areas:

- (1) Ocean Erodible Area. This is the area where there exists a substantial possibility of excessive erosion and significant shoreline fluctuation. The oceanward boundary of this area is the mean low water line. The landward extent of this area is the distance landward from the first line of stable and natural vegetation as defined in 15A NCAC 07H .0305(a)(5) to the recession line established by multiplying the long-term annual erosion rate times 90; provided that, where there has been no long-term erosion or the rate is less than two feet per year, this distance shall be set at 120 feet landward from the first line of stable and natural vegetation. For the purposes of this Rule, the erosion rates are the long-term average based on available historical data. The current long-term average erosion rate data for each segment of the North Carolina coast is depicted on maps entitled “2011 Long-Term Average Annual Shoreline Rate Update” and approved by the Coastal Resources Commission on May 5, 2011 (except as such rates may be varied in individual contested cases or in declaratory or interpretive rulings). In all cases, the rate of shoreline change shall be no less than two feet of erosion per year. The maps are available without cost from any Local Permit Officer or the Division of Coastal Management on the internet at <http://www.nccoastalmanagement.net>.
- (2) Inlet Hazard Area. The inlet hazard areas are natural-hazard areas that are especially vulnerable to erosion, flooding, and other adverse effects of sand, wind, and water because of their proximity to dynamic ocean inlets. This area extends landward from the mean low water line a distance sufficient to encompass that area within which the inlet migrates, based on statistical analysis, and shall consider such factors as previous inlet territory, structurally weak areas near the inlet, and external influences such as jetties and channelization. The areas on the maps identified as suggested Inlet Hazard Areas included in the report entitled INLET HAZARD AREAS, The Final Report and Recommendations to the Coastal Resources Commission, 1978, as amended in 1981, by Loie J. Priddy and Rick Carraway are incorporated by reference and are hereby designated as Inlet Hazard Areas, except for:
  - (a) ~~the Cape Fear Inlet Hazard Area as shown on the map does not extend northeast of the Bald Head Island marina entrance channel; and~~
  - (b) ~~the former location of Mad Inlet, which closed in 1997.~~
  - (a) the location of a former inlet which has been closed for at least 15 years.
  - (b) inlets that due to shoreline migration, no longer include the current location of the inlet.
  - (c) inlets providing access to a State Port via a channel maintained by the United States Army Corps of Engineers.

In all cases, the Inlet Hazard Area shall be an extension of the adjacent ocean erodible areas and in no case shall the width of the inlet hazard area be less than the width of the adjacent ocean erodible area. This report is available for inspection at the Department of Environmental Quality, Division of Coastal Management, 400 Commerce Avenue, Morehead City, North Carolina or at the website referenced in Item (1) of this Rule. ~~Photocopies are available at no charge.~~

- (3) Unvegetated Beach Area. Beach areas within the Ocean Hazard Area where no stable and natural vegetation is present may be designated as ~~an~~ Unvegetated Beach ~~Area~~ Areas on either a permanent or temporary basis as follows:
  - (a) An area appropriate for permanent designation as an Unvegetated Beach Area is a dynamic area that is subject to rapid unpredictable landform change due to wind and wave action. The areas in this category shall be designated following studies by the Division of Coastal Management. These areas shall be designated on maps approved by the Coastal Resources

Commission and available without cost from any Local Permit Officer or the Division of Coastal Management on the internet at the website referenced in Item (1) of this Rule.

- (b) An area that is suddenly unvegetated as a result of a hurricane or other major storm event may be designated by the Coastal Resources Commission as an Unvegetated Beach Area for a specific period of time, or until the vegetation has re-established in accordance with 15A NCAC 07H .0305(a)(5). At the expiration of the time specified or the re-establishment of the vegetation, the area shall return to its pre-storm designation.

(4) State Ports Inlet Management Area. These are areas adjacent to and within Beaufort Inlet and the mouth of the Cape Fear River, providing access to a State Port via a channel maintained by the United States Army Corps of Engineers. These areas are unique due to the influence of federally-maintained channels, and the critical nature of maintaining shipping access to North Carolina's State Ports. These areas may require specific management strategies not warranted at other inlets to address erosion and shoreline stabilization. State Ports Inlet Management Areas shall extend from the mean low water line landward as designated on maps approved by the Coastal Resources Commission and available without cost from the Division of Coastal Management, and on the internet at the website referenced in Sub-item(1)(a) of this Rule.

#### **15A NCAC 07H .0309 USE STANDARDS FOR OCEAN HAZARD AREAS: EXCEPTIONS**

(a) The following types of development shall be permitted seaward of the oceanfront setback requirements of Rule .0306(a) of the Subchapter if all other provisions of this Subchapter and other state and local regulations are met:

- (1) campsites;
- (2) driveways and parking areas with clay, packed sand or gravel;
- (3) elevated decks not exceeding a footprint of 500 square feet;
- (4) beach accessways consistent with Rule .0308(c) of this Subchapter;
- (5) unenclosed, uninhabitable gazebos with a footprint of 200 square feet or less;
- (6) uninhabitable, single-story storage sheds with a foundation or floor consisting of wood, clay, packed sand or gravel, and a footprint of 200 square feet or less;
- (7) temporary amusement stands;
- (8) sand fences; and
- (9) swimming pools.

In all cases, this development shall be permitted only if it is landward of the vegetation line or static vegetation line, whichever is applicable; involves no alteration or removal of primary or frontal dunes which would compromise the integrity of the dune as a protective landform or the dune vegetation; has overwalks to protect any existing dunes; is not essential to the continued existence or use of an associated principal development; is not required to satisfy minimum requirements of local zoning, subdivision or health regulations; and meets all other non-setback requirements of this Subchapter.

(b) Where 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, buildings shall be permitted seaward of the applicable setback line in ocean erodible areas and State Ports Inlet Management Areas, but not inlet hazard areas or unvegetated beach areas, if each of the following conditions are met:

- (1) The development is set back from the ocean the maximum feasible distance possible on the existing lot and the development is designed to minimize encroachment into the setback area;
- (2) The development is at least 60 feet landward of the vegetation line or static vegetation line, whichever is applicable;
- (3) The development is not located on or in front of a frontal dune, but is entirely behind the landward toe of the frontal dune;
- (4) The development incorporates each of the following design standards, which are in addition to those required by Rule .0308(d) of this Subchapter.
  - (A) All pilings shall have a tip penetration that extends to at least four feet below mean sea level;
  - (B) The footprint of the structure shall be no more than 1,000 square feet, and the total floor area of the structure shall be no more than 2,000 square feet. For the purpose of this Section, roof covered decks and porches that are structurally attached shall be included in the calculation of footprint;



(C) Driveways and parking areas shall be constructed of clay, packed sand or gravel except in those cases where the development does not abut the ocean and is located landward of a paved public street or highway currently in use. In those cases concrete, asphalt or turfstone may also be used;

(D) No portion of a building's total floor area, including elevated portions that are cantilevered, knee braced or otherwise extended beyond the support of pilings or footings, may extend oceanward of the total floor area of the landward-most adjacent building. When the geometry or orientation of a lot precludes the placement of a building in line with the landward most adjacent structure of similar use, an average line of construction shall be determined by the Division of Coastal Management on a case-by-case basis in order to determine an ocean hazard setback that is landward of the vegetation line, static vegetation line or measurement line, whichever is applicable, a distance no less than 60 feet.

(5) All other provisions of this Subchapter and other state and local regulations are met. If the development is to be serviced by an on-site waste disposal system, a copy of a valid permit for such a system shall be submitted as part of the CAMA permit application.

(c) Reconfiguration and development of lots and projects that have a grandfather status under Paragraph (b) of this Rule shall be allowed provided that the following conditions are met:

(1) Development is setback from the first line of stable natural vegetation a distance no less than that required by the applicable exception;

(2) Reconfiguration shall not result in an increase in the number of buildable lots within the Ocean Hazard AEC or have other adverse environmental consequences. For the purposes of this Rule, an existing lot is a lot or tract of land which, as of June 1, 1979, is specifically described in a recorded plat and which cannot be enlarged by combining the lot or tract of land with a contiguous lot(s) or tract(s) of land under the same ownership. The footprint is defined as the greatest exterior dimensions of the structure, including covered decks, porches, and stairways, when extended to ground level.

(d) The following types of water dependent development shall be permitted seaward of the oceanfront setback requirements of Rule .0306(a) of this Section if all other provisions of this Subchapter and other state and local regulations are met:

(1) piers providing public access; and

(2) maintenance and replacement of existing state-owned bridges and causeways and accessways to such bridges.

(e) Replacement or construction of a pier house associated with an ocean pier shall be permitted if each of the following conditions is met:

(1) The ocean pier provides public access for fishing and other recreational purposes whether on a commercial, public, or nonprofit basis;

(2) Commercial, non-water dependent uses of the ocean pier and associated pier house shall be limited to restaurants and retail services. Residential uses, lodging, and parking areas shall be prohibited;

(3) The pier house shall be limited to a maximum of two stories;

(4) A new pier house shall not exceed a footprint of 5,000 square feet and shall be located landward of mean high water;

(5) A replacement pier house may be rebuilt not to exceed its most recent footprint or a footprint of 5,000 square feet, whichever is larger;

(6) The pier house shall be rebuilt to comply with all other provisions of this Subchapter; and

(7) If the pier has been destroyed or rendered unusable, replacement or expansion of the associated pier house shall be permitted only if the pier is being replaced and returned to its original function.

(f) In addition to the development authorized under Paragraph (d) of this Rule, small scale, non-essential development that does not induce further growth in the Ocean Hazard Area, such as the construction of single family piers and small scale erosion control measures that do not interfere with natural oceanfront processes, shall be permitted on those nonoceanfront portions of shoreline that exhibit features characteristic of an Estuarine Shoreline. Such features include the presence of wetland vegetation, and lower wave energy and erosion rates than in the adjoining Ocean Erodible Area. Such development shall be permitted under the standards set out in Rule .0208 of this Subchapter. For the purpose of this Rule, small scale is defined as those projects which are eligible for authorization under 15A NCAC 07H .1100, .1200 and 07K .0203.

(g) Transmission lines necessary to transmit electricity from an offshore energy-producing facility may be permitted provided that each of the following conditions is met:

- (1) The transmission lines are buried under the ocean beach, nearshore area, and primary and frontal dunes, all as defined in Rule 07H .0305, in such a manner so as to ensure that the placement of the transmission lines involves no alteration or removal of the primary or frontal dunes; and
- (2) The design and placement of the transmission lines shall be performed in a manner so as not to endanger the public or the public's use of the beach.

**15A NCAC 07H .0313 USE STANDARDS FOR STATE PORTS INLET MANAGEMENT AREAS**

Development within State Ports Inlet Management areas, as defined by Rule .0304 of this Section, shall be permitted in accordance with the following standards:

- (a) All development in the State Ports Inlet Management Areas shall be set back from the first line of stable and natural vegetation, static vegetation line, or measurement line at a distance in accordance with 15A NCAC 7H .0306(a)(5), except for development exempted under 15A NCAC 7H .0309.
- (b) Notwithstanding the use standards for temporary erosion control structures described in 15A NCAC 7H .0308(a)(2), a local or state government may apply for a permit to seek protection of an imminently threatened frontal or primary dune, public and private structures and/or infrastructure within a State Ports Inlet Management Area. For the purpose of this rule, a frontal or primary dune, structure, or infrastructure shall be considered imminently threatened in a State Ports Inlet Management Area if:
  - (1) its foundation, septic system, right-of-way in the case of roads, or waterward toe of dune is less than 20 feet away from the erosion scarp; or
  - (2) site conditions, such as flat beach profile or accelerated erosion, increase the risk of imminent damage to the structure as determined by the Director of the Division of Coastal Management; or
  - (3) the frontal or primary dune or infrastructure will be imminently threatened within six (6) months as certified by persons meeting applicable State occupational licensing requirements; or
  - (4) the rate of erosion from the erosion scarp or shoreline within 100 feet of the infrastructure, structure, frontal or primary dune was greater than 20 feet over the preceding 30 days.Permit applications to protect property where no structures are imminently threatened require consultation with the US Army Corps of Engineers.
- (c) Temporary erosion control structures constructed by a local or state government shall have a base width not exceeding 20 feet, and a height not to exceed six feet. Individual sandbags shall be tan in color and be a minimum of three feet wide and seven feet in length when measured flat.
- (d) Established common-law and statutory public rights of access to the public trust lands and waters in State Ports Inlet Management Areas shall not be eliminated or restricted. Development shall not encroach upon public accessways nor shall it limit the intended use of the accessways.
- (e) Except where inconsistent with the above standards, all other rules in this Subchapter pertaining to development in the ocean hazard areas shall be applied to development within the State Ports Inlet Management Areas.
- (f) In addition to the types of development excepted under Rule .0309 of this Section, small scale, non-essential development that does not induce further growth in the State Ports Inlet Management Areas, such as the construction of single-family piers and small scale erosion control measures that do not interfere with natural inlet movement, may be permitted on those portions of shoreline within a designated State Ports Inlet Management Area that exhibit features characteristic of Estuarine Shoreline. Such features include the presence of wetland vegetation, lower wave energy, and lower erosion rates than in the adjoining Ocean Erodible Area. Such development shall be permitted under the standards set out in Rule .0208 of this Subchapter. For the purpose of this Rule, small scale is defined as those projects which are eligible for authorization under 15A NCAC 7H .1100, and.1200.