

ROY COOPER
Governor
ELIZABETH S. BISER
Secretary
WILLIAM F. LANE
General Counsel



TO: The Coastal Resources Commission

FROM: Christine A. Goebel, DEQ Assistant General Counsel

DATE: February 13, 2023 (for the February 22-23, 2023 CRC Meeting)

RE: Variance Request by Town of Ocean Isle Beach (CRC-VR-23-01)

Petitioner is the Town of Ocean Isle Beach, which owns six road-ends at issue at the east end of Town which are used as beach access points. Following the Town's groin project, they covered existing sandbags with sand and planted vegetation at these six road ends. Due to supply chain issues for traditional wooden sand fencing, the Town proposed to use hay and pine straw bales as sand fencing. In accordance, with the Commission's rule at 15A NCAC 7H .0311, DCM coordinated with WRC and USFWS during the CAMA minor permit process. Both agencies raised concerns about the use of hay and pine straw bales as sand fencing. On June 6, 2022, DCM denied the Town's CAMA minor permit application based on those concerns about impacts to nesting sea turtles. The much of the dry sand beach in the area of the existing boardwalk and central business district. The Town now seeks a variance to develop the sand fencing from hay and pine straw as proposed in their permit application.

The following additional information is attached to this memorandum:

Attachment A: Relevant Rules
Attachment B: Stipulated Facts
Attachment C: Petitioner's Positions and Staff's Responses to Variance Criteria
Attachment D: Petitioner's Variance Request Materials
Attachment E: Stipulated Exhibits including powerpoint

cc(w/enc.): Brian Edes, Esq., Petitioner's Counsel, electronically
Mary Lucasse, Special Deputy AG and CRC Counsel, electronically



RELEVANT STATUTES OR RULES**APPENDIX A****15A NCAC 07H .0301 OCEAN HAZARD CATEGORIES**

The Ocean Hazard categories of AECs encompass the natural hazard areas along the Atlantic Ocean shoreline where, because of their vulnerability to erosion or other adverse effects of sand, wind, and water, uncontrolled or incompatible development could endanger life or property. Ocean hazard areas include beaches, frontal dunes, inlet lands, and other areas in which geologic, vegetative and soil conditions indicate a substantial possibility of excessive erosion or flood damage.

15A NCAC 07H .0302 SIGNIFICANCE OF THE OCEAN HAZARD CATEGORY

(a) Hazards associated with ocean shorelines are due to the constant forces exerted by waves, winds, and currents upon the unstable sands that form the shore. During storms, these forces are intensified and can cause changes in the bordering landforms and to structures located on them. Ocean hazard area property is in the ownership of a large number of private individuals as well as several public agencies and is used by a vast number of visitors to the coast. Ocean hazard areas are critical due to both the severity of the hazards and the intensity of interest in the areas.

(b) The location and form of the various hazard area landforms, in particular the beaches, dunes, and inlets, are in a permanent state of flux, responding to meteorologically induced changes in the wave climate. For this reason, the siting of development on and near these landforms shall be subject to the provisions in this Section in order to avoid loss or damage. The flexible nature of these landforms presents hazard to development situation immediately on them and offers protection to the land, water, and structures located landward of them. The value of each landform lies in the particular role it plays in affording protection to life and property. Development shall not diminish the energy dissipation and sand storage capacities of the landforms essential to the maintenance of the landforms' protective function.

15A NCAC 07H .0303 MANAGEMENT OBJECTIVE OF OCEAN HAZARD AREAS

(a) The CRC recognizes that absolute safety from the destructive forces of the Atlantic shoreline is an impossibility for development located adjacent to the coast. The loss of life and property to these forces, however, can be greatly reduced by the proper location and design of structures and by care taken in prevention of damage to natural protective features particularly primary and frontal dunes. Therefore, it is the CRC's objective that development in ocean hazard areas shall be sited to minimize danger to life and property and achieve a balance between the financial, safety and social factors that are involved in hazard area development.

(b) The rules set forth in this Section shall further the goals set out in G.S. 113A-102(b), to minimize losses to life and property resulting from storms and long-term erosion, prevent encroachment of permanent structures on public beach areas, preserve the natural ecological conditions of the barrier dune and beach systems, and reducing the public costs of development within ocean hazard areas, and protect common-law and statutory public rights of access to and use of the lands and waters of the coastal area.

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 vegetation line 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 180 feet landward from the vegetation line. 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 “North Carolina 2019 Oceanfront Setback Factors & Long-Term Average Annual Erosion Rate Update Study” and approved by the Coastal Resources Commission on February 28, 2019 (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>.

15A NCAC 07H .0311 INSTALLATION AND MAINTENANCE OF SAND FENCING

(a) Sand fencing may only be installed for the purpose of building sand dunes by trapping windblown sand, for the protection of the dune(s) and vegetation (planted or existing).

(b) Sand fencing shall not be installed in a manner that impedes or restricts existing public access to the beach, recreational use of the beach, or emergency vehicle access. Sand fencing shall not be installed in a manner that impedes or restricts established common law and statutory rights of public access and use of public trust lands and waters.

(c) Sand fencing shall not be installed in a manner that impedes, traps or otherwise endangers sea turtles, sea turtle nests or sea turtle hatchlings. CAMA permit applications for sand fencing shall be subject to review by the Wildlife Resources Commission and the U.S. Fish and Wildlife Service in order to determine whether or not the proposed design or installation will have an adverse impact on sea turtles or other threatened or endangered species.

(d) Non-functioning, damaged, or unsecured sand fencing shall be removed by the property owner.

(d) Sand fencing shall not be placed on the wet sand beach area.

STIPULATED FACTS**ATTACHMENT B**

1. Petitioner Town of Ocean Isle Beach (“Town”) is a North Carolina municipal corporation and body politic organized and existing in Brunswick County, North Carolina. The Town is represented by Brian E. Edes, of the law firm of Crossley McIntosh Collier Hanley & Edes, PLLC located in Wilmington, North Carolina.

2. The Town owns the street-ends which run generally perpendicular to the ocean and dead-end at the beach. These streets were publicly dedicated to and accepted by the Town, as shown on the recorded plats and Powell Bill roll attached as stipulated exhibits. These road-ends are used for beach access. In this variance, the six street-end sites at issue are (moving east to west at the eastern end of the island) the east end of E. 3rd Street, Columbia Street, Shallotte Boulevard, Charlotte Street, Durham Street and Lumberton Street. The bales are proposed to be placed within the same requirements as normal wooden slat and wire sand fencing. With the exception of the area along E. Third St., public access is provided at each street end. The minimum opening for public access at these sites would be 8’. The street end placement areas for each street measure as follows:

Lumberton St – 50’

Durham St – 50’

Charlotte St – 50’

Shallotte Blvd – 100’

Columbia St – 50’

Area along sandbags adjacent to E. Third St – 212’

Total linear footage: 512’ – 40’ (footage for public access) = 472’

3. These six sites are at the east end of the Town and the approximate distance from the western-most Durham Street site to the eastern-most east end of E. 3rd Street site is about a half-mile.

4. The Town’s six sites at issue in this variance are located within the Ocean Hazard Area of Environmental Concern. While the current (old) Inlet Hazard Area ends at the appropriate location of the groin, the pending (new) Inlet Hazard Area extends west past the western-most site at Lumberton Street and encompasses all six sites. A copy of the old and new Inlet Hazard AEC boundaries in the area of the Site are attached as a stipulated exhibit. The Commission’s average annual erosion rates used for determining erosion setbacks for the sites (moving west to east) are 2 feet per year for Lumberton Street, 4 feet per year for Durham and Charlotte Streets, and 5 feet per year for Shallotte Boulevard, E. 3rd Street, and Columbia Street, as shown on a picture of the DCM map viewer with the erosion rate blocks viewer.

5. For several decades, the Town has contended with chronic erosion along the easternmost portion of the Town’s oceanfront shoreline. Over the years, the Town has implemented various measures to address this erosion in attempts to stem the economic losses resulting from damages to structures due to hurricane and storm activity, as well as

the loss of beachfront land due to the ongoing shoreline erosion along the east end of the island in proximity to Shallotte Inlet.

6. In 2001, the United States Army Corps of Engineers' (USACE) first nourished the beach through the Town's Coastal Storm Risk Reduction (CSRSM) project, however, due to the chronic erosion along the east end, the USACE's pre-project cost/benefit analysis determined that placing material east of Shallotte Blvd. should not be included in the project leaving that area vulnerable. Accordingly, no material was placed east of Shallotte Blvd. as part of the CRSM project.

7. In response, the Town and many private property owners installed sandbag revetments along approximately 1,400 feet of shoreline, beginning at a point just west of Shallotte Boulevard and extending east to 469 East 3rd Street. Most of the sandbags were initially installed around 2005 and have been periodically repaired and replaced as some of the bag revetments have failed under the continued landward retreat of the shoreline.

8. Due to continued erosion, the sandbag revetment was extended 400 feet to the west just past Charlotte Street in 2012.

9. Per the CAMA at G.S. 113A-115.1 and 15A NCAC 7H .0308(a) these sandbag revetments are not authorized to provide permanent shoreline protection solution for the impacted area. Accordingly, working with CPE as their coastal engineer, the Town sought and received permits to construct a terminal groin in 2016. A copy of CAMA Major Permit No. 107-16 is attached as a stipulated exhibit.

10. Following a delay due to NEPA-related federal litigation where the Town ultimately prevailed, the Town's terminal groin project was completed in April of 2022. The groin project included a 1,050 ft long terminal groin structure located approximately one block east of Columbia Street, just east of the easternmost building along the oceanfront shoreline. The project also included approximately 270,000 cy of beach fill sand to form an "accretion fillet" placed immediately to the west of the groin structure. According to Mr. Rosov of Coastal Protection Engineering of North Carolina, Inc., the Town's contractor for the project, collectively, this project was designed to provide long-term protection to the easternmost 3,000 ft of the Town's oceanfront shoreline. A copy of Mr. Rosov's December 2, 2022 letter regarding the variance request and a copy of his CV are attached as stipulated exhibits.

11. Following the construction of the terminal groin and associated beach fill project, the Town covered many of the sandbags within the project area with stockpiled sand to create "starter dunes" to provide additional protection. The Town also planted dune vegetation atop these "starter dunes" to help increase their stability as the roots begin to grow and to trap aeolian- transported sand thereby functioning to build the dune in size over time. The Town's consultant Mr. Rosov contends that to date these starter dunes do not provide adequate protection from storm events.

12. Commission rules at 15A NCAC 7H .0308(a)(2)(J) allow sandbags to remain on a site if they remain covered by sand. Any portion of the temporary erosion control structure that becomes exposed above grade after the expiration of the permitted time shall be removed by the property owner within 30 days of official notification from DCM.

13. According to Mr. Rosov, from a coastal engineering perspective, the utilization of sand fencing to facilitate dune growth along the landward portion of the beach is recommended. In Mr. Rosov's opinion, ultimately a robust dune along the east end of Ocean Isle Beach could help prevent storm-induced flooding.

14. The condition of the east end of the Town remains vulnerable to storm event over wash given the lack of a dune system in that area, though this area has the newly installed terminal groin, the groin's fillet, and the existing sandbags covered with sand and vegetated as described in other stipulated facts.

15. On November 10, 2021, the Coastal Resources Commission ("CRC") met in Atlantic Beach, North Carolina. According to the meeting minutes, a copy of which are attached as a stipulated exhibit, during the Executive Secretary's Report portion of the meeting, Division of Coastal Management ("DCM") Director Braxton Davis reported that "last weekend a coastal low-pressure system combined with king tides caused impacts due to flooding and ocean over wash in numerous areas". Director Davis went on to report that "[w]e are aware that some sandbags were over-washed in Ocean Isle".

16. Later in that meeting, during the Coastal Resources Advisory Council's ("CRAC") Report to the CRC, the meeting minutes reflect that CRAC Chair Greg "Rudi" Rudolph reported that the CRAC "also discussed the possibility of using hay bales in lieu of sand fencing. Figure Eight Island property owners have been trying this approach and reports that it is working well". CRC Chair Renee Cahoon then directed staff to "look at rule amendments that would allow the use of hay bales".

17. The hay bales used at Figure Eight Island were initially placed on two lots with for a total approximate total shoreline length of 200 feet in May of 2015 without CAMA permit authorization. DCM staff along with Staff with the WRC met with Figure Eight Island HOA at these lots to observe the unauthorized hay bales. In an effort to bring the unpermitted development into compliance, Figure Eight HOA agreed to remove the unauthorized hay bales and then submitted a CAMA Minor Permit application on August 12, 2015. Prior to the issuance of that Permit DCM sought agency comments from both WRC and U.S. Fish and Wildlife Service ("USFWS"). USFWS responded that they "don't have much more concerns for these structures than for sand fencing". WRC responded in part, they believed the use of hay bales as sand fencing "could have merit", that "[i]t appears from an earlier endeavor that the bales will do reasonably well catching the sand" and that "it would be nice to only allow the bale installation on an experimental basis". WRC suggested that if allowed, the hay bales should be monitored by way of "picture documentation on a monthly / seasonal / storm event basis (nothing intensive) and stated a concern regarding bale decomposition". On August 31, 2015, DCM staff issued CAMA Minor Development Permit 15-48 authorizing the use of hay bales as sand

fencing on Figure Eight Island, a copy of which is attached as a stipulated exhibit, along with the CAMA minor permit application and WRC and USFWS comment emails.

18. The Hay bales installed on Figure Eight Island were in place for no more than a few months due to storm activity which washed them away. The Memo referenced below states that early site visits and photographs of the site indicated that hay bales did capture and hold sand within the first month of placement on the site.

19. In response to Chair Cahoon's direction, on January 28, 2022, DCM Assistant Major Permit Coordinator Curt Weychert drafted a memorandum for the CRC regarding the possible use of hay bales as an alternative to sand fencing in the 7K sand fencing exemption rule. ("Memo"). The Memo bears the subject line of "Amendments to 15A NCAC 7K .0212 – Installation and Maintenance of Sand Fencing. A copy of this Memo is attached as a Stipulated Exhibit.

20. In the DCM Memo, Mr. Weychert outlined the criteria for sand fencing and described the process of using hay bales by Figure 8 Island, including permit conditions proposed by the North Carolina Wildlife Resources Commission ("WRC") limiting the height to one bale and removal of bindings on the bales.

21. The Memo concludes with the following recommendation to the CRC:

To date, no CAMA permit applications for the use of hay bales as sand fencing have been denied. At this time, DCM Staff recommends maintaining the current minor permitting process for hay bales until more information can be gathered from multiple sites across the state and further analyzed by resource agencies.

22. On February 10, 2022, the CRC met in Beaufort, North Carolina. During that meeting Mr. Weychert conveyed the contents of the Memo including DCM Staff's recommendation to the CRC Chair and Members. The minutes of that meeting, a copy of which are attached as a stipulated exhibit, do not reflect any opposition being voiced to said recommendation.

23. Town Mayor Debbie Smith and Assistant Town Administrator Justin Whiteside attended the November 21, 2021, CRC meeting. Assistant Town Administrator Justin Whiteside attended the February 10, 2022, CRC meetings. After attending these meetings and observing the discussion concerning the use of hay bales as a potential alternative to traditional sand fencing, the Town decided to pursue the installation of hay bales along various sections of the east end of the island. The Town's submission of the permit application for the hay bales coincided with the completion of the terminal groin construction project (April 2022). A letter describing this timeline drafted by Assistant Town Administrator Justin Whiteside is attached as a stipulated exhibit.

24. The Town submitted a CAMA minor permit application dated April 6, 2022 to DCM proposing to utilize hay bales for the installation of sand fencing at the six street ends noted in the facts above.

25. DCM received the Town's permit application on April 14, 2022. Although the Town's original application requested the use of hay bales only, DCM staff requested that the Town try both hay bales and pine straw bales so DCM could compare the effectiveness of each type. On May 10, 2022, DCM wrote to the Town asking for additional information regarding the proposed project.

26. As part of the CAMA Minor Permit process, the Town sent notice of the application to the adjacent riparian owners of the six sites. Copies of the notice letters, the certified mail receipts and the tracking information are attached as stipulated exhibits. No objections to the proposed development from neighbors or the public were received by DCM.

27. On May 6, 2022 DCM Field Representative Brendan Brock emailed Maria Dunn, Coastal Coordinator for WRC a copy of the Town's permit application and site plan which depicted the areas where the Town would be utilizing both hay and pine straw bales as requested by DCM.

28. On June 14, 2022, the WRC expressed concerns about the town's proposed use of bales for sand fencing as "they have undetermined impacts that should be vetted prior to allowance". In addition, WRC stated:

The direct, secondary, and cumulative impacts bales may have on these resources coast wide is unknown and should be discussed in more detail prior to the inclusion of bales as a management tool by the NCDCM. No information has been found regarding bale use on ocean shorelines in other states, so previously studied examples cannot be compared. Therefore, we request additional conversation occur between the NCDCM, NCWRC, and United States Fish and Wildlife Service (USFWS) to discuss impacts bales may have in the immediate area of installation, the cumulative impact they may have on repeat installations in the same area, the cumulative impact they may have on habitats with coast wide use, and the regulation of use if determined to be an appropriate tool. These discussions should occur prior to the issuance of any permits or allowances of bales on ocean shorelines.

29. On June 16, 2022, the USFWS emailed DCM stating that USFWS generally agreed with NCWRC's comments.

30. On June 16 2022, DCM denied the Town's CAMA Minor Permit application seeking to install hay bales and pine straw bales at the six road-end sites on the east end. DCM informed the Town that their CAMA Minor Permit application must be denied as it was deemed inconsistent with 15A NCAC 07H.0311(c) based on:

Sand fencing shall not be installed in a manner that impedes, traps or otherwise endangers sea turtles, sea turtle nests or sea turtle hatchlings. CAMA permit applications for sand fencing shall be subject to review by the Wildlife Resources Commission and the U.S. Fish and Wildlife Service in order to determine whether or not the proposed design or installation will have an adverse impact on sea turtles or other threatened or endangered species.

31. Upon receipt of the CAMA permit denial letter the Town shared WRC's and USFWS's stated concerns with by Coastal Protection Engineering of North Carolina, Inc. ("CPE"). Through a December 2, 2022 letter, CPE Senior Biologist Brad Rosov stated his opinion about the pros and cons of the use of hay bales as sand fencing, concluding that the benefits outweigh the potential for negative impacts caused by perceived risks. A copy of this letter is attached as a stipulated exhibit.

32. At the September 22, 2022 CRC meeting where the Commission discussed a proposed rule about a minimum vegetation growing period for planted vegetation, Mr. Mairs described speaking with Steve Mercer at Coastal Transplants about this issue. A copy of those minutes is attached as a stipulated exhibit.

33. On September 30, 2022, the east end of Ocean Isle experienced overwash due to the effects of Hurricane Ian. These effects are depicted in pictures taken by Mr. Hill attached as stipulated exhibits along with his statement about the photos.

34. The Town asserts that the desire to utilize bale fencing is a result of the unavailability of traditional sand fencing due to supply chain delays and material shortages coupled with labor shortages. The Town further asserts that These shortages have been observed by CPE. CPE contacted Mr. Peter McClintock, owner of Emerald Forest Landscaping, to inquire about the future availability of sand fencing material. CPE was informed that of the two main wholesale suppliers, one is currently providing materials exclusively to Emerald Forest Landscaping who is currently backordered with other customers and the other supplier, a smaller company, is also faced with a backlog and is not accepting new orders at this time.

35. As recently as January 10, 2023, the Town's customary sand fence vendor, Green Resource, informed the Town that sand fence "[m]anufacturers are experiencing more than normal backlogs due to raw material cost and labor shortages as well. We are outsourcing this product from other sources but currently do not have a lead time on availability and delivery". A 1-10-23 letter from Green Resource is attached as a stipulated exhibit.

36. After receiving the Town's variance petition, DCM reached out to some contractors and towns to ask what their experience with obtaining sand fencing has been recently. DCM Minor Permit Coordinator Robb Mairs contacted the Town of Wrightsville Beach who indicated that their last purchase of sand fence was in May of 2022 and that in addition to the "slightly longer wait" there was a "drastic price increase." Green Resource in Supply, NC has been the Town of Wrightsville Beach's supplier for many years. DCM Elizabeth City District Manager Ron Renaldi reached out to a beach-push contractor who said that

after a few weeks of no supply, Kempsville Building Materials recently got a truckload which sold out quickly and appears to have been used in the Corolla area.

37. On January 3, 2023 DCM LPO Minor Permits Coordinator Robb Mairs disseminated an email to LPOs providing guidance to Towns and property owners with respect to the use of Christmas Trees in dune restoration and/or beach sand fencing, and when the 7K exemption was appropriate and when a CAMA Minor Permit was needed A copy of this email and the attached guidance document are attached as a stipulated exhibit.

38. For purposes of this variance application, Petitioner stipulates that the proposed development is inconsistent with the Commission's rules from which it seeks a variance, including 15A NCAC 7H. .0311(c).

39. After receiving the Town's Variance Petition, DCM sent a copy of the petition to WRC and USFWS and asked them to provide any comments on the petition to DCM. Through a January 27, 2023 letter, a copy of which is attached as a stipulated exhibit, USFWS stated its continuing concerns about the use of stray/hay bales to be used as sand fencing, specifically as it related to sea turtles. USFWS also stated concerns that a study project could incorrectly give oceanfront owners the impression they were approved state-wide. Through a January 31, 2023 letter, a copy of which is attached as a stipulated exhibit, WRC stated its continuing concerns about the use of straw/hay bales, most specifically regarding impacts to sea turtles. WRC also indicated that while there could be an opportunity for a study, it "should involve significant consultation between NCWRC, NCDCM, and USFWS staff.." DCM subsequently forwarded the WRC and USFWS comments to the Town on January 30th and 31st respectively, for their review.

40. On January 30, 2021, along with new comments from WRC and USFWS, DCM provided contact information for UNCW Professor Dr. Zachary Long and Steve Mercer of Coastal Transplants as they had expressed interest to DCM in working with the Town on a potential monitoring program. Justin Whiteside, the Town's Assistant Manager contacted Mr. Mercer (see fact below) but did not contact Dr. Long.

41. In Response, the Town contacted Steve Mercer. On February 8, 2023 Mr. Mercer corresponded with Assistant Town Administrator Justin Whiteside, stating, the following:

I would like to respond in writing to your questions about sand fence and supply chain issues over the [past several years. My order wait time in 2019 was a average of 2-3 weeks for of season sand fence. Since 2019 we have seen that wait time extend to 9-11 months due to the delays in receiving materials and the lack of labor due to covid concerns and Covid workplace protocols. A phone call placed today reviled a 4 month wait for fence even in the off season. Also, as can be expected, the cost of a delivered roll of sand fence in 2018 was \$35.00 and the last shipment I received from the same manufacture in April of 2022 was \$62.37. That included an incentive to "RUSH" my order that I had been waiting on for 9 months. The fence I bought off the open market in October/November was \$81.00 a roll delivered from a broker out of Washington State.

I have always tried to keep several truckloads at my shop so I would never be without, but even my supplies dwindled to nothing in late 2021-2022. In order to complete contracts, I was having to buy fence from hardware stores, brokers, and distributors all across the US.

Our discussion also led to the use of hay bales. I am in favor with caveat of no grass bales. Commonly available wheat or oat straw with twine or clean pine straw with twine would be fine. Pine straw bales should not contain broom grass or broom sage so I would advise a harvested straw. I thought the town [Ocean Isle Beach] had been asked to try both and I was looking forward to seeing the results for sand trapping and the pros and cons of each.

42. To minimize impacts to wildlife, the Town proposes to remove any ties or ropes from the bales during installation. The Town proposes to monitor the status of the bale sand fencing post installation. This monitoring will consist of picture documentation on a monthly, seasonal, and post storm basis. The Town will likewise provide a statement regarding the status of bale decomposition. The aim of this monitoring will be to document bale effectiveness, material durability (intactness and decomposition), and the bale fencing's effect on the surrounding habitat. If requested, the Town agrees to erect signage at the project site that informs the public that the bale fencing project is a pilot study. The Town proposed this monitoring after receiving the most recent late-January concerns from WRC and USFWS.

Stipulated Exhibits:

1. Town Plats of dedicated streets at the six sites and Powell Bill roll showing subject streets
2. Image from DCM Map Viewer showing current and pending Inlet Hazard AEC
3. Image from DCM Map Viewer showing erosion rates at the sites
4. Town's Terminal Groin permit- CAMA Major Permit No. 107-16
5. Rosov (CPE) 12/2/22 Statement and CV
6. November 2021 CRC Meeting Minutes
7. Figure Eight Island's 2015 CAMA Minor Permit 15-48 with application and emails from WRC/USFWS
8. 1-28-22 Memo from DCM to CRC re Use of Hay Bales
9. February 2022 CRC Meeting Minutes
10. Justin Whiteside 1-10-23 letter
11. CAMA Minor Permit application and related materials dated 4-6-22
12. May 10, 2022 Add Info Letter to OIB
13. Notice of permit application to adjacent riparian owners with receipts and tracking
14. 5-6-22 email from DCM to WRC with permit application
15. 6-14-22 WRC's Response to application
16. 6-16-22 USFWS's Response to application
17. 6-6-22 Denial Letter
18. September 2022 CRC Minutes
19. Photos of Hurricane Ian overwash and Mr. Hill's signed statement
20. 1-3-23 Email from DCM to LPOs re: Christmas Trees
21. 1-27-23 Response from WRC re variance petition
22. 1-27-23 Response from USFWS re variance petition
23. Powerpoint of aerial/ground level photos of the sites and surrounding area

PETITIONERS' and STAFF'S POSITIONS**ATTACHMENT C****I. Will strict application of the applicable development rules, standards, or orders issued by the Commission cause the petitioner unnecessary hardships? If so, the petitioner must identify the hardships.****Petitioner's Position: Yes.**

In April of 2022, the Town completed the construction of a properly permitted terminal groin at the east end of the Town. The groin was necessitated to combat the severe erosion the Town has been experiencing in that area for decades. Since that time the Town has attempted to create a dune system adjacent to the groin by covering the previously placed permitted sandbags in the area with sand followed by planting dune vegetation atop these "starter dunes". To date these efforts have not created a dune system sufficient to provide protection. As recently as September 30, 2022 the Town experienced extreme storm over wash in this area. The Town, in good faith and based on information provided at the November 2021 and February 2022 CRAC/CRC meeting applied for a permit to install bale sand fencing in this area. Traditional sand fencing materials are not readily available due to supply chain delays as well as material and labor shortages. If the Town is not authorized to utilize hay bale sand fencing the Town will most likely have to wait a significant amount of time to obtain traditional sand fencing which will consequently leave the subject unprotected and vulnerable.

The tax base in the area adjacent to the groin is valued at in excess of \$16,500,000. This is exclusive of the public infrastructure servicing these properties such as public water and sewer infrastructure, public roadways (including some State-owned roadways), electrical, telephone, cable, and internet infrastructure. Given the availability of bale fencing, the supply problems with traditional fencing, and the prior success of the Figure Eight Island sand fencing, and the lack of any scientific data supporting the concerns expressed in the denial letter, the Town's continued hardship is unnecessary and would be ameliorated if the requested variance is granted.

Staff's Position: No.

The Town seeks a variance from 7H .0311(c) which states:

Sand fencing shall not be installed in a manner that impedes, traps or otherwise endangers sea turtles, sea turtle nests or sea turtle hatchlings. CAMA permit applications for sand fencing shall be subject to review by the Wildlife Resources Commission and the U.S. Fish and Wildlife Service in order to determine whether or not the proposed design or installation will have an adverse impact on sea turtles or other threatened or endangered species.

In this case, DCM asked both the Wildlife Resources Commission (WRC) and the US Fish & Wildlife Service (USFWS) to review the project during the application review process as well as to review the Town's variance petition. Their responses are attached as stipulated exhibits. While the responses to the variance petition were more robust, both agencies have been consistent in raising concerns about the use of hay, straw, or pine straw bales as sand fencing. These concerns

include the potential obstruction of nesting habitat, potential for invasive species within the bales, and decomposition of the bales and resulting temperature impacts on sea turtle nests. They also raised concerns about the possible cumulative impacts of the use of bales coast-wide in the state, especially given the lack of data regarding this proposed use. USFWS did not recommend the approval of the proposed use by OIB as a pilot project due to the potential impacts and also “the ease with which these structures may be installed” and the resulting enforcement problems. WRC acknowledged there may be “an opportunity to consider a related research project on bales as a potential alternative to sand fencing” but they did not believe a study is appropriate for this proposal and that such a study couldn’t be adequately designed in the timeframe of this variance hearing. The Town proposes (in the stipulated facts, not as part of their application) to provide photographs and statements about decomposition, which is what was done at Figure Eight Island, for the few months before those bales were washed away.

Staff notes that characterizing the Figure Eight Island experience as a “success” is an overstatement, though that may have been the term attributed to Mr. Rudolph in his CRAC report from the official minutes of the CRC meeting. The unpermitted bales initially placed were there removed after approximately six weeks and the permitted bales remained only a matter of months before being washed away. While the photos show some collection of sand, Staff note that they washed out in a storm in the fall of 2015. Beyond photos of the bales, not much was learned from their use, particularly regarding concerns about invasive species, temperature impacts and potential interference with nesting habitat.

DCM notes that 15A NCAC 7J .0703(d) allows that “In the event that the Commission cannot reach a final decision because it determines that more facts are necessary, it shall remand the matter to staff and the petitioner with instruction for the parties to either agree to the necessary fact(s) or to request a hearing in the Office of Administrative Hearings.” Staff also note that the Commission may “impose reasonable and appropriate conditions and safeguards upon any variance it grants.” G.S. 113A-120.1(b).

In this case, Staff recommend that any hardship in this case is necessary where the WRC and USFWS have stated concerns about the use of straw or pine straw bales as sand fencing as it relates to possibly negative impacts on nesting sea turtles. Staff contend that any hardship is a result of both the real supply chain issues for traditional wood sand fencing, and the Town’s choice not to develop a scientific monitoring plan in collaboration with WRC and USFWS prior to this variance hearing. While photographs may have been all that was requested by the agencies in 2015 for a smaller project, recent comments on the proposal from these agencies indicate that level of monitoring is insufficient for the agencies to evaluate the potential impacts and implications of broader use of bales as sand fencing in North Carolina. Staff recommend that the Commission direct Staff, Petitioner, WRC and USFWS to work together to develop and implement a monitoring or research plan that addresses sea turtle concerns.

II. Do such hardships result from conditions peculiar to the petitioner's property such as the location, size, or topography of the property? Explain.

Petitioner's Position: Yes.

The East End of the Town has experienced such significant erosion over the years the Town sought and obtained permits to construct a terminal groin. Now that the groin has been constructed the adjacent area remains unprotected despite the positive effects of the groin. The fact that the groin exists adjacent to the subject proposed project area demonstrates that the conditions creating the hardship are peculiar given there have only been two groins constructed in the state.

It is also important to note that when originally constructed, the above-described tax base and infrastructure was not "front or second row" from the oceanfront and the present threat is due to erosion, not to any act attributable to the Town.

Staff's Position: No.

While the east end of the Town has experienced chronic erosion over the years, they have recently completed the terminal groin and fillet. Instead of removing the existing sandbags (at the Town's street-ends and the private homes), they covered them with sand and planted portions of those covered bags with vegetation to create "starter dunes" with the hope that this planted vegetation, in conjunction with sand fencing, will collect more sand over time and grow into naturalized dunes.

Any hardship is due to the difficulty in obtaining traditional wooden sand fencing and the lack of data regarding the use of bales as a reasonable alternative to traditional wooden sand fence. These are not hardships caused by conditions peculiar to the property, such as size, location or topography.

III. Do the hardships result from actions taken by the petitioner? Explain.

Petitioner's Position: No.

The Petitioners have done nothing to accelerate or otherwise aggravate the erosion problem at the east end of Town. Moreover, the Town constructed the groin to combat this erosion problem. The Town is not responsible for the supply chain delays affecting the availability of traditional sand fencing. Moreover, acted in good faith and based on its understanding of the DCM's recommendations regarding the use of bale sand fencing.

Staff's Position: No.

While Staff acknowledge that the Town did not cause the hardships regarding the availability of traditional wood sand fencing, staff did recommend pausing before proceeding with this variance in order to meet and collaborate with WRC and USFWS, and to potentially work with Dr. Long at UNCW or Mr. Mercer of Coastal Transplants to develop a more robust monitoring plan/study in order to bring a detailed, collaborative plan for consideration by the Commission in the context of this variance. While the Town has not done anything to accelerate erosion, Staff contends that since the variance here is related to potential turtle impacts from straw bales as a sand fence alternative (denial was based on 7H .0311(c)), the hardship would have to be related to that issue (see Factor 1, above).

IV. Will the variance requested by the petitioner (1) be consistent with the spirit, purpose, and intent of the rules, standards or orders issued by the Commission; (2) secure the public safety and welfare; and (3) preserve substantial justice? Explain.

Petitioner's Position: Yes.

The variance sought is necessary to preserve and protect the tax base and public infrastructure at the east end of the Town.

As recently as January 3, 2023, DCM disseminated an email to numerous coastal Towns providing guidance to Towns and property owners with respect to the authorized use of Christmas Trees for use in dune restoration and/or beach sand fencing. The use of Christmas Trees for dune restoration and/or beach sand fencing demonstrates that the use of hay and/or pine bales is consistent with the spirit, purpose, and intent of the rules of the Commission.

The variance sought by the Town will secure public safety and welfare by protecting over \$16,500,00 of the Town's tax base and a significant amount of public infrastructure. It will likewise protect and enhance the public beach adjacent to the proposed project.

The granting of the Town's requested variance will preserve substantial justice in that the Town has expended a significant amount of money to construct the authorized and properly permitted groin and justly seeks to protect the adjacent area by installing bale sand fencing. Likewise, substantial justice will be served by granting the variance given the Town's good faith reliance on the bale fencing discussions during the November 2021 and February 2022 CRAC/CRC meetings and the DCMs request for the Town to modify its application to include both hale bales and pine bales to allow the DCM to see the effects of each. Substantial justice will also be preserved given the fact that the commenting agencies have provided no scientific evidence supporting their stated concerns whereas conversely, the Town's engineer has cited to numerous studies to support the Town's use of bale fencing.

Staff's Position: No.

The focus of the Town's argument for this variance is on its need to use bales as sand fencing in order to protect the east end road-ends from further erosion where they have constructed "starter dunes" over the existing sandbags following the completion of the terminal groin and fillet project in the Spring of 2022. This is due to the supply chain issues for wooden fencing. The Town further contends that they relied on Staff's and the Commission's "recommendation" in February 2022 about the possibility of using straw and pine straw bales. Staff notes that the use of the word "recommendation" is from the Staff's Memo to the CRC at the February 2022 meeting on this issue. It was not a recommendation for applicants to use alternative sand fence materials but was Staff's recommendation of procedurally keeping alternative sand fencing materials reviewed through the CAMA Minor Permit process "until more information can be gathered from multiple sites across the state and further analyzed by resource agencies." It is Staff's understanding that the Commission agreed with keeping this process in place instead of undertaking rulemaking to change the rules to specifically allow alternative sand fence materials.

Staff contend that granting a variance with only the Town's proposal to provide monthly/seasonal/post-storm photographs and to report on bale decomposition is not in the spirit, purpose, and intent of 7H .0311, which requires DCM to coordinate with WRC and USFWS to ensure that sand fencing will not have adverse impacts on sea turtles. These agencies have expressed concerns in this case, both in reviewing the permit application and in reviewing the variance petition. Staff suggests that granting a variance for the use of straw/pine straw bales would be more in the spirit, purpose and intent of this rule if the project included a monitoring program undertaken in such a way that it could be scientifically useful to the review agencies in managing or mitigating potential impacts.

Staff believes that protecting endangered sea turtles is in the interest of public welfare though this project as proposed lacks a robust monitoring plan, and so would not protect public welfare. Substantial justice would not be preserved with the Town's current proposal through a variance where the federal and state resource agencies are concerned about the precedent this will set for beach stabilization efforts across the coast.

Staff acknowledges the efforts taken and resources spent by the Town to install the groin and fillet project. The discussions by the CRAC and Commission in considering whether to initiate rulemaking or to continue reviewing alternative material sand fencing through the CAMA Minor Permit process was not intended to encourage study projects to move forward without consultation with the WRC and USFWS. While it may be helpful undertake a pilot project to examine how bales perform longer term, it should be based on consultation with the WRC and USFWS.

**ATTACHMENT D:
PETITIONER'S VARIANCE REQUEST MATERIALS**

Crossley McIntosh & Collier**CROSSLEY MCINTOSH COLLIER HANLEY & EDES, P.L.L.C.**
ATTORNEYS AT LAWJOHN F. CROSSLEY (1921-2006)
DOUGLAS F. MCINTOSH (1959-2016)
CLAY ALLEN COLLIER
ANDREW HANLEY
BRIAN E. EDES
NORWOOD P. BLANCHARD III
BRIAN KROMKE

January 11, 2023

5002 RANDALL PARKWAY
WILMINGTON, NC 28403TELEPHONE 910/762-9711
FAX 910/256-0310
TOLL FREE 800/499-9711E-mail briane@cmclawfirm.comBraxton Davis
Director, NC Division of Coastal Management
400 Commerce Avenue
Morehead City, NC 28557
(252) 808-2808 ext. 202
*Via Email: Braxton.Davis@NCDENR.Gov***RE: Town of Ocean Isle Variance Petition**

Dear Mr. Davis:

I hope you are off to a good new year. On behalf of the Town of Ocean Isle Beach, I am emailing the Town's CAMA VARIANCE REQUEST FORM and additional required documents along with this letter.

As always, please do not hesitate to call or email should you have any questions or comments.

Sincerely,

Brian Edes

Brian E. Edes

CAMA VARIANCE REQUEST FORM**DCM FORM 11****DCM FILE No.:** _____

PETITIONER'S NAME Town of Ocean Isle Beach
 COUNTY WHERE THE DEVELOPMENT IS PROPOSED Brunswick

Pursuant to N.C.G.S. § 113A-120.1 and 15A N.C.A.C. 07J .0700 *et seq.*, the above-named Petitioner hereby applies to the Coastal Resources Commission (CRC) for a variance.

VARIANCE HEARING PROCEDURES

A variance petition will be considered by the CRC at a regularly scheduled meeting, heard in chronological order based upon the date of receipt of a complete petition. 15A N.C.A.C. 07J .0701(e). A complete variance petition, as described below, must be *received* by the Division of Coastal Management (DCM) a minimum of six (6) weeks in advance of the first day of a regularly scheduled CRC meeting to be eligible for consideration by the CRC at that meeting. 15A N.C.A.C. 07J .0701(e). The final set of stipulated facts must be agreed to at least four (4) weeks prior to the first day of a regularly scheduled meeting. 15A N.C.A.C. 07J .0701(e). The dates of CRC meetings can be found at DCM's website: www.nccoastalmanagement.net

If there are controverted facts that are significant in determining the propriety of a variance, or if the Commission determines that more facts are necessary, the facts will be determined in an administrative hearing. 15A N.C.A.C. 07J .0701(b).

VARIANCE CRITERIA

The petitioner has the burden of convincing the CRC that it meets the following criteria:

- (a) Will strict application of the applicable development rules, standards, or orders issued by the Commission cause the petitioner unnecessary hardships? Explain the hardships.
- (b) Do such hardships result from conditions peculiar to the petitioner's property such as the location, size, or topography of the property? Explain.
- (c) Do the hardships result from actions taken by the petitioner? Explain.
- (d) Will the variance requested by the petitioner (1) be consistent with the spirit, purpose, and intent of the rules, standards or orders issued by the Commission; (2) secure the public safety and welfare; and (3) preserve substantial justice? Explain.

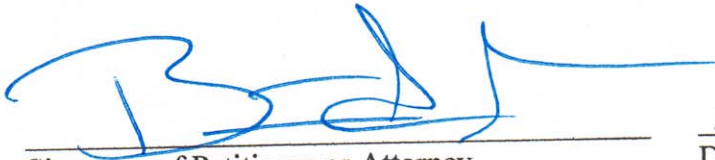
Please make your written arguments that Petitioner meets these criteria on a separate piece of paper. The Commission notes that there are some opinions of the State Bar which indicate that non-attorneys may not represent others at quasi-judicial proceedings such as a variance hearing before the Commission. These opinions note that the practice of professionals, such as engineers, surveyors or contractors, representing others in quasi-judicial proceedings through written or oral argument, may be considered the practice of law. Before you proceed with this variance request, you may wish to seek the advice of counsel before having a non-lawyer represent your interests through preparation of this Petition.

For this variance request to be complete, the petitioner must provide the information listed below. The undersigned petitioner verifies that this variance request is complete and includes:

- The name and location of the development as identified on the permit application;
- A copy of the permit decision for the development in question;
- A copy of the deed to the property on which the proposed development would be located;
- A complete description of the proposed development including a site plan;
- A stipulation that the proposed development is inconsistent with the rule at issue;
- Proof that notice was sent to adjacent owners and objectors*, as required by 15A N.C.A.C. 07J .0701(c)(7);
- N/A Proof that a variance was sought from the local government per 15A N.C.A.C. 07J .0701(a), if applicable;
- Petitioner's written reasons and arguments about why the Petitioner meets the four variance criteria, listed above;
- A draft set of proposed stipulated facts and stipulated exhibits. Please make these verifiable facts free from argument. Arguments or characterizations about the facts should be included in the written responses to the four variance criteria instead of being included in the facts.
- This form completed, dated, and signed by the Petitioner or Petitioner's Attorney.

**Please contact DCM or the local permit officer for a full list of comments received on your permit application. Please note, for CAMA Major Permits, the complete permit file is kept in the DCM Morehead City Office.*

Due to the above information and pursuant to statute, the undersigned hereby requests a variance.



 Signature of Petitioner or Attorney

January 11, 2023

Date

Brian E. Edes

 Printed Name of Petitioner or Attorney

briane@cmclawfirm.com

 Email address of Petitioner or Attorney

5002 Randall Parkway

 Mailing Address

(910) 762-9711

 Telephone Number of Petitioner or Attorney

Wilmington, NC 28412

 City State Zip

(910) 256-0310

 Fax Number of Petitioner or Attorney

DELIVERY OF THIS HEARING REQUEST

This variance petition must be **received** by the Division of Coastal Management at least six (6) weeks before the first day of the regularly scheduled Commission meeting at which it is heard. A copy of this request must also be sent to the Attorney General's Office, Environmental Division. 15A N.C.A.C. 07J .0701(e).

Contact Information for DCM:

By mail, express mail or hand delivery:
 Director
 Division of Coastal Management
 400 Commerce Avenue
 Morehead City, NC 28557

By Fax:
 (252) 247-3330

By Email:
 Check DCM website for the email
 address of the current DCM Director
www.nccoastalmanagement.net

Contact Information for Attorney General's Office:

By mail:
 Environmental Division
 9001 Mail Service Center
 Raleigh, NC 27699-9001

By express mail:
 Environmental Division
 114 W. Edenton Street
 Raleigh, NC 27603

By Fax:
 (919) 716-6767

Tracking Number:

Remove X

70210950000226931445

Copy

Schedule a Redelivery (<https://tools.usps.com/redelivery.htm>)

Latest Update

This is a reminder to arrange for redelivery of your item before January 20, 2023 or your item will be returned on January 21, 2023. You may arrange redelivery by using the Schedule a Redelivery feature on this page or may pick up the item at the Post Office indicated on the notice.

Get More Out of USPS Tracking:

USPS Tracking Plus®

Feedback

Delivery Attempt: Action Needed

Reminder to Schedule Redelivery of your item before January 20, 2023

January 11, 2023

Notice Left (No Authorized Recipient Available)

OCEAN ISLE BEACH, NC 28469

January 6, 2023, 12:45 pm

Out for Delivery

OCEAN ISLE BEACH, NC 28469

January 6, 2023, 9:36 am

Arrived at Post Office

OCEAN ISLE BEACH, NC 28469

January 6, 2023, 9:25 am

Departed USPS Regional Facility

FAYETTEVILLE NC DISTRIBUTION CENTER ANNEX

January 6, 2023, 3:42 am

Arrived at USPS Regional Facility

FAYETTEVILLE NC DISTRIBUTION CENTER ANNEX

January 5, 2023, 8:31 am

024

Arrived at USPS Regional Facility

CHARLOTTE NC DISTRIBUTION CENTER

January 4, 2023, 11:15 pm

Hide Tracking History

Text & Email Updates



Schedule Redelivery



USPS Tracking Plus®



Product Information



See Less 

Track Another Package

Enter tracking or barcode numbers

Need More Help?

Contact USPS Tracking support for further assistance.

FAQs

Tracking Number:

Remove X

70210950000226931384

Copy

Add to Informed Delivery (<https://informedelivery.usps.com/>)

Latest Update

Your item was returned to the sender on January 9, 2023 at 8:37 am in MARIETTA, GA 30068 because the addressee was not known at the delivery address noted on the package.

Get More Out of USPS Tracking:

USPS Tracking Plus®

Alert

Addressee Unknown

MARIETTA, GA 30068
January 9, 2023, 8:37 am

No Such Number

MARIETTA, GA 30068
January 9, 2023, 8:37 am

In Transit to Next Facility

January 8, 2023

Departed USPS Regional Facility

ATLANTA NORTH METRO DISTRIBUTION CENTER
January 6, 2023, 1:17 am

Arrived at USPS Regional Facility

ATLANTA NORTH METRO DISTRIBUTION CENTER
January 5, 2023, 12:13 pm

Departed USPS Regional Facility

CHARLOTTE NC DISTRIBUTION CENTER

Feedback

January 4, 2023, 11:55 pm

026

Arrived at USPS Regional Facility

CHARLOTTE NC DISTRIBUTION CENTER

January 4, 2023, 11:09 pm

Hide Tracking History

Text & Email Updates



USPS Tracking Plus®



Product Information



See Less ^

Track Another Package

Enter tracking or barcode numbers

Need More Help?

Contact USPS Tracking support for further assistance.

FAQs

Tracking Number:

Remove X

70210950000226931353

Copy

Schedule a Redelivery (<https://tools.usps.com/redelivery.htm>)

Latest Update

This is a reminder to arrange for redelivery of your item before January 20, 2023 or your item will be returned on January 21, 2023. You may arrange redelivery by using the Schedule a Redelivery feature on this page or may pick up the item at the Post Office indicated on the notice.

Get More Out of USPS Tracking:

USPS Tracking Plus®

Feedback

Delivery Attempt: Action Needed

Reminder to Schedule Redelivery of your item before January 20, 2023

January 11, 2023

Notice Left (No Authorized Recipient Available)

OCEAN ISLE BEACH, NC 28469

January 6, 2023, 12:21 pm

Out for Delivery

OCEAN ISLE BEACH, NC 28469

January 6, 2023, 9:35 am

Arrived at Post Office

OCEAN ISLE BEACH, NC 28469

January 6, 2023, 9:24 am

Departed USPS Regional Facility

FAYETTEVILLE NC DISTRIBUTION CENTER ANNEX

January 6, 2023, 3:42 am

Arrived at USPS Regional Facility

FAYETTEVILLE NC DISTRIBUTION CENTER ANNEX

January 5, 2023, 8:28 am

028

Arrived at USPS Regional Facility

CHARLOTTE NC DISTRIBUTION CENTER

January 4, 2023, 11:18 pm

Hide Tracking History

Text & Email Updates



Schedule Redelivery



USPS Tracking Plus®



Product Information



See Less

Track Another Package

Enter tracking or barcode numbers

Need More Help?

Contact USPS Tracking support for further assistance.

FAQs

Tracking Number:

Remove X

70210950000226931377

Copy

Add to Informed Delivery (<https://informedelivery.usps.com/>)

Latest Update

Your item was delivered to an individual at the address at 1:51 pm on January 9, 2023 in CAVE CREEK, AZ 85331.

Get More Out of USPS Tracking:

USPS Tracking Plus[®]

Delivered

Delivered, Left with Individual

CAVE CREEK, AZ 85331

January 9, 2023, 1:51 pm

Out for Delivery

CAVE CREEK, AZ 85331

January 9, 2023, 10:49 am

Arrived at Post Office

CAVE CREEK, AZ 85331

January 9, 2023, 10:38 am

Departed USPS Regional Facility

PHOENIX AZ DISTRIBUTION CENTER

January 8, 2023, 1:16 pm

Arrived at USPS Regional Facility

PHOENIX AZ DISTRIBUTION CENTER

January 8, 2023, 8:08 am

Hide Tracking History

Feedback

Text & Email Updates

030



USPS Tracking Plus®



Product Information



See Less

Track Another Package

Enter tracking or barcode numbers

Need More Help?

Contact USPS Tracking support for further assistance.

FAQs

Tracking Number:

Remove X

70210950000226931407

Copy

Add to Informed Delivery (<https://informedelivery.usps.com/>)

Latest Update

Your item was picked up at the post office at 9:44 am on January 11, 2023 in OCEAN ISLE BEACH, NC 28469.

Get More Out of USPS Tracking:

USPS Tracking Plus[®]

Delivered

Delivered, Individual Picked Up at Post Office

OCEAN ISLE BEACH, NC 28469
January 11, 2023, 9:44 am

Reminder to Schedule Redelivery of your item

January 11, 2023

Notice Left (No Authorized Recipient Available)

OCEAN ISLE BEACH, NC 28469
January 6, 2023, 12:56 pm

Out for Delivery

OCEAN ISLE BEACH, NC 28469
January 6, 2023, 9:36 am

Arrived at Post Office

OCEAN ISLE BEACH, NC 28469
January 6, 2023, 9:25 am

Departed USPS Regional Facility

FAYETTEVILLE NC DISTRIBUTION CENTER ANNEX
January 6, 2023, 3:42 am

Feedback

● **Arrived at USPS Regional Facility** 032
FAYETTEVILLE NC DISTRIBUTION CENTER ANNEX
January 5, 2023, 8:29 am

● **Arrived at USPS Regional Facility**
CHARLOTTE NC DISTRIBUTION CENTER
January 4, 2023, 11:13 pm

● **Hide Tracking History**

Text & Email Updates 

USPS Tracking Plus® 

Product Information 

See Less 

Track Another Package

Enter tracking or barcode numbers

Need More Help?

Contact USPS Tracking support for further assistance.

FAQs

Tracking Number:

Remove X

70210950000226931391

Copy

Add to Informed Delivery (<https://informedelivery.usps.com/>)

Latest Update

Your item was delivered to an individual at the address at 2:03 pm on January 6, 2023 in WAXHAW, NC 28173.

Get More Out of USPS Tracking:

USPS Tracking Plus[®]

Delivered

Delivered, Left with Individual

WAXHAW, NC 28173

January 6, 2023, 2:03 pm

Out for Delivery

WAXHAW, NC 28173

January 6, 2023, 9:57 am

Arrived at Post Office

WAXHAW, NC 28173

January 6, 2023, 9:46 am

Departed USPS Regional Facility

CHARLOTTE NC DISTRIBUTION CENTER

January 5, 2023, 3:32 pm

Arrived at USPS Regional Facility

CHARLOTTE NC DISTRIBUTION CENTER

January 4, 2023, 11:08 pm

Hide Tracking History

Feedback

Text & Email Updates

034



USPS Tracking Plus®



Product Information



See Less

Track Another Package

Enter tracking or barcode numbers

Need More Help?

Contact USPS Tracking support for further assistance.

FAQs

Tracking Number:

Remove X

70210950000226931360

Copy

Add to Informed Delivery (<https://informedelivery.usps.com/>)

Latest Update

Your item was picked up at the post office at 3:25 pm on January 9, 2023 in OCEAN ISLE BEACH, NC 28469.

Get More Out of USPS Tracking:

USPS Tracking Plus®

Delivered

Delivered, Individual Picked Up at Post Office

OCEAN ISLE BEACH, NC 28469

January 9, 2023, 3:25 pm

Available for Pickup

OCEAN ISLE BEACH, NC 28469

January 6, 2023, 9:59 am

Arrived at Post Office

OCEAN ISLE BEACH, NC 28469

January 6, 2023, 9:25 am

Departed USPS Regional Facility

FAYETTEVILLE NC DISTRIBUTION CENTER ANNEX

January 6, 2023, 3:42 am

Arrived at USPS Regional Facility

FAYETTEVILLE NC DISTRIBUTION CENTER ANNEX

January 5, 2023, 8:31 am

Arrived at USPS Regional Facility

CHARLOTTE NC DISTRIBUTION CENTER

Feedback

● **Hide Tracking History**

Text & Email Updates



USPS Tracking Plus®



Product Information



See Less ^

Track Another Package

Enter tracking or barcode numbers

Need More Help?

Contact USPS Tracking support for further assistance.

FAQs

Tracking Number:

Remove X

70210950000226931414

Copy

Add to Informed Delivery (<https://informedelivery.usps.com/>)

Latest Update

Your item was delivered to an individual at the address at 1:29 pm on January 6, 2023 in CARY, NC 27519.

Get More Out of USPS Tracking:

USPS Tracking Plus[®]

Delivered

Delivered, Left with Individual

CARY, NC 27519

January 6, 2023, 1:29 pm

Notice Left (No Authorized Recipient Available)

CARY, NC 27519

January 6, 2023, 1:28 pm

Out for Delivery

CARY, NC 27511

January 6, 2023, 7:43 am

Arrived at Post Office

CARY, NC 27511

January 6, 2023, 7:32 am

Departed USPS Regional Facility

RALEIGH NC DISTRIBUTION CENTER

January 5, 2023, 10:13 pm

Arrived at USPS Regional Facility

RALEIGH NC DISTRIBUTION CENTER

Feedback

January 5, 2023, 11:20 am

038

Arrived at USPS Regional Facility

CHARLOTTE NC DISTRIBUTION CENTER

January 4, 2023, 11:16 pm

Hide Tracking History

Text & Email Updates



USPS Tracking Plus®



Product Information



See Less 

Track Another Package

Enter tracking or barcode numbers

Need More Help?

Contact USPS Tracking support for further assistance.

FAQs

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

William Geoffrey Brantley
504 Frontgate Dr.
Cary, NC 27519-7161



9590 9402 7671 2122 0032 96

2. Article Number (Transfer from service label)

121 0950 0002 2693 1414

PS Form 3811, July 2020 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature Agent Addressee

X *William Brantley*

B. Received by (Printed Name)

W Brantley

C. Date of Delivery

1-6-23

D. Is delivery address different from item 1? Yes No
If YES, enter delivery address below:

3. Service Type

- Adult Signature
- Adult Signature Restricted Delivery
- Certified Mail®
- Certified Mail Restricted Delivery
- Collect on Delivery
- Collect on Delivery Restricted Delivery
- Insured Mail
- Insured Mail Restricted Delivery (over \$500)
- Priority Mail Express®
- Registered Mail™
- Registered Mail Restricted Delivery
- Signature Confirmation™
- Signature Confirmation Restricted Delivery

Domestic Return Receipt

Tracking Number:

Remove X

70210950000226931438

Copy

Add to Informed Delivery (<https://informedelivery.usps.com/>)

Latest Update

Your item was delivered to an individual at the address at 2:34 pm on January 9, 2023 in POUND RIDGE, NY 10576.

Get More Out of USPS Tracking:

USPS Tracking Plus[®]

Delivered

Delivered, Left with Individual

POUND RIDGE, NY 10576
January 9, 2023, 2:34 pm

Out for Delivery

POUND RIDGE, NY 10576
January 9, 2023, 7:54 am

Arrived at Post Office

POUND RIDGE, NY 10576
January 9, 2023, 7:48 am

In Transit to Next Facility

January 8, 2023

Departed USPS Regional Facility

WHITE PLAINS NY DISTRIBUTION CENTER
January 7, 2023, 9:18 pm

Arrived at USPS Regional Facility

WHITE PLAINS NY DISTRIBUTION CENTER

Feedback

January 7, 2023, 10:18 am

041

Departed USPS Regional Facility

CHARLOTTE NC DISTRIBUTION CENTER

January 6, 2023, 12:55 am

Arrived at USPS Regional Facility

CHARLOTTE NC DISTRIBUTION CENTER

January 4, 2023, 11:17 pm

Hide Tracking History

Text & Email Updates



USPS Tracking Plus®



Product Information



See Less

Track Another Package

Enter tracking or barcode numbers

Need More Help?

Contact USPS Tracking support for further assistance.

FAQs

Tracking Number:

Remove X

70210950000226931421

Copy

Add to Informed Delivery (<https://informedelivery.usps.com/>)

Latest Update

Your item was picked up at a postal facility at 9:59 am on January 9, 2023 in HARRISBURG, NC 28075.

Get More Out of USPS Tracking:

USPS Tracking Plus®

Delivered

Delivered, Individual Picked Up at Postal Facility

HARRISBURG, NC 28075
January 9, 2023, 9:59 am

Notice Left (No Authorized Recipient Available)

HARRISBURG, NC 28075
January 6, 2023, 3:06 pm

Out for Delivery

HARRISBURG, NC 28075
January 6, 2023, 9:09 am

Arrived at Post Office

HARRISBURG, NC 28075
January 6, 2023, 8:58 am

Departed USPS Regional Facility

CHARLOTTE NC DISTRIBUTION CENTER
January 5, 2023, 1:36 pm

Arrived at USPS Regional Facility

CHARLOTTE NC DISTRIBUTION CENTER

Feedback

● **Hide Tracking History**

Text & Email Updates



USPS Tracking Plus®



Product Information



See Less ^

Track Another Package

Enter tracking or barcode numbers

Need More Help?

Contact USPS Tracking support for further assistance.

FAQs



January 4, 2023

Via Certified Mail – Return Receipt Requested

William Moody
2048 Rocky Hollow Dr.
Marvin, NC 28173-5021

RE: CAMA Variance Request by the Town of Ocean Isle Beach

Dear Property Owner:

I am writing to notify you that the Town of Ocean Isle Beach is applying for a variance from the North Carolina Coastal Resources Commission to install hay bales as sand fencing to be used for the rebuilding of dunes. The locations proposed under this variance are Columbia Street, Shallotte Boulevard, Charlotte Street, Durham Street, and Lumberton Street accesses within the Town Right-of-Ways. Maps of the proposed locations are enclosed for your information.

The variance is projected to be heard at the February 22-23, 2023, meeting of the Coastal Resources Commission located at the Town of Ocean Isle Beach Town Hall, 111 Causeway Drive, Ocean Isle Beach, NC 28469. If you would like to receive more information about the variance request, you may contact me. If you would like to provide comments on the variance request, you may direct your comments to the North Carolina Division of Coastal Management, Wilmington District, 127 Cardinal Drive Extension, Wilmington, NC 28405-3845. You may also call the Division of Coastal Management to talk to a representative at (910) 796-7215.

Sincerely,

Justin W. Whiteside
Asst. Town Administrator
Town of Ocean Isle Beach

Enclosure



January 4, 2023

Via Certified Mail – Return Receipt Requested

Raymond Boyd
1923 Lower Roswell Rd.
Marietta, GA 30068-3348

RE: CAMA Variance Request by the Town of Ocean Isle Beach

Dear Property Owner:

I am writing to notify you that the Town of Ocean Isle Beach is applying for a variance from the North Carolina Coastal Resources Commission to install hay bales as sand fencing to be used for the rebuilding of dunes. The locations proposed under this variance are Columbia Street, Shallotte Boulevard, Charlotte Street, Durham Street, and Lumberton Street accesses within the Town Right-of-Ways. Maps of the proposed locations are enclosed for your information.

The variance is projected to be heard at the February 22-23, 2023, meeting of the Coastal Resources Commission located at the Town of Ocean Isle Beach Town Hall, 111 Causeway Drive, Ocean Isle Beach, NC 28469. If you would like to receive more information about the variance request, you may contact me. If you would like to provide comments on the variance request, you may direct your comments to the North Carolina Division of Coastal Management, Wilmington District, 127 Cardinal Drive Extension, Wilmington, NC 28405-3845. You may also call the Division of Coastal Management to talk to a representative at (910) 796-7215.

Sincerely,

Justin W. Whiteside
Asst. Town Administrator
Town of Ocean Isle Beach

Enclosure



January 4, 2023

Via Certified Mail – Return Receipt Requested

Sand Dwellers HOA
P.O. Box 8126
Ocean Isle Beach, NC 28469

RE: CAMA Variance Request by the Town of Ocean Isle Beach

Dear Property Owner:

I am writing to notify you that the Town of Ocean Isle Beach is applying for a variance from the North Carolina Coastal Resources Commission to install hay bales as sand fencing to be used for the rebuilding of dunes. The locations proposed under this variance are Columbia Street, Shallotte Boulevard, Charlotte Street, Durham Street, and Lumberton Street accesses within the Town Right-of-Ways. Maps of the proposed locations are enclosed for your information.

The variance is projected to be heard at the February 22-23, 2023, meeting of the Coastal Resources Commission located at the Town of Ocean Isle Beach Town Hall, 111 Causeway Drive, Ocean Isle Beach, NC 28469. If you would like to receive more information about the variance request, you may contact me. If you would like to provide comments on the variance request, you may direct your comments to the North Carolina Division of Coastal Management, Wilmington District, 127 Cardinal Drive Extension, Wilmington, NC 28405-3845. You may also call the Division of Coastal Management to talk to a representative at (910) 796-7215.

Sincerely,

A handwritten signature in cursive script, appearing to read "Justin W. Whiteside".

Justin W. Whiteside
Asst. Town Administrator
Town of Ocean Isle Beach

Enclosure



January 4, 2023

Via Certified Mail – Return Receipt Requested

David Hill
123 Ocean Isle West Blvd.
Ocean Isle Beach, NC 28469-7557

RE: CAMA Variance Request by the Town of Ocean Isle Beach

Dear Property Owner:

I am writing to notify you that the Town of Ocean Isle Beach is applying for a variance from the North Carolina Coastal Resources Commission to install hay bales as sand fencing to be used for the rebuilding of dunes. The locations proposed under this variance are Columbia Street, Shallotte Boulevard, Charlotte Street, Durham Street, and Lumberton Street accesses within the Town Right-of-Ways. Maps of the proposed locations are enclosed for your information.

The variance is projected to be heard at the February 22-23, 2023, meeting of the Coastal Resources Commission located at the Town of Ocean Isle Beach Town Hall, 111 Causeway Drive, Ocean Isle Beach, NC 28469. If you would like to receive more information about the variance request, you may contact me. If you would like to provide comments on the variance request, you may direct your comments to the North Carolina Division of Coastal Management, Wilmington District, 127 Cardinal Drive Extension, Wilmington, NC 28405-3845. You may also call the Division of Coastal Management to talk to a representative at (910) 796-7215.

Sincerely,

Justin W. Whiteside
Asst. Town Administrator
Town of Ocean Isle Beach

Enclosure



January 4, 2023

Via Certified Mail – Return Receipt Requested

Jeffrey Milliken
1541 Seaside Rd. SW
Ocean Isle Beach, NC 28469-5501

RE: CAMA Variance Request by the Town of Ocean Isle Beach

Dear Property Owner:

I am writing to notify you that the Town of Ocean Isle Beach is applying for a variance from the North Carolina Coastal Resources Commission to install hay bales as sand fencing to be used for the rebuilding of dunes. The locations proposed under this variance are Columbia Street, Shallotte Boulevard, Charlotte Street, Durham Street, and Lumberton Street accesses within the Town Right-of-Ways. Maps of the proposed locations are enclosed for your information.

The variance is projected to be heard at the February 22-23, 2023, meeting of the Coastal Resources Commission located at the Town of Ocean Isle Beach Town Hall, 111 Causeway Drive, Ocean Isle Beach, NC 28469. If you would like to receive more information about the variance request, you may contact me. If you would like to provide comments on the variance request, you may direct your comments to the North Carolina Division of Coastal Management, Wilmington District, 127 Cardinal Drive Extension, Wilmington, NC 28405-3845. You may also call the Division of Coastal Management to talk to a representative at (910) 796-7215.

Sincerely,

A handwritten signature in black ink, appearing to read "Justin W. Whiteside".

Justin W. Whiteside
Asst. Town Administrator
Town of Ocean Isle Beach

Enclosure



January 4, 2023

Via Certified Mail – Return Receipt Requested

Peter Williamson
127 Horseshoe Hill Rd.
Pound Ridge, NY 10576-1636

RE: CAMA Variance Request by the Town of Ocean Isle Beach

Dear Property Owner:

I am writing to notify you that the Town of Ocean Isle Beach is applying for a variance from the North Carolina Coastal Resources Commission to install hay bales as sand fencing to be used for the rebuilding of dunes. The locations proposed under this variance are Columbia Street, Shallotte Boulevard, Charlotte Street, Durham Street, and Lumberton Street accesses within the Town Right-of-Ways. Maps of the proposed locations are enclosed for your information.

The variance is projected to be heard at the February 22-23, 2023, meeting of the Coastal Resources Commission located at the Town of Ocean Isle Beach Town Hall, 111 Causeway Drive, Ocean Isle Beach, NC 28469. If you would like to receive more information about the variance request, you may contact me. If you would like to provide comments on the variance request, you may direct your comments to the North Carolina Division of Coastal Management, Wilmington District, 127 Cardinal Drive Extension, Wilmington, NC 28405-3845. You may also call the Division of Coastal Management to talk to a representative at (910) 796-7215.

Sincerely,

Justin W. Whiteside
Asst. Town Administrator
Town of Ocean Isle Beach

Enclosure



January 4, 2023

Via Certified Mail – Return Receipt Requested

Josh & Carmen Costner
9825 Moody Ct.
Harrisburg, NC 28075-6643

RE: CAMA Variance Request by the Town of Ocean Isle Beach

Dear Property Owner:

I am writing to notify you that the Town of Ocean Isle Beach is applying for a variance from the North Carolina Coastal Resources Commission to install hay bales as sand fencing to be used for the rebuilding of dunes. The locations proposed under this variance are Columbia Street, Shallotte Boulevard, Charlotte Street, Durham Street, and Lumberton Street accesses within the Town Right-of-Ways. Maps of the proposed locations are enclosed for your information.

The variance is projected to be heard at the February 22-23, 2023, meeting of the Coastal Resources Commission located at the Town of Ocean Isle Beach Town Hall, 111 Causeway Drive, Ocean Isle Beach, NC 28469. If you would like to receive more information about the variance request, you may contact me. If you would like to provide comments on the variance request, you may direct your comments to the North Carolina Division of Coastal Management, Wilmington District, 127 Cardinal Drive Extension, Wilmington, NC 28405-3845. You may also call the Division of Coastal Management to talk to a representative at (910) 796-7215.

Sincerely,

Justin W. Whiteside
Asst. Town Administrator
Town of Ocean Isle Beach

Enclosure



January 4, 2023

Via Certified Mail – Return Receipt Requested

William Geoffrey Brantley
504 Frontgate Dr.
Cary, NC 27519-7161

RE: CAMA Variance Request by the Town of Ocean Isle Beach

Dear Property Owner:

I am writing to notify you that the Town of Ocean Isle Beach is applying for a variance from the North Carolina Coastal Resources Commission to install hay bales as sand fencing to be used for the rebuilding of dunes. The locations proposed under this variance are Columbia Street, Shallotte Boulevard, Charlotte Street, Durham Street, and Lumberton Street accesses within the Town Right-of-Ways. Maps of the proposed locations are enclosed for your information.

The variance is projected to be heard at the February 22-23, 2023, meeting of the Coastal Resources Commission located at the Town of Ocean Isle Beach Town Hall, 111 Causeway Drive, Ocean Isle Beach, NC 28469. If you would like to receive more information about the variance request, you may contact me. If you would like to provide comments on the variance request, you may direct your comments to the North Carolina Division of Coastal Management, Wilmington District, 127 Cardinal Drive Extension, Wilmington, NC 28405-3845. You may also call the Division of Coastal Management to talk to a representative at (910) 796-7215.

Sincerely,

Justin W. Whiteside
Asst. Town Administrator
Town of Ocean Isle Beach

Enclosure



January 4, 2023

Via Certified Mail – Return Receipt Requested

Deborah Doyle
27438 N 45th Way
Cave Creek, AZ 85331-3602

RE: CAMA Variance Request by the Town of Ocean Isle Beach

Dear Property Owner:

I am writing to notify you that the Town of Ocean Isle Beach is applying for a variance from the North Carolina Coastal Resources Commission to install hay bales as sand fencing to be used for the rebuilding of dunes. The locations proposed under this variance are Columbia Street, Shallotte Boulevard, Charlotte Street, Durham Street, and Lumberton Street accesses within the Town Right-of-Ways. Maps of the proposed locations are enclosed for your information.

The variance is projected to be heard at the February 22-23, 2023, meeting of the Coastal Resources Commission located at the Town of Ocean Isle Beach Town Hall, 111 Causeway Drive, Ocean Isle Beach, NC 28469. If you would like to receive more information about the variance request, you may contact me. If you would like to provide comments on the variance request, you may direct your comments to the North Carolina Division of Coastal Management, Wilmington District, 127 Cardinal Drive Extension, Wilmington, NC 28405-3845. You may also call the Division of Coastal Management to talk to a representative at (910) 796-7215.

Sincerely,

A handwritten signature in black ink, appearing to read 'Justin W. Whiteside'.

Justin W. Whiteside
Asst. Town Administrator
Town of Ocean Isle Beach

Enclosure



January 4, 2023

Via Certified Mail – Return Receipt Requested

Robert Roberts
474 E. Third St.
Ocean Isle Beach, NC 28469

RE: CAMA Variance Request by the Town of Ocean Isle Beach

Dear Property Owner:

I am writing to notify you that the Town of Ocean Isle Beach is applying for a variance from the North Carolina Coastal Resources Commission to install hay bales as sand fencing to be used for the rebuilding of dunes. The locations proposed under this variance are Columbia Street, Shallotte Boulevard, Charlotte Street, Durham Street, and Lumberton Street accesses within the Town Right-of-Ways. Maps of the proposed locations are enclosed for your information.

The variance is projected to be heard at the February 22-23, 2023, meeting of the Coastal Resources Commission located at the Town of Ocean Isle Beach Town Hall, 111 Causeway Drive, Ocean Isle Beach, NC 28469. If you would like to receive more information about the variance request, you may contact me. If you would like to provide comments on the variance request, you may direct your comments to the North Carolina Division of Coastal Management, Wilmington District, 127 Cardinal Drive Extension, Wilmington, NC 28405-3845. You may also call the Division of Coastal Management to talk to a representative at (910) 796-7215.

Sincerely,

A handwritten signature in black ink, appearing to read "Justin W. Whiteside".

Justin W. Whiteside
Asst. Town Administrator
Town of Ocean Isle Beach

Enclosure

7021 0950 0002 2693 1445

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee
 \$ _____

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ _____

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postage
 \$ _____

Total Postage
 \$ _____

Sent To
 Street and Apt. # _____
 City, State, ZIP+4 _____

Jeffrey Milliken
1541 Seaside Rd. SW
Ocean Isle Beach, NC 28469-5501

Postmark Here

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7021 0950 0002 2693 1377

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee
 \$ _____

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ _____

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postage
 \$ _____

Total Postage
 \$ _____

Sent To
 Street and Apt. # _____
 City, State, ZIP+4 _____

Deborah Doyle
27438 N 45th Way
Cave Creek, AZ 85331-3602

Postmark Here

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7021 0950 0002 2693 1391

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee
 \$ _____

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ _____

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postage
 \$ _____

Total Postage
 \$ _____

Sent To
 Street and Apt. # _____
 City, State, ZIP+4 _____

William Moody
2048 Rocky Hollow Dr.
Marvin, NC 28173-5021

Postmark Here

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7021 0950 0002 2693 1407

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee
 \$ _____

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ _____

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postage
 \$ _____

Total Postage
 \$ _____

Sent To
 Street and Apt. # _____
 City, State, ZIP+4 _____

Robert Roberts
474 E. Third St.
Ocean Isle Beach, NC 28469

Postmark Here

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7021 0950 0002 2693 1360

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee

\$ _____

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ _____

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postmark
Here

Postage

\$ _____

Total Post

\$ _____

Sent To

Street and Apt. No.

City, State

SAND DWELLERS 1 HOA/CAM
ATTN: CHRISTY CHAPPELL
P.O. BOX 8126
OCEAN ISLE BEACH, NC 28469

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

055

7021 0950 0002 2693 1384

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee

\$ _____

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ _____

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postmark
Here

Postage

\$ _____

Total Post

\$ _____

Sent To

Street and Apt. No.

City, State

Raymond Boyd
1923 Lower Roswell Rd.
Marietta, GA 30068-3348

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7021 0950 0002 2693 1353

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee

\$ _____

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ _____

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postmark
Here

Postage

\$ _____

Total Post

\$ _____

Sent To

Street and Apt. No.

City, State

David Hill
123 Ocean Isle West Blvd.
Ocean Isle Beach, NC 28469-7557

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7021 0950 0002 2693 1414

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee

\$ _____

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ _____

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postmark
Here

Postage

\$ _____

Total Post

\$ _____

Sent To

Street and Apt. No.

City, State, ZIP+4

William Geoffrey Brantley
504 Frontgate Dr.
Cary, NC 27519-7161

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7021 0950 0002 2693 1421

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee

\$ _____

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ _____

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postmark
Here

Postage

\$ _____

Total Postage and

\$ _____

Sent To

Street and Apt. No.

City, State, ZIP+4

Josh & Carmen Costner
9825 Moody Ct.
Harrisburg, NC 28075

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7021 0950 0002 2693 1438

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee

\$ _____

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ _____

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postmark
Here

Postage

\$ _____

Total Postage and

\$ _____

Sent To

Street and Apt. No.

City, State, ZIP+4

Peter Williamson
127 Horseshoe Hill Rd
Pound Ridge, NY 10576-1636

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

oceanisle
B E A C H

TOWN OF OCEAN ISLE BEACH
3 W THIRD STREET
OCEAN ISLE BEACH, NC 28469

7021 0950 0002 2473 1391
7021 0950 0002 2473 1391

William Moody
2048 Rocky Hollow I
Marvin, NC 28173-5

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

oceanisle
B E A C H

TOWN OF OCEAN ISLE BEACH
3 W THIRD STREET
OCEAN ISLE BEACH, NC 28469

7021 0950 0002 2473 1397
7021 0950 0002 2473 1397

Robert Roberts
474 E. Third St.
Ocean Isle Beach, NC 28469

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

oceanisle
B E A C H

TOWN OF OCEAN ISLE BEACH
3 W THIRD STREET
OCEAN ISLE BEACH, NC 28469

7021 0950 0002 2473 1377
7021 0950 0002 2473 1377

Debrah Dyle
3748 N 45th Way
Cave Creek, AZ 85331-3602

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

oceanisle
B E A C H

TOWN OF OCEAN ISLE BEACH
3 W THIRD STREET
OCEAN ISLE BEACH, NC 28469

7021 0950 0002 2473 1377
7021 0950 0002 2473 1377

Josh & Karen Carter
1923 Moody Ct.
Marshburg, NC 28075

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

oceanisle
B E A C H

TOWN OF OCEAN ISLE BEACH
3 W THIRD STREET
OCEAN ISLE BEACH, NC 28469

7021 0950 0002 2473 1377
7021 0950 0002 2473 1377

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

U.S. POSTAGE
\$ 007.820
PAID
OCEAN ISLE BEACH, NC 28469

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

U.S. POSTAGE
\$ 008.080
PAID
OCEAN ISLE BEACH, NC 28469

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

U.S. POSTAGE
\$ 007.820
PAID
OCEAN ISLE BEACH, NC 28469

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

U.S. POSTAGE
\$ 007.820
PAID
OCEAN ISLE BEACH, NC 28469

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

U.S. POSTAGE
\$ 007.820
PAID
OCEAN ISLE BEACH, NC 28469

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

oceanisle
B E A C H

TOWN OF OCEAN ISLE BEACH
3 W THIRD STREET
OCEAN ISLE BEACH, NC 28469

7021 0950 0002 2473 1345
7021 0950 0002 2473 1345

Jeffrey Milliken
1541 Seaside Rd. SW
Ocean Isle Beach, NC 28469-5501

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

oceanisle
B E A C H

TOWN OF OCEAN ISLE BEACH
3 W THIRD STREET
OCEAN ISLE BEACH, NC 28469

7021 0950 0002 2473 1353
7021 0950 0002 2473 1353

David Hill
123 Ocean Isle West Blvd.
Ocean Isle Beach, NC 28469-7555

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

oceanisle
B E A C H

TOWN OF OCEAN ISLE BEACH
3 W THIRD STREET
OCEAN ISLE BEACH, NC 28469

7021 0950 0002 2473 1377
7021 0950 0002 2473 1377

William Geoffrey Brantley
644 Fringale Dr.
Cary, NC 27519-7161

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

oceanisle
B E A C H

TOWN OF OCEAN ISLE BEACH
3 W THIRD STREET
OCEAN ISLE BEACH, NC 28469

7021 0950 0002 2473 1377
7021 0950 0002 2473 1377

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

oceanisle
B E A C H

TOWN OF OCEAN ISLE BEACH
3 W THIRD STREET
OCEAN ISLE BEACH, NC 28469

7021 0950 0002 2473 1377
7021 0950 0002 2473 1377

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

U.S. POSTAGE
\$ 007.820
PAID
OCEAN ISLE BEACH, NC 28469

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

U.S. POSTAGE
\$ 007.820
PAID
OCEAN ISLE BEACH, NC 28469

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

U.S. POSTAGE
\$ 007.820
PAID
OCEAN ISLE BEACH, NC 28469

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

U.S. POSTAGE
\$ 007.820
PAID
OCEAN ISLE BEACH, NC 28469

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

U.S. POSTAGE
\$ 007.820
PAID
OCEAN ISLE BEACH, NC 28469

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT

PETITIONER'S POSITIONS

I. Will strict application of the applicable development rules, standards, or orders issued by the Commission cause the petitioner unnecessary hardships? Explain the hardships.

Yes. In April of 2022, the Town completed the construction of a properly permitted terminal groin at the east end of the Town. The groin was necessitated to combat the severe erosion the Town has been experiencing in that area for decades. Since that time the Town has attempted to create a dune system adjacent to the groin by covering the previously placed permitted sandbags in the area with sand followed by planting dune vegetation atop these “starter dunes”. To date these efforts have not created a dune system sufficient to provide protection. As recently as September 30, 2022 the Town experienced extreme storm over wash in this area. The Town, in good faith and based on information provided at the November 2021 and February 2022 CRAC/CRC meeting applied for a permit to install bale sand fencing in this area. Traditional sand fencing materials are not readily available due to supply chain delays as well as material and labor shortages. If the Town is not authorized to utilize hay bale sand fencing the Town will most likely have to wait a significant amount of time to obtain traditional sand fencing which will consequently leave the subject unprotected and vulnerable.

The tax base in the area adjacent to the groin is valued at in excess of \$16,500,000. This is exclusive of the public infrastructure servicing these properties such as public water and sewer infrastructure, public roadways (including some State-owned roadways), electrical, telephone, cable, and internet infrastructure. Given the availability of bale fencing, the supply problems with traditional fencing, and the prior success of the Figure Eight Island sand fencing, and the lack of any scientific data supporting the concerns expressed in the denial letter, the Town's continued hardship is unnecessary and would be ameliorated if the requested variance is granted.

II. Do such hardships result from conditions peculiar to the petitioner's property such as the location, size, or topography of the property? Explain.

Yes. The East End of the Town has experienced such significant erosion over the years the Town sought and obtained permits to construct a terminal groin. Now that the groin has been constructed the adjacent area remains unprotected despite the positive effects of the groin. The fact that the groin exists adjacent to the subject proposed project area demonstrates that the conditions creating the hardship are peculiar given there have only been two groins constructed in the state.

It is also important to note that when originally constructed, the above-described tax base and infrastructure was not “front or second row” from the oceanfront and the present threat is due to erosion, not to any act attributable to the Town.

III. Do the hardships result from actions taken by the petitioner? Explain.

No. The Petitioners have done nothing to accelerate or otherwise aggravate the erosion problem at the east end of Town. Moreover, the Town constructed the groin to combat this erosion problem. The Town is not responsible for the supply chain delays affecting the availability of traditional sand fencing. Moreover, acted in good faith and based on its understanding of the DCM's recommendations regarding the use of bale sand fencing.

IV. Will the variance requested by the petitioner (1) be consistent with the spirit, purpose, and intent of the rules, standards or orders issued by the Commission; (2) secure the public safety and welfare; and (3) preserve substantial justice? Explain.

Yes. The variance sought is necessary to preserve and protect the tax base and public infrastructure at the east end of the Town.

As recently as January 3, 2023, DCM disseminated an email to numerous coastal Towns providing guidance to Towns and property owners with respect to the authorized use of Christmas Trees for use in dune restoration and/or beach sand fencing. The use of Christmas Trees for dune restoration and/or beach sand fencing demonstrates that the use of hay and/or pine bales is consistent with the spirit, purpose, and intent of the rules of the Commission.

The variance sought by the Town will secure public safety and welfare by protecting over \$16,500,00 of the Town's tax base and a significant amount of public infrastructure. It will likewise protect and enhance the public beach adjacent to the proposed project.

The granting of the Town's requested variance will preserve substantial justice in that the Town has expended a significant amount of money to construct the authorized and properly permitted groin and justly seeks to protect the adjacent area by installing bale sand fencing. Likewise, substantial justice will be served by granting the variance given the Town's good faith reliance on the bale fencing discussions during the November 2021 and February 2022 CRAC/CRC meetings and the DCMs request for the Town to modify its application to include both hale bales and pine bales to allow the DCM to see the effects of each. Substantial justice will also be preserved given the fact that the commenting agencies have provided no scientific evidence supporting their stated concerns whereas conversely, the Town's engineer has cited to numerous studies to support the Town's use of bale fencing.

ATTACHMENT E:
STIPULATED EXHIBITS

1. Town Plats of dedicated streets at the six sites and Powell Bill roll showing subject streets
2. Image from DCM Map Viewer showing current and pending Inlet Hazard AEC
3. Image from DCM Map Viewer showing erosion rates at the sites
4. Town's Terminal Groin permit- CAMA Major Permit No. 107-16
5. Rosov (CPE) 12/2/22 Statement and CV
6. November 2021 CRC Meeting Minutes
7. Figure Eight Island's 2015 CAMA Minor Permit 15-48 with application and emails from WRC/USFWS
8. 1-28-22 Memo from DCM to CRC re Use of Hay Bales
9. February 2022 CRC Meeting Minutes
10. Justin Whiteside 1-10-23 letter
11. CAMA Minor Permit application and related materials dated 4-6-22
12. May 10, 2022 Add Info Letter to OIB
13. Notice of permit application to adjacent riparian owners with receipts and tracking
14. 5-6-22 email from DCM to WRC with permit application
15. 6-14-22 WRC's Response to application
16. 6-16-22 USFWS's Response to application
17. 6-6-22 Denial Letter
18. September 2022 CRC Minutes
19. Photos of Hurricane Ian overwash and Mr. Hill's signed statement
20. 1-3-23 Email from DCM to LPOs re: Christmas Trees
21. 1-27-23 Response from WRC re variance petition
22. 1-27-23 Response from USFWS re variance petition
23. Powerpoint of aerial/ground level photos of the sites and surrounding area

ARCATA MICROFILM

STATE OF NORTH CAROLINA
 County of Brunswick
 B. Rodgers
 1976
 10/22/76

CERTIFICATION
 I, JAN K. DALE R.L.S., CERTIFY THAT THIS MAP DRAWN BY PERCY CANADAY C.E., SEPTEMBER 22, 1953, IS CORRECT TO THE BEST OF MY KNOWLEDGE.

WITNESS MY HAND AND SEAL THIS THE 10 DAY OF SEPT. 1976.

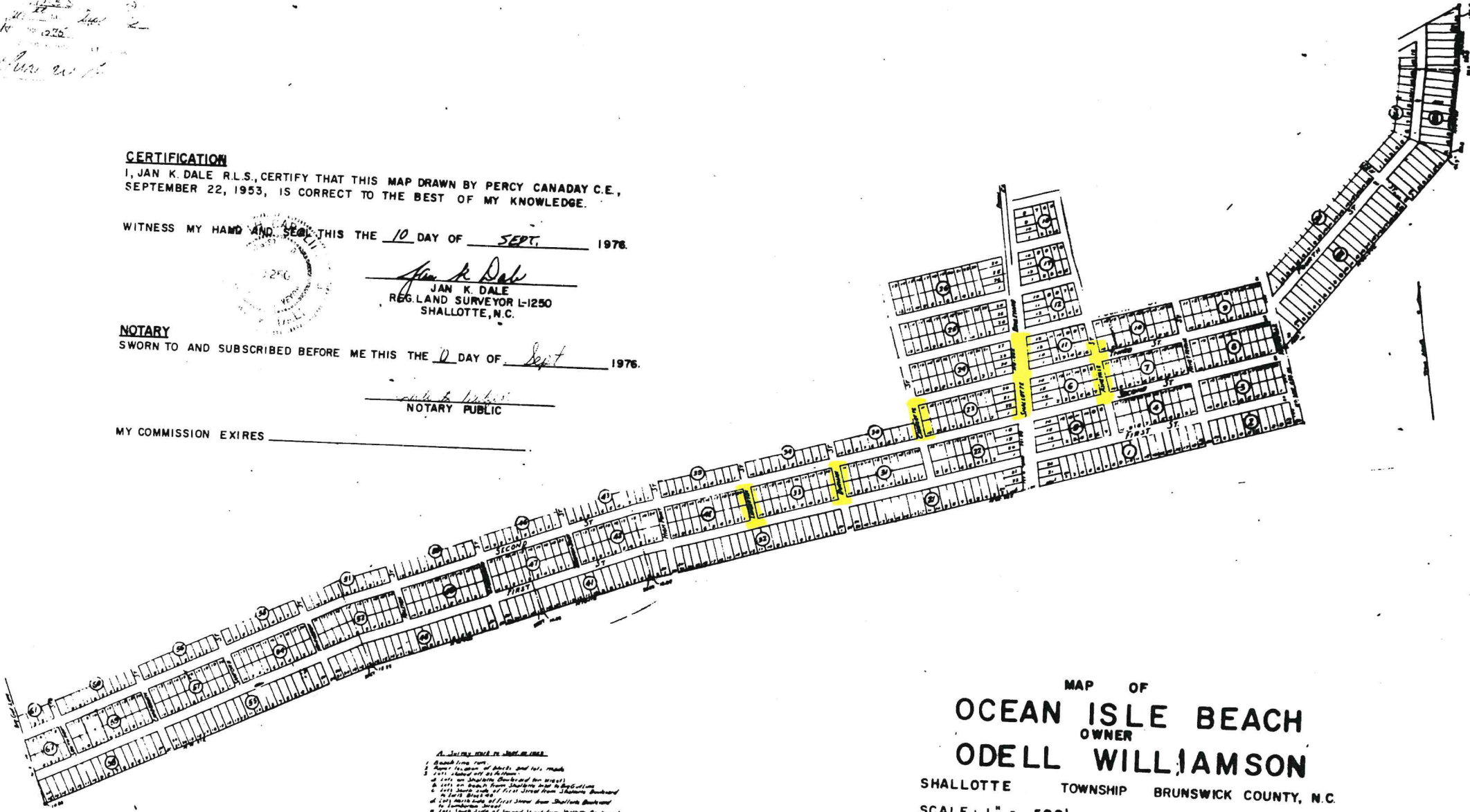


Jan K. Dale
 JAN K. DALE
 REG. LAND SURVEYOR L-1250
 SHALLOTTE, N.C.

NOTARY
 SWORN TO AND SUBSCRIBED BEFORE ME THIS THE 10 DAY OF Sept 1976.

John B. Roberts
 NOTARY PUBLIC

MY COMMISSION EXIRES _____



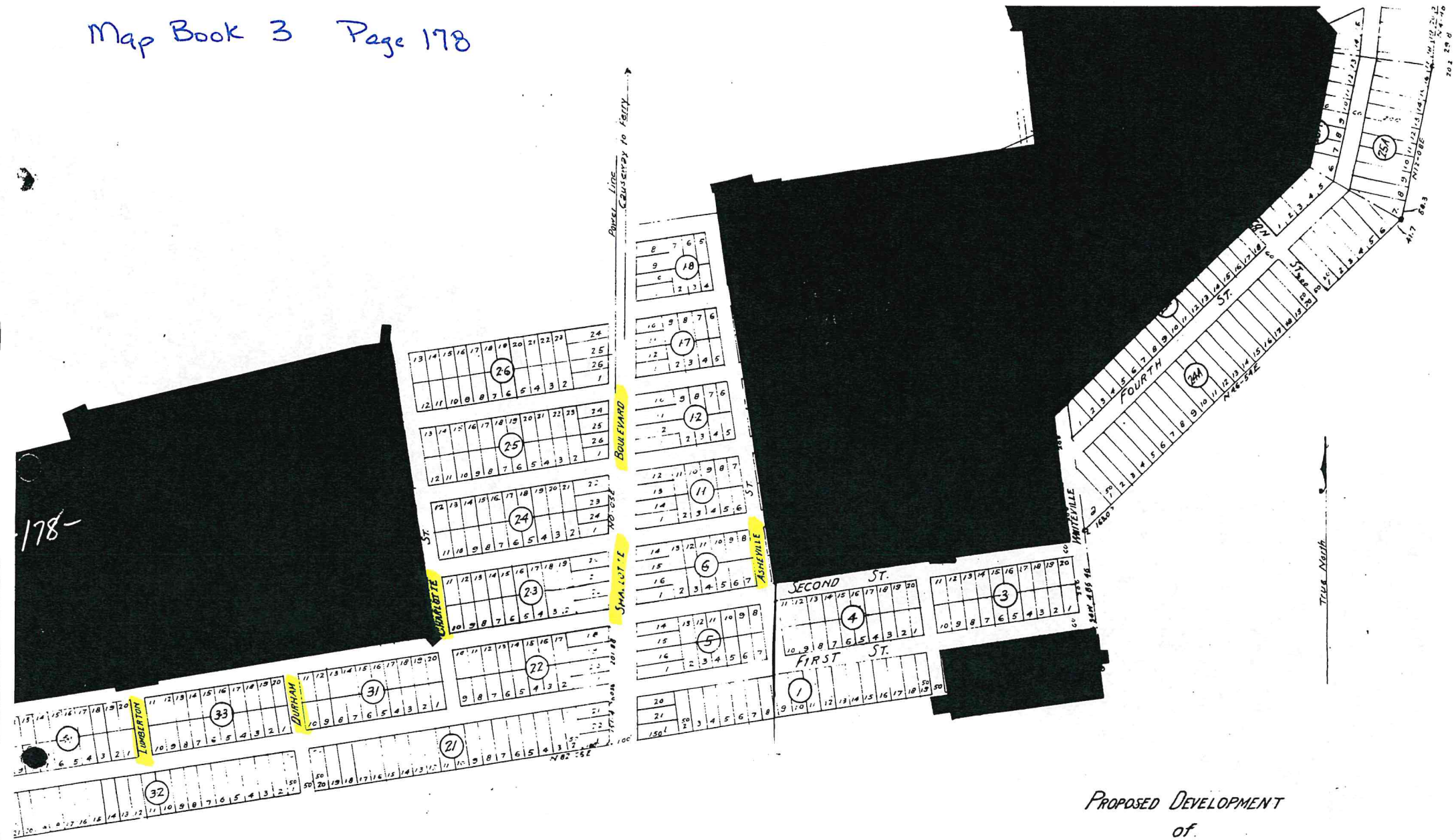
A. Survey and to show...
 1. Bound lines...
 2. Part of...
 3. Part of...
 4. Part of...
 5. Part of...
 6. Part of...
 7. Part of...
 8. Part of...
 9. Part of...
 10. Part of...
 11. Part of...
 12. Part of...
 13. Part of...
 14. Part of...
 15. Part of...
 16. Part of...
 17. Part of...
 18. Part of...
 19. Part of...
 20. Part of...
 21. Part of...
 22. Part of...
 23. Part of...
 24. Part of...
 25. Part of...
 26. Part of...
 27. Part of...
 28. Part of...
 29. Part of...
 30. Part of...
 31. Part of...
 32. Part of...
 33. Part of...
 34. Part of...
 35. Part of...
 36. Part of...
 37. Part of...
 38. Part of...
 39. Part of...
 40. Part of...
 41. Part of...
 42. Part of...
 43. Part of...
 44. Part of...
 45. Part of...
 46. Part of...
 47. Part of...
 48. Part of...
 49. Part of...
 50. Part of...
 51. Part of...
 52. Part of...
 53. Part of...
 54. Part of...
 55. Part of...
 56. Part of...
 57. Part of...
 58. Part of...
 59. Part of...
 60. Part of...
 61. Part of...
 62. Part of...
 63. Part of...
 64. Part of...
 65. Part of...
 66. Part of...
 67. Part of...
 68. Part of...
 69. Part of...
 70. Part of...
 71. Part of...
 72. Part of...
 73. Part of...
 74. Part of...
 75. Part of...
 76. Part of...
 77. Part of...
 78. Part of...
 79. Part of...
 80. Part of...
 81. Part of...
 82. Part of...
 83. Part of...
 84. Part of...
 85. Part of...
 86. Part of...
 87. Part of...
 88. Part of...
 89. Part of...
 90. Part of...
 91. Part of...
 92. Part of...
 93. Part of...
 94. Part of...
 95. Part of...
 96. Part of...
 97. Part of...
 98. Part of...
 99. Part of...
 100. Part of...

MAP OF
OCEAN ISLE BEACH
 OWNER
ODELL WILLIAMSON
 SHALLOTTE TOWNSHIP BRUNSWICK COUNTY, N.C.
 SCALE: 1" = 500'
 AUGUST 1976



Jan K. Dale
 JAN K. DALE
 REG. LAND SURVEYOR L-1250
 SHALLOTTE, N.C.

Map Book 3 Page 178



178-

- A. Survey work to Sept. 19 1953:
1. Beach line run.
 2. True location of blocks and lots made
 3. Lots staked off as follows:
 - a. Lots on Shallotte Boulevard (on street).
 - b. Lots on beach from Shallotte Inld to Big Gut Line.
 - c. Lots South side of First Street from Shallotte Boulevard to Lot 12, Block 4-8.
 - d. Lots North side of First Street from Shallotte Boulevard to Lumberton Street.
 - e. Lots South side of Second Street from Shallotte Boulevard to Lumberton Street.
 - f. Lots North side of Second Street from Shallotte Boulevard to Durnam Street.
 - g. Beach line from Big Gut Line to Shallotte Boulevard marked with Iron Stakes.

Notes:

1. Shallotte Boulevard to be 100ft wide; all other North and South Streets 50ft wide. East and West Streets to be 60ft wide.

2. Beach blocks from Whiteville Street to the Big Gut Line to be 150 ft in depth. All other blocks to be 200ft in depth.

3. Lots to be 10ft wide on Shallotte Boulevard and on East and West Streets. To be 6ft wide on North and South Streets.

Control: Base line to be established. Block and lot corners adjusted and blocks marked with Iron Pipes.

STATE OF NORTH CAROLINA,
 Brunswick County.
 The foregoing certificate of Oliver S. C. Johnson
 A Notary Public of Brunswick County
 and State of North Carolina is adjudge
 to be correct.
 Let the instrument, with the certificate, be registered.
 Witness my hand.
 this the 30 day of September 1953

Oliver S. C. Johnson
 Notary Public

Southport, N.C.
 Sept. 22, 1953
 Mapped and surveyed as shown.
Terrell Brantley, C.E.

Shallotte, N.C.
 Sept. 22, 1953.
 Approved,
M. C. Gore
Odell Williamson

PROPOSED DEVELOPMENT
 of
 SECTION A
 OCEAN ISLE BEACH
 by
 M. C. Gore & Odell Williamson
 1953

Scale 1" = 200 Ft.

OCEAN ISLE BEACH COMPLETE STREET LISTING**July 18th, 2022**

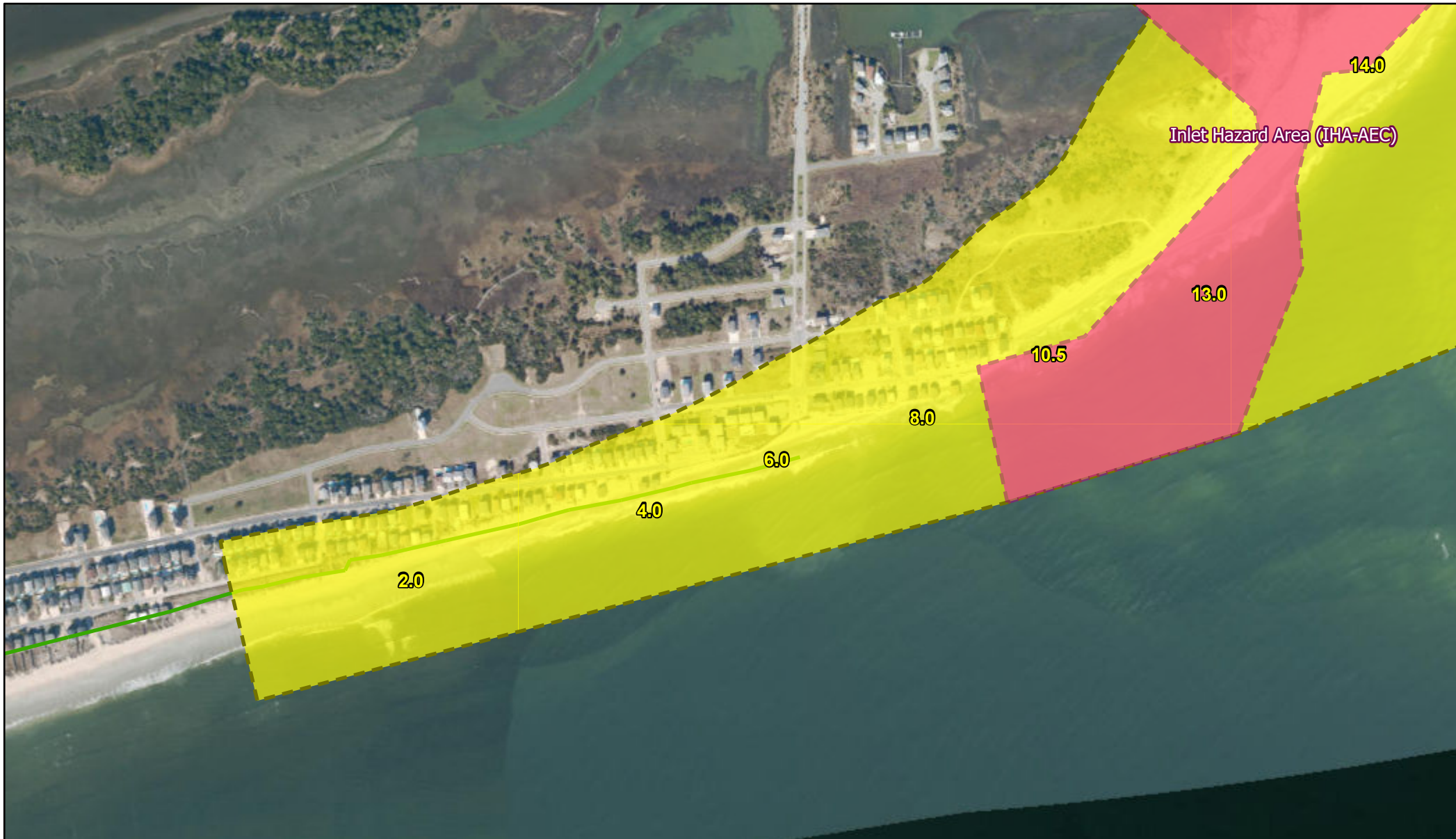
<u>Local Streets - Hard Surfaced:</u>	<u>Length (Ft)</u>
Anson Street	1,500
Asheville Street	815
Bay Watch Drive	375
Beaufort Street	240
Chadburn Street	800
Chapel Hill Street	240
Charlotte	1,575
Clinton Street	490
Columbia Street	355
Concord Street	2,550
Craven Street	1,930
Cumberland Street	1,440
Dare Street	1,440
Driftwood Drive	1,230
Duneside Drive	1,085
Durham Street	260
E. Fourth Street	3,902
E. Fifth Street	934
E. Second Street	85
E. Seventh Street	650
E. Sixth Street	790
E. Third Street	1,750
Gatha Lane	413
Fairmont Street	2,340
Goldsboro Street	1,700
Greensboro Street	240
Halifax Street	240
High Point Street	428
Isle Plaza	1,150
Lagrange Street	240
Laurinburg Street	2,400
Lee Street	1,440
Leland Street	1,700
Lumberton Street	185
Monroe Street	2,600
Moore Street	1,440
Mt. Olive Street	240
Newport Street	1,800
Oakridge Street	240
Old Marina Drive	305

<u>Local Streets - Hard Surfaced:</u>	<u>Length (Ft)</u>	
Pender Street	1,440	
Private Drive	1,777	
Raeford Street	1,700	
Raleigh Street	550	
Richmond Street	1,630	
Sanford Street	240	
Scotland Street	1,590	
Sea Turtle Path	655	
Shalotte Blvd.	1,965	
Shelby Street	490	
Southport Street	240	
Starboard Street	240	
Tarboro Street	240	
Troy Street	240	
Union Street	1,440	
W. Second Street (Conway to Clinton)	480	
W. Second Street (Driftwood to Beaufort)	1,400	
W. Second Street (Sea Turtle to Troy)	1,155	
W. Third-Fourth Street	4,360	
Wilmington Street	2,300	
Winnabow Street	240	
Winston Salem	150	
TOTAL	68,059	12.89 Miles





<u>Local Streets - Gravel, Stone, Marl</u>	<u>Length (Ft)</u>	
Oxford Street	240	
Troy Street	220	
W Second Street	500	
TOTAL	960	0.18 Miles

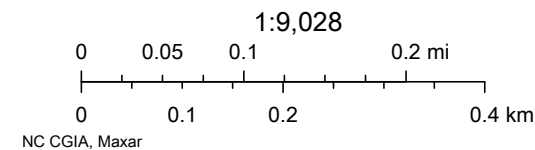
<u>Local Streets - Less than 16'</u>	<u>Length (Ft)</u>	
E. First Street	550	
TOTAL	550	0.10 Miles

Division of Coastal Management

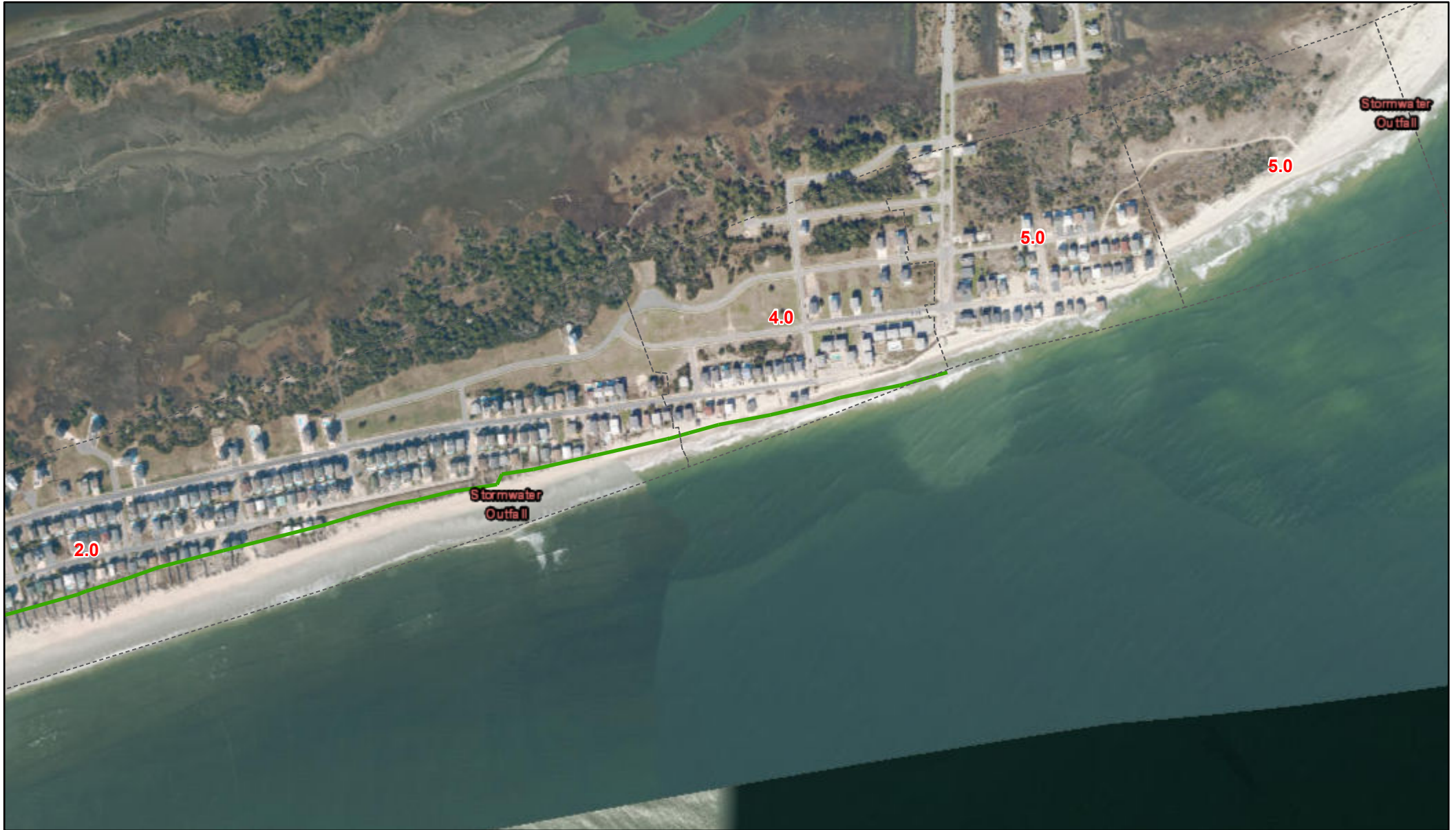


2/13/2023, 4:27:54 PM



-  Inlet Hazard Areas (current)
-  Inlet Hazard Areas (pending)
-  Inlet Setback Factors (pending)
-  Static Vegetation Lines

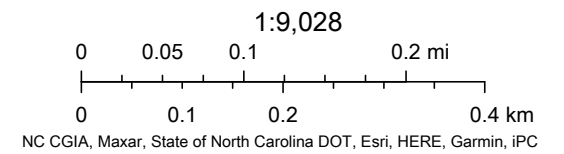


Division of Coastal Management



2/13/2023, 4:24:08 PM

-  Setback Factors (2020)
-  Static Vegetation Lines



Permit Class
NEW

Permit Number
107-16

STATE OF NORTH CAROLINA
Department of Environmental Quality
and
Coastal Resources Commission

Permit

for

Major Development in an Area of Environmental Concern
pursuant to NCGS 113A-118

Excavation and/or filling pursuant to NCGS 113-229

Issued to **Town of Ocean Isle Beach, 3 West 3rd Street, Ocean Isle Beach, NC 28469**

Authorizing development in Brunswick County at adj. to the Atlantic Ocean and Ocean Isle

, as requested in the permittee's application dated 10/16/16, AEC Hazard

Notice dated 3/23/15, incl. attached workplan drawings (12), as referenced in Condition No.1 of this permit.

This permit, issued on November 7, 2016, is subject to compliance with the application (where consistent with the permit); all applicable regulations, special conditions and notes set forth below. Any violation of these terms may be subject to fines, imprisonment or civil action; or may cause the permit to be null and void.

- 1) Unless specifically altered herein, all development shall be carried out in accordance with the attached workplan drawings (12), 1-2, and 4-12 dated 5/13/15, and 3 of 12 dated 1/19/16.
- 2) Unless specifically altered herein, this permit authorizes construction of the terminal groin structure and its associated development activities, all as expressly and specifically set forth in the attached permit application and workplan drawings. Any additional land development and/or construction activities may require a modification of this permit. Contact a Division of Coastal Management (DCM) representative at (910) 796-7215 for this determination.

(See attached sheets for Additional Conditions)

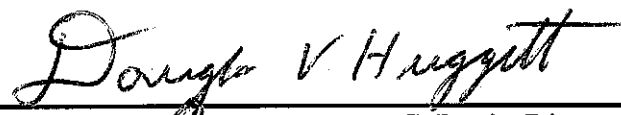
This permit action may be appealed by the permittee or other qualified persons within twenty (20) days of the issuing date.

Signed by the authority of the Secretary of DEQ and the Chairman of the Coastal Resources Commission.

This permit must be accessible on-site to Department personnel when the project is inspected for compliance.

Any maintenance work or project modification not covered hereunder requires further Division approval.

All work must cease when the permit expires on


for **Braxton C. Davis, Director**
Division of Coastal Management

This permit and its conditions are hereby accepted.

December 31, 2019

In issuing this permit, the State of North Carolina agrees that your project is consistent with the North Carolina Coastal Management Program.

Signature of Permittee

ADDITIONAL CONDITIONS

- 3) To the extent any condition of this permit alters the proposed project, including mitigation and monitoring requirements, in such a manner so as to increase the actual or estimated cost of the project over the estimated cost for which a financial assurance package was prepared by the permittee and certified by the Department of Environmental Quality (DEQ) on 9/29/15, a modified financial assurance package shall be prepared and approved by DEQ prior to project initiation.
- 4) In order to protect threatened and endangered species and to minimize adverse impacts to offshore, nearshore, intertidal and beach resources, no development seaward of the first line of stable natural vegetation shall occur from April 1 to November 15 of any year without the prior approval of the Division of Coastal Management, in consultation with the appropriate agencies.

NOTE: The permittee is advised that there may be additional timing restrictions placed on the authorized project by the U.S. Army Corps of Engineers (USACE) as part of the Federal permitting process. Nothing in this State Permit should be construed as overriding or superseding any such Federal permit requirement.

Staging

- 5) Land-based equipment necessary for implementation of the permitted activities shall be brought to the site through existing accesses. Should the work result in any damage to existing accesses, the accesses shall be restored to pre-project conditions immediately upon project completion in that specific area.

NOTE: The permittee is advised that any new access sites may require a modification of this permit.

- 6) All materials, including stones and construction mats, shall be staged above Mean High Water, and landward of the dunes when possible.

Terminal Groin Construction

- 7) Construction of the terminal groin shall take place entirely within the areas indicated on the attached workplan drawings, unless additional authorizations for an expanded footprint or alternate alignment are first obtained from the DCM.
- 8) Material used for the construction of the terminal groin shall be free from loose dirt or any other pollutant in other than non-harmful quantities, and be of a size sufficient to prevent its movement from the approved alignment by wave and/or current action.
- 9) The terminal groin shall not exceed a length of 1,050 feet, which includes the 750-foot rubble mound groin and the associated 300-foot shore anchorage system.
- 10) In accordance with commitments made in the attached permit application and workplan drawings by the permittee, the terminal groin shall be constructed in a manner to allow the bypassing of sand through and over the structure.

ADDITIONAL CONDITIONS

- 11) Any post-construction tuning associated with the terminal groin shall be coordinated with the DCM, in consultation with the appropriate permit and resource agencies. Such tuning activities may require a modification of this CAMA Permit.

Sand Fillet

- 12) Prior to initiation of beach nourishment activity along each section of beach, the existing mean high water line shall be surveyed, and a copy of the survey provided to the Division of Coastal Management.
- 13) All excavation activities shall take place entirely within the areas indicated on attached workplan drawings.
- 14) Excavation shall not exceed -15' MLW (-13' MLW with a maximum 2' overdredge allowance).
- 15) Any such use authorized under this permit will be limited to a one (1) time use of the borrow site source. Any future use of the borrow area shall require additional coordination with the DCM.

- 16) The seaward sand fillet limit shall be constructed in accordance with the attached work plan drawings.
- 17) In order to prevent leakage, dredge pipes shall be routinely inspected. If leakage is found and repairs cannot be made immediately, pumping of material shall stop until such leaks are fixed.

Construction Trestle

- 18) All portions of the proposed construction trestle shall be removed in its entirety after project completion.
- 19) The construction trestle shall be placed in the alignment as depicted on the attached workplan drawings.

Inlet Management Plan - Mitigation and Monitoring

- 20) Unless specifically altered herein, the permittee shall implement, at its expense, all mitigation and monitoring commitments made in, or submitted with, the permit application, the Inlet Management Plan dated Received DCM Wilmington 2/23/16, or the FEIS.
- 21) Standardized surveys for piping plover, red knot and other beach-dependent birds shall be conducted by a contractor trained in bird identification and surveys before, during, and after construction and pipeline placement and removal.

NOTE:

In an effort to protect nesting shorebird habitat, the permittee is encouraged to mark potential nesting areas each March with posts, signs and flagged stringed between posts. Any such posted areas should be maintained through August 15. Additional information can be obtained by contacting the N.C. Wildlife Resources Commission.

ADDITIONAL CONDITIONS

- 22) In accordance with commitments made by the permittee in the Inlet Management Plan dated Received DCM Wilmington 2/23/16, beach profile surveys shall continue at 6-month intervals, and inlet radial profiles and aerial photos shall be surveyed annually. An annual report shall be prepared and submitted annually. Surveys and monitoring, as described in the plan, shall continue until such time as the DCM agrees in writing that additional surveying and monitoring activities are no longer necessary.
- 23) The DCM may order the modification or removal of the terminal groin structure upon finding that any negative impacts associated with the constructed terminal groin structure outweigh the protective value of the structure. Upon such order, and in compliance with the time frames in the order, the permittee agrees to modify or to remove the terminal groin as in accordance with the order, potentially including up to removal in its entirety, including all portions of the structure below grade.
- 24) If erosion at Ocean Isle Beach or Holden Beach reaches any of the shoreline change thresholds listed in Table 6.1, the October 2009 Ocean Isle Beach shoreline depicted in Figure 6.4, or the Holden Beach shoreline position threshold depicted in Figure 6.6, as identified in the Inlet Management Plan dated Received DCM Wilmington 2/23/16, the permittee shall implement the verification and mitigation measures as proposed in the Inlet Management Plan, and/or as required by the DCM.

NOTE: Additional authorization from the DCM, as well as other resource agencies, may be required for any proposed mitigation.

- 25) Should the permittee utilize as a sand source material other than that identified in the application, the applicant shall implement additional consultation with DCM, to determine any additional requirements and/or authorizations.
- 26) All monitoring and reporting requirements shall continue until written authorization to terminate the monitoring and reporting is obtained from the DCM.

Sedimentation and Erosion Control

NOTE: An Erosion and Sedimentation Control Plan may be required for this project. This plan must be filed at least thirty (30) days prior to the beginning of any land disturbing activity. Submit this plan to the Department of Environmental Quality, Division of Energy, Mineral and Land Resources, 127 Cardinal Drive Extension, Wilmington, NC 28405.

General

- 27) No sand shall be placed on any sand bags that have been determined by the DCM to be subject to removal under 15A NCAC 07H .0308(a)(2). In order to ensure compliance with this condition, the DCM shall be contacted at (910) 796-7215 prior to project initiation to allow the DCM to meet on site with the permittee and/or contractor.

NOTE: The permittee is advised that the DCM regulates the removal of existing sandbags and the placement of new sandbags in accordance with 15A NCAC 07H .0308(a)(2), or in accordance with any variances granted by the N.C. Coastal Resources Commission.

ADDITIONAL CONDITIONS

- 28) Dune disturbance shall be allowed only to the extent necessary for development and provided that the dune's protective value is not weakened or reduced. All disturbed areas shall be immediately stabilized with vegetation.
- 29) Prior to the initiation of any beach nourishment activity above the mean high water contour (MHW) within the limits of the project area, easements or similar legal instruments shall be obtained from all affected property owners.
- 30) The permittee and contractor shall schedule a pre-construction conference with the DCM prior to the initiation of construction authorized by this permit.
- 31) This permit is not assignable, transferable, or otherwise alienable without the prior written approval of the DCM.

NOTE: The permittee's contractor is advised to contact the U.S. Coast Guard at (910) 815-4895, ext. 108 to discuss operations and appropriate lighting, markers, etc. for all structures located below Mean High Water.

NOTE: This permit does not eliminate the need to obtain any additional state, federal or local permits, approvals or authorizations that may be required, including but not limited to an Individual Permit from the USACE.

NOTE: Future development of the permittee's property may require a modification of this permit. Contact a representative of the DCM at (910) 796-7215 prior to the commencement of any such activity for this determination by the DCM.

NOTE: The N.C. Division of Water Resources (DWR) has authorized the proposed project under DWR Project No. 15-0220v2.

NOTE: The USACE has assigned the proposed project COE Action Id. No. SAW-2011-01241.



Brad Rosov
 Project Manager/Senior Marine Biologist
 Coastal Protection Engineering of North Carolina, Inc.

4038 Masonboro Loop Road
 Wilmington, North Carolina
 Tel: +1 910-399-1905
 brosov@coastalprotectioneng.com

December 2, 2022

Daisy Ivey
 Administrator
 Town of Ocean Isle Beach
 111 Causeway Drive
 Ocean Isle Beach, North Carolina 28469

Re: Sand fencing alternatives for dune stabilization at Ocean Isle Beach

Dear Ms. Ivey:

As you are aware, for several decades, the Town of Ocean Isle Beach has contended with chronic erosion along the easternmost portion of the town's oceanfront shoreline. Over the years, the town has implemented various measures to address this erosion in attempts to stem the economic losses resulting from damages to structures and their contents due to hurricane and storm activity, as well as the loss of beachfront land due to the ongoing shoreline erosion along the east end of the island in proximity to Shallotte Inlet. In 2001, the United States Army Corps of Engineers' (USACE) constructed the first event of the town's Coastal Storm Risk Reduction (CSR) beach nourishment project, however, due to the chronic erosion along the east end, the USACE's cost/benefit analysis determined that placing material east of Shallotte Blvd. should not be included in the project leaving that area vulnerable. In response, the town and private property owners installed sandbag revetments along approximately 1,400 feet of shoreline, beginning at a point west of Shallotte Boulevard and extending to the east end of the development. Most of the sandbags were initially installed around 2005 and have been periodically repaired and replaced as some of the bag revetments have failed under the continued landward retreat of the shoreline. Due to continued erosion, the sandbag revetment was extended 400 feet to the west just past Charlotte Street in 2012. As per State regulations, these sandbag revetments were not intended to provide a permanent shoreline protection solution for the impacted area. Accordingly, working with CPE as their coastal engineer, the town sought and received permits to construct a terminal groin in 2016. The project, which was completed in April 2022 included a 1,050 ft long terminal groin structure located just east of the easternmost development along the oceanfront shoreline. The project also included approximately 270,000 cy of beach fill to form an "accretion fillet" placed to the west of the structure. Collectively, this project was designed to provide long-term protection to the easternmost 3,000 ft of the town's oceanfront shoreline. Following the construction of the terminal groin and beach fill project, the town covered many of the sandbags within the project area with stockpiled sand in an attempt to create "starter dunes" which should serve to provide additional protection. The town also planted dune vegetation atop these "starter dunes" to help increase their stability as the roots begin to grow and to trap aeolian- transported sand thereby functioning to build the dune in size over time.

CPE recognizes the importance of the measures the town has taken to help further fortify the east end of the island from storm damage and we support their efforts to promote the growth of these incipient dunes. From a coastal engineering perspective, CPE also generally supports the utilization of sand fencing to facilitate dune growth along the landward portion of the beach. Ultimately, a robust dune along the east end of Ocean Isle Beach could help prevent storm-induced flooding such as what was recently observed as a result of Hurricane Ian passing the area on September 30, 2022. Accordingly, CPE encourages the town to install sand fencing in these areas. CPE has been informed by the town, however, that despite attempts to purchase traditional sand fencing, they have been unable to procure any due to a supply chain shortage of the wooden slats used to fabricate the fences. CPE contacted Mr. Peter McClintock, owner of Emerald Forest Landscaping to inquire about the future availability for sand fencing material. We were told that of the two main wholesale suppliers, one is currently providing materials exclusively to Emerald Forest Landscaping who is currently backordered with other customers. The other supplier, a smaller company, is also faced with a backlog and is not accepting new orders at this time. Due to the unavailability of traditional sand fencing material, the town is seeking a CAMA Minor Permit to allow for the application of hay bales or pine straw bales as an alternative means for sand fencing. In a January 28 2002 memorandum to the Coastal Resources Commission (CRC), the North Carolina Division of Coastal Management (NCDQM) recognized several benefits the use of bales as sand fence material including:

- Hay bales are natural, readily available, inexpensive, and bio-degradable material
- Can be installed under the same requirements required by 15NCAC 07K.0212
- May reduce the amount of marine debris generated after storm-events

In the same memo, NCDQM noted several concerns about the use of bales for sand fencing. These included:

- Lack of testing done on various shorelines along the NC coastline
- Potential negative interactions with wildlife
- Moisture-associated bacteria, mold, introduced pathogens
- Temperature/sediment differences
- Reduced longevity/efficacy
- Potential for increased footprint (bales v. fencing) and interaction with threatened or endangered species (bales may therefore be subject to initial placement during times when interactions would be less likely)

In 2015, a CAMA Minor Permit was issued to two properties in Figure 8 Island to serve as a “pilot study” regarding the efficacy and longevity of the use of hay bales as an alternative material to traditional sand fencing. The permit required that the installation of hay bales to be limited to one hay bale in height and the bindings were to be removed to prevent entanglements by sea turtles or other wildlife. According to the NCDQM, while the hay bales did not last for more than a few months, early site visits and photographs indicated that hay bales did capture and hold sand within the first month of placement on the site. With this success in mind, the Town of Ocean Isle Beach applied for a CAMA Minor Permit (#OIB 22-32) on April 14 2002 to install hay bales and, at DCM’s recommendation, pine straw bales along various public access areas to help facilitate the accretion of sand in several specific locations along the town’s east end. The permit application described the configuration of the bales would be similar to the sand fence design exemption (15A NCAC 07K .0212) and would be limited to 10’ in length from the toe of the dune with a minimum of 7’ spacing with a height of one bale. The average bale fencing was approximated to be 15 ft² per section totaling approximately 555 ft² of beach area covered by bales.

In a letter sent to the NCDCM on June 14, 2022, the North Carolina Wildlife Resource Commission (NCWRC) expressed concerns about the town's proposed use of bales for sand fencing as "they have undetermined impacts that should be vetted prior to allowance". In addition, NCWRC stated:

"The direct, secondary, and cumulative impacts bales may have on these resources coast wide is unknown and should be discussed in more detail prior to the inclusion of bales as a management tool by the NCDCM. No information has been found regarding bale use on ocean shorelines in other states, so previously studied examples cannot be compared. Therefore, we request additional conversation occur between the NCDCM, NCWRC, and United States Fish and Wildlife Service (USFWS) to discuss impacts bales may have in the immediate area of installation, the cumulative impact they may have on repeat installations in the same area, the cumulative impact they may have on habitats with coast wide use, and the regulation of use if determined to be an appropriate tool. These discussions should occur prior to the issuance of any permits or allowances of bales on ocean shorelines".

The USFWS generally agreed with NCWRC's comments and submitted an email to NCDCM on June 16 2022 citing the following specific concerns:

- The potential for introduction of invasive species (via plant seeds and/or insect eggs within the bales)
- The potential changes in pH (especially from pine straw)
- The potential for rapid decomposition of the bales
- The potential for the introduction of excessive nutrients and plant material into the surround area and waters

On June 16 2022, NCDCM informed the town that their CAMA Minor Permit application was denied as it was deemed inconsistent with 15A NCAC 07H.0311(c) based on:

"Sand fencing shall not be installed in a manner that impedes, traps or otherwise endangers sea turtles, sea turtle nests or sea turtle hatchlings. CAMA permit applications for sand fencing shall be subject to review by the Wildlife Resources Commission and the U.S. Fish and Wildlife Service in order to determine whether or not the proposed design or installation will have an adverse impact on sea turtles or other threatened or endangered species."

Despite the denial of the permit based on the reasons expressed above, CPE feels that the benefits associated with the installation a bale-based sand fencing strongly outweighs the potential for negative impacts caused by perceived risks. Despite that NCWRC's comment to NCDCM states that "no information has been found regarding bale use on ocean shorelines in other states", relevant research may help alleviate some of the agency's concerns. First, the Central Coast Wetlands Group (CCWG) at Moss landing Marine Labs, in partnership with California State Parks and Coastal Conservation and Research worked to restore 20 acres of sensitive dune habitat in areas that have been identified as vulnerable to sea level rise impacts. Along with the removal of invasive vegetation, efforts to increase the structural integrity of the dunes included strategic foredune planting of native dune grass and the use of driftwood and hay bales to enhance sand accretion of the dunes were initiated in 2017 (CCWG, 2019). Using high resolution images from the UAV surveys, a GIS analysis was conducted to determine how the location of the foredune may have changed between 2015 and 2018. This change was determined by comparing the location of foredune vegetation (an indicator of the toe of the foredune) in 2015 to the location in 2018 in the area where the hay bales and logs were installed (in 2017). The purpose of the hay bales and logs, as mentioned above, was to aid in the capture of sand which to rebuild the foredune in a high traffic area.

Results of this study showed that the foredune vegetation moved seaward and the increase in rugosity of the beach between 2015 and 2018 was apparent. This may suggest that the hay bales and logs were effective at capturing additional sand and helping to rebuild the dune (CCWG, 2019).

In another study conducted by Joyce et al. (2022), the effects of organic material on dune vegetation and sediment capture were examined. While this study did not specifically explore the impacts of hay bales or pine straw placed on incipient dunes, this large-scale Florida-based study examined the impacts of an alternate source of organic material, beach wrack, on dune development. Following Hurricane Irma in 2017, researchers allowed beach wrack composed primarily of dislodged seagrass, salt marsh cordgrass, sea oats, mangrove seeds, seaweed along with inorganic material including pieces of wood and plastic to be left in place at the base of the dune at Anastasia State Park, Florida in portions of the study area and while removing the wrack from other areas. The results of the study suggested that wrack left at the base of the dune enhanced the overall vegetation recovery and had particularly strong effects on several grass species as the wrack likely boosted plant establishment and growth by provisioning limiting nutrients. The authors hypothesize that the high-quality *Sargassum* macroalgae (seaweed) wrack that was quick to decompose provided an early initial pulse of nutrients, while more carbon rich components such as wood will likely provide a longer-term nutrient source. Because hay, pine, and straw are carbon rich, bales composed of this material would most likely also facilitate a slower release of nutrients compared to other kinds of organic materials when placed on the dunes. As for sediment capture, this study concluded that areas with wrack was associated with a greater dune elevation after 21 months of the experiment illustrated that wrack (and its removal) can have persistent impacts on the geomorphology of embryo dunes. However, the authors detected no clear effect of wrack on changes in elevation—thus dune growth—during the experiment. This suggests that differences were largely established at the start of the experiment and persisted—but were not further amplified—during geomorphological recovery (Joyce et al., 2022). Other studies exploring sediment behavior along seagrass wrack belts, however, demonstrate a clear impact on the accretion in sand (Hemminga and Nieuwenhuize 1990). Work performed by the University of Florida investigated using surrogate wrack to enhance dune planting growth and demonstrated that the surrogate wrack improved plant growth and increased sediment accumulation on the dune (Hooton et al. 2019)

In a separate study at Galveston, Texas, researchers utilized a different alternative material to help build and restore dunes. For this study, permits were issued to allow for a demonstration project designed to test the behavior of compacted *Sargassum* macroalgae bales placed within a constructed sand dune (Figlus et al., 201%). To do so, an 800-foot test dune was built in the summer of 2014 at Apffel Park on Galveston Island's East End. *Sargassum* wrack material was collected from the beach in front of a newly constructed dune and mechanically compacted using a generator-powered, vertical-style compactor mounted on a flatbed trailer. The resulting “seabales” were then placed inside the berm of the dune and covered with sand. Results of the study indicated that the vegetated dunes including seabales were able to develop strong root systems quicker than dunes constructed without seabale cores. This may be in part linked to the moisture-retaining capabilities of the seabales and the time-release nutrient provision to the plants, making them more resistant to drought and nutrient shortage. The abundant dune vegetation supported by the seabales also captured a significant amount of wind-blown sediment which aided in fortification of the dune and continued accretion. Accordingly, the authors of the study concluded that the long-term benefits of building dunes with “seabales” include spurred vegetation growth, enhanced capture of aeolian sediment transport, and overall increase in dune resilience to drought and erosive conditions (Figlus et al., 201%). Although the “seabales” were artificially covered with sand, it is anticipated that the hay bales or pine bales proposed for placement at Ocean Isle Beach would become buried with aeolian sand over time. Therefore, the results of this study can be used to inform the potential impacts for the use of bales as sand fencing.

With the preliminary results from Figure Eight Island and from these additional studies in mind, from a functionality perspective, CPE believes that sand fencing constructed with hay bales and pine straw bales have the ability to retain sand and stabilize dunes by capturing wind-blown sand. The studies cited above also bring credence to the fact that while nutrients can leach organic vegetative material as it decomposes upon a dune, the effects may not be a hinderance and, rather, should be seen as a benefit as it breaks down and slowly releases its nutrients resulting in robust dune vegetation growth. The potential effects of altering the pH through the placement of pine bales may also be inconsequential. While live pine needles are slightly acidic, by the time they drop off the tree, their acidity reduces further and does not make soils acidic (Washington State University, 2022). A study examining the effects of adding pine straw to soil noted that experimental plots treated with pine straw did not significantly alter pH of the soil (Singh et al., 2021). It should be noted that in North Carolina, Christmas trees (pine trees) may be used as sand fencing without the need for a permit so long as they are deployed in compliance with all the rules that apply to sand fencing as outline in 15A NCAC 07K .0212.

In an attempt to reduce potential impacts associated with temperature changes within the dune as the organic material decomposes, moisture associated bacteria/mold/introduced pathogens, and the introduction of invasive diseases or invasive/non-native plants via seeds from within bales, CPE recommends that the town limit the deployment of hay or pine bales for use as sand fencing during the cooler weather (i.e. between the months of November and March). Biological activity is diminished under cold temperatures and therefore bacterial decomposition of the bales may be delayed until sand has had the ability to cover them. In addition, it is unlikely that any seeds contained within bales would have the ability to germinate in the cold weather; furthermore, it is unlikely that seeds or insect eggs harbored in bales would be viable for survival or growth in the dune environment thereby reducing the potential for impacts associated with invasive or non-native species. Along with limiting the seasonal deployment of hay bale or pine bale sand fencing materials, CPE recommends that the town remove any strings or materials used to bind bales to reduce the potential for interactions or entanglements with nesting female sea turtles. Following storms, traditional sand fence material is often found scattered on the beach and dunes resulting in the potential for interactions with wildlife including nesting sea turtles. The use of unbound bales would drastically reduce this potential impact.

In light of the inability to obtain traditional sand fencing material combined with the environmental factors cited above, the efficacy of sand fences created by bales as demonstrated on Figure 8 Island and elsewhere, CPE supports the town's efforts to take the proactive steps to install sand fencing constructed with these alternative materials. These efforts demonstrate their progressive approach to coastal management as they are seeking to utilize more "tools in the toolbox" to help manage their coastal issues. Ocean Isle Beach clearly recognizes the value of healthy dunes as habitat and storm protection and is eager to take proactive steps to protect their oceanfront resources.

Very truly yours,



Brad Rosov
Senior Marine Biologist
Coastal Protection Engineering of North Carolina, Inc.

Literature Cited

- Central Coast Wetlands Group (CCWG). 2019. Salinas River State Beach Dune Restoration Project Final Restoration and Monitoring Report. Report prepared for the California State Coastal Conservancy. Climate Ready Grant Program Grant Agreement # 15-137
- Figlus, J., J. Sigren, R. Webster, and T. Linton. 2015. Innovative Technology Seaweed Prototype Dunes Demonstration Project. Final Technical Report. Texas A&M Dept. of Ocean Engineering.
- Hemminga, M. A., and J. Nieuwenhuize. 1990. "Seagrass Wrack-Induced Dune Formation on a Tropical Coast (Banc d'Arguin Mauritania)." *Estuarine, Coastal and Shelf Science* 31:499–502. [https://doi.org/10.1016/0272-7714\(90\)90040-X](https://doi.org/10.1016/0272-7714(90)90040-X).
- Hooton, N., D. L. Miller, M. Thetford, and S. Claypool. 2019. "Building Coastal Dunes with Sea Oats and Surrogate Wrack" University of Florida Wildlife Ecology and Conservation WEC364. <https://journals.flvc.org/edis/article/download/128002/128764>.
- Joyce MA, Crotty SM, Angelini C, Cordero O, Ortals C, de Battisti D, et al. 2022. Wrack enhancement of post-hurricane vegetation and geomorphological recovery in a coastal dune. *PLoS ONE* 17(8): e0273258. <https://doi.org/10.1371/journal.pone.0273258>
- Singh, Z., A. Maggard, R. Barlow, and J. Kush. 2021. A Comparison of the Attributes of Pine Straw from Southern Pine Species. *Journal of Environmental Horticulture*. 39 (3): 115-122.
- Washington State University. 2022. Spokane County Extension, Master Garden Program- Soil Amendments. <https://s3.wp.wsu.edu/uploads/sites/2076/2021/09/C130-Soil-Amendments-format-update-21.pdf>. Last visited October 24, 2022.



Brad Rosov, MS **ENVIRONMENTAL DOCUMENTATION & PERMITTING LEAD**

4038 Masonboro Loop Rd.
brsov@coastalprotectioneng.com; 910.399.1905

PROFESSIONAL QUALIFICATIONS

Brad Rosov brings over 20 years of environmental permitting, documentation, and coastal fieldwork experience to the team. Mr. Rosov has developed a comprehensive understanding of the NEPA process and has developed strong skills in drafting NEPA compliant documents including Environmental Impact Statements (EIS), Environmental Assessments (EA), Essential Fish Habitat Assessments (EFH), Biological Assessments (BA), and Cumulative Effects Assessments (CEA) in support of various projects. Along with NEPA compliance, Mr. Rosov has worked extensively with USACE and the State of North Carolina through their permitting process to obtain the necessary permits to clients in a timely manner. Permits obtained from USACE include both Individual Permits and General Permits while the permits obtained from the State of North Carolina have been both Minor and Major CAMA permits. Permit modifications have been sought and subsequently issued for project circumstances that warrant such actions. Along with permits, Mr. Rosov has coordinated with other Federal and State agencies to obtain the required certifications and concurrences. Lease agreements with BOEM have also been obtained to allow for the use of offshore sand sources.

Mr. Rosov has also demonstrated the ability to design and conduct a wide array of field studies including salt marsh monitoring, water quality monitoring, hardbottom/coral reef assessments, submerged aquatic vegetation (SAV) monitoring, and shellfish assessments. While at CPE, Mr. Rosov has ensured the delivery of high-quality reports, NEPA documents, and permit applications in a timely manner while maintaining effective relationships with clients and agency personnel.

RELEVANT EXPERIENCE

Central Dare County Channel Maintenance and Dredge Material Management Project, Dare County, North Carolina

Given the need for additional dredge capacity, Dare County initiated efforts to identify options for increasing dredge disposal capacity with a focus on project alternatives that enhance coastal resilience and beneficially use dredged sediments. Mr. Rosov help embark on a needs assessment that resulted in several products including an

Education

M.S., Marine Biology, University of North Carolina at Wilmington, 2001

B.S., Biology with a concentration in Neuroscience, University of Delaware, 1997

Highlights

Has led numerous permitting and environmental documentation efforts for clients throughout North Carolina and beyond

Experience with biological monitoring efforts associated with biota found in coastal North Carolina

Local presence in Wilmington, North Carolina for over 20 years

Professional Affiliations

Member, American Shore and Beach Preservation Association

Member, North Carolina Beach, Inlet, and Waterway Association

Registrations/Certifications

Certified Protected Species Observer, Bureau of Ocean Energy Management (BOEM), 2015

Professional Association of Diving Instructors (PADI) Enriched Air Nitrox Diver (IANTD/EANx), 2008

Licensed FAA Part 107 Remote Pilot, Unmanned Aircraft System (sUAS), 2019, License No. 4247236

NC UAS Aviation Operators Certification

Employment History

CPE 2020 – Present

APTIM 2007 – 2020

University of North Carolina at Wilmington 2005-2007

The Nature Conservancy 2001-2005

online GIS, maintenance statistics for each of the channels included in the study, and sediment characteristics for material dredged from channels where sufficient data existed. Following the completion of the needs assessment, twenty-two (22) concept alternatives were developed to expand capacity of current dredge material management facilities; several alternatives involved the application of thin layer placement. Subsequent to the issuance of the report, Mr. Rosov has led permitting and environmental documentation efforts, including the development of three NEPA-compliant Environmental Assessments (EAs), in an attempt to move several select project alternatives to construction.

Carbon Sequestration using the Deployment of Olivine Sand in Nearshore Waters, Duck, North Carolina

Mineral weathering is the natural process by which the Earth regulates atmospheric CO₂ levels, and in turn global temperature, on long timescales (i.e. hundreds of thousands to millions of years). One method of carbon sequestration under exploration as a means to counter climate change is “Coastal Carbon Capture™ (CCC). The process of CCC aims to accelerate natural chemical weathering by spreading sand, derived from the mineral olivine, onto or just offshore coastlines where it can slowly dissolve in seawater over the course of decades. Olivine is a common magnesium iron silicate mineral found worldwide, including in North Carolina. When olivine dissolves in water, it can remove up to 1 ton of CO₂ from the atmosphere per ton of olivine. It also increases seawater pH and generates alkalinity. Project Vesta, BPC is conducting the Research and Development projects necessary to assess whether CCC is a scalable carbon removal strategy. By adding olivine sand to coastlines, Vesta seeks to help mitigate climate change and simultaneously contribute to coastal protection. Mr. Rosov worked directly with Project Vesta to design a proposed pilot project entailing the deployment of 20,000 cy of olivine sand off the coast of Duck, NC. He convened multiple interagency scoping meetings and developed the required environmental documentation, including an EA, and assembled and submitted permit applications to the State of North Carolina and the USACE.

Multi-Town Cooperative Beach Nourishment Project (Towns of Duck, Southern Shores, Kitty Hawk, and Kill Devil Hills), Dare County, North Carolina

Mr. Rosov lead the permitting and environmental documentation efforts on behalf of four different local governments as they collaborated with Dare County on the Multi-Town Cooperative Beach Nourishment Project. He oversaw the development of three separate EAs, a “batched” BA, and EFH assessment in coordination with four different federal agencies and in compliance with NEPA regulations. Due to the large-scale of this project, an abundance of biological, environmental, and information pertaining to human interest factors were included in these documents. Permit applications were assembled and submitted to North Carolina’s Division of Coastal Management and USACE within a timely manner, such that the project could move towards construction as scheduled.

Shallowbag Bay Channel Maintenance Project, Dare County, North Carolina

Over recent years, the navigability within the Federal navigation channel spanning between the Town of Manteo and Shallowbag Bay has been compromised due to shoaling. As such, safe and reliable recreational boating opportunities have been limited within the area. In addition, this continued shoaling has prevented the Elizabeth II, a representative 16th century sailing ship, from navigating into Roanoke Sound from its home berth at Festival Park. As project manager, Mr. Rosov lead efforts associated with obtaining the necessary permits and authorizations to allow the County to perform the required maintenance dredging. Due to concerns over contaminants within the disposal material, he has coordinated extensively with numerous State and Federal agency personnel to determine the appropriate means of disposing of the material. The project went to construction and was completed on time and on budget.

Permitting of a New Dredge to Maintain Oregon Inlet, Dare County, North Carolina

Dredging is necessary to maintain safe and reliable transportation routes through waterways. Oregon Inlet is no exception. Despite considerable efforts on the part of the USACE, State, and Dare County, shoaling continues to impede mariners and has resulted in the U.S. Coast Guard's inability to properly position navigation buoys within the channel. As a result, the risk of damage to vessels and injury to people continues. Due to a federal funding shortfall, the USACE has been unable to maintain navigation through the inlet. As such, Dare County sought permits to operate a new privately-owned dredge that will operate within Oregon Inlet. Mr. Rosov drafted several NEPA documents including an EA, EFH, and BA in support of this effort. He submitted a Coastal Area Management Act (CAMA) major permit application to the State and an Individual Permit application to the USACE- both permits have been obtained by Dare County.

New Hanover County Water Quality Monitoring Program, Wilmington, North Carolina

Since 2007, Mr. Rosov has managed a long-term water quality monitoring within a network of nineteen monitoring stations within seven tidal creeks within New Hanover County. Physical, chemical, and biological data obtained on a monthly basis have been used to determine trends inform County managers on ways to help improve the water quality within these creeks. Mr. Rosov compiles and analyzes this data in order to prepare annual reports. Over the past 15 years, several sampling sites have demonstrated chronic problems with bacteria loading. In an attempt to determine the source of this contamination, Mr. Rosov has teamed with UNC-Chapel Hill and UNC-W to employ high tech methods including qPCR analysis and remote-sensed thermal imaging.

Ocean Isle Beach 30-Year Island-Wide Shoreline Management Plan, Ocean Isle Beach, North Carolina

The Town of Ocean Isle Beach proactively sought permits allowing for beach nourishment along the entirety of the Town's 5.1-mile long oceanfront shoreline which would serve as protection from erosion caused by chronic and storm-induced erosion. Mr. Rosov lead the permitting and environmental documentation effort by coordinating with numerous state and federal agencies and drafting an EA, BA, and EFH assessment.

Ocean Isle Beach Shoreline Protection Project, Ocean Isle Beach, North Carolina

Mr. Rosov led the effort to develop an Environmental Impact Statement (EIS), BA, and EFH for the Town's terminal groin project. Early in the process, he helped convene interagency meetings and a public hearing. He coordinated with engineering and geotechnical staff to ensure that the project design was permissible through the NEPA process. Mr. Rosov managed consultation efforts with federal environmental agencies as required under Section 7 of the Endangered Species Act and conducted surveys for submerged aquatic vegetation and shellfish in the project area. Mr. Rosov also managed efforts to map and ground-truth the ecological habitats in the project area using aerial photography and ArcGIS. He was responsible for the development and submittal of Department of the Army and state CAMA permit applications. He served as the project manager during the construction phase of the project and continues to manage and perform biological monitoring during the post-construction phase of the project.

Figure Eight Island Shoreline Protection Project, Figure Eight Island, North Carolina

This project was proposed as a beach stabilization effort on the north end of the barrier island Figure Eight Island; the proposed design consisted of a terminal groin and small beach fill project. Mr. Rosov was the lead environmental scientist and developed an EIS to appropriately vet the potential project impacts to water quality as required under Section 404, cultural resources as required under Section 106, and all pertinent aspects of human and natural environment as required by NEPA. Mr. Rosov initiated consultation with federal environmental agencies as required under Section 7 of the Endangered Species

Act and conducted surveys for biological resources in the area. Mr. Rosov was responsible for development and submittal of Department of the Army and state CAMA permit applications.

New Hanover County Contingency Permitting Projects, New Hanover County, Carolina Beach, Kure Beach, and Wrightsville Beach, North Carolina

Mr. Rosov led efforts to draft NEPA compliant environmental documentation and permit applications on behalf of New Hanover County such that the County could implement beach nourishment projects at three coastal municipalities as a contingency plan if the USACE authorizations expire or are not adequately funded. With his staff, Mr. Rosov convened interagency meetings to facilitate coordination with USACE, US Fish & Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and several state resource agencies. This ensures that the documents addressed all environmental issues. He then modified the existing permits for these projects to suit the client's need. Mr. Rosov completed and submitted permit modifications within the proposed schedule. Ultimately, he provided all deliverables to the client in a timely manner and within budget.

Hatteras Inlet Channel Maintenance Project, Dare County, Hatteras Inlet, North Carolina

In an attempt to reestablish the navigability into Hatteras Inlet, Dare County hired our firm to assist with obtaining the necessary permits that would allow for the utilization of USACE dredges (sidecast and special purpose) to conduct maintenance within the inlet channel. To do so, Mr. Rosov first organized and convened an interagency meeting, which served to identify concerns raised by agency representatives. With that information, he led the effort to draft NEPA-compliant documents including an EA, BA, and EFH. He reviewed and utilized the existing CAMA permits to develop new permit applications, which he submitted to the USACE and NC DCM in a timely manner. USACE and NC DCM subsequently issued permits, which were then utilized for a dredge maintenance event within Hatteras Inlet, as planned. Several permit modifications have been granted over the years to allow as this dynamic project has required updating and changes over time to fit the needs of the client.

North Topsail Beach Shoreline Protection Project, North Topsail Beach, North Carolina

Mr. Rosov developed all NEPA associated documents, including and Environmental Impact Statement, in support of obtaining state CAMA and federal Department of the Army permits for a beach nourishment project along 11.1 miles of the Town of North Topsail Beach. He managed mapping of the ecological communities within the project area and assisted in pre-construction monitoring for shorebirds including the federally listed piping plover and red knot. He is leading development of a supplemental Environmental Impact Statement in support of modifications to the project.

SELECT PUBLICATIONS/PRESENTATIONS

Angelos Hannides, Nicole Elko, Tiffany Roberts Briggs, Sung-Chan Kim, Annie Mercer, Kyeong Park, **Brad Rosov**, Ryan Searcy, and Michael Walther, 2021. "U.S. beach water quality monitoring", *Shore & Beach*, 89(3), 26-35.

Rosov, B., Long Term Water Quality Trends within a Network of Seven Tidal Creeks. New Hanover County Board of County Commissioners. Wilmington, North Carolina, November 2020.

Rosov, B. and S. Bush., The state of understanding the impacts of beach nourishment activities on infaunal communities. *Shore and Beach*. 84 (3): 53-57. 2016.

Rosov, B. and K Willson., Re-Evaluation of the Efficacy of existing environmental dredge windows in

North Carolina. Shore and Beach. 84 (1): 26-28. 2016.

Rosov, B., The Known Impacts of Beach Nourishment Activities on Infaunal Communities. American Shore and Beach Preservation Association (ASBPA) Annual Conference. Long Branch, New Jersey, 2016.

Rosov, B., Taking the Bull by the Horns: Local Communities Taking Initiative to Ensure the Long-Term Health of Federal Storm Damage Reduction Projects". American Shore and Beaches Preservation Association (ASBPA) Annual Meeting. Virginia Beach, Virginia, October 2014.

Rosov, B., Are Our Beaches Resilient? Beach Nourishment Environmental Concerns. University of North Carolina at Wilmington's Science Friday Series. Wilmington, North Carolina, March 2012.

Rosov, B., Anthropogenic Impacts to the Waters of Tidal Creeks- Septic Tank Woes. Board of New Hanover County Commissioners Meeting. Wilmington, North Carolina, October 2010.

Rosov, B., Salt Marsh Monitoring Following Channel Relocation in the Vicinity of Bogue Inlet, North Carolina. Southeastern Estuarine Research Society (SEERS) Annual Conference. Charleston, South Carolina, March, 2008.

Mallin, M. and **Rosov B.**, A Continuing Assessment of the Efficacy of the 2005-2006 Greenfield Lake Restoration Measures. pp. 32-39. In: Mallin, Michael; Cahoon, Lawrence; Alphin, Troy; Posey, Martin; Rosov, Brad; Parsons, Douglas; Harrington, Renee; and Merritt. James. 2007. Environmental Quality of Wilmington and New Hanover County Watersheds 2005-2006. CMS Report 07-01. Center for Marine Science, University of North Carolina at Wilmington, Wilmington, North Carolina. 2007.

Mallin, M., Cahoon, L., Alphin, T., Posey, M., **Rosov, B.**, Parsons, D., Harrington, R., and Merritt, J., Environmental Quality of Wilmington and New Hanover County Watersheds 2005-2006. CMS Report 07-01. Center for Marine Science, University of North Carolina at Wilmington, Wilmington, North Carolina. 2007.

Mallin, M. and **Rosov, B.**, 2006. Wilmington Watersheds Annual Report 2006. Center for Marine Science, University of North Carolina at Wilmington, Wilmington, North Carolina. 2006.

Rosov, B., Water Quality Trends in the New River. 2006 State of the New River Forum. Jacksonville, North Carolina, April, 2006.

Rosov, B., Initial Activities of the Florida Reef Resilience Program. Florida Reef Resilience Program Steering Committee. Marathon, Florida, February, 2005.

Rosov, B., Coral Reef Classification Schemes in South Florida. 12th Annual Coral Reef Task Force Meeting. Miami, Florida, December 2004.

Rosov, B., Restoration of long spine sea urchins: A possible strategy to improve coral reef health (Florida). *Ecological Restoration* 22:297-298. 2004.

Rosov, B., Sea Stewards: A Volunteer-Driven Ecological Monitoring Program. In: U.S. Department of Commerce, Sanctuary Monitoring Report 2001: An Ecosystem Report Card. Florida Keys National Marine Sanctuary, Marathon, FL, pp.51-53. 2003.

Rosov, B., *Diadema* Restoration Project: Clearing the Way for Corals. Caribbean Coral Reef Conference. Curaçao, October 2002.

NC COASTAL RESOURCES COMMISSION (CRC)

November 10, 2021

DoubleTree, Atlantic Beach

Present CRC Members

Renee Cahoon, Chair
 Larry Baldwin, Vice-Chair
 Neal Andrew
 Trace Cooper
 Bob Emory
 Robert High
 Doug Medlin
 Phil Norris
 Lauren Salter
 Angie Wills

Present CRAC Members

Greg “rudi” Rudolph, Chair
 David Kellam
 Mike Moore
 Spencer Rogers
 Debbie Smith

Present from the Office of the Attorney General

Shawn Maier

Present from the Department of Environmental Quality, Office of the General Counsel

Christine A. Goebel

CALL TO ORDER/ROLL CALL

Renee Cahoon called the meeting to order at 9:00 a.m. on November 10, 2021, reminding the Commissioners of the need to state any conflicts due to Executive Order Number 34 and the State Government Ethics Act. The State Government Ethics Act mandates that at the beginning of each meeting the Chair remind all members of their duty to avoid conflicts of interest and inquire as to whether any member knows of a conflict of interest or potential conflict with respect to matters to come before the Commission. The Chair requested that if any member knows of a conflict of interest or a potential conflict of interest, they so state when the roll is called. Commissioners Bromby and Tunnell were absent. Trace Cooper stated he would recuse himself from the proposed beach management plan rules discussion. Based upon this roll call Chair Cahoon declared a quorum.

CHAIR’S COMMENTS

Chair Cahoon stated Robin Smith has resigned from the CRC as she has been named Chair of the NC Environmental Management Commission. Greg “rudi” Rudolph, the Chair of the CRAC, is resigning from the CRAC, but will remain on the CRC’s Science Panel. The CRC Executive Committee has appointed Dr. Laura Moore as Chair of the Science Panel.

MINUTES

Doug Medlin made a motion to approve the minutes of the September 15, 2021, Coastal Resources Commission meeting. Angie Wills seconded the motion. The motion passed unanimously (Cahoon, Andrew, Baldwin, Cooper, Emory, High, Medlin, Norris, Salter, Wills).

EXECUTIVE SECRETARY'S REPORT

DCM Director Braxton Davis gave the following report:

First, a quick report on this weekend's storm event. North Carolina was very fortunate not to experience landfall from a named hurricane in 2021. However, last weekend a coastal low-pressure system combined with king tides caused impacts due to flooding and ocean overwash in numerous areas. N.C. Highway 12 was closed on Sunday and Monday from Rodanthe north to the Marc Basnight Bridge at Oregon Inlet due to ocean overwash, which has caused beach erosion, exposed sandbags, damaged septic systems and accessways, and caused some minor flooding. I also heard that there was some damage to the pier in Rodanthe. As always, we have been in regular communication with DOT staff to avoid any delays in DOT's response efforts. It appears that no asphalt was significantly damaged and existing sandbags are undamaged and still in alignment. NCDOT plans to submit dune repair/maintenance information, under existing dune maintenance permits today. At this time, NCDOT does not plan any activities that are not covered under existing permits. Farther south, most of the eastern-facing beaches had major erosion and have large dune escarpments. Damage assessments were still being conducted yesterday. Figure 8 has contacted DCM for proposed emergency beach bulldozing in some areas. Carolina and Kure Beach had significant beach accessway damage and loss, and the north end remains closed due to erosion and flooding. Parts of Canal Drive on the north end were still flooded yesterday and the Town will be doing sand removal from Carolina Beach Ave North near the pier. Ocean Dunes in Kure Beach is requesting sandbags for the remaining buildings, as high water is coming up to and under some of the buildings. There is also substantial debris piled up at the Riggings/Fort Fisher area from beach accessways and lifeguard stands. We are still waiting on damage assessments for the southern beaches. We are aware that some sandbags were over-washed in Ocean Isle and there are some breaches on the West End of Oak Island. I also wanted to provide a quick glimpse of the types of coastal provisions and funding in the recently passed congressional Infrastructure Bill (HR 3684). Much of this is still to be worked out, so apologies for any errors or omissions. First, NOAA, our federal partner, will receive over \$500M/year for five years to be distributed across its programs subject to a spend plan. In addition, state coastal zone management programs will receive over \$200M, allocated over 5 years, for technical assistance on coastal resilience initiatives and for conservation and land acquisition efforts. The National Estuarine Research Reserve program will receive over \$77M to be allocated over 5 years for similar purposes. It is likely that much of the CZM and NERR funds will be dispersed on a competitive basis across the 35 coastal states and territories. The National Coastal Resilience Fund will receive \$492M over 5 years for competitive grants with a focus on natural infrastructure. NOAA Fisheries (or NMFS) will receive \$492M over 5 years for its Community-Based Habitat Restoration Program. NOAA's Marine Debris Program will receive \$150M over 5 years. NOAA Mapping, Observations, and Modeling will receive \$492M over 5 years, and other NOAA programs will also receive one-time increases under this bill. These funds are in addition to base program funding. Under the EPA, Clean Water State

Revolving Funds will receive over \$11.7B over 5 years, and the National Estuaries Program will receive \$132M over 5 years. Under FEMA, over the 5-year period, the pre-disaster hazard mitigation assistance will receive \$1B, the Hazard Mitigation Revolving Loan Fund will receive \$500M, and the NFIP will receive \$3.5B. The Corps of Engineers will receive approximately \$150M for studies and planning assistance, over \$250B for CSRM projects targeting states impacted by federally-declared disasters over the past 6 years – not all shoreline protection; \$4B for operations and maintenance; and over \$250B for Flood Control and Coastal Emergencies to “restore authorized shore protection projects to the full project profile at full federal expense” where certain requirements are met. Under the Federal Highways Administration, there is also a new resilience program (“PROTECT”) establishing grants to strengthen, stabilize, harden, elevate, relocate, or otherwise enhance the resilience of coastal highways and non-rail infrastructure. Depending on what happens with the state budget, DCM may also receive funds distributed to the States from the American Rescue Plan Act, which was passed in March 2021. Early state budget bills also included significant coastal project funding, and we hope to know what the final budget will look like in the coming weeks. I’ll note that our Department is already preparing to execute funds and funding agreements quickly and efficiently, while ensuring the maximum amount of funding is getting to the end users and to project work. At the same time, we will need to ensure successful projects – so project selection, permitting, and oversight will be very important. Overall, it appears that we are heading into unprecedented times with respect to coastal planning and project funding at the federal and state levels, which presents both an incredible opportunity and some significant work ahead for all of us, but I think coastal North Carolina is in a great position due to our strong, existing partnerships and networks.

I’ll move over to the regulatory side of DCM. One procedural item of note - some of you may recall that applicants for CAMA Major Permits were required to request a meeting with the NC Division of Water Resources 30 days before their application could be accepted due to the EPA’s adoption of a revised 401 certification rule back in 2020. This was challenging for our staff and for applicants, and I am happy to report that, following comments submitted on our behalf by the Department, the federal rule has reverted to the pre-2020 rule and we can now accept applications without the 30-day waiting period. Next, as part of the NEPA process, the Corps is scheduling a scoping meeting concerning North Topsail Beach’s proposal to construct a terminal groin along the western shoulder of New River Inlet. The scoping meeting will include resource and regulatory agencies as well as relevant stakeholders to identify issues to be considered in the development of the Draft Environmental Impact Statement. The Town of Topsail Beach is working on a long-term (30-year) beach plan and permit application. The Town is in the scoping phase and will be working with agencies to discuss plans for the long-term maintenance of the ocean front. The Town of Oak Island is also developing a long-term beach plan for permitting. DCM supports these long-term planning approaches to beach management by proactively identifying project needs, sand sources and funding mechanisms, which can streamline the permitting process, reduce costs, and provide better protection and predictability.

Federal Consistency

DCM has submitted a Routine Program Change request to NOAA’s Office for Coastal Management. The Coastal Zone Management Act requires state Coastal Programs to formally incorporate changes made to the laws, rules and policies that are used for Federal Consistency. Your rules at 07H .0208 were recently amended to remove outdated provisions and clarify vague

and ambiguous language. The purpose of this action is to incorporate these changes into our enforceable policies for Federal Consistency review. Comments will be accepted until November 15th.

BOEM requested public input on a proposed wind energy lease sale in federal waters in the Carolina Long Bay area offshore the Carolinas. The proposed lease area consists of over 125,000 acres and includes the majority of the Wilmington East Wind Energy Area, with the potential to produce more than 1.5 GW annually (which can power more than 500,000 homes). Staff has been in contact with BOEM and is expecting a Federal Consistency Determination for the lease sale and site assessment plan in early 2022. Comments on the Proposed Sale Notice can be submitted through BOEM's website.

Land Use Plan Certifications

DCM certified two land use plans since your last meeting - the Town of Atlantic Beach's CAMA Land Use Plan Update on September 24th, and an amendment to the Town of Carolina Beach's Land Use Plan on October 25th. Please let us know if you have a question about this process, or the plans themselves.

Access Grants

The Public Beach and Coastal Waterfront Access program is now in its 40th year. In October, DCM awarded more than \$1.1 million to nine local governments to improve public access to coastal beaches and waters. That includes a grant to the Town of Atlantic Beach, which received \$73,288 to construct a handicap-accessible dune crossover right here at the DoubleTree East Public Beach Access. Please let me know if you are interested in information on the other projects funded this year.

Resilient Coastal Communities Program

Work in the Resilient Coastal Communities Program's 26 communities continues to go well. There are over 200 people serving on Community Action Teams, and most communities are working on vulnerability assessments and community outreach. Work will continue through next March, resulting in completed vulnerability assessments, along with project identification and prioritization. We will issue a request for applications for engineering and design projects in January.

Coastal Reserve

The Coastal Reserve will hold its fall Local Advisory Committee meetings for all ten Reserve sites via web conference November 30-December 8. We welcome the newly appointed and reappointed community members, community organizations, and partner organizations. The meetings are open to the public and meeting details are located on the Reserve's event calendar. The Department adopted proposed amendments to the rules related to the Coastal Reserve on October 1 (15A NCAC 07O). These amendments satisfy the Legislative Periodic Review and Expiration of Existing Rules process requirements, and address priority updates to enhance clarity of existing rules and address issues and gaps to ensure effective management of the Coastal Reserve. Changes were made to 2 rule sections following the public comment period, and staff are now working on technical changes requested by the Rules Review Commission. We

anticipate that the rules will be heard by the RRC at their November 18 meeting. The proposed effective date is February 1, 2022. The Coastal Training Program and Division regulatory staff are offering a Coastal Area Management Act Basics Webinar on December 1. Participants will learn how DCM balances competing coastal pressures through development permitting under the rules of the Commission. This includes an overview of permits needed for coastal development; development rules for the oceanfront, inlet hazard areas, and estuarine shorelines; and development rules related to coastal habitats including wetlands and primary nursery areas. Registration is full, but a recording of the webinar will be available after the event given the high demand for the offering. The Coastal Training Program will host NOAA Office for Coastal Management's Nature-Based Solutions for Coastal Hazards 101 training on January 11, 2022. This virtual course is a starting point in preparing coastal managers and planners to plan and implement green, natural infrastructure projects to reduce impacts to coastal hazards in their community. Registration is required and more details are located on the Reserve's website. The Division of Coastal Management has wrapped up its federally funded project to remove Hurricane Florence debris and abandoned vessels from public lands and waters along North Carolina's coast. In total, over 1.25M pounds of debris and 24 vessels were removed from Brunswick through Carteret, including Craven and Pamlico Counties, and from 4 of the Coastal Reserve sites managed by the Division (Zeke's Island, Masonboro Island, Permuda Island, and Rachel Carson). Funded by the Natural Resources Conservation Service's Emergency Watershed Protection program (EWP; \$1,562,445 expended) and matched with State funding (\$444,480 expended), the Division contracted with the NC Coastal Federation to complete the debris and vessels removal, working closely with the Wildlife Resources Commission on the vessel removals given their authority over that activity. This project was part of the largest coordinated debris removal effort along North Carolina's coast in the State's history and has received significant media attention. Funds provided by other partners were focused primarily on removal of additional vessels. Debris and vessel removal is important activity to avoid resuspension and relocation of debris in future storms, maintain ecosystem functionality and aesthetics, and protect public safety.

Staff News

Last, I wanted to take a moment to recognize Tancred Miller as recent recipient of the DEQ Distinguished Employee Award, and furthermore, Distinguished Employee of the Year – the highest recognition among all awardees. As you know, Tancred serves as chief of DCM's Policy and Planning Section, but over the past several years, he has taken on far more than his role usually requires. Starting back around 2010, with the DCM's efforts to document the impacts of sea level rise, Tancred has taken the lead in coordinating DCM's efforts on coastal resilience. He has focused on addressing the needs of coastal communities through regional workshops and pilot projects, which led to the successful launch of the Resilient Coastal Communities Program. In addition, last year DEQ delivered the state's Climate Risk Assessment & Resilience Plan – the most comprehensive effort to date to address North Carolina's vulnerability to climate change. Tancred played a key role in writing and developing the Plan. He also worked in partnership with the NC Office of Recovery and Resiliency, N.C. Sea Grant, and The Nature Conservancy to secure over \$1M in federal funding from the Emergency Coastal Resilience Fund and is managing this award in addition to over \$800K in state funds associated with the 2019 NC Disaster Recovery Act. He has also served on several regional climate resilience initiatives and has kept NC involved at that scale. And while he has been leading our division's efforts on all

these fronts, he has also been handling rule development, fiscal analyses, 5-year strategies and NOAA funding for special projects, among many other things. We are all very proud to work with him, and glad that he has received this recognition from the Department for a job well done.

CRAC REPORT

Greg “rudi” Rudolph, CRAC Chair, stated the main topic of discussion during our meeting was parking fees at public access sites. The CRAC would like some more information on how parking fees are used that are generated at state funded sites. Officer elections will be postponed until the next meeting. The CRAC also discussed the possibility of using hay bales in lieu of sand fencing. Figure Eight Island property owners have been trying this approach and reports that it is working well. Chair Cahoon directed staff to look at rule amendments that would allow the use of hay bales.

VARIANCES

**Town of Kure Beach (CRC-VR-21-04), Development Line
Bryan Hall, DCM/Christine Goebel, Esq./Holly Ingram, Esq.
Jim Eldridge, Esq.**

Bryan Hall gave an overview of the site. Christy Goebel and Holly Ingram represented staff. Jim Eldridge represented the Town of Kure Beach. Ms. Ingram stated the Town owns a right-of-way area and an ocean rescue service building located at 104 Atlantic Avenue in Kure Beach. The Town has proposed a 12x16 foot addition to an existing structure to store its five ATVs, which it uses for its ocean rescue duties as well as some general town duties. The site of the proposed addition is waterward of the Town’s CAMA development line that the Commission authorized in 2017. The Minor Development permit was denied due to its inconsistency with the Commission’s development line rules which states that in no case shall new development be sited seaward of the development line. The Town is seeking relief from 15A NCAC 07H .0306(a)(2). Ms. Ingram reviewed the stipulated facts of this variance request and stated staff and Petitioner agree on all four statutory criteria which must be met to grant the variance. Jim Eldridge represented the Town of Kure Beach and reviewed the stipulated facts which Petitioner contends supports the granting of the variance.

Phil Norris made a motion that Petitioner has shown that strict application of the applicable development rules, standards, or orders issued by the Commission will cause the Petitioner an unnecessary hardship. Larry Baldwin seconded the motion. The motion passed unanimously (Cooper, Wills, Medlin, Andrew, Baldwin, Cahoon, Salter, Emory, Norris, High).

Bob Emory made a motion that Petitioner has shown that hardships result from conditions peculiar to Petitioner’s property. Larry Baldwin seconded the motion. The motion passed unanimously (Cooper, Wills, Medlin, Andrew, Baldwin, Cahoon, Salter, Emory, Norris, High).

Bob Emory made a motion that Petitioner has shown that hardships do not result from actions taken by Petitioner. Phil Norris seconded the motion. The motion passed

unanimously (Cooper, Wills, Medlin, Andrew, Baldwin, Cahoon, Salter, Emory, Norris, High).

Larry Baldwin made a motion that Petitioner has shown that the variance request will be consistent with spirit, purpose, and intent of the rules, standards, or orders issued by the Commission; will secure the public safety and welfare; and will preserve substantial justice. Doug Medlin seconded the motion. The motion passed unanimously (Cooper, Wills, Medlin, Andrew, Baldwin, Cahoon, Salter, Emory, Norris, High).

This variance request was granted.

BEACH MANAGEMENT PLANS

Review of Proposed Beach Management Plan Rules (CRC 21-34)

Mike Lopazanski

***Trace Cooper recused himself from discussion and voting on this agenda item.*

Mike Lopazanski stated to address implementation issues with the development line, the CRC formed a subcommittee to look at the development line, static line exception, and strategies for encouraging long-term planning for development on the oceanfront. The subcommittee recommended the CRC form a comprehensive strategy that would provide incentives for local governments to develop long-term planning for siting development along the oceanfront. The Commission was interested in regulatory flexibility and a demonstrated local commitment for long-term maintenance projects. Staff incorporated the provisions approved by the Commission and simplified and streamlined the oceanfront setback rules. The beach management plans are based on the static line exception process and would be reviewed and approved by the CRC. Local governments would be eligible to submit a beach management plan after an initial large-scale project. DCM staff will provide a recommendation to the CRC on whether to approve the plan. If approved, this will provide regulatory relief for communities with beach management plans. A public comment requirement has been added at the local level during the development of the beach management plan. These communities will have to come back to the CRC every five years to provide an update on their long-term maintenance. Clarifying language has also been added to provide guidance for adjacent properties and how to measure setbacks if there is not an existing structure on the adjacent lot. This will provide consistency with the landward most adjacent requirement. Staff recommends approving these amendments for public hearing.

Bob Emory made a motion to approve the beach management plan rules for public hearing. Phil Norris seconded the motion. The motion passed unanimously (Wills, Medlin, Andrew, Baldwin, Cahoon, Salter, Emory, Norris, High).

PUBLIC ACCESS

Additional Amendments to 15A NCAC 7M .0300 Shoreline Access Policies – Parking Fees & Clarifying Language (CRC 21-35)

Mike Lopazanski

Mike Lopazanski stated these amendments address whether parking fees can be used to fund beach nourishment at public access sites. The decision to charge for parking is a local decision.

The Commission has been discussing state funded sites and whether to allow parking fees to be used for beach nourishment. At our last meeting, Commissioner Robin Smith provided an analysis of the current rules and General Statute, and the Commission was interested in seeing the options available.

Neal Andrew stated he would like to allow parking fees to be used for beach nourishment. Chair Cahoon stated parking fees should only be used for maintenance and services of state funded sites. Trace Cooper stated Towns should be allowed to use any funds available for beach nourishment including parking fees. Phil Norris stated Towns should have the flexibility to use parking fees for any costs related to access sites including beach nourishment.

Neal Andrew made a motion to approve Option C as presented in CRC 21-34 to allow for parking fees to be used for beach nourishment for public hearing. Angie Wills seconded the motion. The motion passed with seven votes in favor (Cooper, Wills, Medlin, Andrew, Baldwin, Norris, High) and two opposed (Cahoon, Emory)(Salter abstained).

COASTAL HABITAT PROTECTION PLAN

Consideration of Public Comments and Approval 2021 CHPP Update

Jimmy Johnson/Anne Deaton

Jimmy Johnson stated the public comment period has ended and each of the Advisory Committees has reviewed the comments and recommended actions within the Update. Anne Deaton provided an update of changes that have been made based on comments received. We are seeking the Commission's approval of the 2021 CHPP Update.

Larry Baldwin and Bob Emory, members of the CHPP Steering Committee, both spoke in favor of approving the CHPP Update. Angie Wills stated the number of letters of support for the update is impressive. Phil Norris stated this effort can clear the way for potential funding. Chair Cahoon stated this document and all those who have worked on it have done a huge service to the state of North Carolina.

Bob Emory made a motion that the CRC approve the 2021 Amendment to the Coastal Habitat Protection Plan. The CRC further encourages that all avenues to obtain federal, state, local and private funds to implement the actions in the plan be pursued, including forming the private/public partnership that the plan recommends. As suggested by the CHPP Steering Committee, the CRC will help identify engaged stakeholders to participate in the partnership and encourages the EMC and MFC to do the same. Larry Baldwin seconded the motion. Motion passed unanimously (Cooper, Wills, Medlin, Andrew, Baldwin, Cahoon, Salter, Emory, Norris, High).

PUBLIC INPUT AND COMMENT

Chris Matteo, NC Shellfish Growers Assn., spoke in favor of larger floating structures being allowed within shellfish leases. (Written comments provided)

Written Comments Received

Kyle Frey, Crystal Coast Oysters, wrote in favor of larger floating structures within shellfish leases.

Chris Millis, NC Homebuilders Association, wrote regarding continued discussion of 7B CAMA Land Use Plans Enforceable Policies and suggested revisions.

FLOATING STRUCTURES

Proposed Amendments to 15A NCAC 7M .0600 and 7H .0208 – Floating Structures Associated with Shellfish Leases

Daniel Govoni

Daniel Govoni stated shellfish growers have requested floating structures as a workspace on shellfish leases. Based on input and feedback from shellfish growers, the Division of Marine Fisheries, the Coastal Federation and DCM staff, the commission instructed staff to proceed with developing draft rule language to allow floating structures at a DMF-approved shellfish leases. A list of management considerations from past discussions were used as concepts for possible rule language including navigational issues, resource impacts, aesthetics, marine sanitation, the size of the structure and time limits. When looking at possible rule amendments, we reached out to the Corps for their regulatory requirements. The Corps explained that NWP 48 allows floating bags, cages, and structures but not an enclosed structure so they would need a separate authorization. In discussions with other states, we learned that some floating structures have required an Individual Permit from the Corps. We have also had preliminary discussions with DMF, Shellfish Sanitation, and DWR regarding their regulatory requirements. For the potential rule amendments, staff began with the CRC's floating structure policy in the 7M section of your rules. Currently these policies do not allow a floating structure within a shellfish lease. A sentence was added in 7M .0603 which states that a floating structure is allowed within a shellfish lease authorized by DMF. We also drafted Specific Use Standards to address the management considerations such as: navigation; siting criteria; anchoring; marine sanitation; and dimensions. The standards require that the structures shall not block navigation, not be located over shellfish beds or SAV and shall have 18-inches of water at low tide to prevent the structure from sitting on the bottom within a primary nursery area, and the structure shall be limited to a maximum of 450 square feet and shall not be attached to permanent moorings. To address aesthetics and sanitation concerns the amendments prohibit second story and habitation, require approved sanitation devices, and any requirements by DMF to reduce bird or mammal waste. After discussions with DMF, staff felt it is appropriate to allow these structures for the life of the lease and only one structure is allowed within a shellfish lease. We are currently in discussions with DMF and DEQ legal counsel, and plan to bring a recommendation back to both commissions.

Braxton Davis stated that DCM intends to seek further guidance from the Department of Environmental Quality on these standards and on the overall lease approval/permitting processes at DMF and DCM. For example, a lease issued by DMF is intended to resolve conflicts through siting criteria and authorize gear through the management plan submitted to DMF as part of the lease application. Violations within a lease would result in a breach of contract with DMF. Once the lease is authorized, the CRC could develop standards regarding what is allowed within the lease by way of a CAMA permit, but there may not be a need to duplicate all or part of these reviews. Historically, DCM has only had a commenting role in DMF leases. Jacob Boyd is present from DMF and can answer any questions the Commission may have on the lease process.

Phil Norris stated we should support shellfish growers, but there should be standards. Trace Cooper stated the lease process needs some work and while there is support for the industry, there isn't enough information to alleviate conflicts of water column leases and structures within them. Commission Cooper further stated he would not support these structures outside of permitted marinas. Robert High asked if there is a limit on the number of leases one person could have and the possibility of a floating structure on each lease within a 50-acre tract. Jacob Boyd stated these are some of the details that still need to be discussed. Bob Emory asked to discuss the absence of rules and whether it hinders the industry while the details are being worked on. Jacob Boyd stated it would be more of an impediment to rush through this process without considering all potential conflicts. Larry Baldwin commented that this is a good step towards helping the shellfish industry. Neal Andrew stated there is discrepancy in the size limitations proposed and the size request from the growers. Commissioner Baldwin stated riparian property owner notification needs to be incorporated into the process and there should be a limit on the number of structures allowed in areas with more than one lease. Chair Cahoon stated this issue will be discussed further at the February CRC meeting.

CAMA Land Use Plans

Continued Discussion of Amendments to 15A NCAC 7B CAMA Land Use Plans – Enforceable Policies (CRC 21-36)

Tancred Miller

Tancred thanked Gregory Rudolph for his work on the CRC's Science Panel and for leading the Coastal Resources Advisory Council as Chair. Tancred also congratulated Braxton Davis for his 10 years of service to the State of North Carolina as Division Director.

At the September Commission, meeting, staff presented proposed amendments to Subchapter 7B that would require local governments to clarify which of their land use policies exceed the Commission's coastal development rules, and which policies the local government wishes the Division to enforce during CAMA permitting reviews. The Commission's Subchapter 7B rules define the template that local land use plans must follow, and the topics that must be addressed to be certified by the Commission, but do not prohibit a local government from adopting policies or ordinances that are more stringent than the Commission's standards or establishing standards for development activities that the Commission's rules do not address. Since the last meeting, staff has reviewed a September 14th comment letter from Mr. Chris Millis, Director of Regulatory Affairs for the NC Home Builders Association, regarding the proposed amendments. The letter expressed support for the goal of clarifying enforceable policies, but also concern that the amendments alter existing powers that the Commission gives to local governments, enabling them to adopt ordinances that exceed the Commission's authority to enforce, putting the amendments in conflict with existing law. Per our discussion with DCM and CRC counsel, the proposed amendments do not grant any new authority to local governments, nor do they seek to expand the commission's existing permitting authority. G.S. 160A-174 expressly authorizes a local government to adopt a standard that is more stringent than a State standard, and G.S. 113A-120(a)(8) requires the Division to deny a CAMA permit application that is inconsistent with a local land use plan. It is also important to note that CRC certification of a local land use plan is an acknowledgement that the plan has fulfilled the required planning elements under Subchapter 7B; a local government has the freedom to include any desired standard within its legislative authority. Staff has added language to the proposed amendment to clarify that the term

“exceeding” refers to a policy that is more stringent than a Commission development standard, or to an activity for which the Commission has no standard and is within the Commission’s jurisdiction by requiring a CAMA permit.

Bob Emory made a motion to approve amendments to 15A NCAC 07B as presented for public hearing. Trace Cooper seconded the motion. The motion passed with nine votes in favor (Cooper, Wills, Medlin, Andrew, Cahoon, Salter, Emory, Norris, High) and one opposed (Baldwin).

ACTION ITEMS

Consideration of Fiscal Analysis 15A NCAC 07H .0208(b)(6) & 07H .1200 – Structural Boat Covers (CRC 21-39)

Mike Lopazanski

Mike Lopazanski stated these amendments address canvas over fixed frames and will permit them similarly to boat houses. There is no additional cost to property owners because of these amendments. The fiscal analysis has been approved by DEQ and OSBM. Staff recommends approval of the fiscal analysis for public hearing.

Neal Andrew made a motion to approve the fiscal analysis for 15A CAC 07H .0208 and 07H .1200 for public hearing. Phil Norris seconded the motion. The motion passed unanimously (Cooper, Wills, Medlin, Andrew, Baldwin, Cahoon, Salter, Emory, Norris, High).

Consideration of fiscal analysis 15A NCAC 07H .0308 & 07H .1800 – General Permit for Beach Bulldozing (CRC 21-40)

Ken Richardson

Ken Richardson stated these amendments address new dune creation within Inlet Hazard Areas and restoration of existing dunes. The fiscal analysis for these amendments indicates a minimal impact with no increase in costs to local governments or NCDOT. This analysis has been approved by the Department and OSBM. Staff recommends approval of the fiscal analysis for public hearing.

Neal Andrew made a motion to approve the fiscal analysis for 15A NCAC 07H .0308 and 07H .1800. Doug Medlin seconded the motion. The motion passed unanimously (Cooper, Wills, Meldin, Andrew, Baldwin, Cahoon, Salter, Emory, Norris, High).

Consideration of Fiscal Analysis 15A NCAC 07J .0405 – Modifications (CRC 21-41)

Curt Weychert

Curt Weychert stated these amendments apply to both major and minor modifications to CAMA Major Permits. These amendments will provide staff with guidance on when a modification is considered major or minor. This change will reduce the burden on Minor Permit holders when notifying adjacent property owners of modifications of approved Minor Permits as well as correcting the fee schedule for Major Modifications to Major Permits. This fiscal analysis has been reviewed and approved by OSBM and staff recommends approval of the analysis for public hearing.

Neal Andrew made a motion to approve the fiscal analysis for 15A NCAC 07J .0405 for public hearing. Bob Emory seconded the motion. The motion passed unanimously (Cooper, Wills, Medlin, Andrew, Baldwin, Cahoon, Salter, Emory, Norris, High).

LEGAL UPDATES

Update on Litigation of Interest to the Commission (CRC 21-32)

Shawn Maier, serving as CRC Counsel, reviewed all active and pending litigation of interest to the CRC.

With no further business, the CRC adjourned.
Respectfully submitted,



Braxton Davis, Executive Secretary

AMW

Angela Willis, Recording Secretary



5-19-15

097



5-19-15



099



5-19-15



5-19-15









105



4-19-15



4-19-15



4-19-15





5-11-15



5-11-15



5-11-15



5-11-15

Goebel, Christine A

From: Davis, Braxton C <Braxton.Davis@NCDENR.Gov>
Sent: Monday, August 3, 2015 11:00 AM
To: Mairs, Robb L
Subject: FW: FW: hay bales vs. sand fencing

 Braxton Davis
 Director, NC Division of Coastal Management
 400 Commerce Avenue
 Morehead City, NC 28557
 (252) 808-2808 ext. 202

Please visit www.nccoastalmanagement.net to subscribe to Coastal Management's quarterly newsletter, the CAMAgram.

E-mail correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties.

From: Davis, Braxton C
Sent: Wednesday, June 03, 2015 2:56 PM
To: 'Matthews, Kathryn'
Cc: Dunn, Maria T.; John Ellis
Subject: RE: FW: hay bales vs. sand fencing

Good points and questions Kathy – the idea would be to test how they work and how they hold up, and if the tests are positive, we could propose amending our current rule that exempts sand fencing (with specific dimensions and orientation) from permitting. That rule change would take a while to get done and would involve further discussions, public input, etc., so for now we are only considering this as a minor permit. We would also look to avoid placement in overwash areas.

Thanks for your quick response!

 Braxton Davis
 Director, NC Division of Coastal Management
 400 Commerce Avenue
 Morehead City, NC 28557
 (252) 808-2808 ext. 202

Please visit www.nccoastalmanagement.net to subscribe to Coastal Management's quarterly newsletter, the CAMAgram.

E-mail correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties.

From: Matthews, Kathryn [mailto:kathryn_matthews@fws.gov]
Sent: Wednesday, June 03, 2015 2:49 PM
To: Davis, Braxton C

Cc: Dunn, Maria T.; John Ellis

Subject: Re: FW: hay bales vs. sand fencing

Thanks, Braxton.

We don't have much more concerns for these structures than for sand fencing. I understand this is a pilot project to see how well it works, right? Or are they seeking permission to use hay bales from now on instead of sand fence?

My other thought is that hopefully these structures are being placed only in front of homes, and not in front of undeveloped overwash areas.

Thanks,
Kathy

On Wed, Jun 3, 2015 at 2:27 PM, Davis, Braxton C <Braxton.Davis@ncdenr.gov> wrote:

picture attached, thanks!

Braxton Davis

Director, NC Division of Coastal Management

400 Commerce Avenue

Morehead City, NC 28557

(252) 808-2808 ext. 202

Please visit www.nccoastalmanagement.net to subscribe to Coastal Management's quarterly newsletter, the CAMAgram.

E-mail correspondence to and from this address is subject to the

North Carolina Public Records Law and may be disclosed to third parties.

From: Davis, Braxton C
Sent: Wednesday, June 03, 2015 2:16 PM
To: 'maria.dunn@ncwildlife.org'; 'Matthews, Kathryn'
Subject: hay bales vs. sand fencing


Maria and Kathy –

DCM has a unique request from Figure Eight Island to obtain a CAMA Minor Permit to use hay bales instead of sand fencing as a case study for dune creation/restoration. Their proposal is intended to address the debris that is often left after storms with something that may be less expensive and more environmentally sound in the sense that hay bales may quickly and harmlessly deteriorate if exposed to beach erosion or storms. The hay bales would need to conform with our existing rules for sand fencing, i.e. no more than 10 feet in length from the toe of the frontal dune, at least 7 feet apart and at an angle of no less than 45 degrees to the shoreline, above normal high water and not impeding beach access. We would also want to restrict the size (height) of hay bales to similar dimensions of sand fencing.

We don't normally ask for agency comments on minor permits, but in this case I wanted to know if either of your agencies have any comments, concerns or suggestions, or if you are comfortable with our Division moving forward with this as long as we keep the dimensions and orientation generally the same as our rules allow for sand fencing.

Thanks in advance,

Braxton

<p>Braxton C. Davis</p> <p>Director</p> <p>NC Division of Coastal Management</p> <p>400 Commerce Ave</p> <p>Morehead City, NC 28557</p> <p>(252) 808-2808 Extension 202</p> <p>Braxton.Davis@ncdenr.gov</p>	
---	---

Please visit www.nccoastalmanagement.net to subscribe to Coastal Management's quarterly newsletter, the CAMAgram.

E-mail correspondence to and from this address may be subject to the

North Carolina Public Records Law and may be disclosed to third parties.

Email correspondence to and from this sender is subject to the N.C. Public Records Law and may be disclosed to third parties.

--

Kathy Matthews
Fish and Wildlife Biologist
Raleigh Ecological Services
U.S. Fish and Wildlife Service
P.O. Box 33726
Raleigh, NC 27636-3726
Phone 919-856-4520 x27
Email kathryn_matthews@fws.gov

FWS.GOV/RALEIGH | [Facebook](#) | [YouTube](#) | [Flickr](#) |

Goebel, Christine A

From: Dunn, Maria T. <maria.dunn@ncwildlife.org>
Sent: Thursday, August 27, 2015 1:12 PM
To: Mairs, Robb L
Subject: RE: hay bales vs. sand fencing

Seems pretty good, though I didn't see anything regarding planting. That wasn't covered in rule, so I'm not sure you would be able to include as a condition, but it would help determine the effectiveness of the bales stand alone. Please share the pictorial documentation as it becomes available.
Thanks.

Maria T. Dunn
Coastal Coordinator

NC Wildlife Resources Commission
943 Washington Sq. Mall
Washington, NC 27889
office: 252-948-3916
fax: 252-975-3716

www.ncwildlife.org

Email correspondence to and from this sender is subject to the N.C. Public Records Law and may be disclosed to third parties.

From: Mairs, Robb L
Sent: Thursday, August 27, 2015 9:33 AM
To: Dunn, Maria T.
Subject: RE: hay bales vs. sand fencing

Please review.

Thanks!

From: Dunn, Maria T.
Sent: Wednesday, June 03, 2015 4:24 PM
To: Mairs, Robb L
Subject: FW: hay bales vs. sand fencing

FYI.

Maria T. Dunn
Coastal Coordinator

NC Wildlife Resources Commission

943 Washington Sq. Mall
 Washington, NC 27889
 office: 252-948-3916
 fax: 252-975-3716

www.ncwildlife.org



Email correspondence to and from this sender is subject to the N.C. Public Records Law and may be disclosed to third parties.

From: Davis, Braxton C
Sent: Wednesday, June 03, 2015 3:55 PM
To: Matthews, Kathryn; Dunn, Maria T.
Subject: RE: hay bales vs. sand fencing

Thank you both for your responses! We will keep you posted as this progresses and take all of your recommendations into account as we work on the minor permit.

Take care,
 Braxton

 Braxton Davis
 Director, NC Division of Coastal Management
 400 Commerce Avenue
 Morehead City, NC 28557
 (252) 808-2808 ext. 202

Please visit www.nccoastalmanagement.net to subscribe to Coastal Management's quarterly newsletter, the CAMAgram.

E-mail correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties.

From: Matthews, Kathryn [mailto:kathryn_matthews@fws.gov]
Sent: Wednesday, June 03, 2015 3:01 PM
To: Dunn, Maria T.
Cc: Davis, Braxton C
Subject: Re: hay bales vs. sand fencing

Thanks Maria, I agree with all of your recommendations.

Kathy

On Wed, Jun 3, 2015 at 2:57 PM, Dunn, Maria T. <maria.dunn@ncwildlife.org> wrote:

Braxton,

Thank you for forwarding the project notice and asking for resource agency input.

I am familiar with the project proposal and believe the idea could have merit. It appears from an earlier endeavor that the bales will do reasonably well catching the sand.

However, since this is a new material proposal that is not covered in rule, it would be nice to only allow the bale installation on an experimental basis. Perhaps “monitoring” could be done post installation to show bale effectiveness, material durability, and potential affects to habitat. Concerns that would be addressed by this would be the intactness / decomposition of the bales and their impediment to turtle nesting and the breakdown and accumulation of material in overwash areas. Obviously the latter would be a more site specific concern. “Monitoring” could be picture documentation on a monthly / seasonal / storm event basis (nothing intensive) and a basic statement regarding bale decomposition. I believe installing the bales, as were done in the circulated photo, would be the project limit NCWRC would like to see at this time. Moving additional bales up the dune or down the beach could be discussed as the success of the project is monitored. We would have no concern with plantings once sand has accumulated, but it would be good to leave a portion of the area unplanted just to note project effectiveness without planting over time. To minimize impacts to wildlife, any ties or ropes should be removed from the bales during installation.

If there is anyway myself or other staff can be of assistance, please do not hesitate to call. I am interested in the project and would like to continue to be included in any updates.

Take care,

Maria

Maria T. Dunn

Coastal Coordinator

NC Wildlife Resources Commission

943 Washington Sq. Mall

Washington, NC 27889

office: 252-948-3916
fax: 252-975-3716

www.ncwildlife.org



Email correspondence to and from this sender is subject to the N.C. Public Records Law and may be disclosed to third parties.

From: Davis, Braxton C
Sent: Wednesday, June 03, 2015 2:16 PM
To: Dunn, Maria T.; Matthews, Kathryn
Subject: hay bales vs. sand fencing

Maria and Kathy –

DCM has a unique request from Figure Eight Island to obtain a CAMA Minor Permit to use hay bales instead of sand fencing as a case study for dune creation/restoration. Their proposal is intended to address the debris that is often left after storms with something that may be less expensive and more environmentally sound in the sense that hay bales may quickly and harmlessly deteriorate if exposed to beach erosion or storms. The hay bales would need to conform with our existing rules for sand fencing, i.e. no more than 10 feet in length from the toe of the frontal dune, at least 7 feet apart and at an angle of no less than 45 degrees to the shoreline, above normal high water and not impeding beach access. We would also want to restrict the size (height) of hay bales to similar dimensions of sand fencing.

We don't normally ask for agency comments on minor permits, but in this case I wanted to know if either of your agencies have any comments, concerns or suggestions, or if you are comfortable with our Division moving forward with this as long as we keep the dimensions and orientation generally the same as our rules allow for sand fencing.

Thanks in advance,

Braxton

<p>Braxton C. Davis</p> <p>Director</p> <p>NC Division of Coastal Management</p> <p>400 Commerce Ave</p> <p>Morehead City, NC 28557</p> <p>(252) 808-2808 Extension 202</p> <p>Braxton.Davis@ncdenr.gov</p>	
---	---

Please visit www.nccoastalmanagement.net to subscribe to Coastal Management's quarterly newsletter, the CAMAgram.

E-mail correspondence to and from this address may be subject to the

North Carolina Public Records Law and may be disclosed to third parties.

Email correspondence to and from this sender is subject to the N.C. Public Records Law and may be disclosed to third parties.

--

Kathy Matthews
 Fish and Wildlife Biologist
 Raleigh Ecological Services
 U.S. Fish and Wildlife Service
 P.O. Box 33726
 Raleigh, NC 27636-3726
 Phone 919-856-4520 x27
 Email kathryn_matthews@fws.gov

FWS.GOV/RALEIGH | [Facebook](#) | [YouTube](#) | [Flickr](#) |

CAMA MINOR DEVELOPMENT PERMIT



as authorized by the State of North Carolina, Department of Environment, and Natural Resources and the Coastal Resources Commission for development in an area of environment concern pursuant to Section 113A-118 of the General Statutes, "Coastal Area Management"

Issued to **Blanche Bacon and Karen Pigman, c/o David Kellam**, authorizing development in the Ocean Hazard Area of Environmental Concern (AEC) at **12 and 16 Beach Road South**, on Figure "8" Island, New Hanover County as requested in the permittee's application dated received by the Division of Coastal Management (DCM) on August 12, 2015. This permit, issued on **August 31, 2015**, is subject to compliance with the application and site drawing (where consistent with the permit), and all applicable regulations and special conditions and notes set forth below. Any violation of these terms may subject permittee to a fine, imprisonment or civil action, or may cause the permit to be null and void.

This permit authorizes: Experimental installation of hay bales in the same configuration as sand fencing per **15A NCAC 07H .0311**.

- (1) All proposed development and associated construction must be done in accordance with the permitted work plat drawings(s) and project narrative dated received by DCM on August 12, 2015.
- (2) Monitoring requirement: Per the recommendations from the NC Wildlife Resources and the US Fish and Wildlife Service, once the hale bales are installed, monitoring could be picture documentation on a monthly / seasonal / storm event basis ~~(nothing intensive) and a basic statement regarding bale decomposition.~~ Installing the bales, done per guidelines in **15A NCAC 07H .0311**, would be the project limit NCWRC would like to see at this time. Moving additional bales up the dune or down the beach could be discussed as the success of the project is monitored.
- (3) To minimize impacts to wildlife, any ties or ropes shall be removed from the bales during installation.
- (4) A copy of this permit shall be posted or available on site. Contact this office at (910) 796-7423 for a final inspection at completion of work.

This permit action may be appealed by the permittee or other qualified persons within twenty (20) days of the issuing date. This permit must be on the project site and accessible to the permit officer when the project is inspected for compliance. Any maintenance work or project modification not covered under this permit, require further written permit approval. All work must cease when this permit expires on:

December 31, 2018

In issuing this permit it is agreed that this project is consistent with the local Land Use Plan and all applicable ordinances. This permit may not be transferred to another party without the written approval of the Division of Coastal Management.

Robb Mairs
ACTING CAMA LOCAL PERMIT OFFICIAL
127 Cardinal Drive Extension
Wilmington, NC 28405-3845

PERMITEES

(Signature required if conditions above apply to permit)

RECEIVED
DCM WILMINGTON, NC
SEP 10 2015

Locality New Hanover County Permit Number 15-48
Ocean Hazard Estuarine Shoreline _____ ORW Shoreline _____ Public Trust Shoreline _____ Other _____
(For official use only)

GENERAL INFORMATION

LAND OWNER

Name Blanche Bacon
Address 12 Beach Rd. South
City Wilmington State NC Zip 28411 Phone 910 686 0635
Email _____

AUTHORIZED AGENT

Name David Kellam
Address 15 Bridge Rd.
City Wilmington State NC Zip 28411 Phone 910 686 0635
Email _____

LOCATION OF PROJECT: (Address, street name and/or directions to site. If not oceanfront, what is the name of the adjacent waterbody.) Same as above

DESCRIPTION OF PROJECT: (List all proposed construction and land disturbance.) none/haybales

SIZE OF LOT/PARCEL: _____ square feet _____ acres

PROPOSED USE: Residential (Single-family Multi-family) Commercial/Industrial Other

COMPLETE EITHER (1) OR (2) BELOW (Contact your Local Permit Officer if you are not sure which AEC applies to your property):

(1) OCEAN HAZARD AECs: TOTAL FLOOR AREA OF PROPOSED STRUCTURE: N/A square feet (includes air conditioned living space, parking elevated above ground level, non-conditioned space elevated above ground level but excluding non-load-bearing attic space)

(2) COASTAL SHORELINE AECs: SIZE OF BUILDING FOOTPRINT AND OTHER IMPERVIOUS OR BUILT UPON SURFACES: N/A square feet (includes the area of the roof/strip line of all buildings, driveways, covered decks, concrete or masonry patios, etc. that are within the applicable AEC. Attach your calculations with the project drawing.)

STATE STORMWATER MANAGEMENT PERMIT: Is the project located in an area subject to a State Stormwater Management Permit issued by the NC Division of Water Quality?
YES NO

If yes, list the total built upon area/impervious surface allowed for your lot or parcel: _____ square feet.

OTHER PERMITS MAY BE REQUIRED: The activity you are planning may require permits other than the CAMA minor development permit, including, but not limited to: Drinking Water Well, Septic Tank (or other sanitary waste treatment system), Building, Electrical, Plumbing, Heating and Air Conditioning, Insulation and Energy Conservation, F Certification, Sand Dune, Sediment Control, Subdivision Approval, Mobile Home Park Approval, Highway Connection, others. Check with your Local Permit Officer for more information.

STATEMENT OF OWNERSHIP:

I, the undersigned, an applicant for a CAMA minor development permit, being either the owner of property in an AEC or person authorized to act as an agent for purposes of applying for a CAMA minor development permit, certify that the person listed as landowner on this application has a significant interest in the real property described therein. This interest can be described as: (check one)

- an owner or record title. Title is vested in Blanche Bacon, see Deed Book 1882 page 593 in the NEW HANOVER County Registry of Deeds.
- an owner by virtue of inheritance. Applicant is an heir to the estate of _____; probate was in _____ County.
- if other interest, such as written contract or lease, explain below or use a separate sheet & attach to this application.

NOTIFICATION OF ADJACENT PROPERTY OWNERS:

If furthermore certify that the following persons are owners of properties adjoining this property. I affirm that I have given ACTUAL NOTICE to each of them concerning my intent to develop this property and to apply for a CAMA permit.

- | (Name) | (Address) |
|---|---------------------------|
| (1) <u>Walker & Elizabeth Simmons</u> | <u>10 Beach Rd. South</u> |
| (2) <u>Harold Hope</u> | <u>14 Beach Rd. South</u> |
| (3) _____ | _____ |
| (4) _____ | _____ |

ACKNOWLEDGEMENTS:

I, the undersigned, acknowledge that the land owner is aware that the proposed development is planned for an area which may be susceptible to erosion and/or flooding. I acknowledge that the Local Permit Officer has explained to me the particular hazard problems associated with this lot. This explanation was accompanied by recommendations concerning stabilization and floodproofing techniques.

I furthermore certify that I am authorized to grant, and do in fact grant, permission to Division of Coastal Management & the Local Permit Officer and their agents to enter on the aforementioned lands in connection with evaluating information related to this permit application.

David Kellam This the _____ day of _____, 20____
Landowner or person authorized to act as his/her agent for purpose of filing a CAMA permit application

This application includes: general information (this form), a site drawing as described on the back of this application, an ownership statement, the Ocean Hazard AEC Notice where necessary, a check for \$100.00 made payable to the locality, any information as may be provided orally by the applicant. The details of the application as described by these sources incorporated without reference in any permit which may be issued. Deviation from these details will constitute a violation any permit. Any person developing in an AEC without permit is subject to civil, criminal and administrative action.

RECEIVED
DCM WILMINGTON, NC
AUG 12 2015

Locality New Hanover Co. Permit Number 15-48
 Ocean Hazard Estuarine Shoreline _____ ORW Shoreline _____ Public Trust Shoreline _____ Other _____
(For official use only)

GENERAL INFORMATION

LAND OWNER

Name Karen Pigman
 Address 16 Beach Rd. South
 City Wilmington State NC Zip 28411 Phone 910-686-0635
 Email _____

AUTHORIZED AGENT

Name David Kellam
 Address 15 Bridge Rd.
 City Wilmington State NC Zip 28411 Phone 910-686-0635
 Email _____

LOCATION OF PROJECT: (Address, street name and/or directions to site. If not oceanfront, what is the name of the adjacent waterbody.) same as above

DESCRIPTION OF PROJECT: (List all proposed construction and land disturbance.) none/haybales

SIZE OF LOT/PARCEL: _____ square feet _____ acres

PROPOSED USE: Residential (Single-family Multi-family) Commercial/Industrial Other

COMPLETE EITHER (1) OR (2) BELOW (Contact your Local Permit Officer if you are not sure which AEC applies to your property):

(1) OCEAN HAZARD AECs: TOTAL FLOOR AREA OF PROPOSED STRUCTURE: N/A square feet (includes air conditioned living space, parking elevated above ground level, non-conditioned space elevated above ground level but excluding non-load-bearing attic space)

(2) COASTAL SHORELINE AECs: SIZE OF BUILDING FOOTPRINT AND OTHER IMPERVIOUS OR BUILT UPON SURFACES: N/A square feet (includes the area of the roof/rip line of all buildings, driveways, covered decks, concrete or masonry patios, etc. that are within the applicable AEC. Attach your calculations with the project drawing.)

STATE STORMWATER MANAGEMENT PERMIT: Is the project located in an area subject to a State Stormwater Management Permit issued by the NC Division of Water Quality?
 YES NO

If yes, list the total built upon area/impervious surface allowed for your lot or parcel: _____ square feet.

OTHER PERMITS MAY BE REQUIRED: The activity you are planning may require permits other than the CAMA minor development permit, including, but not limited to: Drinking Water Well, Septic Tank (or other sanitary waste treatment system), Building, Electrical, Plumbing, Heating and Air Conditioning, Insulation and Energy Conservation, F Certification, Sand Dune, Sediment Control, Subdivision Approval, Mobile Home Park Approval, Highway Correlation, others. Check with your Local Permit Officer for more information.

STATEMENT OF OWNERSHIP:

I, the undersigned, an applicant for a CAMA minor development permit, being either the owner of property in an AEC or person authorized to act as an agent for purposes of applying for a CAMA minor development permit, certify that the parcel listed as landowner on this application has a significant interest in the real property described therein. This interest can be described as: (check one)

an owner or record title, Title is vested in Karen Pigman, see Deed Book 5832 page 26 in the New Hanover County Registry of Deeds.

an owner by virtue of inheritance. Applicant is an heir to the estate of _____; probate was in _____ County.

if other interest, such as written contract or lease, explain below or use a separate sheet & attach to this application.

NOTIFICATION OF ADJACENT PROPERTY OWNERS:

I furthermore certify that the following persons are owners of properties adjoining this property. I affirm that I have given **ACTUAL NOTICE** to each of them concerning my intent to develop this property and to apply for a CAMA permit.

- | (Name) | (Address) |
|------------------------|---------------------------|
| (1) <u>Harold Hope</u> | <u>14 Beach Rd. South</u> |
| (2) <u>John Andrew</u> | <u>18 Beach Rd. South</u> |
| (3) _____ | _____ |
| (4) _____ | _____ |

ACKNOWLEDGEMENTS:

I, the undersigned, acknowledge that the land owner is aware that the proposed development is planned for an area which may be susceptible to erosion and/or flooding. I acknowledge that the Local Permit Officer has explained to me the particular hazard problems associated with this lot. This explanation was accompanied by recommendations concerning stabilization and floodproofing techniques.

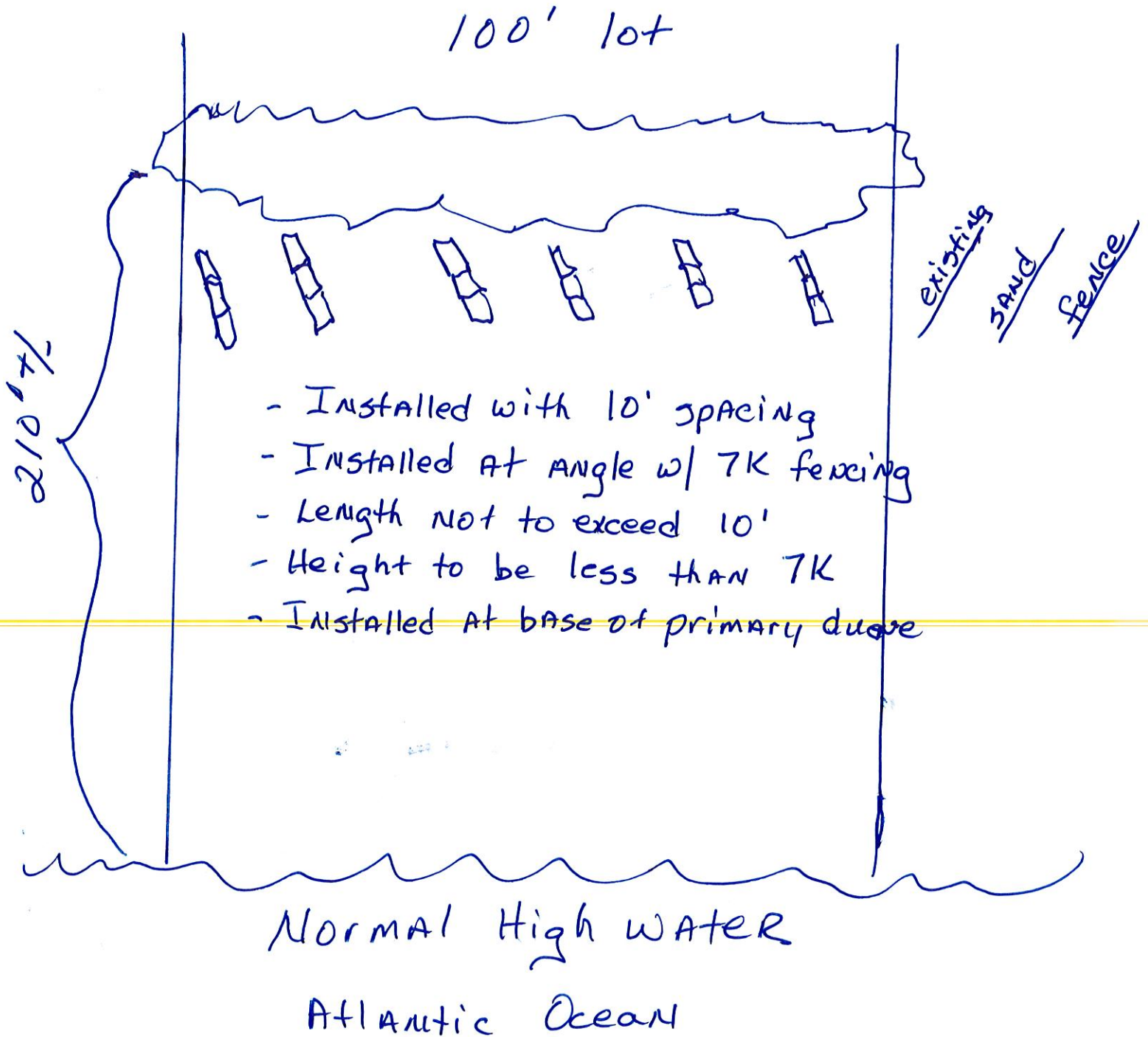
I furthermore certify that I am authorized to grant, and do in fact grant, permission to Division of Coastal Management's the Local Permit Officer and the agents to enter on the aforementioned lands in connection with evaluating information related to this permit application.

David Kellam This the _____ day of _____, 20____
 Landowner or person authorized to act as his/her agent for purpose of filing a CAMA permit application

This application includes: general information (this form), a site drawing as described on the back of this application, an ownership statement, the Ocean Hazard AEC Notice where necessary, a check for \$100.00 made payable to the locality, any information as may be provided orally by the applicant. The details of the application as described by these sources incorporated without reference in any permit which may be issued. Deviation from these details will constitute a violation of any permit. Any person developing in an AEC without permit is subject to civil, criminal and administrative action.

RECEIVED
 DIVISION OF COASTAL MANAGEMENT
 WILMINGTON, NC
 AUG 12 2015

CAMA MINOR Permit DRAWING



RECEIVED
DCM WILMINGTON, NC

AUG 12 2015

Post 8-27

Applicant proposes to install experimental hay bales to be used as sand fencing, adjacent to the Atlantic Ocean at 12+16 Beach Road South, on Figure 8 Island, New Hanover County.

August 31, 2015

**Blanche Bacon / Karen Pigman
12 & 16 Beach Road South
Wilmington, NC 28411**

Agent: David Kellam (910_ 686-0635)

**NC Div. of Coastal Management
127 Cardinal Dr. Extension
Wilmington, NC 28405
Robb Mairs, Field Representative
910-796-7423**



North Carolina Department of Environment and Natural Resources

Pat McCrory,
Governor

Donald R. van der Vaart
Secretary

September 1, 2015

Karen Pigman
16 Beach Road South
Wilmington, NC 28411

Dear Ms. Bacon & Ms. Pigman:

Attached is CAMA Minor Development Permit # NH 15-48 for work to be done at 12 & 16 Beach Road South, on Figure 8 Island, in New Hanover County.

In order to validate this permit, please sign both copies of the permit as indicated for our records. Please retain the gold copy for your files and sign front and back pages of the white copy then return to us within 20 days of receipt, in the enclosed, self-addressed envelope.

This is not a valid permit until it is signed and returned to our office.

Thank you for your prompt attention to this matter.

Sincerely,

Shaun K. Simpson
Permit Support Technician

Enclosures

Cc: WIRO files



128

Figure "8" Beach Homeowners' Association, Inc.

15 Bridge Road • Wilmington, North Carolina 28411

Telephone: (910) 686-0635 • Fax: (910) 686-1558

Web: www.figure8homeowners.com • Email: figure8homeowners@bizec.rr.com

July 29, 2015

Shore Lane LLC
Mr. Harold P. Hope, III
1100 Park Avenue, Apt 11-A
New York, New York 10128

RE: Permit Application for lots at 12 and 16 Beach Road South.

Dear Adjoining Land Owner,

Two locations on the Figure 8 beach have been selected as proposed test sites to benefit beach management techniques and the coastal regulatory community. The test sites are on the beach in front of the lots at 12 and 16 Beach Road South. The NC Division of Coastal Management requires a permit authorizing such a proposal, and the coastal permitting process requires that adjoining land owners be notified of the permit application.

The proposal is to install rectangular hay bales at the two locations according to the State's current sand-fence installation regulations. The test will determine the effectiveness of trapping sand using the environmentally friendly material of hay bales in comparison to using the traditional wire sand-fence and posts.

During the course of the testing we will be exploring options for making this a viable alternative for future use by others. Sand-fence is problematic for coastal management. It requires construction and creates an entanglement risk to wildlife and it places sharp rusty wire on our NC beaches and washes in to our waters and sounds during a storm causing numerous problems.

The proposal is simple: Hay bales are placed on the beach to collect wind-blown sand. The strings that hold the bales are removed about two weeks after installation. The placement of hay bales on the ocean front places only biodegradable materials on the beach and does not involve any form of construction, posts, wire, or entanglement hazards typical with other forms of development. The end product is a completely biodegradable tool for enhanced coastal management.

The Division of Coastal Management Permit Guidelines require this notification to provide adjacent land owners an opportunity to ask questions or address concerns regarding this proposal. If you have questions or concerns please contact Mr. Robb Mairs of the NC DCM at (910)796-7423. His mailing address is 127 Cardinal Drive Extension, Wilmington, NC 28405. Otherwise, you need take no action.

Sincerely,

David C. Kellam
Administrator

RECEIVED
DCM WILMINGTON, NC

AUG 12 2015



129

Figure "8" Beach Homeowners' Association, Inc.

15 Bridge Road • Wilmington, North Carolina 28411

Telephone: (910) 686-0635 • Fax: (910) 686-1558

Web: www.figure8homeowners.com • Email: figure8homeowners@bizec.rr.com

July 29, 2015

Mr. and Mrs. John M. Andrew
2309 Danbury Road
Greensboro, North Carolina 27408

RE: Permit Application for lots at 12 and 16 Beach Road South.

Dear Adjoining Land Owner,

Two locations on the Figure 8 beach have been selected as proposed test sites to benefit beach management techniques and the coastal regulatory community. The test sites are on the beach in front of the lots at 12 and 16 Beach Road South. The NC Division of Coastal Management requires a permit authorizing such a proposal, and the coastal permitting process requires that adjoining land owners be notified of the permit application.

The proposal is to install rectangular hay bales at the two locations according to the State's current sand-fence installation regulations. The test will determine the effectiveness of trapping sand using the environmentally friendly material of hay bales in comparison to using the traditional wire sand-fence and posts.

During the course of the testing we will be exploring options for making this a viable alternative for future use by others. Sand-fence is problematic for coastal management. It requires construction and creates an entanglement risk to wildlife and it places sharp rusty wire on our NC beaches and washes in to our waters and sounds during a storm causing numerous problems.

The proposal is simple: Hay bales are placed on the beach to collect wind-blown sand. The strings that hold the bales are removed about two weeks after installation. The placement of hay bales on the ocean front places only biodegradable materials on the beach and does not involve any form of construction, posts, wire, or entanglement hazards typical with other forms of development. The end product is a completely biodegradable tool for enhanced coastal management.

The Division of Coastal Management Permit Guidelines require this notification to provide adjacent land owners an opportunity to ask questions or address concerns regarding this proposal. If you have questions or concerns please contact Mr. Robb Mairs of the NC DCM at (910)796-7423. His mailing address is 127 Cardinal Drive Extension, Wilmington, NC 28405. Otherwise, you need take no action.

Sincerely,

David C. Kellam

David C. Kellam
Administrator

RECEIVED
DCM WILMINGTON, NC

AUG 12 2015

**Figure "8" Beach Homeowners' Association, Inc.**

15 Bridge Road • Wilmington, North Carolina 28411

Telephone: (910) 686-0635 • Fax: (910) 686-1558

Web: www.figure8homeowners.com • Email: figure8homeowners@bizec.rr.com

July 29, 2015

Mr. and Mrs. Walker C. Simmons
1630 Brandon Road
Charlotte, North Carolina 28207

RE: Permit Application for lots at 12 and 16 Beach Road South.

Dear Adjoining Land Owner,

Two locations on the Figure 8 beach have been selected as proposed test sites to benefit beach management techniques and the coastal regulatory community. The test sites are on the beach in front of the lots at 12 and 16 Beach Road South. The NC Division of Coastal Management requires a permit authorizing such a proposal, and the coastal permitting process requires that adjoining land owners be notified of the permit application.

The proposal is to install rectangular hay bales at the two locations according to the State's current sand-fence installation regulations. The test will determine the effectiveness of trapping sand using the environmentally friendly material of hay bales in comparison to using the traditional wire sand-fence and posts.

During the course of the testing we will be exploring options for making this a viable alternative for future use by others. Sand-fence is problematic for coastal management. It requires construction and creates an entanglement risk to wildlife and it places sharp rusty wire on our NC beaches and washes in to our waters and sounds during a storm causing numerous problems.

The proposal is simple: Hay bales are placed on the beach to collect wind-blown sand. The strings that hold the bales are removed about two weeks after installation. The placement of hay bales on the ocean front places only biodegradable materials on the beach and does not involve any form of construction, posts, wire, or entanglement hazards typical with other forms of development. The end product is a completely biodegradable tool for enhanced coastal management.

The Division of Coastal Management Permit Guidelines require this notification to provide adjacent land owners an opportunity to ask questions or address concerns regarding this proposal. If you have questions or concerns please contact Mr. Robb Mairs of the NC DCM at (910)796-7423. His mailing address is 127 Cardinal Drive Extension, Wilmington, NC 28405. Otherwise, you need take no action.

Sincerely,

David C. Kellam
Administrator

RECEIVED
DCM WILMINGTON, NC

AUG 12 2015

David Kellam

Subject: Project Narrative for hay bales test site.

We propose to install hay bales in the same configuration format as sand fencing would be installed on a beach front and with the same general guideline requirements of the 7K rules pertaining to sand fence. The hay bales (strings removed) are completely biodegradable and should have a much less impact on the beach, wildlife, public and the resources. We will monitor them and document and photograph changes. One lot will be planted in conjunction with the wheat straw hay bales to monitor actions. I welcome DCM or WRC staff to come inspect on a regular basis.

*David Kellam, Administrator
Figure Eight Island Homeowners
15 Bridge Road
Wilmington, NC 28411
910.686.0635 office
910.686.1558 fax*

RECEIVED
DCM WILMINGTON, NC

AUG 12 2015

David Kellam

Subject: Project Narrative for hay bales test site.

We propose to install hay bales in the same configuration format as sand fencing would be installed on a beach front and with the same general guideline requirements of the 7K rules pertaining to sand fence. The hay bales (strings removed) are completely biodegradable and should have a much less impact on the beach, wildlife, public and the resources. We will monitor them and document and photograph changes. One lot will be planted in conjunction with the wheat straw hay bales to monitor actions. I welcome DCM or WRC staff to come inspect on a regular basis.

I hope to install and monitor them with hopes of utilizing in other areas once approved. I feel this is a much better management option that is also much more environmentally friendly.

Please let me know if you have any questions or comments.

*David Kellam; Administrator
Figure Eight Island Homeowners
15 Bridge Road
Wilmington, NC 28411
910.686.0635 office
910.686.1558 fax*

RECEIVED
DCM WILMINGTON, NC

AUG 12 2015

David Kellam

From: Mairs, Robb L [robb.mairs@ncdenr.gov]
Sent: Monday, August 03, 2015 11:14 AM
To: David Kellam
Subject: RE: See if this is a starter?

David,

Thanks for sending the application over for review. Please label the waterward end of the existing dune and the first line of stable natural vegetation on the drawing. Also, please include any proposed monitoring of the bales once installed and how it will be done into the project narrative.

Thanks and feel free to call if you have any questions.

Robb

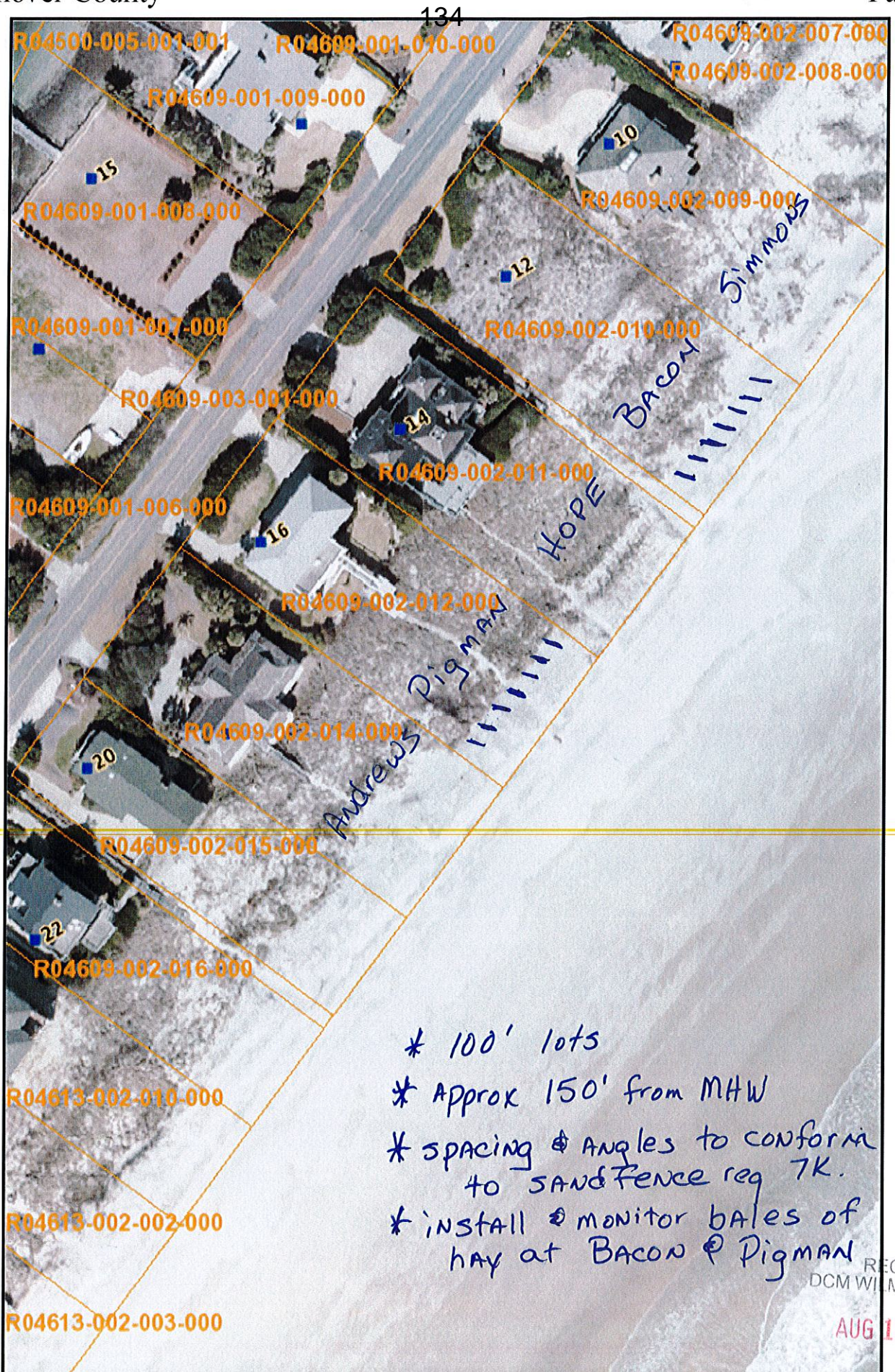
From: David Kellam [mailto:dkellam@bizec.rr.com]
Sent: Friday, July 31, 2015 11:33 AM
To: Mairs, Robb L
Subject: See if this is a starter?

What else is needed and what needs changing. This is a draft only. Once you say I am getting close, I will mail or deliver you a hard copy with a check.

David

RECEIVED
DCM WILMINGTON, NC

AUG 12 2015





NORTH CAROLINA
Environmental Quality

ROY COOPER

Governor

ELIZABETH S. BISER

Secretary

BRAXTON DAVIS

Director

CRC-22-04

January 28, 2022

MEMORANDUM

TO: Coastal Resources Commission
FROM: Curt Weychert
SUBJECT: Amendments to 15A NCAC 7K .0212 – Installation and Maintenance of Sand Fencing

At the last CRAC Meeting, members of the Advisory Council requested Staff to investigate the use of hay bales as an addition to the existing exemption rule language of 15A NCAC 7K .0212 Installation and Maintenance of Sand Fencing. Due to concerns regarding the marine debris associated with structural accessways, gazebos, and particularly sand fencing resulting from storm events, the use of hay bales has been suggested as a natural, biodegradable material to be used for trapping and storing sand.

Sand fencing is a mechanism used within the Ocean and Inlet Hazard AECs to capture and store sand from aeolian transport within the coastal dune system. Over time, naturally and through plantings, vegetation is allowed to naturalize and stabilize the dunes further. Currently, sand fencing can be authorized through a CAMA Minor Development Permit, or if it meets the rule language of 15A NCAC 7K .0212, the activity is considered minor maintenance and improvements under section .0200 and therefore exempt from the permit requirements of the CAMA. However, the use of hay bales is not mentioned in the current exemption rule language as an approved material/method of sand fencing and would require a CAMA Minor Development Permit.

The criteria associated with the use of sand fencing was originally established in 2002, and has been implemented across the state (through CAMA minor permitting and exemptions) to stabilize dunes and dune vegetation. In 2015, a CAMA Minor Permit was issued to two properties in Figure 8 Island to serve as a “pilot study” regarding the efficacy and longevity of the use of hay bales as an alternative material to traditional sand fencing. While the haybales did not last for more than a few months, early site visits and photographs indicated that hay bales did capture and hold sand within the first month of placement on the site. This permit was considered a study and had reporting requirements conditioned on the permit to provide DCM, NC Wildlife Resources Commission (WRC), and US Fish and Wildlife Service with updates regarding displacement, turtle interactions, and storm-related performance. However, the hay bales were not in place long enough for long-term study or analysis.

The following are the existing criteria for sand fencing exempt from CAMA Permit requirements:

- Sand fencing must not impede public access to the beach for recreation, emergency vehicles, or public access.
- Sand fencing must not impede or entrap sea turtle hatchlings.
- Any damaged, or nonfunctional sand fencing is to be removed by the homeowner.
- Sand fencing is identified as evenly spaced, vertical wooden slats less than 5 feet tall connected by wire and supported by no wooden posts or stakes larger than a 2” x 4” or 3” diameter.



North Carolina Department of Environmental Quality | Division of Coastal Management
Morehead City Office | 400 Commerce Avenue | Morehead City, North Carolina 28557
252.808.2808

- Placement of sand fencing is to be as landward as possible as to not interfere with nesting sea turtles and is not authorized on the wet sand beach area.
- Any sand fencing not placed landward of the crest of primary or frontal dune, must be angled no less than 45° to the shoreline, not exceed 10 feet in length, and placed no less than 7 feet apart.

The experimental Minor Permit issued on Figure 8 Island followed the same criteria listed above, however the permit conditions limited the vertical extent to the height of one bale as per the request of the NC WRC. Recommendations from resource agencies also included removal of all bindings or ties on the bales to prevent entanglement with threatened or endangered species.

In further conversations with WRC, there are continuing concerns regarding the use of hay bales for sand fencing. These concerns include the effects of temperature of the bales in relation to nesting sea turtles, retention of moisture that could cause biological contamination of the area, and the potential introduction of invasive diseases, species, or non-native plants. The WRC also voiced concerns of the scope and scale of these projects moving forward without the proper amount of review and replication of these pilot studies.

The Division has identified several pros and cons in review of this recommendation from the CRAC for the use of hay bales as sand fencing:

- + Hay Bales are a natural, readily available, inexpensive, and bio-degradable material for sand capture
- + Can be installed under the same requirements required by 15NCAC 07K.0212
- + May reduce the amount of marine debris generated after storm-events
- Lack of testing done on various shorelines along the NC coastline
- Potential negative interactions with wildlife:
- Moisture-associated bacteria, mold, introduced pathogens
- Temperature/sediment differences
- Reduced longevity/efficacy
- Potential for increased footprint (bales v. fencing) and interaction with threatened or endangered species (bales may therefore be subject to initial placement during times when interactions would be less likely)

Recommendation:

To date, no CAMA permit applications for the use of hay bales as sand fencing have been denied. At this time, DCM Staff recommend maintaining the current minor permitting process for hay bales until more information can be gathered from multiple sites across the state and further analyzed by resource agencies.

I look forward to discussing this information at your February 2022 meeting.

ATTACHMENT A: 15A NCAC 07H .0212 INSTALLATION AND MAINTENANCE OF SAND FENCING

ATTACHMENT B: IMAGES FROM THE EXPERIMENTAL SITE IN FIGURE 8 ISLAND



ATTACHMENT A:**15A NCAC 07K .0212 INSTALLATION AND MAINTENANCE OF SAND FENCING**

Sand fences that are installed and maintained subject to the following criteria are exempt from the permit requirements of the Coastal Area Management Act:

- (1) Sand fencing may only be installed for the purpose of: building sand dunes by trapping wind blown sand; the protection of the dune(s) and vegetation (planted or existing).
- (2) Sand fencing shall not impede existing public access to the beach, recreational use of the beach or emergency vehicle access. Sand fencing shall not be installed in a manner that impedes or restricts established common law and statutory rights of public access and use of public trust lands and waters.
- (3) Sand fencing shall not be installed in a manner that impedes, traps or otherwise endangers sea turtles, sea turtle nests or sea turtle hatchlings.
- (4) Non-functioning, damaged, or unsecured, sand fencing shall be immediately removed by the property owner.
- (5) Sand fencing shall be constructed from evenly spaced thin wooden vertical slats connected with twisted wire, no more than 5 feet in height. Wooden posts or stakes no larger than 2" X 4" or 3" diameter shall support sand fencing.
- (6) Location. Sand fencing shall be placed as far landward as possible to avoid interference with sea turtle nesting, existing public access, recreational use of the beach, and emergency vehicle access.
 - (a) Sand fencing shall not be placed on the wet sand beach area.
 - (b) Sand fencing installed parallel to the shoreline shall be located no farther waterward than the crest of the frontal or primary dune; or
 - (c) Sand fencing installed waterward of the crest of the frontal or primary dune shall be installed at an angle no less than 45 degrees to the shoreline. Individual sections of sand fence shall not exceed more than 10 feet in length (except for public accessways) and shall be spaced no less than seven feet apart, and shall not extend more than 10 feet waterward of the following locations, whichever is most waterward, as defined in 15A NCAC 7H .0305: the first line of stable natural vegetation, the toe of the frontal or primary dune, or erosion escarpment of frontal or primary dune; and
 - (d) Sand fencing along public accessways may equal the length of the accessway, and may include a 45 degree funnel on the waterward end. The waterward location of the funnel shall not exceed 10 feet waterward of the locations identified in Item (6)(c) of this Rule.

History Note: Authority G.S. 113A-103(5)c.;
Eff. August 1, 2002.



ATTACHM ENT B:



NC COASTAL RESOURCES COMMISSION (CRC)

February 10, 2022

Beaufort Hotel, Beaufort

Present CRC Members

Renee Cahoon, Chair
 Larry Baldwin, Vice-Chair
 Neal Andrew
 Craig Bromby
 Bob Emory
 Robert High
 Sheila Holman
 Doug Medlin
 Phil Norris
 Lauren Salter
 Alexander "Dick" Tunnell
 Angie Wills

Present CRAC Members

Spencer Rogers, Vice-Chair
 David Kellam
 Ike McRee
 Michael Moore
 David Moye

Present from the Office of the Attorney General

Mary Lucasse

Present from the Department of Environmental Quality, Office of the General Counsel

Christine A. Goebel
 Holly Ingram

CALL TO ORDER/ROLL CALL

Renee Cahoon called the meeting to order at 9:00 a.m. on February 10, 2022, reminding the Commissioners of the need to state any conflicts due to Executive Order Number 34 and the State Government Ethics Act. The State Government Ethics Act mandates that at the beginning of each meeting the Chair remind all members of their duty to avoid conflicts of interest and inquire as to whether any member knows of a conflict of interest or potential conflict with respect to matters to come before the Commission. The Chair requested that if any member knows of a conflict of interest or a potential conflict of interest, they so state when the roll is called. Commissioner Cooper was absent. No conflicts were reported. Commissioner Sheila Holman read her evaluation of statement of economic interest into the record which indicated that the State Ethics Commission did not find any actual conflicts of interest or likelihood for a conflict of interest. Based upon this roll call Chair Cahoon declared a quorum.

CHAIR'S COMMENTS

Chair Cahoon advised the Commission of an agenda change. It will be necessary for the Commission to enter closed session at the end of the meeting to confer with CRC Counsel. Ms.

Cahoon welcomed the newest Commissioner, Sheila Holman, and thanked MaryJo Alcoke of the Governor's Office and Assistant Secretary Sushma Masemore for attending the meeting. The Chair congratulated Spencer Rogers, CRAC and Science Panel member, on his retirement from NC Sea Grant.

MINUTES

Neal Andrew made a motion to approve the minutes of the November 10, 2021, Coastal Resources Commission meeting. Bob Emory seconded the motion. The motion passed unanimously (Cahoon, Andrew, Baldwin, Emory, High, Medlin, Norris, Salter, Tunnell, Wills)(Bromby, Holman abstained).

EXECUTIVE SECRETARY'S REPORT

DCM Director Braxton Davis gave the following report:

DCM is off to a busy start this year. Our permit numbers are up over last year, and we are moving forward with a lot of rulemaking, resilience planning, training and outreach, and new hires. Some of our highest priorities for 2022 include a transition to electronic permitting, a renewed focus on estuarine shorelines, and expansion of our Resilient Coastal Communities Program. As part of the renewed focus on estuarine policy, today you'll hear from Whitney Jenkins, our Coastal Reserve Training Coordinator, who is now leading DCM's internal work group focusing on estuarine shoreline stabilization. We hope to follow her presentation with discussions of living shorelines, shoreline mapping, thin layer disposal, and other estuarine topics at upcoming commission meetings.

Regulatory

Since Robb Mairs accepted the new Minor Permitting Coordinator position in April of last year, he has been expanding our outreach and training of new Local Permitting Officers. In November 2021, Robb re-launched the "Minor Details" Newsletter for LPOs to provide regular updates on commission rule changes, rule interpretations, and other guidance and training. The last Minor Details newsletter was back in 2009. Also, as part of a Department-wide study of permitting fees, we recently sent a survey to the LPOs on whether they feel the current minor permit application fee of \$100 should be increased, along with any justifications for their recommendation. We will bring the results of that survey to you at your next meeting. On oceanfront matters, Ocean Isle Beach is continuing construction of their terminal groin and has a Federal Coastal Storm Risk Management project being constructed by the US Army Corps of Engineers. Holden Beach is currently conducting a beach nourishment project, as is the Town of Oak Island. The Town of North Topsail Beach is also planning to begin a 2-year truck haul beach nourishment project in the southern part of the town. The Town is also proposing a modification for additional fill at the north end of the beach adjacent to Topsail Reef, which is currently under agency review. The Carolina Beach & Kure Beach federal CSRMS project has also been contracted, with work scheduled to start this month. Finally, there are also a few federal beneficial use projects occurring this winter - where the Corps is nourishing adjacent beaches with beach-compatible material from channel maintenance. Dredging of Snows Cut, with material going to Masonboro Island, is wrapping up and dredging of the Lockwoods Folly Inlet AIWW crossing will place material on Holden Beach. The USACE has also placed material on Onslow Beach from maintenance dredging of Brown's Inlet. In January, staff received a request from Kinder Morgan

for emergency agitation dredge authorization at the Wilmington Port in preparation for a large vessel seeking berthing that evening. Staff were able to rapidly coordinate with commenting agencies to ensure the proper precautions were taken prior to providing the authorization and we are looking forward to working with Kinder Morgan soon on a more comprehensive dredge plan. Also, Carteret County proposed a modification of an existing major permit to dredge Taylors Creek and place the beach compatible sediment in an upland disposal site, and later onto the beach at Radio Island to protect an existing roadway. The proposal had several issues that needed to be resolved, including sediment testing and DCM coordinated with the Army Corps of Engineers, Wildlife Resources Commission, Division of Marine Fisheries, and the Division of Water Resources to resolve those issues, and a monitoring plan was developed to allow the project to move forward. This project is important to both the military and Carteret County as the road is being undermined by erosion and is an area heavily used as a public access site. This project has received two grants, from the Division of Water Resources Shallow Draft Fund and from the federal Defense Community Infrastructure Program. Staff should have this permit modification issued by the end of this week.

Federal Consistency

Last year, DCM submitted a Routine Program Change request to NOAA's Office for Coastal Management. The Coastal Zone Management Act requires state Coastal Programs to formally incorporate changes made to the laws, rules and policies that are used in Federal Consistency reviews. Your rules at 15a NCAC 07H .0208 were recently amended to remove outdated provisions and clarify vague and ambiguous language, so the purpose of this action was to incorporate these changes into our enforceable policies for Federal Consistency review. On January 20, 2022, NOAA concurred with this program change thereby incorporating all of 15A NCAC 07H .0208 as enforceable policies. On the offshore energy front, the federal Bureau of Ocean Energy Management (BOEM) has proposed issuing up to three commercial wind energy leases and approving site assessment activities in the Wilmington East Wind Energy Area (WEA), approximately 17 nautical miles offshore North Carolina. Site characterization activities would involve meteorological buoys, vessel and aerial surveys of benthic habitats, avian resources, and marine fauna. The lease, by itself, would not authorize the construction of a wind energy project. On January 12, 2022, DCM received BOEM's Federal Consistency Determination to review whether issuing up to three commercial wind energy leases and site assessment activities are consistent to the maximum extent practicable with the enforceable policies of the North Carolina and South Carolina Coastal Management Programs. On January 23, 2022, DCM published a public notice for comments to be accepted on the consistency determination until February 23, 2022. To date, thirteen comments have been received: One in support, eleven in opposition, and one requesting additional information. DCM staff is also participating on a Central Atlantic Renewable Energy Task Force regarding BOEM's Draft Call for Information and Nomination Areas. The planning area and possible leasing process encompasses the area offshore Delaware south to Cape Hatteras. The task force includes members from NC, VA, MD, and DE. In other areas, the Division is reviewing a plan from the N.C. Department of Transportation to provide the wetland mitigation requirements for the US-17 Hampstead Bypass project through the Beane Property Wetland Mitigation Site in New Hanover County in accordance with their federal (Section 404) permit requirements. The 309-acre project site will provide approximately 79 acres of wetland restoration, 78 acres of wetland

enhancement, and 31 acres of wetland preservation. DCM is circulating the plan to review agencies for comment and anticipates making a federal consistency decision soon.

Land Use Plan Certifications

DCM certified two land use plan updates since your last meeting for the Town of Duck and for Carteret County and certified an amendment to the Currituck County Land Use Plan. Please let us know if you have a question about this process, or the plans themselves.

Access Grants

The Public Beach and Coastal Waterfront Access program, now in its 40th year, is accepting pre-applications for the upcoming 2022-2023 fiscal year which are due April 22nd. You will recall that recent actions by the General Assembly have restored the funding source of the Parks and Recreation Trust Fund to a portion of the deed transfer tax rather than annual appropriations. For this round of grants, DCM expects about \$1.2 million for local governments to improve public access to coastal beaches and waters.

Resilient Coastal Communities Program

Work in the Resilient Coastal Communities Program's 26 communities continues to go well. Communities are hosting public meetings to receive feedback on their risk and vulnerability assessments and beginning to identify potential projects. Navassa, Leland, and Sunset Beach have submitted final deliverables for Phases 1 and 2, and staff are currently reviewing those documents. Last month, DCM staff attended four public meetings in Bertie County, Hertford County, Windsor, and the Town of Hertford. Staff plan to travel to Washington, Aurora, Belhaven, and Beaufort County next week for public meetings. Staff anticipate releasing the Request for Applications for Phase 3 of the program later this month. Phase 3 will fund the engineering and design of a prioritized project (identified during Phase 2). The RCCP recently received about \$545,000 from NFWF's National Coastal Resilience Fund, plus another \$1.15 million through the state budget to continue and expand the RCCP. Phases 1 and 2 are scheduled to wrap up later this spring, and Phase 3 work is tentatively scheduled to begin later this summer.

DCM has also drafted and is circulating a new guidance document for coastal resilience projects in North Carolina. The document is intended to promote a consistent approach across all organizations providing funding or technical assistance for resilience projects, and we hope that the various programs will incorporate the principles and project guidelines into their Requests for Proposals and scoring criteria used in project selection. We received great feedback from partner organizations on early drafts, and we've received requests for copies from other coastal states who are also seeking to publish guidance. Please let me or Tancred Miller know if you'd like a copy, which will also be available on our website.

Coastal Reserve

Coastal Reserve rule amendments re-adopted by the Department in October and approved by the Rules Review Commission in November became effective last week, on February 1. These amendments satisfy the Legislative Periodic Review and Expiration of Existing Rules process requirements, and address priority updates to enhance clarity of existing rules and address issues and gaps to ensure effective management of the Coastal Reserve. Reserve Staff will host a

webinar for commercial users of Reserve sites on February 22 regarding the special activity authorization, a new process authorized in the rules. On March 2, The Coastal Training Program and Division staff are once again offering a virtual workshop on “Living on a Barrier Island” for real estate professionals. Participants will learn about the ecology and geology of barrier islands, rules that govern development, NFIP updates, and native plantings for the coastal landscape. Real estate professionals will receive four elective continuing education credits from the N.C. Real Estate Commission.

Staff News

As I mentioned at the November meeting, DCM is receiving funding from the Legislature to establish several new positions. The Coastal Resiliency Program will be getting one permanent full-time position and two time-limited positions to staff the program and increase the Division’s capacity to work with local governments on resiliency projects. These positions will be supervised by Tancred Miller in the Division’s Policy and Planning Section. We are also establishing a new Major Permits position that will focus on infrastructure projects associated with the American Rescue Plan Act, or ARPA and assist with the increased permitting workloads facing the division again this year. Last, but certainly not least, unfortunately, Mr. Roy Brownlow has announced his imminent retirement and transition to the private sector. Roy has been District Manager in the Morehead City office since 2002. Before that, Roy had served as an Assistant Town Manager for Carteret County and as the building inspector for Pine Knoll Shores, bringing excellent experience to the Division and has been our go-to for questions about construction methodology over the years. He also took on an extra role as the Division’s compliance and enforcement coordinator. In that role, he worked with staff and other district managers on our more complex enforcement cases and kept a database of all enforcement actions for the division. But most importantly, he has been a supportive supervisor, steadfast leader, a positive force in the office, and friend to everyone in our program. His presence in the office will be sorely missed, but he’ll still be around town, and we all plan to continue hanging out with Roy for the long-term. Congratulations to Roy, we wish him the very best in his new endeavors.

CRAC REPORT

Spencer Rogers, CRAC Vice-chair, reported that the Advisory Council had a virtual presentation from FEMA on flood insurance rates and “Risk Rating 2.0”. The new rating system is coming online for new construction and the impacts are less than clear. The software used is only available to insurance agents, so you should speak with your agent regarding the impacts to your specific policies, properties, and rates.

VARIANCES

Arnold/McGraw (CRC-VR-21-06), Atlantic Beach, Oceanfront Setback

Heather Styron and Holly Ingram, Esq./pro se

Heather Styron, DCM Field Representative gave an overview of the site location. Holly Ingram stated Petitioner Carolyn Arnold is present and will represent herself. Ms. Ingram stated Petitioners own a single-family residence located at 312 East Boardwalk Boulevard in Atlantic Beach. The residence is attached to a septic system that Petitioners are seeking to replace oceanward of the house, which is waterward of the oceanfront setback requirement as measured from the Static Vegetation Line. On November 2, 2021, The Town of Atlantic Beach’s Local Permit Officer denied Petitioners minor development permit application due to its inconsistency

with the Commission's rules codified in 15A NCAC 07H .0306. Petitioners seek a variance in order to replace the septic system oceanward of the house. Ms. Ingram reviewed the stipulated facts of this variance request and stated that staff and Petitioner agree on all four statutory criteria which must be met to grant the variance.

Petitioner Carolyn Arnold reviewed the stipulated facts which Petitioners contend support the granting of this request.

Neal Andrew made a motion that Petitioner has shown that strict application of the applicable development rules, standards, or orders issued by the Commission will cause the Petitioner an unnecessary hardship. Phil Norris seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Bromby, Wills, Tunnell).

Neal Andrew made a motion that Petitioner has shown that hardships result from conditions peculiar to the Petitioner's property. Larry Baldwin seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Bromby, Wills, Tunnell).

Neal Andrew made a motion that hardships do not result from actions taken by the Petitioner. Doug Medlin seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Bromby, Wills, Tunnell).

Neal Andrew made a motion that the variance will be consistent with the spirit, purpose, and intent of the rules, standards, or orders issued by the Commission; will secure the public safety and welfare; and preserve substantial justice. Angie Wills seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Bromby, Wills, Tunnell).

This variance request was granted.

NCDOT – (CRC-VR-21-07), Mirlo Beach, Sandbags

Jonathan Howell and Christine Goebel, Esq./Colin Justice, Esq.

Jonathan Howell, DCM Major Permit Coordinator, gave an overview of the site location. Ms. Goebel stated NCDOT owns the NC-12 right-of-way in the Rodanthe area in the Outer Banks of Dare County. Following the completion of the Jug Handle Bridge, NCDOT plans to remove the NC-12 roadway in the portion of the area bypassed by the new bridge and develop a turnaround area for traffic to continue to access north Rodanthe up to this dead-end. NCDOT also proposed a new sandbag structure to protect the new turnaround area. On October 25, 2021, DCM denied the Town's application for a minor development permit due to its inconsistency with the Commission's oceanfront setback rules as well as rules regarding the orientation, size, and color of the sandbags. Ms. Goebel reviewed the stipulated facts of this variance request and stated that staff and Petitioner agree on all four statutory criteria which must be met to grant the variance.

Colin Justice represented Petitioner and reviewed the stipulated facts which Petitioner contends supports the granting of the variance.

Larry Baldwin made a motion that Petitioner has shown that strict application of the Commission's rules, standards, or orders will cause Petitioner an unnecessary hardship. Phil Norris seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Bromby, Wills, Tunnell).

Larry Baldwin made a motion that Petitioner has shown that hardships result from conditions peculiar to Petitioner's property. Doug Medlin seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Bromby, Wills, Tunnell).

Larry Baldwin made a motion that hardships do not result from actions taken by the Petitioner. Doug Medlin seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Bromby, Wills, Tunnell).

Larry Baldwin made a motion that the variance request will be consistent with the spirit, purpose and intent of the Commission's rules, standards, or orders; will secure the public's safety and welfare; and preserve substantial justice. Dick Tunnell seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Bromby, Wills, Tunnell).

This variance request was granted.

DEQ ASSISTANT SECRETARY COMMENTS

Sushma Masemore thanked the Commission for its work protecting the resources of the State. Ms. Masemore stated that the Department regularly communicates with the DCM Director on many issues regarding the amount of development, solutions for today's environmental challenges, and regulatory actions. She also noted that the Department is focused on climate and resiliency and is available to assist the Commission at any time.

SHELLFISH LEASING

Floating Structures Associated with Shellfish Leases Update (CRC 22-07)

Braxton Davis, DCM Director

Braxton Davis stated that comments received by the Division on this topic have been provided to each Commissioner. He acknowledged that the NC Statutes authorize the Division of Marine Fisheries to issue shellfish leases, whereas DCM authorizes development within any Area of Environmental Concern. Davis stated that DCM's regulations require specific site plans and allow for minor modifications or amendments to these plans. However, shellfish growers often need to experiment with different alignments and structures within their approved leases, which would present complexities for the CAMA permitting and enforcement process.

Over the past several years, there has been a concerted effort to avoid duplications in permitting, reviews and approvals of shellfish leases between DMF and DCM. At this point, both agencies can be involved in different ways. For example, DMF holds public hearings to attempt to resolve conflicts prior to issuing a new lease. DCM may be involved in the permitting of certain structures such as pilings. At the November 2021 CRC meeting, DCM requested a pause in

rulemaking efforts by the CRC to allow time for DCM, DMF, and DEQ leadership to discuss the recommended roles of each division going forward. In January 2022, a meeting was held with DMF staff, DEQ leadership, and representatives of the DEQ Office of General Counsel where agreement was reached on an approach in which any cages, poles, anchoring systems, and any above-water frames or structural supports used to suspend or hold aquaculture equipment in place should be considered gear and regulated through the DMF shellfish lease. It was also agreed that platforms and floating structures will require a CAMA Major Permit and will not be authorized through a DMF shellfish lease. If the CAMA permit is denied, a request to the CRC for a variance would be available and this approach would allow the CRC to review each proposal on a case-by-case basis and review any unique concerns or comments from federal and state resource agencies, local governments, and commentators on the lease and permit applications. The variance process would also require the petitioner to notify adjacent riparian property owners. However, since that time, the NC Shellfish Growers Association submitted written comments questioning the authority of CAMA contending that an agricultural exemption would apply to anything within a shellfish lease.

Chair Cahoon asked the Commission whether it would be appropriate to ask the Attorney General's Office for an official opinion on whether this development would fall under a CAMA agricultural exemption. Following discussion, the Commission agreed and also requested that the AG's opinion include an assessment regarding whether floating structures would be an infringement of riparian rights, as well as whether local governments have the right to regulate the placement of these structures. The Attorney General's Advisory Opinion can be reviewed at an upcoming CRC meeting for further discussion. Mary Lucasse, CRC Counsel, stated she will draft three questions to be addressed for review by staff and the Executive Committee. By consensus, the Commission approved this approach.

PUBLIC INPUT AND COMMENT

Roger Montague commented on the issuance of a permit in Carteret County.

James Frey, Crystal Coast Oysters, requested that floating structures be allowed for shellfish growers and believes these structures are exempt from CAMA under agricultural exemption.

Chris Matteo, NC Shellfish Growers Association, submitted a signed petition for allowing the use of floating structures on shellfish leases and believes the structures are exempt from CAMA permitting under the agricultural exemption.

Conor MacNair, NC Sea Oyster Company, spoke in favor of allowing floating structures on shellfish leases.

Greg Huhn, Swan Quarter Oyster Company, spoke in favor of allowing floating structures on shellfish leases.

Ronald Sheffield, Topsail Sound Shellfish LLC, spoke in favor of allowing floating structures on shellfish leases.

Kevin Linebarger, Millstone Marine, requested the Commission consider extension of expiration time on General Permits from 120 to 180 days.

Chris Elkins, Coastal Conservation NC, spoke in opposition to floating structures on shellfish leases.

Bobby Schultz spoke in opposition to floating structures on shellfish leases.

Wes Cooper spoke in favor of allowing floating structures on shellfish leases.

PUBLIC HEARING**Amendments to 15A NCAC 7H .0104; .0304 - .0306; .0308 - .0310; 7J .1201-.1206; .1301 - .1303 Beach Management Plans**

Mike Lopazanski stated these amendments were published on January 18 and create procedures for requesting and approving beach management plans for oceanfront communities constructing large-scale beach fill projects to provide regulatory relief from oceanfront development setback provisions. Comments will be accepted until March 21, 2022.

David Kellam, Figure 8 Island, spoke against the amendments. (written comments provided).

Amendments to 15A NCAC 07M .0300 Shoreline Access Policies

Rachel Love-Adrick stated these amendments were published on January 3 and address implementation aspects of the CAMA Public Beach and Coastal Waterfront Access Program as well as reorganization some of the rules based on grant administration, local government requirements, and project selection. Comments will be accepted until March 4, 2022.

No comments were received.

Amendments to 15A NCAC 07H .0208 & .1205 Structural Boat Covers

Mike Lopazanski stated these amendments were published on January 3 and allow for the permitting of structural boat covers. Comments will be accepted until March 4, 2022.

No comments were received.

Amendments to 15A NCAC 07H .0308 and 7H .1800 General Permit for Beach Bulldozing

Ken Richardson stated these amendments were published on January 3 and extend the use of a beach bulldozing General Permit or Emergency Permit to oceanfront areas inside an inlet hazard area. Comments will be accepted until March 4, 2022.

No comments were received.

Amendments to 15A NCAC 07H .0403 - .0404 Development Period/Commencement/Continuation and Extension

Mike Lopazanski stated these amendments were published on January 3 and will lengthen the initial expiration date of most Major Permits. Comments will be accepted until March 4, 2022.

No comments were received.

Amendments to 15A NCAC 07H .0306 and 7K .0208 Elevating Structures

Mike Lopazanski stated these amendments were published on January 3 and clarify when a permit is needed for the elevation of oceanfront structures. Comments will be accepted until March 4, 2022.

No comments were received.

PETITION FOR RULEMAKING**Petition for Rulemaking Procedures (CRC 22-01)****Mary Lucasse**

Mary Lucasse reviewed the petition for rulemaking procedures as outlined in CRC 22-01.

Request for Repeal 15A NCAC 7H .0205 – Alteration of Coastal Wetlands**Nelson G. Paul**

Nelson Paul stated that as a former DCM employee, he is qualified to address the lack of authority issued to the Commission to regulate marsh mowing or cutting. No authority is granted to the CRC under the Coastal Area Management Act to regulate marsh mowing or cutting as neither activity is listed as development in the enabling legislation. Because mowing and cutting are not development under the CAMA, the activities described in 15A NCAC 7H .0205 are clearly outside the legislative authority and jurisdiction of the CRC. The definition of development is clearly outlined in NCGS 113A-103. Development is any activity in any Area of Environmental Concern involving construction or enlargement of a structure, excavation, filling, dumping, or alteration of land. Being that this rule was adopted in error, it compromises the integrity and diminishes the authority of other rules lawfully adopted and administered by the CRC. Repeal of this rule will result in the reallocation of resources into other activities pursuant to the proper implementation of the legislative intent of the Coastal Area Management Act. If DCM wishes to add mowing and cutting to the definition of development, then a request should be sent to the Legislature.

Staff Response to Petition for Rulemaking (CRC 22-02)**Christine Goebel, Asst. General Counsel**

Christy Goebel stated that Mr. Paul is questioning the Commission's and DCM's authority to regulate the alteration or mowing of coastal wetlands and noted that the Director's response to this Petition lays out the history of this issue. The statutory authority has been reviewed by two separate Commission Counsel. In 1998 an Attorney General's opinion was requested by DCM along with a letter on the issue from Professor Stephen Broome of the NCSU Soils Sciences Department which outlined how regular mowing of wetland species eliminates the life support and erosion control values generally attributed to high marshes and will eventually cause a change in the dominant plant species composition. Robin Smith, of the NC Attorney General's Office, provided a legal opinion at the request of then DCM Director Donna Moffitt on whether the CRC has the authority to regulate the alteration of shoreline vegetation or coastal wetlands. Ms. Smith's response specific to coastal wetlands noted that the CAMA identified coastal wetlands as a discreet Area of Environmental Concern for designation by the Commission. Additionally, the CAMA requires permit denial where dredging, filling, or otherwise altering coastal wetlands is prohibited. The alteration of coastal wetlands by cutting, burning, etc., may fall within the definition of development because it includes alterations of the shore, bank, or bottom of the Atlantic Ocean or any sound, bay, river, bank, stream, lake, or canal. In 2006, the Commission was advised by DCM staff of intense efforts to develop marginal land through repeated mowing which would change plant species composition resulting in a more favorable coastal wetlands delineation for development. The Commission, through DCM staff, asked then CRC Counsel, Jill Hickey, for an advisory opinion on the question of the CRC's authority under CAMA to regulate clearing, cutting, mowing, or burning of coastal wetlands. In 2007, Ms. Hickey responded and concluded that the CRC has the authority to regulate the burning and

mowing of coastal wetlands by means of rulemaking and in certain cases permitting. DCM's Director and staff strongly assert that the unrestricted mowing of marsh vegetation can lead to the alteration of the substrate and can therefore constitute development under CAMA. This issue has been thoroughly vetted by the Division, Commission, and Attorney General's Office and note that the Rules Review Commission did not raise any concerns about the statutory authority of the CRC to enact marsh alteration rules when it was before that body in 2009, when other portions of this rule changed in 2016, or when these rules went before them for readoption in July 2020. In response to Petitioner's concern that repeal of this rule will result in the reallocation of resources into other activities pursuant to the proper implantation of the legislative intent of the CAMA, DCM submits that any resources allocated to the prevention of significant salt marsh alterations by mowing, cutting, or other means are well justified given the importance of these resources. As laid out in the documents from the Attorney General's Office regarding advising the Commission about its authority, the Commission has the legislative authority to regulate the alterations of coastal wetlands.

Commissioner Emory stated he was on the Commission at the time of these rule changes and it was apparent from reports from staff that there was a need to regulate this activity. Chair Cahoon stated these rules allow for specific cutting and mowing to provide water access on lots that cannot have a dock or pier. Commissioner Bromby stated this petition may be worth looking at from an authority standpoint. Director Davis stated altering coastal wetlands is altering the substrate which is development under CAMA. It would be the same as if you destroyed submerged aquatic vegetation which is altering the substrate. The AG's Office has provided two advisory opinions which address the authority issue. If the petitioner wants more clarity on legislative authority for the rule, let's not repeal a rule which is protecting the resource, rather, Petitioner could take his concerns to the General Assembly. Mr. Emory stated this question has been raised twice to the Attorney General's Office with the same outcome and has been before the Rules Review Commission multiple times. Commissioner Andrew stated the question of authority has been asked and answered twice and there is no need to ask a third time.

Bob Emory made a motion to deny the Petition for Rulemaking to repeal 15A NCAC 07H .0205. Sheila Holman seconded the motion. The motion passed with eleven votes in favor (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Wills, Tunnell) and one opposed (Bromby).

ESTUARINE SHORELINE MANAGEMENT

DCM Estuarine Shoreline Strategy Update (CRC 22-03)

Whitney Jenkins, Coastal Training Program Coordinator

Whitney Jenkins stated DCM's internal Estuarine Shoreline Workgroup has finalized an update to its estuarine shoreline strategy for the next five years. Through implementation of this strategy, the Division will continue to better understand and manage estuarine shorelines through an integrated approach of planning, permitting, education, and research. This includes promoting the use of living shorelines for shoreline stabilization, understanding shoreline change through mapping and exploring implementation of resilience strategies including thin layer deposition and protection of marsh migration pathways. The strategy update takes into account the significant progress already made in estuarine shoreline permitting, research, and outreach. The purpose of this presentation is to review the Division's accomplishments related to estuarine

shoreline management, review the objectives of the updated estuarine shoreline strategy, and set the stage for future conversations regarding estuarine shoreline management.

Between 2009 and 2021, the Division has permitted 45 marsh sills, 605 riprap revetments, and 3,504 bulkheads. As of 2018, twelve of the 20 CAMA counties have at least one marsh sill. Approximately 67 percent of marsh sills are in Carteret, Dare and Hyde counties. Approximately 86 percent of marsh sills are made of either granite rock, oyster shell, or oyster shell bags. We have yet to quantify the impact of the changes to the marsh sill General Permit which took effect in April 2019 but improving living shoreline permit tracking is an objective in the updated estuarine shoreline strategy. Over the past five years, this research has guided our policy decisions and been incorporated into outreach messaging for decision makers and property owners. The Coastal Reserve's research coordinator, Dr. Brandon Puckett, has been involved in several research areas including a multi-decadal assessment of the impact of bulkhead on salt marsh loss. In partnership with Duke University and NOAA, research staff investigated the long-term effect of bulkheads on adjacent salt marsh. Research has also been conducted to evaluate the resilience of marsh sill living shorelines to storm events. When making decisions about shoreline stabilization, property owners rank effectiveness and durability, particularly during large storms and high wind, when weighing various shoreline stabilization options.

The efficacy and durability of living shorelines, such as marsh sills, compared to traditional hardened shorelines is largely untested. In response to this, research staff partnered with UNC Chapel Hill to evaluate the effectiveness of rock sill living shorelines before and after Hurricane Matthew. The results show that marsh sill living shorelines exhibited better resistance to landward erosion than bulkheads and natural, non-stabilized marshes. Additionally, living shorelines were more resilient than hardened shorelines as they maintained their elevation and didn't require any repair. The results suggest that living shorelines have the potential to improve coastal resilience while supporting important coastal ecosystems.

Reserve research staff and DCM regulatory staff have been conducting annual monitoring of eight rock and oyster marsh sills to assess the performance and resilience of marsh sills. The monitoring addresses structural integrity, erosion reduction, and sediment accumulation as well as repair and maintenance. Continuing this monitoring is an objective of our updated strategy. Reserve staff have also partnered with East Carolina University to evaluate marsh sills constructed with the novel and biodegradable oyster catcher material and oyster shell bags. Sediment accretion was greater in marshes behind shell bag reefs, particularly in low energy settings, than with oyster catcher reefs. However, oyster catcher reefs provided the greatest reduction in shoreline erosion in high energy environments and generally supported a greater density of large oysters than did shell bag reefs. These results indicate that deliberate decisions regarding substrate, siting, and configuration can produce resilient reefs that reduce erosion, promote sediment accretion, and provide valuable oyster habitat.

Jenkins reviewed the use of thin layer sediment placement as a promising management tool for enhancing resilience of tidal marshes to stressors such as sea level rise. Reserve research staff conducted a three-year experiment to evaluate effects of sediment thickness on vegetation response in low and high marsh. Colonization by marsh plants was generally rapid following sediment addition, such that thin layer placement plots soon resembled control plots and found

that thin layer placement was effective at restoring both high and low marsh and can serve as a climate adaptation strategy across the marsh landscape.

The Coastal Reserve Training Program has worked with partners including North Carolina Coastal Federation and North Carolina Sea Grant to offer living shoreline training for coastal decision makers including real estate agents, marine contractors, engineers, environmental consultants, and agency staff. Since 2016, 13 living shoreline workshops have been offered for these audiences reaching 492 professionals. Four of these workshops were held virtually for real estate agents and they earn four elective continuing education credits for participation. To help improve living shoreline training for marine construction professionals, Florida's marine contractor training was adapted for North Carolina. The pilot training was held in the spring of 2021 reaching 32 professionals. Our goal is to offer this yearly in different locations along the coast. Additionally, Dr. Puckett gave a presentation on the value and merits of living shorelines at a Nature as Infrastructure Briefing to the Congressional Estuary Caucus.

As part of the estuarine shoreline strategy, we will continue to host real estate and marine construction professional trainings, keep regulatory field staff aware of the latest research and monitoring findings related to living shorelines to help promote to property owners, and continue living shoreline communication efforts. The strategy for research and monitoring includes continuing to monitor living shoreline sites for structural integrity, erosion, and protection of marsh vegetation; continue to refine research questions for distribution to partners and funding opportunities; and use existing methodology to complete the third iteration of estuarine shoreline mapping and coordinate with other state agencies and organizations to determine additional mapping opportunities. The regulatory strategy includes promoting living shorelines and cost-share opportunities and incentives related to their construction; finalizing a system for tracking living shoreline permits; and comparing and exploring policy approaches with Virginia and South Carolina's regulatory programs. In concert with state and federal partners, the strategy includes developing guidelines for permitting thin layer placement projects; using living shorelines on Coastal Reserve sites to improve resilience and create demonstrations sites; encourage public landowners to use living shorelines where appropriate; and support collaborations related to estuarine shoreline management.

Braxton Davis stated estuarine shoreline management approaches are being compared with Virginia and South Carolina. Virginia and Maryland have preferential laws which require an applicant to show why they could not use a living shoreline using the best available science. Virginia would be willing to come and talk about this strategy at a future Commission meeting.

OCEANFRONT MANAGEMENT

Use of Hay Bales as Sand Fencing (CRC 22-04)

Curt Weychert

Curt Weychert, DCM Assistant Major Permit Coordinator, stated today's presentation provides information on the use of hay bales as an alternative material for sand fencing within the Ocean and Inlet Hazard AEC. At the last Advisory Council meeting, there was interest in investigating the use of hay bales as an alternative material for sand retention along the coastal counties of North Carolina. Several beach communities have voiced concerns regarding marine debris associated with structural accessways, gazebos, and sand fencing following storm events. Hay

bales are being considered as a way to use natural materials that wouldn't have the same concerns of breaking down, while still performing the purpose of trapping and storing sand movement from aeolian transport. This retention of sand may aid to stabilize dunes, while allowing for the planting or stabilization of vegetation. Even though I will refer to this alternative material as a hay bale, it is important to make the distinction between hay and straw. Hay is the harvested product of high nutrient plants primarily used as feed for horses, cattle, and livestock. These bales are typically heavier, more expensive and would likely be less resilient to withstanding high moisture environments. Straw is comprised of the dried stalks of plants which have already been harvested for their seeds. This material is much lighter in weight because it contains more voids within the bales and costs less than hay. The most likely material to be used as sand fencing would be straw. The precedent of using alternative materials to serve as stabilization for dune structures is not uncommon. For example, every year, the Division releases guidance for recycling natural Christmas trees to be used as sand fencing. The recommended use of Christmas trees follows the same rule language as traditional sand fencing regarding the placement, orientation, and configuration. North Topsail Beach used unauthorized bales of pine straw at the oceanward toe of a frontal and primary dune. In August 2015, a CAMA Minor Permit was issued to two individuals in Figure 8 Island to serve as a pilot study looking into the feasibility of using hay bales as an experimental alternative material. The permit authorized the use of hay bales to be placed in the same orientation, length, and distances as the exemption language in 15A NCAC 07K .0212. Through interagency consultation of the 2015 Minor Permit, DCM was able to solicit input from various regulatory and resource agencies regarding the use of this experimental material. Some of the comments and conditions were as follows: all bales must be free of any binding to reduce interactions with nesting shorebirds or turtles; the orientation, size, and location of bales should be in compliance with 15A NCAC 07K .0212; and the applicant was to provide photographs and a brief narrative on the status of the material. Based on the initial analysis of the bales that were placed on Figure 8 Island, which were in place for just over one month before being washed away, the bales appeared to be functional in trapping sand. Additional research seems necessary to monitor these bales for decomposition rates and other factors to address comments from resource agencies such as the NC Wildlife Resources Commission and the US Fish and Wildlife Service. To date, no CAMA permit applications for the use of hay bales as sand fencing have been denied. DCM staff recommend maintaining the current minor permitting process for hay bales until more information can be gathered from multiple sites and be further analyzed by resource agencies.

LEGAL UPDATES

Update on Litigation of Interest to the Commission (CRC 21-32)

Mary Lucasse, CRC Counsel, reviewed all active and pending litigation of interest to the CRC.

OLD/NEW BUSINESS

Larry Baldwin requested the Commission look at the time limits associated with General Permits. Due to the Pandemic and supply chain issues, 120 days is not enough to complete a project. Commissioner Baldwin asked staff to come back at the April meeting with the pros and cons of extending the GP to 180 days. Commissioner High echoed the concerns and asked to consider 365 days. Commissioner Andrew also agreed that the time should be extended.

Tancred Miller reviewed the minor edits to the Charge to the Science Panel since the Panel's last meeting. By consensus, the Commission approved the Charge and asked that it be sent to the Science Panel.

Neal Andrew made a motion that the Commission go into closed session pursuant to North Carolina General Statute section 143-318.11(a)(3) to consult with its attorney regarding the petition for judicial review filed in the North Carolina Superior Court for New Hanover County titled Henry Fonvielle v. Coastal Resources Commission, File No. 21-CVS-3584. Phil Norris seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Andrew, Emory, Bromby, Wills, Tunnell) (Baldwin absent for vote).

After returning to open session and there being no further business, the CRC adjourned.

Respectfully submitted,



Braxton Davis, Executive Secretary


Angela Wills, Recording Secretary



January 10, 2023

Crossley McIntosh Collier Hanley & Edes, P.L.L.C.
Attn: Brian Edes
5002 Randall Parkway
Wilmington, NC 28403

RE: Ocean Isle Beach Haybale Variance

Dear Mr. Edes:

Faced with chronic erosion along portions of the town's ocean front shoreline, the Town of Ocean Isle Beach worked with the US Army Corps of Engineers (USACE) to implement the town's Federal Coastal Storm Risk Management (CSRMM) beach nourishment project in 2001. While the CSRMM beach nourishment project was first authorized in 1966 to provide nourishment along a 3.25-mile section of the town's oceanfront shoreline, it did not include the easternmost portion of the town due to high rates of erosion associated with Shallotte Inlet. Over the years, this erosion had claimed several roads, houses, and infrastructure along the east end of the island.

The initial construction of the CSRMM project occurred in 2001 and was followed by 4 subsequent renourishment events. But the eastern end of the CSRMM project and the portion of the Town not included in the CSRMM project further to the east continued to experience high erosion rates due to the influence of Shallotte Inlet. Even within the CSRMM project area, the federal government had to maintain a short renourishment interval, requiring sand placement approximately every 3 years. The Town attempted to place sand as an add-on project to the Federal renourishment project in 2007, but the sand was short lived. In an attempt to temporarily hold the line and protect the homes, roadways, and infrastructure in the area from the encroaching sea, homeowners and the town constructed a 1,500 ft long sandbag revetment. Even with all of these efforts, very little dry beach remained along portions of the town's developed east end resulting in diminished recreational opportunities on the beach and virtually no sea turtle nesting habitat.

Recognizing the need for a more adaptive approach at managing the Town's overall shoreline management program, the town retained Coastal Protection Engineering of North Carolina, Inc. (CPE) in 2011 to begin to explore alternatives to improving project performance along the east end and protecting the public and private development on the east end of the town. The results of that effort suggested that the construction of a terminal groin located just east of the easternmost development on the island could serve as feasible solution. The town then worked with CPE to move forward with

the design and permitting process for the proposed terminal groin project, formally called the "Ocean Isle Beach Shoreline Protection Project". The project involved two major components: 1) the construction of the terminal groin structure and 2) pre-filling the fillet which entailed placing beach fill along a ~3,000 ft stretch of shoreline on the updrift (west) side of the structure. By 2017, permits were obtained, and the Town was poised to implement the much needed project when litigation delayed the construction of the project. By March 2021, the litigation was resolved and the Town moved forward with implementing the project. Fortuitously, the construction of the terminal groin coincided with the construction of the 5th CSRSM nourishment event. This allowed the town to make use of the USACE's dredging contractor, Norfolk Dredging, Inc., to provide the required fill within the terminal groin's fillet without having to incur additional mobilization/demobilization costs. The terminal groin structure was constructed by Coastal Design & Construction (CDC) between mid-November 2021 and mid-April 2022. The CSRSM project and the terminal groin's associated fillet was constructed by Norfolk Dredging, Inc. between mid-February and early April 2022.

I along with Mayor Debbie Smith attended the Coastal Resources Advisory Council (CRAC)/Coastal resources Commission (CRC) meeting in November 2021 in Atlantic Beach, NC and I subsequently attended the CRC meeting in February 2022 in Beaufort, NC. At each of these meetings, haybales were discussed as being used as a sand fence alternative. As a result of these meetings, it was decided by the Town to pursue the installation of haybales along various sections of the east end of the island. The minor permit application for the haybales coincided with the completion of our terminal groin construction (April 2022).

If you have any additional questions regarding the importance of this project and the importance of dune building along the oceanfront, please contact me at 910-579-2166.

Thank you,



Justin W. Whiteside
Asst. Town Administrator
Town of Ocean Isle Beach

Enc.

Locality _____ Permit Number _____

Ocean Hazard _____ Estuarine Shoreline _____ ORW Shoreline _____ Public Trust Shoreline _____ Other _____

(For official use only)

GENERAL INFORMATION

LAND OWNER - MAILING ADDRESS

Name Town of Ocean Isle Beach

Address 111 Causeway Drive

City Ocean Isle Beach State NC Zip 28469 Phone (910) 579-2166 Email daisy@oibgov.com

AUTHORIZED AGENT

Name _____

Address _____

City _____ State _____ Zip _____ Phone _____

Email _____

LOCATION OF PROJECT: (Address, street name and/or directions to site; name of the adjacent waterbody.)
Columbia Street, Shallotte Blvd., Charlotte Street, Durham Street, and Lumberton Street access within Town Beach
(Accesses within Town Right-of-way)

DESCRIPTION OF PROJECT: (List all proposed construction and land disturbance.)
Hay bales used for rebuilding dunes.

SIZE OF LOT/PARCEL: N/A square feet N/A acres

PROPOSED USE: Residential (Single-family Multi-family) Commercial/Industrial Other X

COMPLETE EITHER (1) OR (2) BELOW (Contact your Local Permit Officer if you are not sure which AEC applies to your property):

(1) OCEAN HAZARD AECs: TOTAL FLOOR AREA OF PROPOSED STRUCTURE: X square feet
(includes air conditioned living space, parking elevated above ground level, non-conditioned space elevated above ground level but excluding non-load-bearing attic space)

(2) COASTAL SHORELINE AECs: SIZE OF BUILDING FOOTPRINT AND OTHER IMPERVIOUS OR BUILT UPON SURFACES: N/A square feet (includes the area of the foundation of all buildings, driveways, covered decks, concrete or masonry patios, etc. that are within the applicable AEC. Attach your calculations with the project drawing.)

STATE STORMWATER MANAGEMENT PERMIT: Is the project located in an area subject to a State Stormwater Management Permit issued by the NC Division of Energy, Mineral and Land Resources (DEMLR)?
YES _____ NO X

If yes, list the total built upon area/impervious surface allowed for your lot or parcel: N/A square feet.

OTHER PERMITS MAY BE REQUIRED: The activity you are planning may require permits other than the CAMA minor development permit, including, but not limited to: Drinking Water Well, Septic Tank (or other sanitary waste treatment system), Building, Electrical, Plumbing, Heating and Air Conditioning, Insulation and Energy Conservation, FIA Certification, Sand Dune, Sediment Control, Subdivision Approval, Mobile Home Park Approval, Highway Connection, and others. Check with your Local Permit Officer for more information.

STATEMENT OF OWNERSHIP:

I, the undersigned, an applicant for a CAMA minor development permit, being either the owner of property in an AEC or a person authorized to act as an agent for purposes of applying for a CAMA minor development permit, certify that the person listed as landowner on this application has a significant interest in the real property described therein. This interest can be described as: (check one)

_____ an owner or record title, Title is vested in name of _____,
see Deed Book _____ page _____ in the _____ County Registry of Deeds.

_____ an owner by virtue of inheritance. Applicant is an heir to the estate of _____
_____ ; probate was in _____ County.

if other interest, such as written contract or lease, explain below or use a separate sheet & attach to this application.

*Town Right-of-Way

NOTIFICATION OF ADJACENT RIPARIAN PROPERTY OWNERS:

I furthermore certify that the following persons are owners of properties adjoining this property. I affirm that I have given **ACTUAL NOTICE** to each of them concerning my intent to develop this property and to apply for a CAMA permit.
(Name) (Address)

- (1) Please see attached List
- (2) _____
- (3) _____
- (4) _____

ACKNOWLEDGEMENTS:

I, the undersigned, acknowledge that the land owner is aware that the proposed development is planned for an area which may be susceptible to erosion and/or flooding. I acknowledge that the Local Permit Officer has explained to me the particular hazard problems associated with this lot. This explanation was accompanied by recommendations concerning stabilization and floodproofing techniques.

I furthermore certify that I am authorized to grant, and do in fact grant, permission to Division of Coastal Management staff, the Local Permit Officer and their agents to enter on the aforementioned lands in connection with evaluating information related to this permit application.

This the 6th day of April, 2022

Oliver Lacey
Landowner or person authorized to act as his/her agent for purpose of filing a CAMA permit application

This application includes: general information (this form), a site drawing as described on the back of this application, the ownership statement, the Ocean Hazard AEC Notice where necessary, a check for \$100.00 made payable to the locality, and any information as may be provided orally by the applicant. The details of the application as described by these sources are incorporated without reference in any permit which may be issued. Deviation from these details will constitute a violation of any permit. Any person developing in an AEC without permit is subject to civil, criminal and administrative action.

158
OCEAN HAZARD AEC NOTICE

Project is in an: Ocean Erodible Area Inlet Hazard Area

Property Owner: Town of Ocean Isle Beach

Property Address: Columbia Street, Shalotte Blvd, Charlotte Street, Durham St., Lumberton Street

Date Lot Was Platted: Town Right of Way

This notice is intended to make you, the applicant, aware of the special risks and conditions associated with development in this area, which is subject to natural hazards such as storms, erosion and currents. The rules of the Coastal Resources Commission require that you receive an AEC Hazard Notice and acknowledge that notice in writing before a permit for development can be issued.

The Commission's rules on building standards, oceanfront setbacks and dune alterations are designed to minimize, but not eliminate, property loss from hazards. By granting permits, the Coastal Resources Commission does not guarantee the safety of the development and assumes no liability for future damage to the development. Permits issued in the Ocean Hazard Area of Environmental Concern include the condition that structures be relocated or dismantled if they become imminently threatened by changes in shoreline configuration. The structure(s) must be relocated or dismantled within two (2) years of becoming imminently threatened, and in any case upon its collapse or subsidence.

The best available information, as accepted by the Coastal Resources Commission, indicates that the annual long-term average ocean erosion rate for the area where your property is located is 2,4+5 feet per year.

The rate was established by careful analysis of aerial photographs of the coastline taken over the past 50 years.

Studies also indicate that the shoreline could move as much as _____ feet landward in a major storm.

180, 360, + 450

The flood waters in a major storm are predicted to be about 13 feet deep in this area.

Preferred oceanfront protection measures are beach nourishment and relocation of threatened structures. Hard erosion control structures such as bulkheads, seawalls, revetments, groins, jetties and breakwaters are prohibited. Temporary sand bags may be authorized under certain conditions.

The applicant must acknowledge this information and requirements by signing this notice in the space below. Without the proper signature, the application will not be complete.

SPECIAL NOTE: This hazard notice is required for development in areas subject to sudden and massive storms and erosion. Permits issued for development in this area expire on December 31 of the third year following the year in which the permit was issued. Shortly before work begins on the project site, the Local Permit Officer must be contacted to determine the vegetation line and setback distance at your site. If the property has seen little change since the time of permit issuance, and the proposed development can still meet the setback requirement, the LPO will inform you that you may begin work. Substantial progress on the project must be made within 60 days of this setback determination, or the setback must be re-measured. Also, the occurrence of a major shoreline change as the result of a storm within the 60-day period will necessitate re-measurement of the setback. It is important that you check with the LPO before the permit expires for official approval to continue the work after the permit has expired. Generally, if foundation pilings have been placed and substantial progress is continuing, permit renewal can be authorized. It is unlawful to continue work after permit expiration.

For more information, contact:

Local Permit Officer

Address

Locality

Phone Number

 4/6/22
Applicant Signature *Date*

Durham Street Access



Legend

- Corps Easement Line
- Static Vegetation Line
- Static Setback
- Parcel



1 inch = 40 feet

Columbia Street Access



160

COLUMBIA ST

E THIRD ST

Location of hay bales at access

1 inch = 40 feet

- 439
- 441
- 443
- 445
- 449
- 451
- 453
- 455
- 457
- 459
- 461

- 462
- 464
- 466
- 468
- 470
- 474
- 476
- 478
- 480
- 484
- 486

Shalotte Blvd. Access



Charlotte Street Access



Legend

- Corps Easement Line
- Static Vegetation Line
- Static Setback
- Parcel

162

CHARLOTTE ST

180 feet

170 feet

160 feet

150 feet

140 feet

130 feet

120 feet

E SECOND ST

Location of hay bales at access

60 feet

Static Vegetation Line

1 inch = 40 feet

433

435

437

439

441

443

445

445

445

445

445

445

445

445

445

447

447

447

447

447

447

450

452

458

460

Lumberton Street Access



Legend

- Corps Easement Line
- Static Vegetation Line
- Static Setback
- Parcel

E SECOND ST

LUMBERTON ST

Location of hay bales at access

Static Vegetation Line

1 inch = 40 feet

160 feet

180 feet

170 feet

150 feet

140 feet

130 feet

120 feet

60 feet

410

412

414

413

415

417

419

420

422

424

426

430

430

432

163

407

409

411

ROY COOPER
Governor
ELIZABETH S. BISER
Secretary
BRAXTON DAVIS
Director



NORTH CAROLINA
Environmental Quality

June 16, 2022

CERTIFIED MAIL - #7018 3090 0000 0968 9826
RETURN RECEIPT REQUESTED

Town of Ocean Isle Beach Sent via email to: daisey@oib.gov
c/o Daisey Ivey
111 Causeway Drive
Ocean Isle Beach, NC 28469

RE: DENIAL OF CAMA MINOR DEVELOPMENT PERMIT
APPLICATION NUMBER- #OIB 22-32
PROJECT ADDRESS- Various Public Beach Accesses, Ocean Isle Beach, NC

Dear Ms. Ivey:

After reviewing the Town of Ocean Isle Beach's (Town's) application in conjunction with the development standards established through rules of the N.C. Coastal Resources Commission (CRC) and in accordance with the N.C. Coastal Area Management Act (CAMA), the proposed permit application must be denied due to inconsistencies with specific CRC rules. Specifically, the Town has applied for installation of hay bales and pine straw for dune rebuilding, as an alternative to the use of sand fencing, at various public accesses along the east end of Ocean Isle Beach. Your proposal is inconsistent with **15A NCAC 07H .0311 (c)**, which allows for "Installation and Maintenance of Sand Fencing," as follows:

"Sand fencing shall not be installed in a manner that impedes, traps or otherwise endangers sea turtles, sea turtle nests or sea turtle hatchlings. CAMA permit applications for sand fencing shall be subject to review by the Wildlife Resources Commission and the U.S. Fish and Wildlife Service in order to determine whether or not the proposed design or installation will have an adverse impact on sea turtles or other threatened or endangered species."

The Division of Coastal Management (NCDQM) requested additional information from the Town in a letter dated May 10, 2022, to address initial comments received from staff with the N.C. Wildlife Resources Commission (NCWRC). The Town provided a response to NCDQM staff on June 1, 2022, which was then provided by NCDQM to staff with the NCWRC.

NCWRC responded to NCDQM with a memo dated June 14, 2022. In its memo, NCWRC indicated that the additional information provided by the Town was beneficial in gaining a better understanding of the project's design and scope; however, that the NCWRC cannot concur with the allowance of bales on the beach to be



North Carolina Department of Environmental Quality | Division of Coastal Management
Wilmington Office | 127 Cardinal Drive Extension | Wilmington, North Carolina 28405
910.796.7215

Brock, Brendan O

From: Justin Whiteside <justin@oibgov.com>
Sent: Wednesday, June 1, 2022 4:10 PM
To: Mairs, Robb L
Cc: Keith Dycus; Brock, Brendan O
Subject: RE: [External] FW: TG Staging Area
Attachments: doc02300220220601143917.pdf

CAUTION: External email. Do not click links or open attachments unless you verify. Send all suspicious email as an attachment to [Report Spam](#).

Robb,

The responses to NC WRC are provided below:

- We currently do not have an as-built of the project so we were hoping the aerial would suffice.
- The spacing and angles of the haybales/pine straw would be 7'-10' apart at 45 degree angles (per the attached DCM guidelines)
- Approximate height of the bales/straw would be one (1) bale high (10"-16")
- The bales/straw would be placed at the toe of the dune and extend out no greater than 10' (per the attached DCM guidelines)
- All areas are existing sandbag structures that have been covered with beach compatible sand. Each site was recently placed with sea oats by Coastal Transplants. The new area was planted from the crest of the landward toe of the dune with an additional 8 rows of sea oats planted oceanward of the toe.
- Approximately 75-90 square feet at Charlotte, Lumberton, & Columbia St. Approximately 150-165 square feet at Shallotte Blvd. Approximately 250-300 square feet along E. Third St.

Please note that these sizes may vary depending on the bale. We estimate an average bale width of 18" x 10' of length. Average 15 square foot per section of "fencing". We have not purchased the bales as we await approval of the project.

Please let me know if you need anything else.

Justin W. Whiteside
 Assistant Town Administrator
 Town of Ocean Isle Beach
 910-579-2166 Phone
 910-579-2940 Fax

Follow Us: [OIB Facebook](#)

From: Mairs, Robb L <robb.mairs@ncdenr.gov>
Sent: Wednesday, June 01, 2022 1:07 PM
To: Justin Whiteside <justin@oibgov.com>
Cc: Keith Dycus <keith@oibgov.com>; Brock, Brendan O <brendan.brock@ncdenr.gov>
Subject: RE: [External] FW: TG Staging Area

Hey Justin,

RECEIVED
 JUN 01 2022
 DCM WILMINGTON
 DCM WILMINGTON

Have you received the additional information request that Brendan sent out? We'll need this to provide the NC WRC to address their comments on this proposal.

Thanks and feel free to give me a call if you have any questions.

Robb

Robb Mairs

LPO Minor Permits Coordinator
Division of Coastal Management
North Carolina Department of Environmental Quality

910.796.7301 office
910.789.2577 cell (Preferred)
robb.mairs@ncdenr.gov
<https://deq.nc.gov/about/divisions/coastal-management>
127 Cardinal Drive Extension
Wilmington, NC 28405



Email correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties.

From: Justin Whiteside <justin@oibgov.com>
Sent: Wednesday, June 1, 2022 11:49 AM
To: Mairs, Robb L <robb.mairs@ncdenr.gov>
Cc: Keith Dycus <keith@oibgov.com>
Subject: RE: [External] FW: TG Staging Area

CAUTION: External email. Do not click links or open attachments unless you verify. Send all suspicious email as an attachment to [Report Spam](#).

Robb,

I wanted to check back in on our application. We need to get this project completed as soon as possible. As you know we are approaching the end of our fiscal year so we need to get bills paid and projects completed.

The bales will be placed exactly as normal sandfence would be installed.

Let us know if you need anything else.

Justin W. Whiteside
Assistant Town Administrator
Town of Ocean Isle Beach
910-579-2166 Phone
910-579-2940 Fax

Follow Us: [OIB Facebook](#)

RECEIVED
JUN 01 2022
DCM WILMINGTON

From: Mairs, Robb L <robb.mairs@ncdenr.gov>
Sent: Friday, May 20, 2022 5:09 PM
To: Justin Whiteside <justin@oibgov.com>
Cc: Keith Dycus <keith@oibgov.com>
Subject: RE: [External] FW: TG Staging Area

Hey Justin,

Thanks for providing this over to us. I believe this should be fine to use in the minor permit application but I will need to run it through NC WRC and Tara MacPherson when she returns on Monday.

Thanks again and I hope ya'll have a nice weekend.

Robb

Robb Mairs
 LPO Minor Permits Coordinator
 Division of Coastal Management
 North Carolina Department of Environmental Quality

910.796.7301 office
 910.789.2577 cell (Preferred)
robb.mairs@ncdenr.gov
<https://deq.nc.gov/about/divisions/coastal-management>
 127 Cardinal Drive Extension
 Wilmington, NC 28405



Email correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties.

From: Justin Whiteside <justin@oibgov.com>
Sent: Tuesday, May 17, 2022 9:01 AM
To: Mairs, Robb L <robb.mairs@ncdenr.gov>
Cc: Keith Dycus <keith@oibgov.com>
Subject: [External] FW: TG Staging Area

CAUTION: External email. Do not click links or open attachments unless you verify. Send all suspicious email as an attachment to [Report Spam](#).

Robb,

Attached is the aerial we would like to use for the hay bale permit. Please give me a call when you're free to discuss. My cell would be best. 910-443-1092.

Justin W. Whiteside
 Assistant Town Administrator
 Town of Ocean Isle Beach
 910-579-2166 Phone

RECEIVED
 JUN 01 2022
 DCM WILMINGTON

Follow Us: [OIB Facebook](#)

From: Adam Priest <apriest@coastalprotectioneng.com>
Sent: Friday, May 13, 2022 5:48 PM
To: Justin Whiteside <justin@oibgov.com>; Brad Rosov <brosov@coastalprotectioneng.com>
Subject: RE: TG Staging Area

Hey Justin,

Attached is the aerial of the accretion fillet. Let me know if that works for you. I also heard back from CDC and the crane has been removed from the Shallotte Blvd staging area but the port-a-jon is still there. CDC is still working to coordinate with their subcontractor to have the port-a-jon removed. I will keep you posted on it's removal.

Thank you,

Adam T. Priest, P.E.
Coastal Engineer
Main: 910-399-1905
Mobile: 850-276-1265
apriest@coastalprotectioneng.com



Coastal Protection Engineering of North Carolina, Inc.
4038 Masonboro Loop Road
Wilmington, NC 28409

From: Adam Priest
Sent: Tuesday, May 10, 2022 4:54 PM
To: Justin Whiteside <justin@oibgov.com>; Brad Rosov <brosov@coastalprotectioneng.com>
Subject: RE: TG Staging Area

Hey Justin,

We can provide an aerial that shows the completed project. We have also been in communication with Justin Carter at the Corps who will be providing As-built dwgs from the project. He did say that it may take a couple of weeks to get the As-builts finalized but assured us that he would provide copies once completed.

Thanks,

Adam T. Priest, P.E.
Coastal Engineer
Main: 910-399-1905
Mobile: 850-276-1265
apriest@coastalprotectioneng.com

RECEIVED
JUN 01 2022
DCM WILMINGTON



Coastal Protection Engineering of North Carolina, Inc.
4038 Masonboro Loop Road
Wilmington, NC 28409

From: Justin Whiteside <justin@oibgov.com>
Sent: Tuesday, May 10, 2022 4:50 PM
To: Adam Priest <apriest@coastalprotectioneng.com>; Brad Rosov <brosov@coastalprotectioneng.com>
Subject: RE: TG Staging Area

Thanks Adam. Could you provide a good aerial of the project area? We are trying to get a CAMA Permit to install hay bales in lieu of sandfence where we created dunes from the sandbags. I'm attaching a letter from DCM detailing what they are requesting. They want an as-built of the project which the USACE doesn't have yet. So I'm just going to mark it on an aerial.

Thanks for all your help.

Justin W. Whiteside
Assistant Town Administrator
Town of Ocean Isle Beach
910-579-2166 Phone
910-579-2940 Fax

Follow Us: [OIB Facebook](#)

From: Adam Priest <apriest@coastalprotectioneng.com>
Sent: Tuesday, May 10, 2022 4:43 PM
To: Justin Whiteside <justin@oibgov.com>; Brad Rosov <brosov@coastalprotectioneng.com>
Subject: RE: TG Staging Area

Justin,

I'll reach out to CDC in the morning to see if I can get an update. I did find out that the port-a-jon was used by the company that filled the marine mattresses and they canceled their rental for the port-a-jon and sounds like the owner of the port-a-jon just haven't picked it up yet. Richard Gunn was going to look into that as well to see about getting it picked up as well as getting the crane moved.

Thanks,

Adam T. Priest, P.E.
Coastal Engineer
Main: 910-399-1905
Mobile: 850-276-1265
apriest@coastalprotectioneng.com



Coastal Protection Engineering of North Carolina, Inc.
4038 Masonboro Loop Road

RECEIVED
JUN 01 2022
DCM WILMINGTON

E. Third Street & Columbia Street



1 inch = 40 feet

Shalotte Blvd.



405 feet

382.5 feet

360 feet

337.5 feet

315 feet

292.5 feet

270 feet

447

447

447

447

447

447

447

447

135 feet

Placement of hay bales

1 inch = 40 feet

SHALLOTTE BLVD

E THIRD ST

171

118

437

439

441

443

445

449

114

462

464

466

468

470

474

Charlotte Street



172

CHARLOTTE ST

180 feet
170 feet
160 feet
150 feet
140 feet

130 feet
120 feet
E SECOND ST

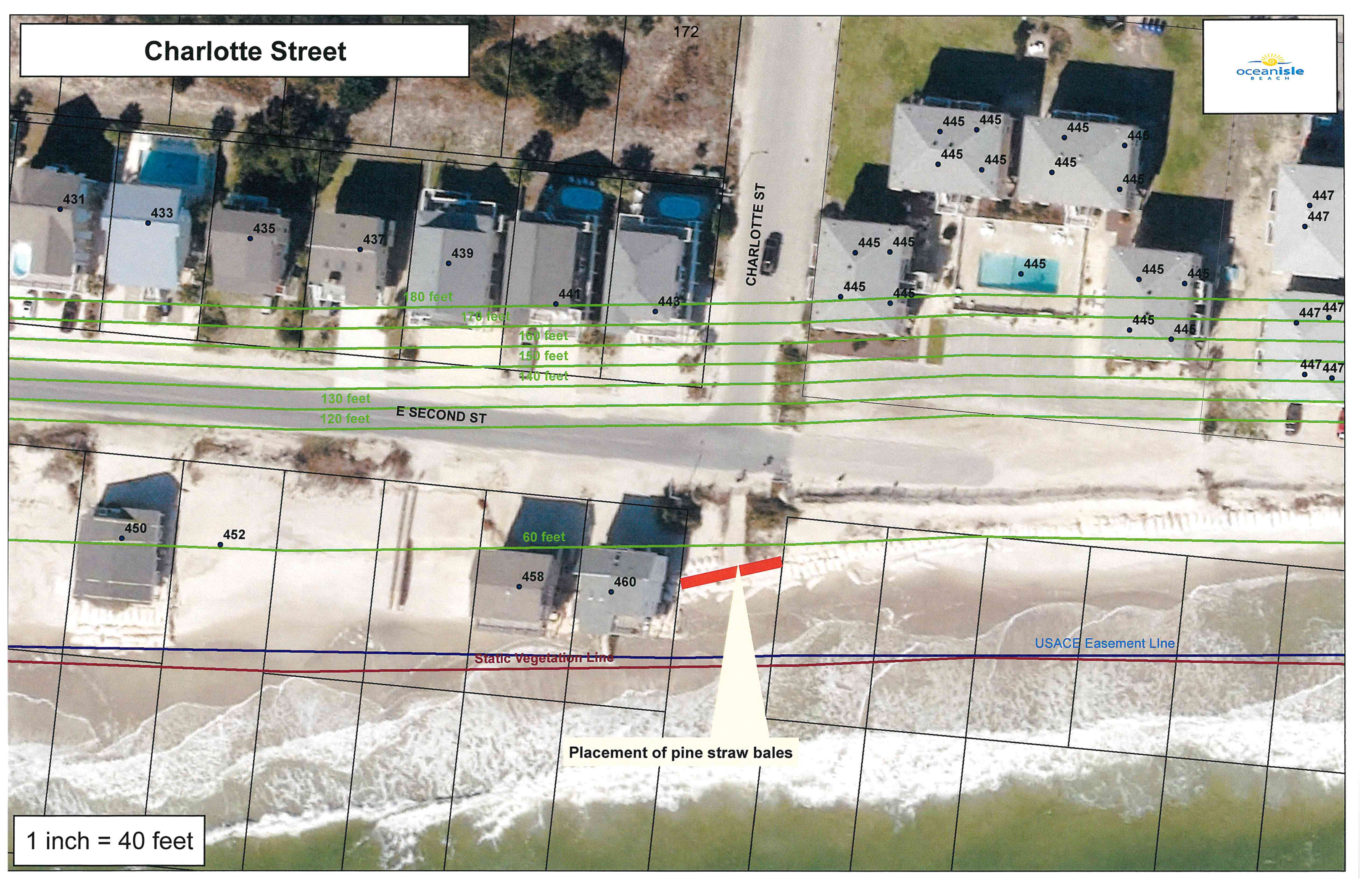
60 feet

Static Vegetation Line

USACE Easement Line

Placement of pine straw bales

1 inch = 40 feet



Durham Street



173

DURHAM ST

423

425

427

429

431

433

435

437

439

180 feet

170 feet

160 feet

150 feet

140 feet

E SECOND ST

130 feet

120 feet

434

436

438

440

442

444

446

60 feet

450

452

458

USACE Easement Line

Static Vegetation Line

Placement of pine straw bales

1 inch = 40 feet

Lumberton Street



E SECOND ST

LUMBERTON ST

180 feet

170 feet

160 feet

150 feet

340 feet

130 feet

120 feet

65 feet

USACE Easement Line

Static Vegetation Line

Placement of pine straw bales

1 inch = 40 feet



From: Brock, Brendan O <brendan.brock@ncdenr.gov>
Sent: Friday, May 6, 2022 12:35 PM
To: Dunn, Maria T. <maria.dunn@ncwildlife.org>
Cc: Keith Dycus <keith@oibgov.com>
Subject: Re: Ocean Isle hay bales

Good Afternoon Maria,

I have attached the minor permit application and a supplemental drawing showing which sites will use hay bales and which will use pine straw. DCM requested they try both types of material so we could compare the effectiveness of each type.

Brendan Brock

Field Representative

NC Division of Coastal Management

Department of Environmental Quality

910 796-7270 office

brendan.brock@ncdenr.gov

127 Cardinal Drive Ext

Wilmington, NC 28405



Nothing Compares

From: Dunn, Maria T. <maria.dunn@ncwildlife.org>
Sent: Friday, May 6, 2022 11:04 AM
To: Brock, Brendan O <brendan.brock@ncdenr.gov>
Subject: Ocean Isle hay bales

Good morning Brendan. I hope you are doing well.

I noticed the Town of Ocean Isle has a permit notice on site for the installation of hay bales. I just can't seem to find the application, could you forward it to me? NCWRC has concern with the use of hay bales or pine straw bales for sand capture and would like to review any proposal to determine impacts that may occur as a result of their use. Important information includes design, linear distance along shore, distance from the dune, MHW, etc. Impacts that may be imposed include but are not limited to introduction of invasives (insects, bacteria, etc.), fill of habitat areas (ultimately removing habitat use), increased organic material that creates voids in the sand as it decomposes, etc.

Thank you. I understand comments are due May 9 and will try to get something to you once I receive the application.

Maria

Maria T. Dunn

Coastal Coordinator

NC Wildlife Resources Commission

943 Washington Sq. Mall

Washington, NC 27889

office: 252-948-3916

www.ncwildlife.org

Email correspondence to and from this sender is subject to the N.C. Public Records Law and may be disclosed to third parties.

E. Third Street & Columbia Street



1 inch = 40 feet

Shalotte Blvd.



405 feet

382.5 feet

360 feet

337.5 feet

315 feet

292.5 feet

270 feet

447

447

447

447

447

447

447

447

135 feet

Placement of hay bales

1 inch = 40 feet

SHALLOTTE BLVD

E THIRD ST

178

118

437

439

441

443

445

449

114

462

464

466

468

470

474

Charlotte Street



179

CHARLOTTE ST

180 feet
170 feet
160 feet
150 feet
140 feet

130 feet
120 feet
E SECOND ST

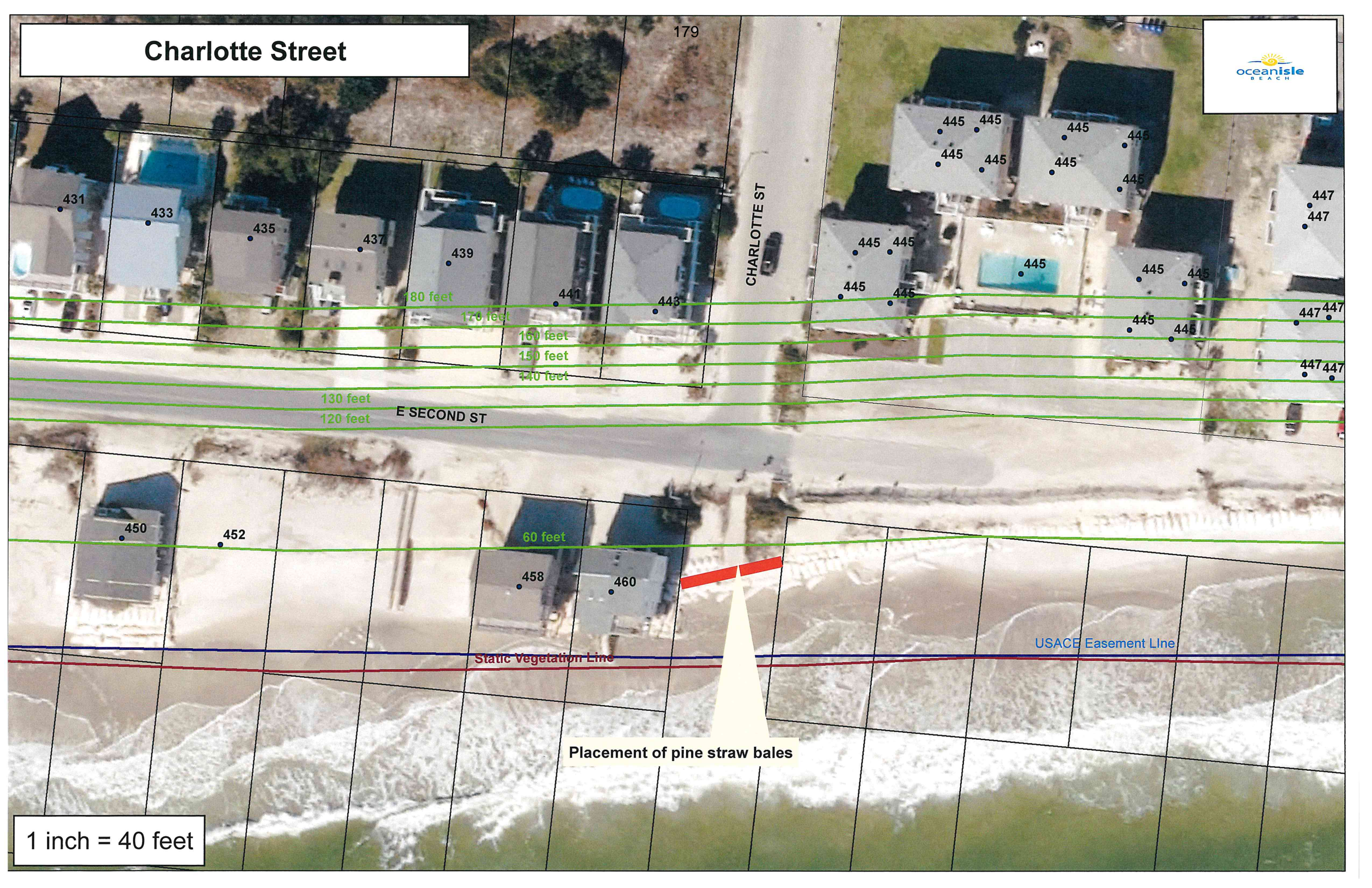
60 feet

Static Vegetation Line

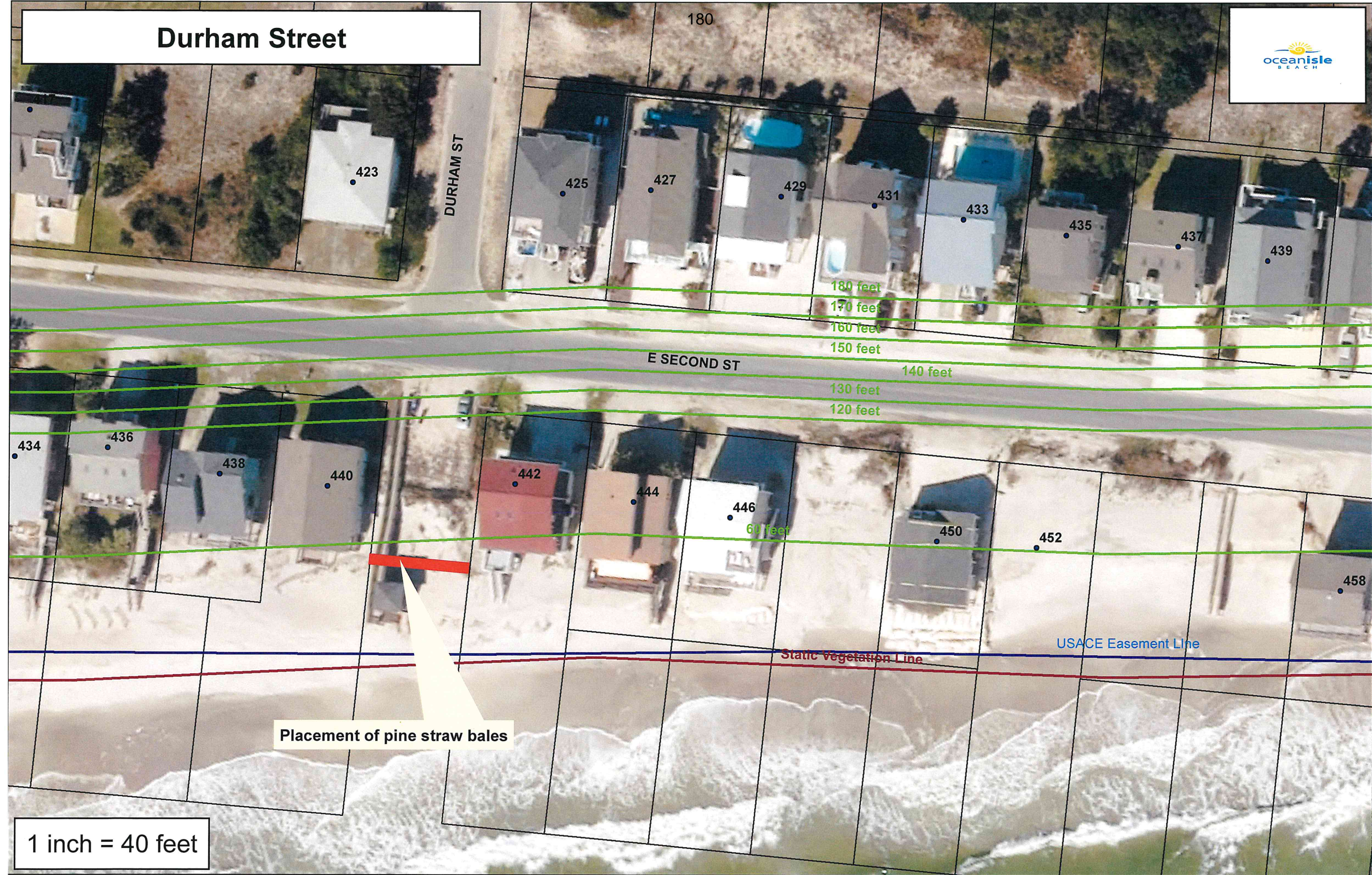
USACE Easement Line

Placement of pine straw bales

1 inch = 40 feet



Durham Street



1 inch = 40 feet

Lumberton Street



E SECOND ST

LUMBERTON ST

180 feet

170 feet

160 feet

150 feet

340 feet

130 feet

120 feet

60 feet

USACE Easement Line

Static Vegetation Line

Placement of pine straw bales

1 inch = 40 feet





NORTH CAROLINA
Environmental Quality
May 10, 2022

ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

BRAXTON DAVIS
Director

SENT VIA EMAIL

Town of Ocean Isle Beach
c/o Daisy Ivey
111 Causeway Drive,
Ocean Isle Beach, NC 28469

SENT VIA EMAIL

INCOMPLETE APPLICATION – Town of Ocean Isle Beach

ADDITIONAL INFORMATION REQUIRED

MINOR APPLICATION PERMIT NUMBER – OIB # 22-32

**PROJECT ADDRESS – Various Beach Accesses along the East End of OIB
Ocean Isle Beach, NC 28469**

Dear Ms. Ivey,

The Division of Coastal Management's Wilmington Regional office received a CAMA Minor Application request for the Town of Ocean Isle Beach from you on 4-14-2022, requesting approval for the installation of hay bales and pine straw for dune rebuilding at various public accesses along the east end of Ocean Isle Beach. During the review process, the Division of Coastal Management, in coordination with NC Wildlife Resources Commission (NCWRC) biologist Maria Dunn, has discovered that additional information is needed to complete the review process. Accordingly, I am requesting that you submit the following additional information on your work plats to this office:

- Please use as-built surveys of the recently completed beach renourishment project as your work plat to give an accurate depiction of the project sites
- Please include design specifics (height, spacing, angles) of proposed hay bale and pine straw bundles at each site (in accordance with NCAC 07H. 0311 and NCAC 07K .0212)
- Location on the beach i.e. distance from existing dune/sandbag structure (in accordance with NCAC 07H. 0311 and NCAC 07K .0212)
- Existing beach condition (dune grass, sand bags, slope) at each site
- Linear distance of proposed hay bales/ pine straw at each site
- Square footage of beach covered at each site

In accordance with the Department of Environmental Quality regulations, we note that a certain time has passed while the application has remained in our office. Upon resubmission of a complete application, a local decision will be made within 2 days, provided this period is not extended as provided by law.

Respectfully yours,

Brendan Brock



ParcelNumb	Name1	Address2	City	State	ZipCode
244MA011	DOYLE DEBORAH A ETALS	27438 N 45TH WAY	CAVE CREEK	AZ	85331-3602
244MB019	BOYD RAYMOND O	1923 LOWER ROSWELL RD	MARIETTA	GA	30068-3348
244NG019	MOODY WILLIAM D ET	2048 ROCKY HOLLOW DR	MARVIN	NC	28173-5021
244LL001	ROBERTS ROBERT JAMES JR ETALS	474 E THIRD STREET	OCEAN ISLE BEACH	NC	28469
244NF010	WILLIAM GEOFFREY BRANTLEY LIVING TR AND	504 FRONTGATE DR	CARY	NC	27519-7161
244MA001	RIVER HILLS ENTERPRISES LLC	109 RIVER HILLS WAY	MORGANTON	NC	28655-7784
244LK010	WILLIAMSON PETER ETUX	127 HORSESHOE HILL RD	POUND RIDGE	NY	10576-1636
244LL008	MILLIKEN JEFFREY A ETALS	1541 SEASIDE RD SW	OCEAN ISL BCH	NC	28469-5501
244NG010	HILL DAVID M	123 OCEAN ISLE WEST BLVD	OCEAN ISL BCH	NC	28469-7557
447 E. Second St.	Sand Dwellers HOA	PO Box 8126	Ocean Isle Beach	NC	28469

7020 1290 0000 6652 3469

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee
 \$ _____

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ _____

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postage
 \$ _____

Total Postage and Fees
 \$ _____

Sent To
 Street and Apt. No., or PO Box No. William Booffroy

City, State, ZIP+4® _____

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

184

7020 1290 0000 6652 3476

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee
 \$ _____

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ _____

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postage
 \$ _____

Total Postage and Fees
 \$ _____

Sent To
 Street and Apt. No., or PO Box No. Sand Dwellers HOA

City, State, ZIP+4® _____

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7020 1290 0000 6652 3445

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee
 \$ _____

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ _____

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postage
 \$ _____

Total Postage and Fees
 \$ _____

Sent To
 Street and Apt. No., or PO Box No. David Hill

City, State, ZIP+4® _____

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7020 1290 0000 6652 3452

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee
 \$ _____

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ _____

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postage
 \$ _____

Total Postage and Fees
 \$ _____

Sent To
 Street and Apt. No., or PO Box No. William Moody

City, State, ZIP+4® _____

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7020 1290 0000 6652 3483

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee
 \$ _____

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ _____

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postage
 \$ _____

Total Postage and Fees
 \$ _____

Sent To
 Street and Apt. No., or PO Box No. Deborah Doyle

City, State, ZIP+4® _____

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7020 1290 0000 6652 3438

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee
 \$ _____

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ _____

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postage
 \$ _____

Total Postage and Fees
 \$ _____

Sent To
 Street and Apt. No., or PO Box No. River Hills Enterprises LLC

City, State, ZIP+4® _____

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7020 1290 0000 6652 3520

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

185

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee	\$
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$
Total Postage and Fees	\$



Sent To Roberts Robert Jr.
Street and Apt. No., or PO Box No.

City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7020 1290 0000 6652 3490

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee	\$
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$
Total Postage and Fees	\$



Sent To Raymond Boyd
Street and Apt. No., or PO Box No.

City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

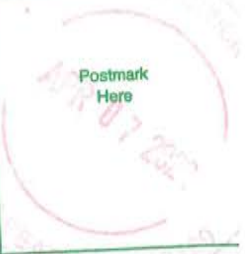
7020 1290 0000 6652 3506

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee	\$
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$
Total Postage and Fees	\$



Sent To Jeffrey Milliken
Street and Apt. No., or PO Box No.

City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instruction

7020 1290 0000 6652 3513

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee	\$
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$
Total Postage and Fees	\$



Sent To Peter Williamson
Street and Apt. No., or PO Box No.

City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instruction

N.C. DIVISION OF COASTAL MANAGEMENT
ADJACENT RIPARIAN PROPERTY OWNER NOTIFICATION (MINOR PERMIT)
CERTIFIED MAIL, RETURN RECEIPT REQUESTED or HAND DELIVERED

6 April 2022
Date

ATTN: Christy Chappell
Community Association Management (CAM)
Address, City, State, Zip Code

To Whom It May Concern:

This correspondence is to notify you as a riparian property owner that I am applying for a CAMA Minor permit to use Hay bales for rebuilding the dunes on my property in the Town of Ocean Isle Beach right-of-way, in Brunswick County, which is adjacent to your property. **A copy of the application and project drawing is attached/ enclosed for your review.**

If you have no objections to the proposed activity, please mark the appropriate statement below and return to me as soon as possible. If no comments are received within 10 days of receipt of this notice, it will be considered that you have no comments or objections regarding this project.

If you have objections or comments, please mark the appropriate statement below and send your correspondence to: (LOCAL PERMIT OFFICER, NAME OF LOCAL GOVERNMENT, MAILING ADDRESS CITY, STATE, ZIP CODE)

If you have any questions about the project, please do not hesitate to contact me at my address/number listed below, or contact (LOCAL PERMIT OFFICER) at (PHONE NUMBER), or by email at: (LPO EMAIL).

Sincerely,

Keith Dycus, Development Services Director
Property Owner's Name

(910) 579-3469
Telephone Number

Address	City	State	Zip
---------	------	-------	-----

I have no objection to the project described in this correspondence.
 I have objection(s) to the project described in this correspondence.

Adjacent Riparian Signature

Date

Print or Type Name

Telephone Number

Address	City	State	Zip
---------	------	-------	-----

N.C. DIVISION OF COASTAL MANAGEMENT
ADJACENT RIPARIAN PROPERTY OWNER NOTIFICATION (MINOR PERMIT)
CERTIFIED MAIL, RETURN RECEIPT REQUESTED or HAND DELIVERED

6 April 2022

Date

William Geoffrey Brantley Living Trust
 Name of Adjacent Riparian Property Owner

504 Frontgate Dr.
 Cary, NC 27519-7161
 Address, City, State, Zip Code

To Whom It May Concern:

This correspondence is to notify you as a riparian property owner that I am applying for a CAMA Minor permit to use Hay bales for rebuilding the dunes on my property in the Town of Ocean Isle Beach right-of-way, in Brunswick County, which is adjacent to your property. **A copy of the application and project drawing is attached/ enclosed for your review.**

If you have no objections to the proposed activity, please mark the appropriate statement below and return to me as soon as possible. If no comments are received within 10 days of receipt of this notice, it will be considered that you have no comments or objections regarding this project.

If you have objections or comments, please mark the appropriate statement below and send your correspondence to: (LOCAL PERMIT OFFICER, NAME OF LOCAL GOVERNMENT, MAILING ADDRESS CITY, STATE, ZIP CODE)

If you have any questions about the project, please do not hesitate to contact me at my address/number listed below, or contact (LOCAL PERMIT OFFICER) at (PHONE NUMBER), or by email at: (LPO EMAIL).

Sincerely,

Keith Dycus, Development Services Director
 Property Owner's Name

(910) 579-3469
 Telephone Number

Address	City	State	Zip
---------	------	-------	-----

I have no objection to the project described in this correspondence.

I have objection(s) to the project described in this correspondence.

 Adjacent Riparian Signature

 Date

 Print or Type Name

 Telephone Number

Address	City	State	Zip
---------	------	-------	-----

N.C. DIVISION OF COASTAL MANAGEMENT
ADJACENT RIPARIAN PROPERTY OWNER NOTIFICATION (MINOR PERMIT)
CERTIFIED MAIL, RETURN RECEIPT REQUESTED or HAND DELIVERED

6 April 2022

Date

Robert J. Roberts, Jr.

Name of Adjacent Riparian Property Owner

474 East Third St.

Ocean Isle Beach, NC 28469

Address, City, State, Zip Code

To Whom It May Concern:

This correspondence is to notify you as a riparian property owner that I am applying for a CAMA Minor permit to use Hay bales for rebuilding the dunes on my property in the Town of Ocean Isle Beach right-of-way, in Brunswick County, which is adjacent to your property. **A copy of the application and project drawing is attached/ enclosed for your review.**

If you have no objections to the proposed activity, please mark the appropriate statement below and return to me as soon as possible. If no comments are received within 10 days of receipt of this notice, it will be considered that you have no comments or objections regarding this project.

If you have objections or comments, please mark the appropriate statement below and send your correspondence to: (LOCAL PERMIT OFFICER, NAME OF LOCAL GOVERNMENT, MAILING ADDRESS CITY, STATE, ZIP CODE)

If you have any questions about the project, please do not hesitate to contact me at my address/number listed below, or contact (LOCAL PERMIT OFFICER) at (PHONE NUMBER), or by email at: (LPO EMAIL).

Sincerely,

Keith Dycus, Development Services Director
 Property Owner's Name

(910) 579-3469

Telephone Number

Address

City

State

Zip

_____ I have no objection to the project described in this correspondence.

_____ I have objection(s) to the project described in this correspondence.

 Adjacent Riparian Signature

 Date

 Print or Type Name

 Telephone Number

Address

City

State

Zip

**N.C. DIVISION OF COASTAL MANAGEMENT
 ADJACENT RIPARIAN PROPERTY OWNER NOTIFICATION (MINOR PERMIT)
CERTIFIED MAIL, RETURN RECEIPT REQUESTED or HAND DELIVERED**

6 April 2022
Date

Peter Williamson
Name of Adjacent Riparian Property Owner

127 Horseshoe Hill Rd.
Pound Ridge, NY 10576-1636
Address, City, State, Zip Code

To Whom It May Concern:

This correspondence is to notify you as a riparian property owner that I am applying for a CAMA Minor permit to use Hay bales for rebuilding the dunes on my property in the Town of Ocean Isle Beach right-of-way, in Brunswick County, which is adjacent to your property. **A copy of the application and project drawing is attached/ enclosed for your review.**

If you have no objections to the proposed activity, please mark the appropriate statement below and return to me as soon as possible. If no comments are received within 10 days of receipt of this notice, it will be considered that you have no comments or objections regarding this project.

If you have objections or comments, please mark the appropriate statement below and send your correspondence to: (LOCAL PERMIT OFFICER, NAME OF LOCAL GOVERNMENT, MAILING ADDRESS CITY, STATE, ZIP CODE)

If you have any questions about the project, please do not hesitate to contact me at my address/number listed below, or contact (LOCAL PERMIT OFFICER) at (PHONE NUMBER), or by email at: (LPO EMAIL).

Sincerely,

Keith Dycus, Development Services Director
Property Owner's Name

(910) 579-3469
Telephone Number

Address	City	State	Zip
---------	------	-------	-----

I have no objection to the project described in this correspondence.
 I have objection(s) to the project described in this correspondence.

Adjacent Riparian Signature

Date

Print or Type Name

Telephone Number

Address	City	State	Zip
---------	------	-------	-----

N.C. DIVISION OF COASTAL MANAGEMENT
ADJACENT RIPARIAN PROPERTY OWNER NOTIFICATION (MINOR PERMIT)
CERTIFIED MAIL, RETURN RECEIPT REQUESTED or HAND DELIVERED

6 April 2022

Date

River Hills Enterprises, LLC

Name of Adjacent Riparian Property Owner

109 River Hills Way

Morganton, NC 28655-7784

Address, City, State, Zip Code

To Whom It May Concern:

This correspondence is to notify you as a riparian property owner that I am applying for a CAMA Minor permit to use Hay bales for rebuilding the dunes on my property in the Town of Ocean Isle Beach right-of-way, in Brunswick County, which is adjacent to your property. **A copy of the application and project drawing is attached/ enclosed for your review.**

If you have no objections to the proposed activity, please mark the appropriate statement below and return to me as soon as possible. If no comments are received within 10 days of receipt of this notice, it will be considered that you have no comments or objections regarding this project.

If you have objections or comments, please mark the appropriate statement below and send your correspondence to: (LOCAL PERMIT OFFICER, NAME OF LOCAL GOVERNMENT, MAILING ADDRESS CITY, STATE, ZIP CODE)

If you have any questions about the project, please do not hesitate to contact me at my address/number listed below, or contact (LOCAL PERMIT OFFICER) at (PHONE NUMBER), or by email at: (LPO EMAIL).

Sincerely,

Keith Dycus, Development Services Director
 Property Owner's Name

(910) 579-3469

Telephone Number

Address

City

State

Zip

I have no objection to the project described in this correspondence.

I have objection(s) to the project described in this correspondence.

 Adjacent Riparian Signature

 Date

 Print or Type Name

 Telephone Number

Address

City

State

Zip

**N.C. DIVISION OF COASTAL MANAGEMENT
 ADJACENT RIPARIAN PROPERTY OWNER NOTIFICATION (MINOR PERMIT)
CERTIFIED MAIL, RETURN RECEIPT REQUESTED or HAND DELIVERED**

6 April 2022
Date

William D. Moody
Name of Adjacent Riparian Property Owner

2048 Rocky Hollow Dr.
Marvin, NC 28173-5021
Address, City, State, Zip Code

To Whom It May Concern:

This correspondence is to notify you as a riparian property owner that I am applying for a CAMA Minor permit to use Hay bales for rebuilding the dunes on my property in the Town of Ocean Isle Beach right-of-way, in Brunswick County, which is adjacent to your property. **A copy of the application and project drawing is attached/ enclosed for your review.**

If you have no objections to the proposed activity, please mark the appropriate statement below and return to me as soon as possible. If no comments are received within 10 days of receipt of this notice, it will be considered that you have no comments or objections regarding this project.

If you have objections or comments, please mark the appropriate statement below and send your correspondence to: (LOCAL PERMIT OFFICER, NAME OF LOCAL GOVERNMENT, MAILING ADDRESS CITY, STATE, ZIP CODE)

If you have any questions about the project, please do not hesitate to contact me at my address/number listed below, or contact (LOCAL PERMIT OFFICER) at (PHONE NUMBER), or by email at: (LPO EMAIL).

Sincerely,

Keith Dycus, Development Services Director
Property Owner's Name

(910) 579-3469
Telephone Number

Address	City	State	Zip
---------	------	-------	-----

I have no objection to the project described in this correspondence.
 I have objection(s) to the project described in this correspondence.

Adjacent Riparian Signature

Date

Print or Type Name

Telephone Number

Address	City	State	Zip
---------	------	-------	-----

N.C. DIVISION OF COASTAL MANAGEMENT
ADJACENT RIPARIAN PROPERTY OWNER NOTIFICATION (MINOR PERMIT)
CERTIFIED MAIL, RETURN RECEIPT REQUESTED or HAND DELIVERED

6 April 2022
Date

Raymond O. Boyd
Name of Adjacent Riparian Property Owner

1923 Lower Roswell Rd.
Marietta, GA 30068-3348
Address, City, State, Zip Code

To Whom It May Concern:

This correspondence is to notify you as a riparian property owner that I am applying for a CAMA Minor permit to use Hay bales for rebuilding the dunes on my property in the Town of Ocean Isle Beach right-of-way, in Brunswick County, which is adjacent to your property. **A copy of the application and project drawing is attached/ enclosed for your review.**

If you have no objections to the proposed activity, please mark the appropriate statement below and return to me as soon as possible. If no comments are received within 10 days of receipt of this notice, it will be considered that you have no comments or objections regarding this project.

If you have objections or comments, please mark the appropriate statement below and send your correspondence to: (LOCAL PERMIT OFFICER, NAME OF LOCAL GOVERNMENT, MAILING ADDRESS CITY, STATE, ZIP CODE)

If you have any questions about the project, please do not hesitate to contact me at my address/number listed below, or contact (LOCAL PERMIT OFFICER) at (PHONE NUMBER), or by email at: (LPO EMAIL).

Sincerely,

Keith Dycus, Development Services Director
Property Owner's Name

(910) 579-3469
Telephone Number

Address City State Zip

I have no objection to the project described in this correspondence.
 I have objection(s) to the project described in this correspondence.

Adjacent Riparian Signature

Date

Print or Type Name

Telephone Number

Address City State Zip

N.C. DIVISION OF COASTAL MANAGEMENT
ADJACENT RIPARIAN PROPERTY OWNER NOTIFICATION (MINOR PERMIT)
CERTIFIED MAIL, RETURN RECEIPT REQUESTED or HAND DELIVERED

6 April 2022

Date

Deborah A. Doyle

Name of Adjacent Riparian Property Owner

27438 N. 45th Way

Cave Creek, AZ 85331-3602

Address, City, State, Zip Code

To Whom It May Concern:

This correspondence is to notify you as a riparian property owner that I am applying for a CAMA Minor permit to use Hay bales for rebuilding the dunes on my property in the Town of Ocean Isle Beach right-of-way,

in Brunswick County, which is adjacent to your property. **A copy of the application and project drawing is attached/ enclosed for your review.**

If you have no objections to the proposed activity, please mark the appropriate statement below and return to me as soon as possible. If no comments are received within 10 days of receipt of this notice, it will be considered that you have no comments or objections regarding this project.

If you have objections or comments, please mark the appropriate statement below and send your correspondence to: (LOCAL PERMIT OFFICER, NAME OF LOCAL GOVERNMENT, MAILING ADDRESS CITY, STATE, ZIP CODE)

If you have any questions about the project, please do not hesitate to contact me at my address/number listed below, or contact (LOCAL PERMIT OFFICER) at (PHONE NUMBER), or by email at: (LPO EMAIL).

Sincerely,

Keith Dycus, Development Services Director

Property Owner's Name

(910) 579-3469

Telephone Number

Address

City

State

Zip

_____ I have no objection to the project described in this correspondence.

_____ I have objection(s) to the project described in this correspondence.

Adjacent Riparian Signature_____
Date_____
Print or Type Name_____
Telephone Number

Address

City

State

Zip

**N.C. DIVISION OF COASTAL MANAGEMENT
 ADJACENT RIPARIAN PROPERTY OWNER NOTIFICATION (MINOR PERMIT)
CERTIFIED MAIL, RETURN RECEIPT REQUESTED or HAND DELIVERED**

6 April 2022
Date

Jeffrey A. Milliken
Name of Adjacent Riparian Property Owner

1541 Seaside Rd. SW
Ocean Isle Beach, NC 28469-5501
Address, City, State, Zip Code

To Whom It May Concern:

This correspondence is to notify you as a riparian property owner that I am applying for a CAMA Minor permit to use Hay bales for rebuilding the dunes on my property in the Town of Ocean Isle Beach right-of-way, in Brunswick County, which is adjacent to your property. **A copy of the application and project drawing is attached/ enclosed for your review.**

If you have no objections to the proposed activity, please mark the appropriate statement below and return to me as soon as possible. If no comments are received within 10 days of receipt of this notice, it will be considered that you have no comments or objections regarding this project.

If you have objections or comments, please mark the appropriate statement below and send your correspondence to: (LOCAL PERMIT OFFICER, NAME OF LOCAL GOVERNMENT, MAILING ADDRESS CITY, STATE, ZIP CODE)

If you have any questions about the project, please do not hesitate to contact me at my address/number listed below, or contact (LOCAL PERMIT OFFICER) at (PHONE NUMBER), or by email at: (LPO EMAIL).

Sincerely,

Keith Dycus, Development Services Director
Property Owner's Name

(910) 579-3469
Telephone Number

Address	City	State	Zip
---------	------	-------	-----

I have no objection to the project described in this correspondence.
 I have objection(s) to the project described in this correspondence.

Adjacent Riparian Signature

Date

Print or Type Name

Telephone Number

Address	City	State	Zip
---------	------	-------	-----

**N.C. DIVISION OF COASTAL MANAGEMENT
 ADJACENT RIPARIAN PROPERTY OWNER NOTIFICATION (MINOR PERMIT)
CERTIFIED MAIL, RETURN RECEIPT REQUESTED or HAND DELIVERED**

6 April 2022
Date

David M. Hill
Name of Adjacent Riparian Property Owner

123 Ocean Isle West BLVD.
Ocean Isle Beach, NC 28469-7557
Address, City, State, Zip Code

To Whom It May Concern:

This correspondence is to notify you as a riparian property owner that I am applying for a CAMA Minor permit to use Hay bales for rebuilding the dunes on my property in the Town of Ocean Isle Beach right-of-way, in Brunswick County, which is adjacent to your property. **A copy of the application and project drawing is attached/enclosed for your review.**

If you have no objections to the proposed activity, please mark the appropriate statement below and return to me as soon as possible. If no comments are received within 10 days of receipt of this notice, it will be considered that you have no comments or objections regarding this project.

If you have objections or comments, please mark the appropriate statement below and send your correspondence to: (LOCAL PERMIT OFFICER, NAME OF LOCAL GOVERNMENT, MAILING ADDRESS CITY, STATE, ZIP CODE)

If you have any questions about the project, please do not hesitate to contact me at my address/number listed below, or contact (LOCAL PERMIT OFFICER) at (PHONE NUMBER), or by email at: (LPO EMAIL).

Sincerely,

Keith Dycus, Development Services Director
Property Owner's Name

(910) 579-3469
Telephone Number

Address	City	State	Zip
---------	------	-------	-----

I have no objection to the project described in this correspondence.
 I have objection(s) to the project described in this correspondence.

Adjacent Riparian Signature

Date

Print or Type Name

Telephone Number

Address	City	State	Zip
---------	------	-------	-----

From: Brock, Brendan O <brendan.brock@ncdenr.gov>
Sent: Friday, May 6, 2022 12:35 PM
To: Dunn, Maria T. <maria.dunn@ncwildlife.org>
Cc: Keith Dycus <keith@oibgov.com>
Subject: Re: Ocean Isle hay bales

Good Afternoon Maria,

I have attached the minor permit application and a supplemental drawing showing which sites will use hay bales and which will use pine straw. DCM requested they try both types of material so we could compare the effectiveness of each type.

Brendan Brock

Field Representative

NC Division of Coastal Management

Department of Environmental Quality

910 796-7270 office

brendan.brock@ncdenr.gov

127 Cardinal Drive Ext

Wilmington, NC 28405



From: Dunn, Maria T. <maria.dunn@ncwildlife.org>
Sent: Friday, May 6, 2022 11:04 AM
To: Brock, Brendan O <brendan.brock@ncdenr.gov>
Subject: Ocean Isle hay bales

Good morning Brendan. I hope you are doing well.

I noticed the Town of Ocean Isle has a permit notice on site for the installation of hay bales. I just can't seem to find the application, could you forward it to me? NCWRC has concern with the use of hay bales or pine straw bales for sand capture and would like to review any proposal to determine impacts that may occur as a result of their use. Important information includes design, linear distance along shore, distance from the dune, MHW, etc. Impacts that may be imposed include but are not limited to introduction of invasives (insects, bacteria, etc.), fill of habitat areas (ultimately removing habitat use), increased organic material that creates voids in the sand as it decomposes, etc.

Thank you. I understand comments are due May 9 and will try to get something to you once I receive the application.

Maria

Maria T. Dunn

Coastal Coordinator

NC Wildlife Resources Commission

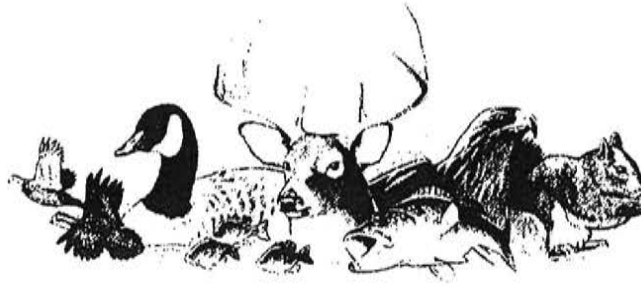
943 Washington Sq. Mall

Washington, NC 27889

office: 252-948-3916

www.ncwildlife.org

Email correspondence to and from this sender is subject to the N.C. Public Records Law and may be disclosed to third parties.



North Carolina Wildlife Resources Commission

Cameron Ingram, Executive Director

MEMORANDUM

TO: Robb Mairs
Division of Coastal Management
North Carolina Department of Environmental Quality

FROM: Maria T. Dunn, Coastal Coordinator
Habitat Conservation Division

DATE: June 14, 2022

SUBJECT: CAMA Minor Permit Application for Town of Ocean Isle, Hay Bales and Pine Straw Installation along Ocean Shoreline, Brunswick County, North Carolina.

Biologists with the North Carolina Wildlife Resources Commission (NCWRC) reviewed the permit application with regard to impacts on fish and wildlife resources. The project area is along various ocean access areas within the Town of Ocean Isle. Our comments are provided in accordance with provisions of the Coastal Area Management Act (G.S. 113A-100 through 113A-128), as amended, Sections 401 and 404 of the Clean Water Act, as amended, the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the Magnuson-Stevens Fishery Conservation and Management Act (FCMA), as amended (16 U.S.C. 1801 et seq.), and the Migratory Bird Treaty Act (16 U.S.C. 703-712 et seq.).

The Town of Ocean Isle submitted a CAMA Minor permit application on April 14, 2022 to install hay bales and pine straw bales along various public access areas to accrete sand in the general beach profile location of dunes. NCWRC was made aware of the permit application during a May 5, 2022 site visit for a different project and contacted the NC Division of Coastal Management (NCDQM) for additional information since the permit application had not been provided for agency review. Upon receipt of the permit application, the NCWRC requested additional project information be provided to clarify the project scope and design. This request included the project's linear distance along the shore, distance from dunes (or sandbags), distance from MHW, and overall design. Additional information was received on June 1, 2022 that stated the design would be similar to the sand fence design exemption (10' in length from the toe of the dune with minimum 7' spacing) with a height of one bale. Average bale fencing was approximated to be 15 ft² per section, totaling approximately 555 ft² of beach area covered by bales.

The additional information provided is beneficial in providing a better understanding of the project's design and scope. At this time, however, the NCWRC cannot concur with the allowance of bales on the beach to be used as a management tool. This position is not only for the Town of Ocean Isle's proposal, but for the use of bales coast wide. While it is understood the use of bales was pursued as an alternative to sand fencing due to inexpensive install and ease of acquisition, they have undetermined impacts that should be vetted prior to allowance.

The beach profile on oceanfront shorelines provides habitat opportunities for numerous species, including species listed as threatened and endangered by the NCWRC and the US Fish and Wildlife Service (USFWS). The direct, secondary, and cumulative impacts bales may have on these resources coast wide is unknown and should be discussed in more detail prior to the inclusion of bales as a management tool by the NCDCM. No information has been found regarding bale use on ocean shorelines in other states, so previously studied examples cannot be compared. Therefore, we request additional conversation occur between the NCDCM, NCWRC, and USFWS to discuss impacts bales may have in the immediate area of installation, the cumulative impact they may have on repeat installations in the same area, the cumulative impact they may have on habitats with coast wide use, and the regulation of use if determined to be an appropriate tool. These discussions should occur prior to the issuance of any permits or allowances of bales on ocean shorelines. During this time, other concerns with sand fencing and alternatives to sand fencing, such as Christmas tree installation, may also be discussed.

The NCWRC appreciates the opportunity to review and comment on this permit application. We look forward to future agency discussion regarding bales and other coastal management tools. If you need further assistance or additional information, please contact me at (252) 948-3916 or at maria.dunn@ncwildlife.org

Mairs, Robb L

From: Matthews, Kathryn H <kathryn_matthews@fws.gov>
Sent: Thursday, June 16, 2022 9:55 AM
To: Mairs, Robb L
Cc: Dunn, Maria T.
Subject: Re: [EXTERNAL] FW: Town of Ocean Isle, CAMA Minor permit for bales
Attachments: 15a ncac 07h .0311.pdf; CAMA Minor_Town of Ocean Isle bales_NCWRC.pdf

CAUTION: External email. Do not click links or open attachments unless you verify. Send all suspicious email as an attachment to [Report Spam](#).

Thanks, Robb.

I agree with NCWRC's concerns. We began discussions with NCDCM and NCWRC during a call with Braxton on June 1. In general, I have concerns about the use of hay bales due to the potential for introduction of invasive species (seeds within the bale), the potential changes in pH (especially from pine straw), and decomposition of the bales. Both types of bales may decompose rather quickly depending on ambient temperature, storms, and wind, introducing excessive nutrients and plant material into the surround area and waters. Insect introduction is also unknown - bales may harbor insect nests or eggs. At this time, I do not recommend authorization of the requested work, especially during the sea turtle nesting season.

Have a good weekend,

Please note that I am teleworking Wednesday through Friday, every week. Email is the best way to reach me. Thanks,

Kathy Matthews
 NC Renewable Energy Coordinator &
 Fish and Wildlife Biologist
 U.S. Fish and Wildlife Service
 551-F Pylon Drive
 Raleigh, NC 27606
 919-856-4520, x. 27

From: Mairs, Robb L <robb.mairs@ncdenr.gov>
Sent: Thursday, June 16, 2022 9:36 AM
To: Matthews, Kathryn H <kathryn_matthews@fws.gov>
Subject: [EXTERNAL] FW: Town of Ocean Isle, CAMA Minor permit for bales

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hey Kathy,

ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

BRAXTON DAVIS
Director



June 16, 2022

CERTIFIED MAIL - #7018 3090 0000 0968 9826
RETURN RECEIPT REQUESTED

Town of Ocean Isle Beach Sent via email to: daisey@oib.gov
c/o Daisey Ivey
111 Causeway Drive
Ocean Isle Beach, NC 28469

RE: DENIAL OF CAMA MINOR DEVELOPMENT PERMIT
APPLICATION NUMBER- #OIB 22-32

PROJECT ADDRESS- Various Public Beach Accesses, Ocean Isle Beach, NC

Dear Ms. Ivey:

After reviewing the Town of Ocean Isle Beach's (Town's) application in conjunction with the development standards established through rules of the N.C. Coastal Resources Commission (CRC) and in accordance with the N.C. Coastal Area Management Act (CAMA), the proposed permit application must be denied due to inconsistencies with specific CRC rules. Specifically, the Town has applied for installation of hay bales and pine straw for dune rebuilding, as an alternative to the use of sand fencing, at various public accesses along the east end of Ocean Isle Beach. Your proposal is inconsistent with **15A NCAC 07H .0311 (c)**, which allows for "Installation and Maintenance of Sand Fencing," as follows:

"Sand fencing shall not be installed in a manner that impedes, traps or otherwise endangers sea turtles, sea turtle nests or sea turtle hatchlings. CAMA permit applications for sand fencing shall be subject to review by the Wildlife Resources Commission and the U.S. Fish and Wildlife Service in order to determine whether or not the proposed design or installation will have an adverse impact on sea turtles or other threatened or endangered species."

The Division of Coastal Management (NCDCM) requested additional information from the Town in a letter dated May 10, 2022, to address initial comments received from staff with the N.C. Wildlife Resources Commission (NCWRC). The Town provided a response to NCDCM staff on June 1, 2022, which was then provided by NCDCM to staff with the NCWRC.

NCWRC responded to NCDCM with a memo dated June 14, 2022. In its memo, NCWRC indicated that the additional information provided by the Town was beneficial in gaining a better understanding of the project's design and scope; however, that the NCWRC cannot concur with the allowance of bales on the beach to be



North Carolina Department of Environmental Quality | Division of Coastal Management
Wilmington Office | 127 Cardinal Drive Extension | Wilmington, North Carolina 28405
910.796.7215

Town of Ocean Isle Beach
 June 16, 2022
 Page Two

used as a management tool. The NCWRC memo further stated that its position applies not only to the Town of Ocean Isle Beach's proposal, but to the use of bales coast wide as an alternative to traditional sand fencing. NCDCM also received comments from staff with the U.S. Fish and Wildlife Service (USFWS) concurring with the NCWRC position and stating their concerns about the use of hay bales due in place of traditional sand fencing (please see attached NCWRC memo and USFWS email).

Given these findings, it is necessary that your request for issuance of a CAMA Major Permit under the Coastal Area Management Act be denied pursuant to N.C.G.S. 113A-120(a)(8), which requires denial for projects inconsistent with the state guidelines for Areas of Environmental Concern or local land use plans. If you wish to appeal this denial, you are entitled to a contested case hearing. The hearing will involve appearing before an Administrative Law Judge who listens to evidence and arguments of both parties before making a final decision on the appeal. Your request for a hearing must be in the form of a written petition, complying with the requirements of §150B of the General Statutes of North Carolina, and must be filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714, within twenty (20) days from the date of this denial letter. A copy of the petition should also be filed with DCM.

Another response to a permit application denial available to you is to petition the Coastal Resources Commission for a variance to undertake a project that is prohibited by the Rules of the Coastal Resources Commission. Applying for a variance requires that you first stipulate that the Division of Coastal Management applied the Rules of the Coastal Resources Commission properly in issuing this denial. You may then request that the Commission vary the rules at issue, and show how you believe your request meets the four criterion found at GS 113A-120.1. To apply for a variance, you must file a petition for a variance with the Director of the Division of Coastal Management and the State Attorney General's Office on a standard form, which must be accompanied by additional information on the nature of the project and the reasons for requesting a variance. The variance request may be filed at any time but must be filed a minimum of six weeks before a scheduled Commission meeting for the variance request to be eligible to be heard at that meeting. Information about both a permit appeal in the Office of Administrative Hearings and the Variance process may be obtained by visiting the Division's web page.

Please let me know if you have any questions or if I can assist in the submittal of your request.

Sincerely,



Robb Mairs, Minor Permits Coordinator-DCM

Cc: Braxton Davis, Director-DCM
 Tara MacPherson, District Manager-DCM
 Brendan Brock, Field Representative-DCM
 WiRo Files

ATTACHMENTS



NC COASTAL RESOURCES COMMISSION (CRC)

September 15, 2022

Holiday Inn, Wilmington

Present CRC Members

Renee Cahoon, Chair
 Larry Baldwin, Vice-Chair
 Neal Andrew
 D.R. Bryan
 Bob Emory
 Robert High
 Sheila Holman
 W. Earl Smith
 Alexander "Dick" Tunnell

Present CRAC Members

Daniel Brinn
 Jett Ferebee
 Kris Noble
 Spencer Rogers
 Debbie Smith
 Dave Weaver

Present from the Office of the Attorney General

Mary Lucasse

Present from the Department of Environmental Quality, Office of the General Counsel

Christine Goebel

CALL TO ORDER/ROLL CALL

Renee Cahoon called the meeting to order at 9:00 a.m. on September 15, 2022, reminding the Commissioners of the need to state any conflicts due to Executive Order Number 34 and the State Government Ethics Act. The State Government Ethics Act mandates that at the beginning of each meeting the Chair remind all members of their duty to avoid conflicts of interest and inquire as to whether any member knows of a conflict of interest or potential conflict with respect to matters to come before the Commission. The Chair requested that if any member knows of a conflict of interest or a potential conflict of interest, they so state when the roll is called. Commissioners Doug Medlin, Phil Norris, Lauren Salter, and Angie Wills were absent. No conflicts were reported. Commissioners D.R. Bryan and W. Earl Smith read their evaluations of statement of economic interest from the State Ethics Commission which indicated no actual conflicts of interest and any potential conflicts would not prohibit service on the Commission. Based upon this roll call Chair Cahoon declared a quorum.

CHAIR'S COMMENTS

Chair Cahoon welcomed Commissioners Bryan and Smith to the Commission. Commissioner D.R. Bryan was appointed by Governor Cooper and Commissioner Smith was appointed by

Senate Pro Tempore Berger. Governor Cooper reappointed Commissioners Holman, Salter, Emory, and Cahoon with terms ending June 2026. Chair Cahoon reappointed Candy Bohmert, Daniel Brinn, David Kellam, Ike McRee, Kris Noble, Bobby Outten, Kathleen Riely, Spencer Rogers, Debbie Smith, and David Weaver to the Coastal Resources Advisory Council (CRAC). Kyle Breuer, Sandra Cross, Ryan Davenport, John Farrell, Webb Fuller, David Hewett, John Spruill, David Szerlag, and John Windley were appointed to the CRAC.

The Commission discussed and approved the 2023 CRC meeting dates as follows: February 22-23; April 26-27; June 14-15; August 23-24; and November 8-9.

MINUTES

Commissioner Holman noted a correction to the June Coastal Resources Commission meeting minutes. On page four of the minutes under the old/new business heading, it states “the EMC is scheduled to approve the readoption of its rules on June 28”; however, it should read, “the WRC...”

Bob Emory made a motion to approve the minutes of the June CRC meeting with the correction. Sheila Holman seconded the motion. The motion passed unanimously (Tunnell, Holman, Emory, Bryan, Cahoon, Baldwin, Andrew, Smith, High).

EXECUTIVE SECRETARY’S REPORT

DCM Director Braxton Davis gave the following report:

I’ll begin my report on the regulatory side of DCM. Permitting is still hovering around historically high numbers for our program. We’ve seen a 10% increase in permitting fees in the first two months of this fiscal year compared with the first two months of last fiscal year, so certainly no slow-down at this point. Over this past weekend, swells produced by Hurricane Earl, combined with a full moon and king tides, caused overwash along NC12 and uncovered sandbags in the S-turns area in Dare County. Due to the recently opened Rodanthe Jug Handle Bridge taking traffic in this area, for the first time in a long time, there was no emergency response initiated by NCDOT to clear the area and traffic was not shut down at any point this weekend. Sandbags and roadway in this area will be removed prior to November 30. On another DOT project, last week DCM participated in an interagency coordination meeting about the proposed mid-Currituck Bridge project in Currituck County. The meeting was led by the North Carolina Turnpike Authority for the purpose of continuing agency coordination and to prepare for the submittal of permit applications in late 2022 or early 2023 with the expectation of awarding the design/build contract in the Summer of 2024. Interagency coordination on the Mid-Currituck Bridge project began in the mid-1990s, and it was identified as a Turnpike project when the N.C. Turnpike Authority was created around 2002. The Final Environmental Impact Statement Reevaluation and Record of Decision were issued in March 2019. DCM staff completed internal testing of our new e-permitting system in July and August. Staff learned about each permit process within the system and then used examples to process test applications from start to finish. The new system will include major permits, modifications, renewals and transfers of major permits, general permits, and enforcement and compliance cases. Currently staff are creating knowledge articles to assist users, preparing federal and state review agencies for implementation, and preparing for a “soft” roll out with a few experienced consultants.

Over the past year, DCM led an interagency working group made of representatives from the Corps of Engineers, National Marine Fisheries Service, Fish and Wildlife Service, N.C. Division of Marine Fisheries, Division of Water Resources, and the Wildlife Resources Commission to develop guidance for permitting “thin layer” placement projects on tidal marshes in North Carolina. Thin-layer placement is a coastal wetland restoration or enhancement strategy where material, usually dredged sediment, is intentionally placed on a wetland to increase its elevation while maintaining hydrology necessary for the restoration of targeted wetland species. The guidance document includes a range of site assessments and monitoring protocols that will help applicants and regulatory agencies determine the suitability of proposed sites, how a project will be monitored, and how impacts and project outcomes will be evaluated. While not all the information in the guidance document will necessarily be required for all projects, each item in the guidance was identified as important for project scoping and interagency permitting reviews. We also benefitted from technical reviews of the document provided by several outside organizations, including the Corps of Engineers’ Regional Sediment Management Center of Expertise in Jacksonville, Florida, and NOAA’s National Center for Coastal Ocean Science. This has been a significant effort, and it has been great to achieve a level of consensus among the regulatory agencies in NC for this relatively new approach to tidal wetlands restoration that is beginning to gain interest across our coast, regionally, and nationally. The guidance document has been finalized and posted on our website, or we’d be happy to provide a copy if you reach out to me or one of our staff. Last, Robb Mairs, DCM Minor Permitting Coordinator, is planning a workshop for Local Permitting Officers for the Northern Districts on October 5 at the Coastal Studies Institute in Wanchese and is also in the process of scheduling a workshop for the Southern District to be held at Carolina Beach State Park in late October.

In the Policy and Planning section, I’ll start with a brief update on land use plans. Amendments to the CAMA Land Use Plans for the Towns of Newport and Morehead City were certified by the Division since your last meeting. Please let us know if you need any further information on those amendments. Also, the first round of Phases 1 and 2 of the Resilient Coastal Communities Program (RCCP) is complete and staff are conducting a program evaluation to identify areas for improvement for future rounds. We’re incorporating feedback from the participating communities, contractors, and program partners in the evaluation. A Request for Applications for a second round of Phases 1 and 2, with a focus on technical assistance, will be released this fall and supported by additional funding from the General Assembly and a second grant from the National Fish and Wildlife Foundation. Phase 3 of the program, which entails engineering and design work, is currently underway. DCM recently awarded \$1.14 million for twenty E&D projects, with no local match requirement. Examples of awarded projects include wetland restoration, flood mitigation, stormwater infrastructure, and the development of a flood damage prevention ordinance. We’ll be happy to provide the list of awards upon request. Communities that complete Phase 3 will also be eligible to apply for Phase 4, which will fund the implementation and construction of their project. While our Phase 4 funding is limited and will be competitive, Staff continues to connect communities to other state and federal funding sources that could fund project implementation. I wanted to mention that DCM is coordinating closely with other state programs on resiliency work and worked with the NC Coastal Federation and other partners to develop a set of Principles and Guidelines for Financial Support of Coastal Resiliency Projects. We are using these guidelines within the RCCP and have also shared them and seen them incorporated into other state funding programs. This week, we are also releasing a

request for applications for a round of Planning & Management grants for local governments. While all the usual planning & management topics will be eligible for funding, we are prioritizing support for three specific focus areas, including the development of Beach Management Plans per your recently adopted rules, plans focused on shoreline management and public trust waters, and enhanced handicap accessibility to coastal waters and shorelines. In the Coastal Reserve program, the Coastal Training Program continues to offer trainings in partnership with regulatory staff to support the Division's work to manage estuarine shorelines and barrier islands. The training program held a virtual living shoreline workshop for real estate professionals last week with close to 100 participants. The training program is also offering an in-person "Living on a Barrier Island" workshop in partnership with the Cape Fear Realtors Association in Wilmington later this month. Participants in both workshops receive continuing education credits from the NC Real Estate Commission.

Finally, in staffing news, I am pleased to announce that Kelsey Beachman joined the Wilmington DCM office in August. She comes to us from the Florida Department of Environmental Protection. She has a master's degree in Environmental Science with a focus in coastal management from UNCW. She also has an undergraduate degree from the University of Rhode Island in Marine Biology. She will be covering Northern New Hanover County. Krista Early started with DCM in July as a Coastal Resiliency Coordinator. Krista joined Mackenzie Todd on our resilience team and works out of our Morehead City office. She has a Master of Environmental Law and Policy from Vermont Law School, and a Bachelor's in Environmental Policy and Decision Making from Ohio State University. She was previously at Environment North Carolina in Raleigh as their Clean Water Advocate. We have completed interviews for a second Resiliency Specialist and expect to make an offer soon to bring that person on board. With that, the new RCCP will be fully staffed for the positions recently funded by the NC General Assembly. Three new graduate fellows joined the Reserve this summer. Madison Lytle, a PhD student at UNCW, and Andrew McMains, a PhD student at ECU, are the 2022 North Carolina Coastal Research Fellows, a program jointly funded by the Division and NC Sea Grant. Daniel Bowling, a PhD student at North Carolina State University, is the 2022-2024 NOAA Margaret A. Davidson Fellow at the NC Reserve. We are excited about working with these fellows and to utilize and share the results of their studies.

CRAC REPORT

Spencer Rogers, co-vice chair, stated the CRAC looked at fishing piers along the oceanfront and whether they allowed fishing. After discussion, there was no indication that fishing piers precluded fishing and the Advisory Council has no recommendations for the CRC for action.

BEACH MANAGEMENT

Cape Hatteras National Seashore and Collapsed Structures

Dave Hallac, Superintendent National Park Service

Dave Hallac stated there are five National Parks in North Carolina. Cape Hatteras National Seashore is a highly visited site. There are 230 buildings and three lighthouses located on Park Service property. The National Parks provide a large economic contribution to North Carolina. The discussions that DCM and Parks have recently had center around beachfront erosion that results in oceanfront homes falling into the ocean which has an impact on visitors' experiences, access, safety, human health, and wildlife habitat. Three houses collapsed in Rodanthe within the

past few months, one on February 9 and two on May 10. These three most recent collapses were not a result of a nor'easter, a tropical storm, or a hurricane. When these homes collapse, we are finding that the contents of the houses create a debris field with more than just lumber and building materials. The debris field from the recent collapses was around 15 miles long. Debris is being strewn up and down the beaches and even when a structure has not collapsed, we still see debris washing off structures and exposing septic systems. There are many more structures within the tidal zone which doesn't allow for safe access to the beach. After the May 10 collapse, we discovered there are 33 septic systems and drain fields which are exposed. While beach nourishment buys some time, these structures become vulnerable in a short amount of time due to the high erosion rates in these areas. The National Park Service has purchased a surf rake to address the small debris left on the public beaches. Challenges associated with erosion are likely to become more significant and complex with sea level rise. NOAA's latest sea level rise report indicates that by 2050 there will be between 10-14' of sea level rise on the east coast with moderate flooding events elevating to ten times as often as today. We have been working with 24 homeowners to move their structures out of harms way without impacting public beaches. The Division of Coastal Management and DEQ Secretary Biser have been working with us on these challenging issues and I cannot thank them enough for their support. We have partnered with DCM to lead a collaborative workgroup that will meet regularly to come up with medium and long-term solutions.

Erosion Threatened Oceanfront Structures (CRC 22-22)
Initial Recommendations Regarding Oceanfront Septic Systems
Braxton Davis, Director NC Division of Coastal Management

Braxton Davis stated this is not a new issue. A survey conducted in 1986 showed there were 777 structures facing short-term erosion risks. Some of the challenges associated with relocating threatened structures are a lack of vacant lots, property owners that are willing to move structures, and the need for cost sharing. From 2020 imagery, DCM has observed that of the 8,777 oceanfront structures, 764 are currently at short-term risk. Approximately 350 existing parcels are submerged. Additional parcels may have been delisted. DCM does not have records of which of these submerged parcels were ever developed. We estimate between 20-30 structures have collapsed over the past 20 years. In reviewing hot spots along the coast, it is important to note a few project updates since the 2020 analysis. The Town of Ocean Isle Beach has installed a terminal groin. The construction was coordinated along with beach nourishment from the US Army Corps of Engineers' Coastal Storm Risk Management project, and this has helped this hot spot area. A terminal groin was installed on Bald Head Island in 2015. Bald Head also received nourishment from the US Army Corps of Engineers' Wilmington Harbor dredging project in 2021. North Topsail Beach is still experiencing erosion and there are a lot of sandbags in this area. Buxton and Avon have benefited from nourishment and engineered dune construction. Nags Head has also had issues with structures on the beach but has benefited from the construction of a beach nourishment project in 2019. North Carolina has some of the strongest oceanfront construction setbacks in the country. Our setbacks are erosion-rate based so larger structures in areas with high erosion rates have increased setbacks. There are limited exceptions allowed within setback areas. In addition to oceanfront setbacks, North Carolina has dune protection rules, inlet hazard area use standards, and bans on most permanent erosion control structures. Sandbags are allowed for up to eight years as a community looks for long-term solutions to erosion. Legislation has recently allowed up to six terminal groins to be constructed

to address erosion. The CRC's rules require that permits include the condition that the structure shall be relocated or dismantled when it becomes imminently threatened and in any case upon its collapse or subsidence. Since 1991 there hasn't been enforcement on relocation, likely due to a combination of factors, such as natural beach recovery, beach nourishment, sandbag structures, and a lack of clarity on the enforcement process and the likelihood of litigation. The CRC's rules also say that structures relocated landward entirely with non-public funds do not have to meet the setback, merely be relocated to the maximum feasible distance landward of its present location. Since 2020, this rule has applied to seven houses in Rodanthe. Another challenge is on-site wastewater treatment, septic tanks. DHHS oversees a county's implementation of on-site wastewater treatment permits. New or replacement systems must be 50 feet from mean high water on the oceanfront. When a property owner comes in with a survey, the County Health Department will issue a septic tank permit. Within DHHS' rules it states that septic tanks are not allowed in areas subject to tidal or storm overwash unless it is designed and installed to be watertight. If a tank is damaged in a way that it is no longer watertight, then it must be serviced immediately. The CRC also has rules that govern septic systems. New septic systems are subject to oceanfront construction setbacks. DEQ policy dictates that replacement of an existing septic system must be in the same location and is usually considered repair. The relocation of an existing septic system requires a CAMA permit. CRC rules say that the system shall not be relocated oceanward of the primary structure and can be protected by sandbag structures. When talking about structures on the beach, there are several legal authorities that come into play. The Public Trust Doctrine provides that the beach is a public easement over private property for public fishing, navigation, and recreation. NC case law supported the Public Trust Doctrine and found that it applies to the entire dry sand beach, seaward of the vegetation line. Regulatory takings claims have shown mixed results and are unpredictable, time-consuming, and expensive. In a 2012 NC case, *Cherry Inc. v. Nags Head*, which dealt with eight houses on the beach in South Nags Head, the ruling said that only the State, not local governments can enforce the Public Trust Doctrine. Legislation was passed in 2013 that clarified that local governments have authority to abate nuisances and condemn structures which are found to be dangerous, or which unreasonably restrict the public trust rights on the beach. Another legal consideration regarding this issue is whether there is any legal authority to enter private property or to require removal of hazardous material prior to collapse. Are there any specific standards for beach clean ups and where is the authority and process for the State to clean up the debris and recover costs. Georgia considers debris "unpermitted shoreline engineering or land alteration" under the Georgia Shore Protection Act. In lieu of a fine, property owners are required to remove debris via consent order or administrative order of the courts. The Georgia Statute also allows for recovery costs if the State removes the debris. In Florida, a collapsed building would be considered "of a solid or highly impermeable design" and their Statute places the responsibility for clean up on the abutting upland property owner. With the National Flood Insurance Program (NFIP), most oceanfront properties in designated flood zones are required to have a policy to secure a mortgage. This policy covers the collapse, undermining or subsidence of land along the shore of a lake or other water body. Erosion is a covered peril if it is caused by waves or currents of water exceeding their cyclical levels which result in flooding. Imminently threatened properties are ineligible for NFIP claims until the structure succumbs to erosion and results in either marine debris, losses of public access or public trust uses, impacts on tourism, permitting conflicts, or litigation. This is an inefficient process. In 1988, the Upton Jones Amendment to the NFIP provided proactive assistance for property owners to deconstruct or relocate structures prior to

collapse. Up to 110% of the insured value was provided for deconstruction and up to 40% of the insured value was provided for relocation. This program ended in 1995 following passage of the NFIP Reform Act of 1994. According to a 1995 local news article, in total, more than 300 claims were submitted nationwide with a total of \$24 million paid out. Of these claims, 238 claims for a total of \$13.3 million, were paid out to properties in North Carolina. Of the properties in North Carolina, 168 were for demolition and 70 were for relocation, with the bulk of the claims being in Dare and Brunswick Counties. FEMA shifted to mitigation grant programs currently administered by NCORR in NC, however investment properties and second homes are typically not eligible for those FEMA mitigation grants. There are state grant programs that aren't targeted to this issue but could provide some limited assistance. In August, DCM and the NPS co-hosted an interagency meeting to discuss new rules, including those governing replacement and relocation of septic systems seaward of the oceanfront vegetation line. DCM recommends the CRC consider rule amendments that clarify that septic tanks are development, require a CAMA permit, and are not to be permitted seaward of the vegetation line. We will continue to educate homeowners and local governments on the existing option to relocate structures to otherwise unbuildable lots if landward of the current location.

In thinking broadly, the interagency group came up with some possible approaches. Some would require Congressional authorization. Approaches suggested for further research and discussion include authorizing federal, state, or local officials to enter property to remove hazards prior to collapse, by looking at parallels with abandoned vessel legislation and clarifying that property owner have liability for debris associated with house collapses. There is also a need to clarify the state versus federal authorities along the National Seashore beaches. There could also be a limit on NFIP policy transfers for imminently threatened structures, or structures partially or wholly located on ocean beaches. We could pursue reinstatement of the Upton Jones program and evaluate the potential for FEMA to allow NFIP payouts for imminently threatened structures prior to collapse. Local governments could potentially lower damage thresholds and allow for assessments of incremental damages. We could look at "continuous lake flooding" claims under NFIP and require local or state certification of beach clean-up prior to NFIP payouts. Consider a mechanism to withhold a portion of a NFIP payout to reimburse local, state, or federal entity involved in a clean-up following a collapse. There could be consideration for state matching funds or a revolving loan program for relocation or deconstruction of erosion-threatened structures. Consider eligibility of federal mitigation assistance for deconstruction or relocation of investment properties and second homes and look at cost/benefit calculations under federal grant programs. At this first interagency meeting, we asked whether the Corps of Engineers would consider any local or state costs of structure removals from within beach project areas to serve as match for federally sponsored beach nourishment projects. After discussion and review by the Corps, it was determined that this could be acceptable to use as match. Consider eligibility of State CSDM fund to address hot spots through relocation or deconstruction funds for threatened structures. Consider establishing federal/state conservation tax credits for threatened structure removal/property abandonment.

The next step will be to have the attendees from the first interagency meeting reconvene and invite other stakeholders to discuss these ideas with the goal of coming up with short and long-term solutions.

Sheila Holman made a motion for staff to bring back amendments to the septic tank rules based on DCM's recommendations to require a permit for septic tanks and not allow septic systems on the beach. Bob Emory seconded the motion. The motion passed unanimously (Tunnell, Holman, Emory, Bryan, Cahoon, Baldwin, Andrew, Smith, High).

ACTION ITEMS

Consideration of Adoption of Amendments to 15A NCAC 07H .0304, .0306, .0309, .0310 – Inlet Hazard Areas

Ken Richardson

Ken Richardson stated staff will be asking the Commission to consider adoption of the updated inlet hazard area boundaries and corresponding setbacks based on inlet erosion rates, in addition to rule amendments to 15A NCAC 7H .0304, .0306, .0309, and .0310. This adoption of amendments follows a second round of public hearings. 7H .0304 defines inlet hazard areas as 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. IHAs are one of three Areas of Environmental Concern (AEC) and were delineated in 1978, then amended in 1981, using statistical analyses with consideration of each inlet's geomorphology, geological weaknesses, and human influence such as jetties and channelization. Although work on updating the IHAs has not been a continual process, it is one that has been ongoing for decades. When initially developed it was estimated that the current IHA boundaries would have a 10-year relevancy. In 1998-99, one of the first recommendations to the CRC from the newly formed CRC Science Panel on Coastal Hazards was that Inlet Hazard Area boundaries should be updated. However, a few things were needed such as resources, additional data, and methodologies. In the early 2000's, DCM worked diligently on collecting data and working with the Science Panel to develop the methodologies that would be used for the 2010 IHA update. For a variety of reasons, questions centered on the size of the proposed boundaries, degrees of risk throughout each boundary, and the need for rule amendments until temporarily giving way to other priorities at the time, specifically the terminal groin study and updating the next oceanfront erosion rates. In 2012, the General Assembly directed the CRC to study the feasibility of created a new AEC for lands adjacent to the mouth of the Cape Fear River. Session Law 2012-202 required the CRC to consider the unique coastal morphologies and hydrographic conditions of the Cape Fear River region, and to determine if action is necessary to preserve, protect, and balance the economic and natural resources of this region through the elimination of current overlapping AECs by incorporating development standards into one single AEC unique to this location. During this study, the CRC found that while the Cape Fear River inlet did present a unique set of challenges, but other inlets may have similar issues. The Commission decided to undertake a comprehensive review of inlet-related issues and with the expectation of developing additional management tools that would allow the CRC to more proactively address the issues confronted by local governments in these dynamic areas. Much of the focus was based on the matter of terminal grins, but inlet AECs were a significant part of that consideration. In 2014, DCM presented a report to the Commission that was prepared following a series of stakeholder meetings, entitled "NC Coastal Resources Commission Inlet Management Study Findings and Policy Options." Stakeholders made several recommendations to the CRC that pertained specifically to IHAs. The first was that the CRC should task the Science Panel to complete the development of methods to defined revised IHAs and potential inlet and near-inlet setback lines for the CRC to review. The second was that the IHAs should be eliminated and incorporated into

the Ocean Erodible Area (OEA) while applying the same development standards currently utilized in the OEA. In 2016, the CRC acknowledged that inlet areas are different and are not under the same influences as the oceanfront and should be identified as a separate AEC. At that time, the Commission issued a Scope of Work to the Science Panel to develop a methodology for calculating inlet shoreline change rates and to re-evaluate points along the oceanfront shoreline where inlet processes no longer influence shoreline position. In 2018, after two years of dedicated work, the Chair of the Science Panel gave a detailed presentation to the Commission on the IHA boundary update methodologies and results. In 2019, the CRC approved amendments to rules pertaining to IHAs, the updated Inlet Hazard Area boundaries as recommended in the CRC's Science Panel report, and the IHA erosion rate setback factors. In 2019 and through 2020, the fiscal analysis associated with these amendments and boundary updates were approved by NCDEQ, OSBM, and the CRC. DCM staff then presented the proposed changes at public hearings in seven affected counties: Brunswick; New Hanover; Pender; Onslow; Carteret; Hyde; and Dare Counties, following by five workshops in Ocean Isle Beach, Holden Beach, Carolina Beach, Topsail Beach, and North Topsail Beach to allow for additional public discussion. The rulemaking process was deliberately extended to give the Commission, the public, and staff the opportunity to work through all issues raised by local governments and the public. Comments were not limited to, but centered around, the size of the updated boundaries at some locations; erosion rates, density, and size limits; ability to replace existing structures; applications of small structure exception; and in current rule, the ability to build dunes in an IHA if needed. Following the Covid-19 delay, in 2022 after careful consideration of all public comments, the CRC made a few additional amendments to the IHA rules. Most of these changes were for clarification purposes for the benefit of property owners who are not currently in an IHA but would be once the amendments become effective. In April and May of 2022, DCM staff presented the proposed rule amendments at the second round of public hearings in the seven effected counties and DCM accepted public comments until June 17, 2022.

During the first round of public hearings and workshops, there were many questions on the ability to restore/repair dunes in an IHA. Currently, the rules state that "no new dunes shall be created in an IHA". The Commission approved additional amendments for clarification purposes to state that "dunes may be restored". Currently, 7H .0309 has exceptions with conditions for small structures (1,000 square foot footprint, max of 2,000 square feet) that cannot meet the current setback. Currently IHAs are excluded, but the Commission approved amendments to allow exceptions in an IHA to include the size limit, that development be as far landward on the lot as feasible, have a minimum setback of 60 feet from the vegetation line or pre-project vegetation line, and cannot be oceanward of the landward most adjacent structure for lots platted prior to 1979. Amendments to 7H .0310 include grandfathering density limits of existing lots with less than 15,000 square feet of land area and limits new construction to 5,000 square feet. 7H .0310 grandfatheres existing large structures of greater than 5000 sf but less than 10,000 square feet within an IHA. This is existing OEA grandfathering rule language that will now be extended to property owners in an IHA. Staff is requesting that the Commission approve the Science Panel's updated Inlet Hazard Area Report and Maps, the inlet erosion rate setback factors, and rule amendments to 7H .0304, .0306, .0309, and .0310.

Bob Emory made a motion to adopt the updated IHA report and maps, inlet erosion rate setback factors, and amendments to 15A NCAC 07H .0304, .0306, .0309, and .0310. Sheila

Holman seconded the motion. The motion passed unanimously (Tunnell, Holman, Emory, Bryan, Cahoon, Baldwin, Andrew, Smith, High).

Consideration of Approval of Fiscal Analysis – Amendments to 15A NCAC 07H and 07J to Allow Electronic Payments (CRC 22-18)

Gregg Bodnar

Gregg Bodnar stated currently the Division is only permitted by rule to accept physical checks, money orders, and account transfers from other state agencies. Staff is proposing amendments to allow for e-check and credit card payments. The State contracts with PayPoint to collect electronic payments. Credit card transactions will incur a fee. For Visa transactions there will be a flat fee of \$3.95 per transaction and for non-Visa transactions there will be a fee of 2.65% of the transaction. The payments for transaction fees will show up as separate transactions on the customer's statement. E-checks, physical checks, and account transfers will not incur a transaction fee. The fiscal analysis assumes the estimated maximum number of Major Permits to be 230 per year and 3,000 General Permits per year. The maximum CAMA application fee is \$475 and the maximum transaction fee for a credit card payment would amount to \$12.59 per transaction. This would be a total fee cost of \$40,657.63 per year. Staff is requesting approval of the fiscal analysis for amendments related to electronic payments.

Robert High made a motion to approve the fiscal analysis for amendments in 15A NCAC 7H and 7J allowing for electronic payments. Larry Baldwin seconded the motion. The motion passed unanimously (Tunnell, Holman, Emory, Bryan, Cahoon, Baldwin, Andrew, Smith, High).

PUBLIC INPUT AND COMMENT

Chris Matteo, NC Shellfish Growers Association, spoke in favor of floating structures within shellfish leases and commented that shellfish aquaculture should fall under the agriculture exemption for development.

Joe Hudyencia, NC Dept. of Agriculture Consumer Services, spoke in favor of shellfish aquaculture being considered agriculture.

Alyson Flynn, NC Coastal Federation, spoke in favor of the DCM and CRC's positions that septic tanks should be prohibited on the dry sand beach, that CAMA permits should be required to replace an existing septic tank located in the ocean hazard area, and prohibit placement of septic tanks seaward of the vegetation line.

Julie Youngman, Southern Environmental Law Center, spoke in favor of DCM Director Davis and Cape Hatteras National Seashore Superintendent Hallac's leadership in addressing houses on the beach and the CRC's motion directing DCM to provide rule amendments that would address septic systems.

VARIANCES**Spogli – (CRC-VR-21-05), Bald Head Island, Oceanfront Setback****Robb Mairs, Christine Goebel, Esq., Charles Baldwin, Esq.**

Robb Mairs gave an overview of the site. Christine Goebel stated Petitioner Ronald Spogli owns a lot at 706 Shoals Watch Way on Bald Head Island in Brunswick County. The property is located near the southern point of West Beach. Petitioner applied for a CAMA Minor Permit to construct a 4,500 square foot home on the lot. The proposed house did not meet the 270-foot setback measured landward from the vegetation line. The CAMA LPO for the Village of Bald Head Island denied Petitioner's application as the proposed house did not meet the applicable setback. Petitioner now seeks a variance from 15A NCAC 7H .0306 to allow development as proposed in the application. Ms. Goebel reviewed the stipulated facts of the variance request and stated that staff and petitioner disagree on three of the four variance criteria which must be met in order to grant the variance. Petitioner is represented by Charles Baldwin.

Charles Baldwin, counsel for petitioner, reviewed the stipulated facts which Petitioner contends supports the granting of this variance request. Mr. Baldwin stated that strict application of the applicable setback rules will render the Petitioner's lot unbuildable for residential purposes and reviewed the petitioner's position on the four variance criteria which he argued supports the request to grant a variance.

Larry Baldwin made a motion to support Petitioner's position that strict application of the applicable rules, standards, or orders issued by the Commission will cause the Petitioner an unnecessary hardship. Robert High seconded the motion. The motion passed with seven votes in favor (Tunnell, Emory, Cahoon, Baldwin, Andrew, Smith, High) and two opposed (Holman, Bryan).

Larry Baldwin made a motion to support Petitioner's position that hardships result from conditions peculiar to the Petitioner's property. Robert High seconded the motion. The motion failed with four votes in favor (Tunnell, Baldwin, Smith, High) and five opposed (Holman, Emory, Bryan, Cahoon, Andrew).

Larry Baldwin made a motion to support Petitioner's position that hardships do not result from actions taken by the Petitioner. Robert High seconded the motion. The motion passed with eight votes in favor (Tunnell, Emory, Bryan, Cahoon, Baldwin, Andrew, Smith, High) and one opposed (Holman).

Larry Baldwin made a motion to support Petitioner's position that the variance request will be consistent with the spirit, purpose, and intent of the rules, standards, or orders issued by the Commission; will secure the public safety and welfare; and will preserve substantial justice. Earl Smith seconded the motion. The motion passed with five votes in favor (Tunnell, Cahoon, Baldwin, Smith, High) and four opposed (Holman, Emory, Bryan, Andrew).

This variance request was denied.

SHELLFISH AQUACULTURE

Attorney General Advisory Opinion Regarding CRC Authority Related to Shellfish Leases (CRC 22-15) Mary Lucasse

Mary Lucasse, Special Deputy Attorney General and CRC Counsel, stated her detailed opinion on this issue was provided to the Commission in the September 12, 2022 letter providing an analysis regarding the Commission's authority to regulate floating structures in shellfish lease and related issues. This presentation will focus on how to interpret the statutes which provide authority to the CRC to regulate development within shellfish leases. The Shellfish Growers Association claims that because aquaculture is agriculture, it should be included within the agriculture exception in NCGS 113A-103. However, simply because aquaculture can be defined as agriculture, does not answer the question of whether it is included in this exception. NCGS 113A-103 provides a definition of development. When reviewing a statute, the first thing to do is look at the plain language in the statute. The plain language in the definition of development defines placing floating structures in Estuarine Waters AEC and Public Trust Areas AEC as development. The statute also provides for exceptions to development. In considering the exception, we note that the exception language does not refer to aquaculture, shellfish, or submerged lands. The legislature has provided authority to the CRC to regulate, and require permits, for development where excavation or fill affects estuarine waters or navigable waters. Based on the rules of statutory construction, more detailed and specific sections control. Exceptions are to be narrowly construed. When a statute lists things, it excludes what is not listed. The purpose of the NC Statute and NC Constitution are to prioritize the protection of North Carolina's natural resources for the benefit of the public. This includes submerged lands held in trust for the use and benefit of all citizens. CAMA is a balancing statute. The Commission must balance the rights of shellfish lease owners and public trust rights. The authority provided by CAMA clearly requires that the CRC balance the protection of natural resources and the use of the resources for development. CAMA authorizes the Commission to set policies, management objectives, and use standards. The plain language of CAMA defines the placement of a floating structure in AECs as development. The spirit and purpose of CAMA authorizes the CRC to establish policies, guidelines, and standards for the protection of the Public Trust Areas and Estuarine Waters AECs. The agricultural exception does not prevent the CRC from regulating a floating structure placed within a shellfish lease in the Public Trust Areas and Estuarine Waters AEC as development.

Update on MFC Shellfish Lease Rulemaking

Owen Mulvey-McFerron, NCDMF

Today I will be providing an update on the shellfish lease rule amendments that took effect on August 23rd. As a reminder, the amendment process began in 2020 for three of the eleven shellfish lease rules to address user conflicts associated with shellfish leases while supporting a productive shellfish aquaculture industry resulting from the User Conflict Study, as required by Session Law 2019-37. These are the same rule amendments we have discussed with the CRC during the rule development process over the past two years. We incorporated some of the CRC's concerns expressed into the rule amendments and policies. Generally, these rule amendments seek to address user conflicts by addressing navigation concerns, improving shellfish lease marking requirements, and addressing changes associated with a growing shellfish aquaculture industry. Specific changes to these rules are as follows:

1. Increase setback requirement for shellfish leases from developed shorelines from 100 feet to 250 feet. This includes any riparian parcel that has a built structure, or water-dependent shore-based structures, such as docks or bulkheads.
2. Add a 250-foot buffer requirement between existing and new shellfish leases.
3. Limit the allowable number of shellfish lease corner markers to eight to simplify the polygon shapes.
4. Modify allowable corner pole marker requirements to allow 3-12” poles without additional permitting and require at least 12 vertical inches of reflective material that is visible from 360° on each pole. Poles greater than 12” in diameter require a CAMA permit.
5. Initiate the Shellfish Aquaculture Training Program for new leaseholders that emphasizes user conflict reduction strategies, as well as general best management practices, storm preparedness, and marine debris mitigation.
6. Add cumulative impact language to allow the DMF Director to account for the impacts to public trust use of existing shellfish leases when determining the compatibility of proposed leases.

Other amendments to eight shellfish lease rules were completed to help streamline and shorten processes for shellfish lease applications, address application grievances by the public, lease production reporting requirements, shellfish lease transfers and subleases, and further address recommendations laid out in Session Law 2019-37 and the subsequent Shellfish Aquaculture User Conflict Study. Lastly, staff have been working on related legislative requests from the 2019 Shellfish Aquaculture Bill, including the Shellfish Enterprise Area (SEA) pilot study. We are exploring the feasibility of SEAs in Bogue sound, as well as other areas of the state.

DCM Recommendations and Commission Discussion

Braxton Davis stated in February, the Commission discussed the history of floating structures and whether they were allowed within shellfish leases. DCM’s recommendation was that supporting infrastructure within shellfish leases could be regulated by the Division of Marine Fisheries as gear, but floating structures and platforms for processing shellfish should be permitted by DCM, as development under CAMA. Under the existing rules, any permit application for floating structures in open water would be denied; however, the permit applicant would have the option to submit a variance request for CRC consideration. The Division will move forward with rulemaking that will allow floating upweller systems within permitted marinas and shore-based operations and will regulate them under existing platform restrictions.

BEACH MANAGEMENT

Amendments to 15A NCAC 7H .0305(5) Proposed Minimum Growing Season for Planted Vegetation and Oceanfront Setback Determinations (CRC 22-16)

Robb Mairs

Robb Mairs stated, the Commission’s current rule 15A NCAC 7H .0305 describes the natural and man-made features found within the Ocean Hazard AEC. This includes ocean beaches, the nearshore area, primary dunes, frontal dunes, the vegetation line, and the pre-project vegetation line. The vegetation line is defined as the first line of stable and natural vegetation which is 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 around the seaward toe of the frontal dune or erosion escarpment. The Division of Coastal Management or Local Permit Officer determines the location of the stable and natural vegetation line based on visual observations of plant composition and density. The vegetation line determines the oceanfront setback designed to minimize losses of life and property resulting from storms and long-term erosion, prevent encroachment of permanent structures on public beach areas, preserve the natural ecological conditions of the barrier dune and beach systems, and reduce the public cost of inappropriately sited development. The first line of stable and natural vegetation is determined by the location of the vegetation and rhizomes and the vegetative species composition based on visual observation and/or aerial imagery, and interpolation across small gaps. CAMA field reps and LPOs determine a first line of stable and natural vegetation prior to submittal of a permit application. When a CAMA permit is issued, a pre-construction meeting is held to verify the first line of vegetation, and construction must begin within 60 days after the pre-construction meeting. Any major shoreline change prior to construction requires a new line delineation. Regarding planted vegetation, the current 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 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 compared with adjacent areas. While the planting of vegetation for stabilization of dunes and other areas 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 UNCW who specializes in dune ecology and Steve Mercer with Coastal Transplants, Inc. who have extensive agriculture 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 agree and therefore are recommending adding a two-year minimum post planting growth requirement to 15A NCAC 7H .0305(5).

Bob Emory made a motion to approve amendments as proposed to 15A NCAC 7H .0305 for public hearing. Sheila Holman seconded the motion. The motion passed unanimously (Holman, Emory, Bryan, Cahoon, Baldwin, Andrew, Smith, High).

Proposed Expanded Exemption for Beach Mats (CRC 22-17)

Mike Lopazanski

Mike Lopazanski stated the Division began receiving requests for beach mats along the dry sand beach in 2020-2021. Local governments were requesting the mats for enhanced handicapped access. The current rules do not allow the mats and these applications require a variance from the CRC. Last year the Commission amended its rules that allow for public access to the beach. The use standards previously limited these accessways to elevated, pile-supported structures terminating on the beach near the seaward toe of the frontal dune. Due to numerous local governments expressing an interest in using synthetic or wooden roll out matting as handicap-accessible alternatives for beach access, the accessway rules were amended to allow the use of

these types of mats for public beach access. However, only State, federal, or local governments were allowed to use these mats due to concerns expressed by the NC Wildlife Resources Commission and U.S. Fish and Wildlife Service about potential adverse impacts on sea turtle habitat resulting from the use waterward of the frontal dune. The Commission has approved three petitions for variances from local governments seeking to install beach mats on the dry sand beach. The Division and Commission have supported these variance requests and efforts were taken to minimize risks to sea turtles, including changes in siting, size, and orientation of proposed structures. Since the amendments went into effect, Staff has had further discussions regarding the use of beach matting for residential applications as an alternative to structural accessways. During storms, dune crossovers can account for a great deal of debris that winds up scattered across beaches and in waterways. Staff believe that by limiting matting to the same general standards that apply to structural accessways, limited to six feet wide in width and no farther waterward than six feet from the toe of the dune, public access and wildlife protection goals will be met while reducing debris on the State's beach during storm events. Residential application of matting material would adhere to the same standards previously approved including installation at grade and prohibiting extension onto the public trust beach. These amendments will remove the limitation restricting use of the mats to local, state, and federal governments and allowing mats for public or private use to allow access over primary and frontal dunes. Installing beach matting farther seaward to enhance handicap accessibility at a public beach access would still be limited to local, state, and federal governments to allow review by the Wildlife Resources Commission and US Fish and Wildlife to determine whether the proposed design or installation will have an adverse impact on sea turtles or other threatened or endangered species.

Larry Baldwin made a motion to approve the rule amendments as proposed to 15A NCAC 7K .0308 and 7K .0207 for public hearing. Neal Andrew seconded the motion. The motion passed unanimously (Holman, Emory, Bryan, Cahoon, Baldwin, Andrew, Smith, High).

Division of Water Resources DMMP Study Update

Kevin Hart, NCDWR

Kevin Hart stated the Army Corps of Engineers changed their internal policy in 2017 to not accept any additional dredge spoil material from dredge projects along the Atlantic Intracoastal Waterway (AIWW). The first phase in addressing this issue was to identify and assess existing non-federal dredged material placement locations along the AIWW. The Corps developed a GIS database mapping of existing non-federal placement sites. A dredging history was compiled from 13 coastal counties. The Corps reached out to existing marinas along the AIWW to find out their historical and current dredging needs. Small facilities, less than 10 slips, were excluded since dredged material volumes are smaller and do not require a confined upland placement site. This process revealed 26 existing non-federal placement sites that extend across 35 parcels. Twelve parcels are owned by the State of North Carolina, 22 parcels are privately owned, and one is federally owned. The Corps identified 227 waterfront facilities along the AIWW. They received responses from 206 facilities. 62% of the marine facilities are located in two counties (Carteret and New Hanover) and 77.5% of the marine facilities are located in three counties (Brunswick, Carteret, New Hanover). Phase Two of this study will assess the 20-year dredged material capacity needs and identify general environmental concerns associated with upland placement. The Corps will identify the 20-year material placement needs for 206 identified marine facilities

and identify the counties which have the greatest placement needs. The Corps will then map 70 to 75 potential non-federal placement sites not currently being utilized and provide a summary report.

PERMIT PROCESSING

Additional Amendment to General Permit Time Limits (CRC 22-19)

Jonathan Howell

Jonathan Howell stated the proposed extension was brought up during a public comment from a marine contractor who asked the Commission to extend the amount of time a General Permit is active. The contractor stated that because of supply chain issues which limit access to materials, he has been required to renew General Permits multiple times before completing a project. At the April meeting, the Commission directed staff to bring back rule amendments that extended the General Permit active period. To accomplish this and determine an appropriate amount of time to extend permits, staff reached out to local governments and found that building and zoning permits were good for 180 days. Staff reviewed all 17 of the Commission's General Permits and found that 10 of the 17 are active for less than six months. At the June CRC meeting, staff presented rule language that expanded the active period from 120 to 180 days. After discussion, the Commission asked staff to bring back additional language that would allow contractors an additional six months to complete the work on a project where substantial development has occurred. Additionally, amendments were made to the Emergency General Permit (7H .2500) to allow for additional time following a storm event when the Secretary activates the Emergency GP.

Robert High made a motion to approve amendments as presented to extend some General Permit expiration dates from 120 days to 180 days. Neal Andrew seconded the motion, The motion passed unanimously (Holman, Emory, Bryan, Cahoon, Baldwin, Andrew, Smith, High).

LEGAL UPDATES

Update on Litigation of Interest to the Commission (CRC 22-21)

Mary Lucasse updated the CRC on active litigation and any actions since CRC memo 22-21 was provided.

OLD/NEW BUSINESS

Inland Waters Boundary Update

Chair Cahoon stated that the Chair of the Marine Fisheries Commission (MFC) has proposed a joint meeting between the MFC, Coastal Resources Commission, and Wildlife Resources Commission to discuss this issue.


Braxton Davis stated the Wildlife Resources Commission and the Marine Fisheries Commission are in the process of readopting their existing rules in conformance with G.S. 150B 21.3A. Those efforts include the re adoption of joint rules these two Commissions share. Earlier this spring, the WRC published proposed changes to their 10C rules related to joint waters that had the potential to impact jurisdictional lines between the two agencies. After it became clear the two commissions would not agree on the proposed changes prior to the deadline set by the Rules Review Commission to re adopt these rules, the WRC agreed to re adopt the existing 10C and

03Q rules as-is and resume any discussions about changing the joint rules after the rules were readopted. The commissions completed the readoption of the existing rules, with minor technical corrections, which were approved by the RRC at its August meeting. The readopted rules did not alter the existing boundaries between inland, joint, and coastal waters. Those boundaries are codified in the MFC's 03Q .0200 rules, which were categorized as necessary without substantive public interest and not subject to readoption. The Chairs for the WRC and MFC have committed to continue to discuss ways in which the joint rules can be improved and to consider potential changes to the boundaries between inland, joint, and coastal waters.

Chair Cahoon stated the next scheduled meeting of the CRC will be November 16-17 in Beaufort.

With no further business, the CRC adjourned.

Respectfully submitted,


Braxton Davis, Executive Secretary

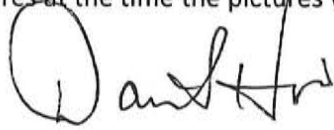

Angela Willis, Recording Secretary

January 11, 2023

Justin W. Whiteside
Asst. Town Administrator
Town of Ocean Isle Beach

Dear Mr. Whiteside,

I David Hill took these pictures on September 30, 2022, to illustrate the effects of Hurricane Ian on the eastern portion of the Town of Ocean Isle Beach. The vantage point from which these pictures were taken is described beneath each picture. The pictures fairly and accurately depict the condition of areas shown in the pictures at the time the pictures were taken.

A handwritten signature in black ink that reads "David Hill". The signature is written in a cursive style with a large, prominent "D" at the beginning.

David Hill



Taken in front of 474 E. Third St. – Looking west toward 470 E. Third St.



Shallotte Blvd. – Looking east down E. Third St.



Backyard of 455 E. Third St. – Looking north toward homes on E. Fourth



469 E. Third St. – Looking east toward Holden Beach

From: [Mairs, Robb L](#)
To: jason.litteral@currituckcounty.gov; [James Berge](#); [KD Jackson](#); [noah.gillam \(noah.gillam@darenc.com\)](mailto:noah.gillam@noah.gillam@darenc.com); [Cross, Sandy](#); [Donna Elliott](#); [Cameron Ray](#); [Ryan Lang](#); [Kelly Wyatt](#); [Lily Nieberding](#); [Ed Snyder](#); [Marcey Baum](#); [rob.testerman](mailto:rob.testerman@currituckcounty.gov); david.lubelski@currituckcounty.gov; jgould@townofduck.com; jcaddy@elizabethcitync.gov; arountree@elizabethcitync.gov; alawrence@elizabethcitync.gov; [Heard, Joseph](#); meredith@kdhnc.com; [Haskett, Wes](#); jason.litteral@currituckcountync.gov; ray.bennett@pamlicocounty.org; pcbi@pamlicocounty.org; [Jason Litteral](#); [Elisabeth Webster](#); [Ansell, Jennifer](#); [J.D. O'Neal](#); [Sheila Slater](#); [Foxworth, Eugene](#); [Hartman, Gregg](#); [Gerald Jones](#); [Sammy Graham](#); [Tracy Barnes](#); dean.lombreglia@carteretcountync.gov; [Haning, Phillip](#); jason.carman@carteretcountync.gov; [Steffey, Zachary](#); [Jeff Hall](#); [Michelle Eitner](#); jeannie.drake@moreheadcitync.gov; [Annie Bunnell \(Annie.Bunnell@moreheadcitync.org\)](mailto:Annie.Bunnell@moreheadcitync.org); barb.lynn@moreheadcitync.org; [Eggleston, Ryan T](#); [Sarah Williams](#); [Jim Taylor](#); clerk@townofpks.com; [Chad Strawn](#); jason.frederick@cravencountync.gov; [Lavelle, Don](#); [Matthew Boswell](#); [Allison McCollum](#); [Delane Jackson \(manager@riverbendnc.org\)](#); [Sammie Rogers](#); david_barnhardt@onslowcountync.gov; [Kendrick Stanton](#); [Pat Donovan-Brandenburg](#); andy-bourland@jacksonvillenc.gov; [Connie Marlowe](#); [Boyett, Stephen](#); mccall@villagebhi.org; ficalabash@atmc.net; [Rhonda Wooten](#); [Steve Edwards](#); judge@ci.oak-island.nc.us; [Courtney Milliron](#); keith@oibgov.com; [Whiteside, Justin](#); [Kiley Barefoot](#); [Katie Atkins](#); sdills@sunsetbeachnc.gov; [Carey White](#); CBouffard@nhcgov.com; [Baena, Andres](#); wbiddle@nhcgov.com; [Hardison, Jeremy](#); gloria.abbotts@carolinabeach.org; haley.moccia@carolinabeach.org; [John Batson](#); [Bethany White](#); twilson@towb.org; [Oquinn, Robert](#); [Deb Hill](#)
Cc: [Renaldi, Ronald](#); [Spivey, Kelly](#); [Styron, Heather M.](#); [MacPherson, Tara](#); [Howell, Jonathan](#); [Simmons, Christy](#); [Carver, Yvonne](#); [Davis, Ellie](#); [Loeffler, Sarah W](#); [Cynthia Rountree](#); [Vaughan, Kent D](#); [Staples, Shane](#); [Grandy, Ashley](#); [Cannon, Amanda J](#); [Guthrie, Kara L](#); [Hall, Wayne P](#); [Martin, Tina R](#); [Amico, Patrick J](#); [Dail, Jason](#); [Hall, Bryan L](#); [Beachman, Kelsey](#); [Brock, Brendan O](#); [Pietila, Tanya K](#); [Gerace, Kimberly J](#)
Subject: Local Permit Officer Quarterly Reports DUE JAN 20th and Christmas Tree Guidance
Date: Tuesday, January 3, 2023 3:10:00 PM
Attachments: [Christmas Tree Recycling Guidance 2022.pdf](#)
[image001.png](#)

Good afternoon LPOs,

I hope everyone had a nice holiday season with your families and friends. The N.C. Division of Coastal Management is providing the following guidance (attached) to property owners, organizations and towns that plan to accept natural Christmas trees for use in dune restoration and/or beach sand fencing. Feel free to call us if you have any questions or need of assistance with these requests.

Also, with the end of the 2nd quarter, we will soon be working to process your reimbursements. In order to do so, we would like to receive all quarterly reports by **5 p.m. on Friday, January 20, 2023.**

Please submit all quarterly reports to your local field office:

Elizabeth City

Ella Godfrey

ella.godfrey@ncdenr.gov

Morehead City

Amanda Cannon

amanda.cannon@ncdenr.gov

Washington

Kent Vaughan

kent.vaughan@ncdenr.gov

Wilmington

Kimberly Gerace

Kimberly.Gerace@ncdenr.gov

Thanks for all that you do and feel free to let me know if you need any assistance.

Robb Mairs

LPO Minor Permits Coordinator

North Carolina Division of Coastal Management

North Carolina Department of Environmental Quality

127 Cardinal Drive Extension

Wilmington, NC 28405

Office: (910) 796-7301

Cell: (910) 789-2577 (preferred)

Robb.Mairs@ncdenr.gov

Click [HERE](#) to Find the DCM Field Rep in your CAMA region.



NC Division of Coastal Management Guidance for Recycling Natural Christmas Trees as Sand Fencing

The N.C. Division of Coastal Management is providing the following guidance to property owners, organizations and towns that plan to accept natural Christmas trees for use in dune restoration and/or beach sand fencing.

Natural Christmas trees may be used for sand fencing but must be free of decorations and should be placed in a manner that meets the State's rules for sand fencing.

Christmas trees should be placed as far landward as possible and should not impede existing public access to the beach, recreational use of the beach or emergency vehicle access. In addition, trees should not be installed in a manner that could impede, trap, or otherwise endanger sea turtles, nests or hatchlings when the nesting season returns in a few months. For example, trees should be installed at an angle no less than 45 degrees to the shoreline, no more than 10 feet seaward of the toe of the natural dune, and no less than seven feet between trees.

If sand fencing is present, a seven-foot separation between trees and sand fencing sections must also be maintained. Rows should be single tree width and not installed in conjunction with sand fencing. Unvegetated beach berms, or created "starter dunes," are not considered natural dunes. Trees should not be placed at the seaward toe of these berms, starter dunes, or on the open beach.

To ensure compliance with all of the rules that apply to sand fencing, please review the standards outlined in [15A NCAC 07K .0212](#). If the proposed layout of trees along the beachfront does not meet these criteria, applicants should submit a CAMA [Minor Permit application](#) for review. For more information, please contact the local CAMA permitting authority or appropriate [DCM district office](#).



☒ North Carolina Wildlife Resources Commission ☒

Cameron Ingram, Executive Director

January 31, 2023

Braxton Davis, Director
 North Carolina Division of Coastal Management
 NC Department of Environmental Quality
 400 Commerce Avenue
 Morehead City, NC 28557

Re: Variance Petition – Town of Ocean Isle, Hay Bales Placement on Oceanfront Beach

Dear Director Davis,

Thank you for offering the NCWRC (NC Wildlife Resources Commission) an opportunity to provide comments on the variance request submitted by the Town of Ocean Isle dated January 11, 2023. The 15A NCAC 07h .0311(c) specifies that NCWRC and USFWS (US Fish and Wildlife Service) shall have the opportunity to review CAMA permit applications for sand fencing to ensure it is not *“installed in a manner that impedes, traps or otherwise endangers sea turtles, sea turtle nests or sea turtle hatchlings...[and] to determine whether or not the proposed design or installation will have an adverse impact on sea turtles or other threatened or endangered species.”* This variance request has been reviewed in accordance with this statute.

The Town of Ocean Isle has stated expense and availability of sand fencing as justification for this variance proposal to use bales as a tool to build or protect dunes. Additional information was not included in the proposal specific to the effectiveness or environmental considerations for bale substitution. NCWRC would like to emphasize that while there may be an opportunity to consider a related research project on bales as a potential alternative to sand fencing, we do not believe that such a study is appropriate for this project proposal. Additionally, a study could not be adequately designed and implemented in the timeframe this variance request would require. The development of such a research project should involve significant consultation between NCWRC, NCDCM and USFWS staff without the assumption that the results would benefit this specific project.

We understand that your office is requesting better insight on our concerns and that science and literature references are scarce related to North Carolina specifically and for this scenario. In review of the literature references included in the Town’s petition, we do not think they offer similar circumstances to this proposal due to differences in environment, habitats, species

presence, type of material, design, and methodology. Therefore, we do not believe these references should be used by NCDRCM to support the use of hay or straw bales on North Carolina beaches. Hopefully the challenges the Town has experienced in securing sand fencing have been or will be soon resolved. Therefore, we defer to the USFWS concerning the applicable science and literature for consideration of adverse impacts to sea turtles and other threatened and endangered species in relation to bales in not only North Carolina but range wide. The NCWRC supports the concerns as outlined in USFWS's January 27, 2023 letter and has nothing additional to add.

Lastly, previous comments shared by NCWRC regarding the adverse impact bales may have on important ocean habitats and species have not changed. We would like to note that we have not objected to the use of appropriately installed sand fencing to protect the Town's interests as stated in their petition. These comments are specific to the substitution of traditional fencing with bales. We do not have any additional information to provide since our last letter.

Thank you for the opportunity to comment during this variance petition. Please do not hesitate to contact Maria Dunn at 252-495-5554 if there are additional comments or questions.

Sincerely,

Shannon Deaton, P.E. // Chief
Habitat Conservation Division



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Raleigh ES Field Office

551-F Pylon Drive

Raleigh, North Carolina 27606

January 27, 2023

Braxton Davis, Director
North Carolina Division of Coastal Management
NC Department of Environmental Quality
400 Commerce Avenue
Morehead City, NC 28557

Re: Placement or Use of Hay Bales on the Beach

Dear Mr. Davis,

Thank you for your January 20, 2023 email, requesting comments from the U.S. Fish and Wildlife Service (Service) on the Town of Ocean Isle Beach's petition for a variance from the Coastal Resources Commission (CRC). The Town requests the authorization to use hay bales on the beach, within the same dimensions allowed for sand fencing.

As stated in our June 16, 2022 email on the proposed project, the Service has concerns about the use of pine straw, oat or wheat straw, or hay bales on the beach due to the potential for obstruction of nesting habitat, introduction of invasive species or species not usually found in a beach environment (seeds, live plants, bacteria, or insects within a bale), potential changes to sand quality and water quality from the presence of bales, and decomposition of the bales. To our knowledge, no studies have been conducted on the presence of bales on the beach, or how they weather, decompose, and are incorporated into the beach sand. We are unaware of any other states that allow the placement of bales on the beach. The Service has discussed our concerns with your staff in previous meetings. A pilot project may provide additional information while officially avoiding a statewide approval of similar projects, but the Service is already aware of the use of pine straw bales on other North Carolina beaches (e.g. Nags Head), and just having those bales on the beach may give others the idea. We continue to recommend that the project not be authorized, due to potential adverse affects to nesting sea turtles and other oceanfront beach species.

Federally listed species

Federally listed species that are present in the proposed Ocean Isle Beach action area include nesting sea turtles, red knot, piping plover, and seabeach amaranth. Although there is a potential for impacts to all of these species, our main concerns are for sea turtles and seabeach amaranth.

Nesting sea turtles

Sea turtle nests and eggs require clean sand that is easy for a sea turtle to dig in. Native beach material such as light-colored sand is the best for digging of nests and incubation of sea turtle eggs. While incubating, sea turtle eggs and embryos require adequate gas exchange across the

surface of the egg (oxygen and carbon dioxide), so the embryos do not suffocate. In addition, in the nest location, certain ranges of sand moisture and temperature are required for successful incubation of sea turtle eggs, and these ranges are typically best supported by clean, native beach sand. After incubation, the area between the nest and the surface must consist of sand that allows hatchling sea turtles to dig their way to the surface. Sediment, dense roots, or other materials that are significantly different from natural beach sand poses problems for the female sea turtle to dig her nest and deposit her eggs, and also poses problems for healthy incubation and hatching of sea turtle eggs.

Installed bales may obstruct sea turtle nesting habitat. When placed on otherwise good habitat, the bale blocks the area from being used. There is the potential to entrap adult females or hatchlings behind them, making it harder for them to find the ocean.

Bales may introduce nutrients to the sand, which may encourage the overgrowth of vegetation and make it more difficult for digging. In other areas of the state, individuals use organic wheat or oat straw bales in raised beds as a growing medium for vegetables and flowers (Tullock 2015; <http://joegardener.com/podcast/gardening-in-straw-bales/>, accessed January 26, 2023; <https://www.gardeners.com/how-to/straw-bale-gardens/8882.html>, accessed January 26, 2023).

Decomposition of the bale results in very high temperatures inside the bale. It is unclear how these higher temperatures may affect a nest that is incubating close by. The interior of oat/wheat straw bales may approach 130 to 140 degrees Fahrenheit once the interior of the bale begins to decompose (Tullock 2015; <https://www.gardeners.com/how-to/straw-bale-gardens/8882.html>, accessed January 26, 2023). It is unclear how the high temperatures in the bales would affect surrounding sea turtle nesting habitat.

If a bale traps enough wind-blown sand to be buried, it would still be incompatible material for a sea turtle nest, and it is unclear how a buried bale would affect the surrounding sand with respect to moisture levels, temperature, residual pesticides, and nutrients. If a sea turtle dug a nest in an area where a bale decomposed or was buried, there is the potential that the temperatures and oxygen exchange will not be appropriate to allow the nest to incubate. Bales that are not completely broken down would be an impediment to digging, and if the nest was dug directly next to a bale, the same issues could arise with temperature and gas exchange.

Bales may fall apart rather quickly, especially in the sunlight during warm weather, and may collapse, spreading the contents of the bale across the beach. However, the straw itself may persist for a year or more (<http://joegardener.com/podcast/gardening-in-straw-bales/>, accessed January 26, 2023; <https://www.gardeners.com/how-to/straw-bale-gardens/8882.html>, accessed January 26, 2023), littering the beach or washing into the water. The decomposition process inside the bale relies on bacteria that are naturally present in the bale, and it is unclear how the bacteria may affect the nesting sands of the beach. When a bale has decomposed, it forms compost, which presumably would be left on the beach. Compost is not good habitat for sea turtle nests. The Service believes that once a bale is used in an area, if it decomposes, it is likely that some project proponents will replace the decomposed bale over and over, resulting in a larger cumulative local impact from composted materials, incompatible nesting habitat, invasive species, residual pesticides, and nutrients.

There is the potential for a bale to harbor plant seeds or insects that are not typically found on a beach. Plants (not hay or straw) may often sprout and grow in a bale for many months and produce additional seeds. An insect nest such as an ant nest, could survive for months in a bale. Ants and other insects are known to prey on sea turtle eggs.

Seabeach amaranth

Installed bales would obstruct seabeach amaranth habitat. It is unclear how the potential for nutrient or invasive species introduction may affect seabeach amaranth that sprout nearby.

Defeo et al. (2009) cite biological invasions of both plants and animals as global threats to sandy beaches, with the potential to alter the food web, nutrient cycling and invertebrate assemblages. Although the extent of the threat is uncertain, this may be due to poor survey coverage more than an absence of invasions.

General comments

1. The Service does not recommend approval of the proposed pilot project or approval of any other bales on the beach, due to the potential impacts and also due to the ease with which these structures may be installed. There is a foreseeable difficulty in enforcing compliance with any applicable requirements. The ease with which any capable adult could install bales on the shoreline makes it more difficult to adequately monitor compliance and enforce applicable restrictions. Bales may be purchased for less than \$10 apiece at home improvement and gardening stores. Although that in itself is not the concern, even a pilot project would compromise the ability of the state agencies to limit activities on other private properties. There is great potential for the use of bales to proliferate on private and public properties with or without state authorization, which would pose an even greater cumulative risk to sea turtles and other beach wildlife. Once one decomposed, another could quickly be set in the same place.
2. Sandy beaches are naturally nutrient-poor and the species present have evolved to be successful in a nutrient-poor habitat. Sandy ocean beaches generally receive nutrients from sources that originated in other environments (i.e. turtle eggs, wrack, washed-up macroalgae or carcasses), but these nutrient inputs are typically short-lived or seasonal (Diane et al. 2017). Introduction of large amounts of decomposing hay/straw bales would introduce nitrogen and phosphorus to the beach and nearshore systems in excess of natural levels. It is unclear what the impacts would be nutrient cycling, the food web, and macroinvertebrate species assemblages on the beach and in the nearshore. Such impacts may be very difficult to measure with one pilot project, but could cumulatively have an adverse impact on local shoreline ecosystems and the species that use them.
3. It does not seem that one bale is tall enough to catch significant amounts of sand. In Florida, when sand fencing is buried by more than 50% (typically at a height of 24 inches above existing ground), it is required to be removed because it often stops collecting sand (FDEP 2020). Partially or completely buried bales would be difficult to remove, but would continue to obstruct nesting habitat and release nutrients and bacteria as it

decomposes beneath the surface. Stacking multiple bales would only multiply the potential for impacts in a particular area.

4. The presence of residual pesticides and herbicides in bales is likely, particularly for oat and wheat straw bales. Hay bales are designed for feeding of animals and are less likely to carry pesticides. Hay bales typically consist of Timothy grass, alfalfa, or Bermuda grass, and instead of persistent pesticides and herbicides, will have more seeds and live plant material that may sprout. The impact that residual pesticides and herbicides may have on the sediment quality of the beach and water quality of the nearshore is unclear.

Thank you for the opportunity to comment on this requested variance. If you have questions, please contact Kathy Matthews at Kathryn_matthews@fws.gov.

Sincerely,

Pete Benjamin
Field Supervisor

Literature Cited

Defeo, O., A. McLachlan, D.S. Schoeman, T.A. Schlacher, J. Dugan, A. Jones, M. Lastra, and F. Scapini. 2009. Threats to sandy beach ecosystems: a review. *Estuarine, Coastal and Shelf Science* 81:1–12.

Diane Z.M., et Le Gouvello, Ronel Nel, Linda R. Harris, Karien Bezuidenhout. 2017. The response of sandy beach meiofauna to nutrients from sea turtle eggs. *Journal of Experimental Marine Biology and Ecology* 487:94-105.

Florida Department of Environmental Protection (FDEP). 2020. Sand Fencing Guidelines. Office of Resilience and Coastal Protection; Coastal Construction Control Line Program. 1 page.

Tulloch, J. 2015. *Straw Bale Gardening. Idiot's Guides.* Penguin Group, New York, New York. 218 pages.

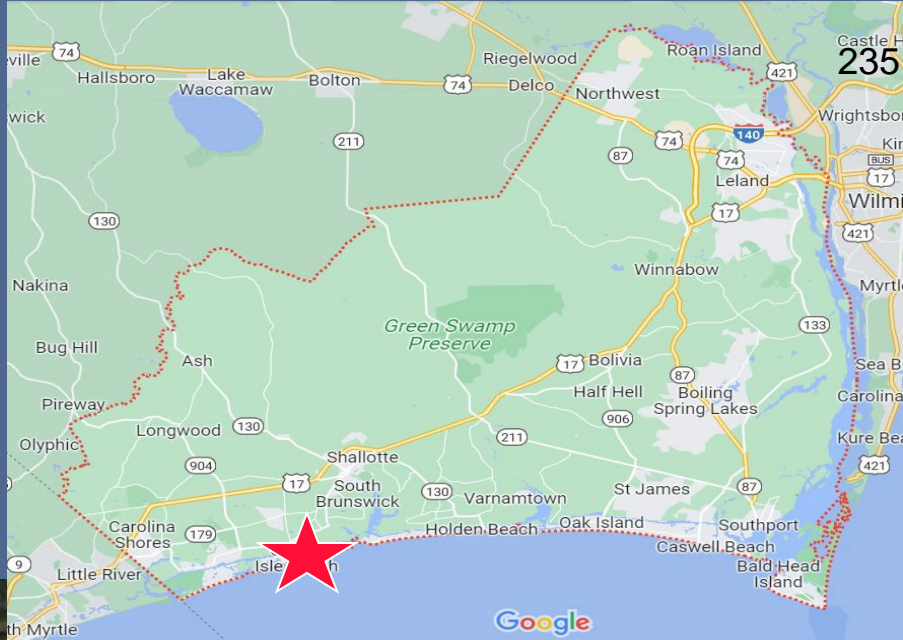


Variance Request for:
Town of Ocean Isle Beach
23-01

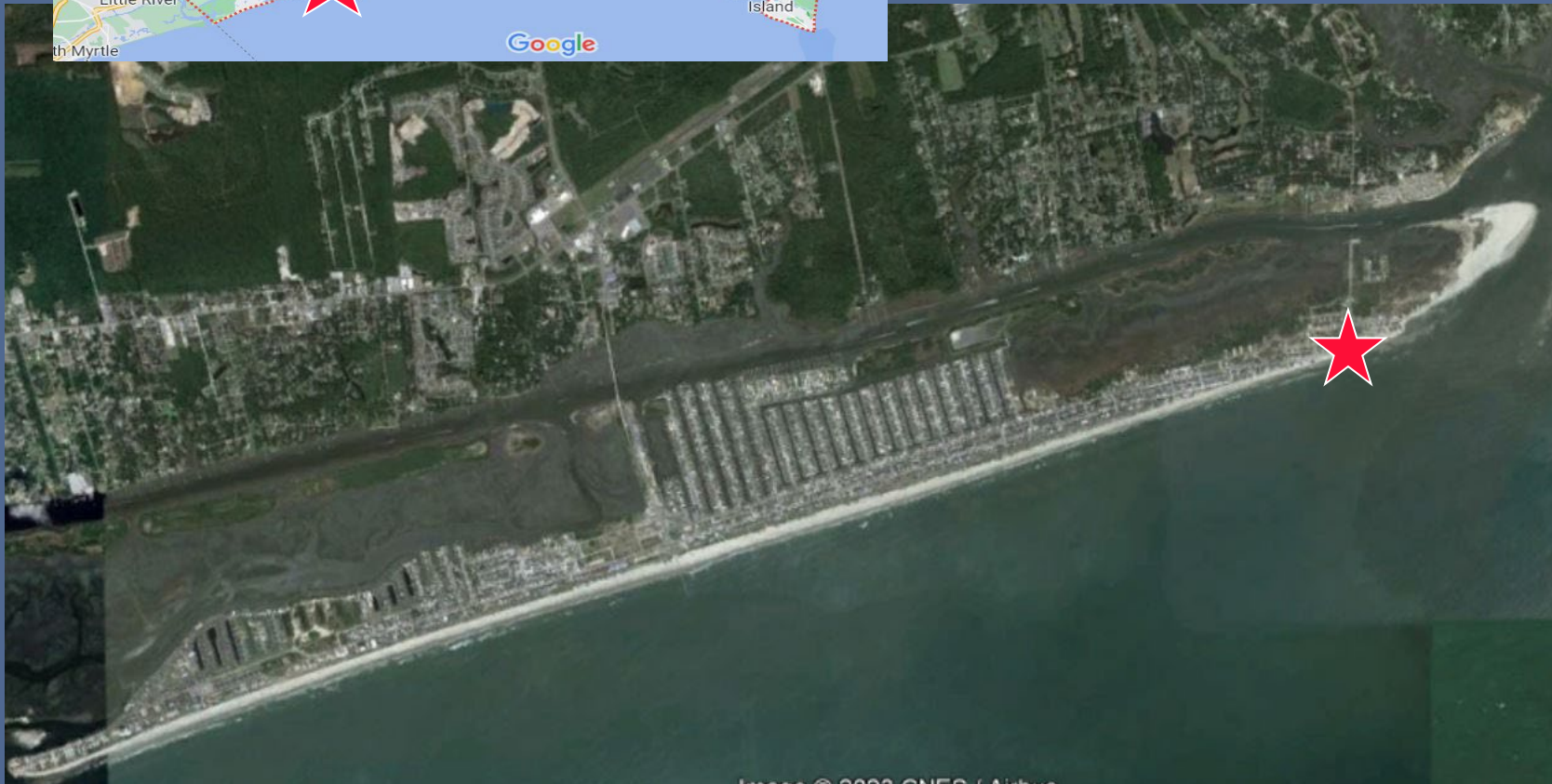
Project Location:
Various Beach Accesses on East End
Ocean Isle Beach, NC 28469
Brunswick County, NC
February 23, 2023



Photos courtesy of Google
Maps 2021



★ = Ocean Isle Beach





★ = Hay Bale/Pine Straw Project Locations

Photo courtesy of Petitioner 2021-2022

237



Before Construction: Facing west along Ocean Isle Beach's east end on 9/14/21



After Construction: Facing west along Ocean Isle Beach's east end on 4/8/22

Photo courtesy of Petitioner 2021-2022

238



Before Construction: Facing northeast on 11/16/21



After Construction: Facing northeast on 4/11/22

Photo courtesy of Petitioner 2021-2022

239



Before Construction: Facing east from above Columbia St. on 11/16/21



After Construction: Facing east from above Columbia St. on 4/11/22

Photo courtesy of Petitioner 2021-2022

240



Before Construction: Facing east at Shallotte Blvd. on 11/10/21



After Construction: Facing east at Shallotte Blvd. on 4/8/22

Photo courtesy of Petitioner 2022

241



- Post groin installation looking west towards E. 3rd St.
(Photo Credit: OIBmickey)

Photo courtesy of Petitioner 2022

242



- Post groin installation looking east towards Shallotte Inlet. (Photo Credit: OIBmickey)









Photo courtesy of Petitioner 2022

247



- Taken in front of 474 E. Third St. – Looking west toward 470 E. Third St. during Hurricane Ian

Photo courtesy of Petitioner 2022

248



- Backyard of 455 E. Third St. – Looking north toward homes on E. Fourth during Hurricane Ian

Photo courtesy of Petitioner 2022

249



- 469 E. Third St. – Looking east toward Holden Beach during Hurricane Ian

Photo courtesy of Petitioner 2022

250



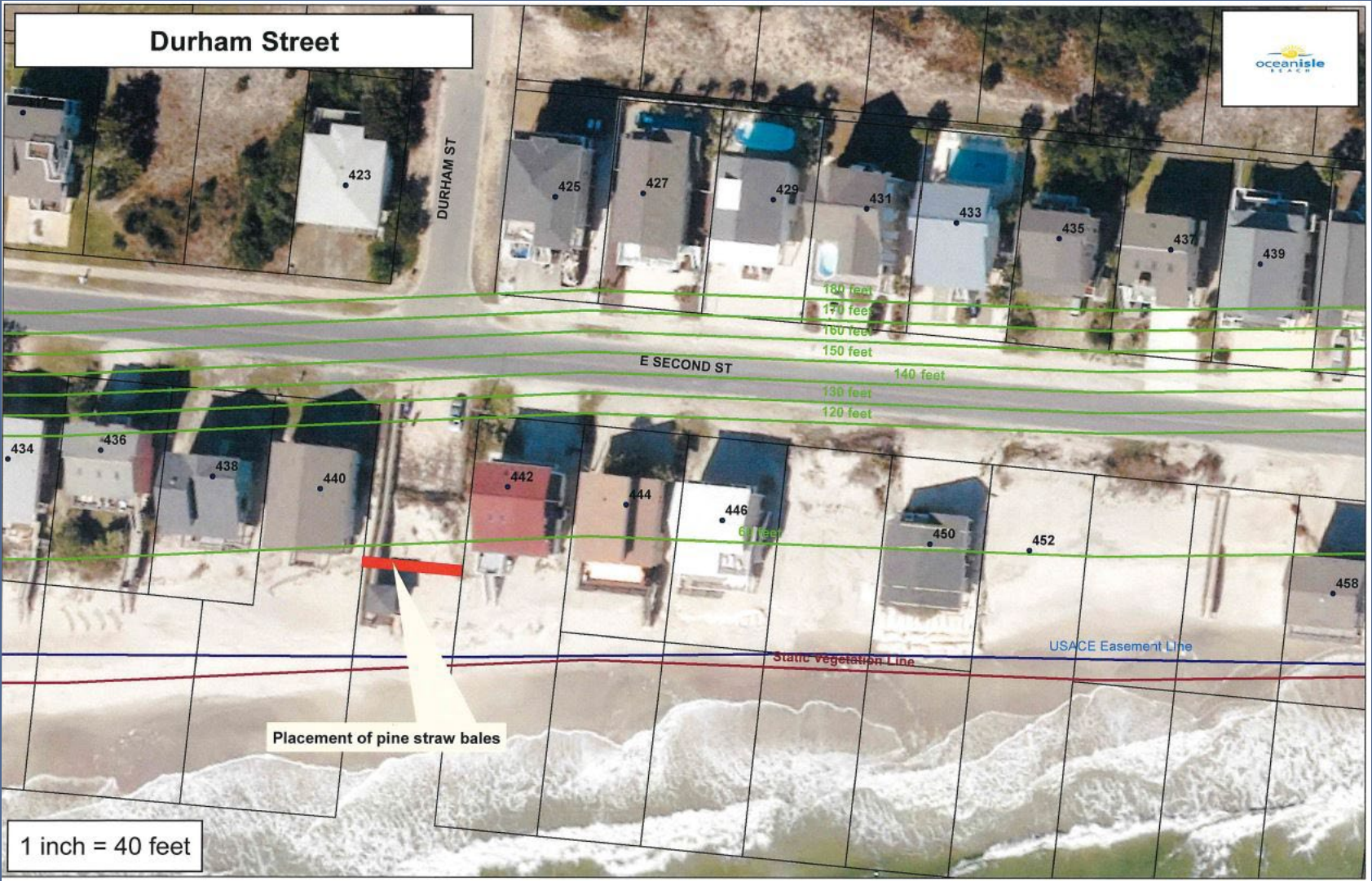
- Shallotte Blvd. – Looking east down E. Third St. during Hurricane Ian





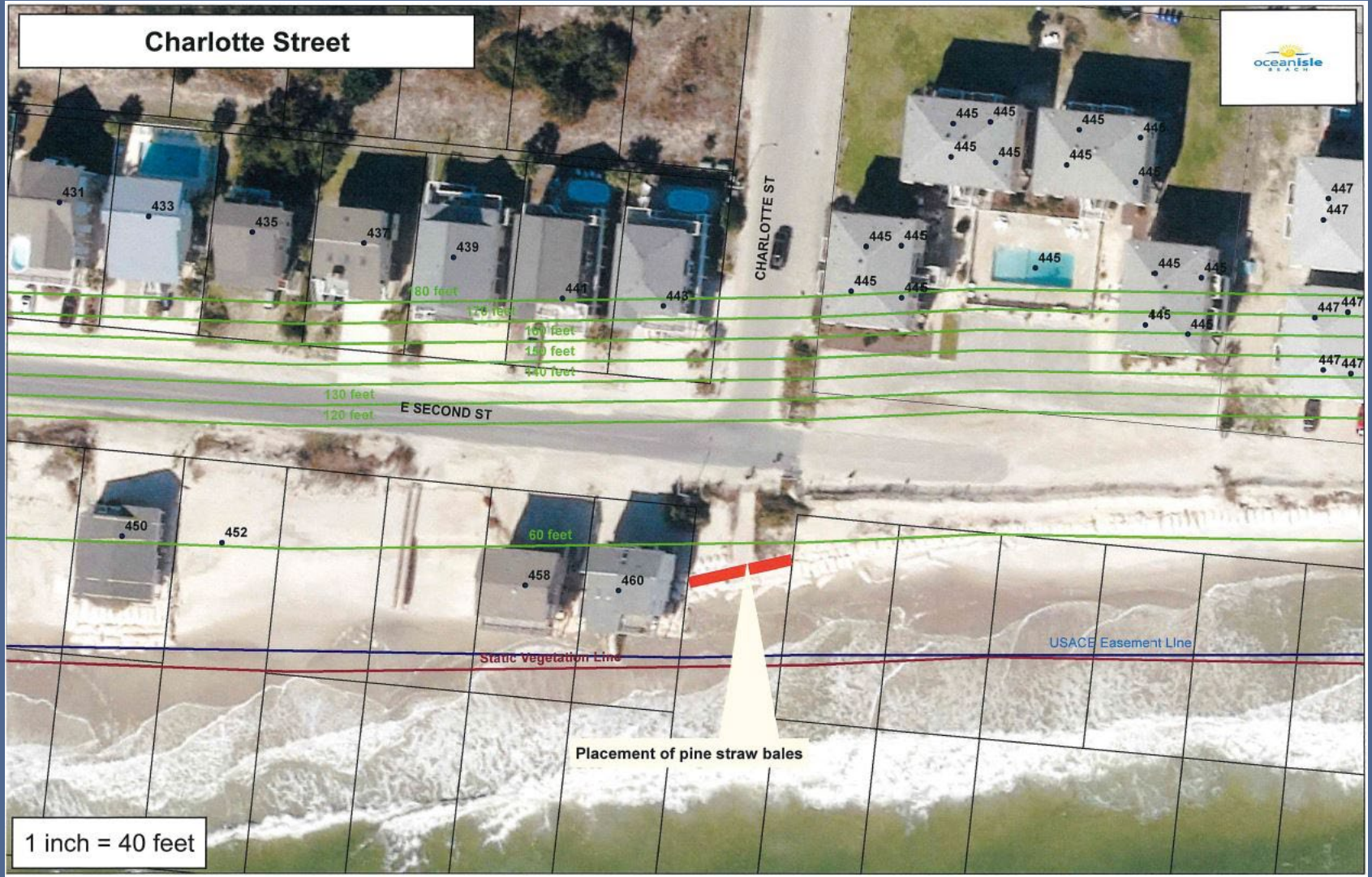
Approx. Toe of Berm

- Lumberton St. Beach Access
- Proposed Pine Straw Bales
- Approximately 130ft from toe of berm to High Water Line



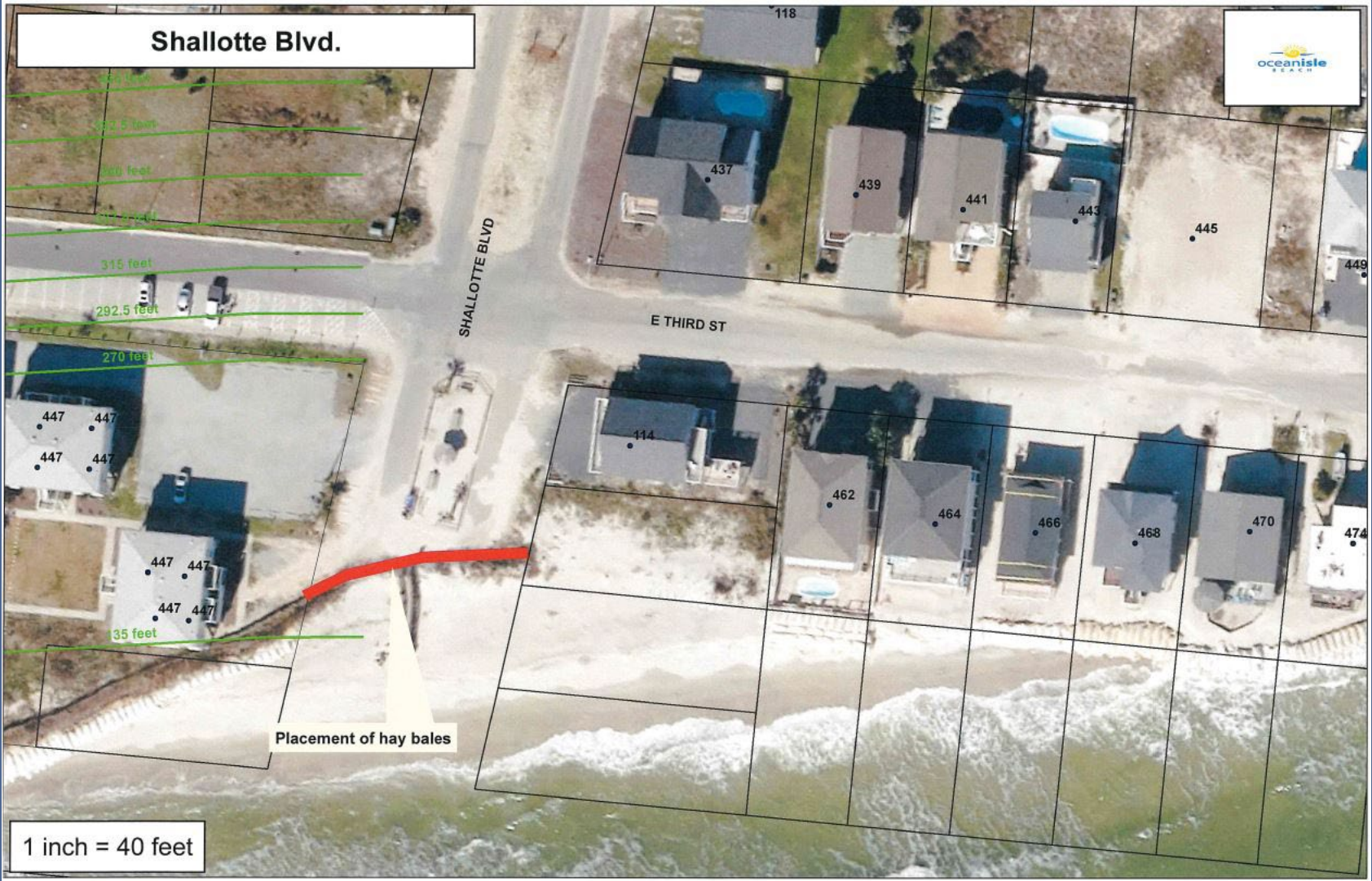


- Durham St. Beach Access
- Proposed Pine Straw Bales
- Approximately 179ft from toe of berm to High Water Line





- Charlotte St. Beach Access
- Proposed Pine Straw Bales
- Approximately 112ft from toe of berm to High Water Line





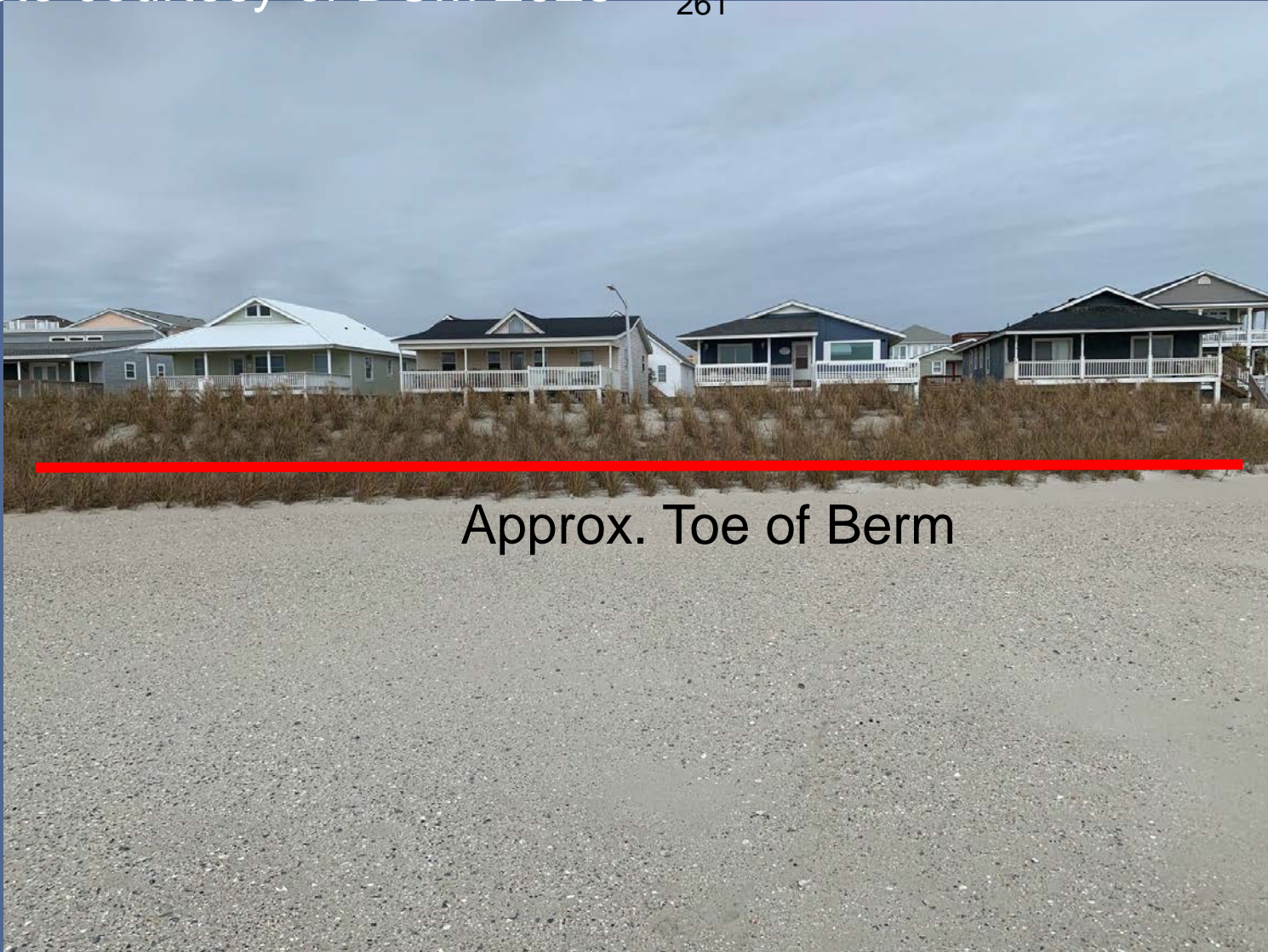
Approx. Toe of Berm

- Shallotte Blvd. Beach Access
- Proposed Hay Bales
- Approximately 212ft from toe of berm to High Water Line



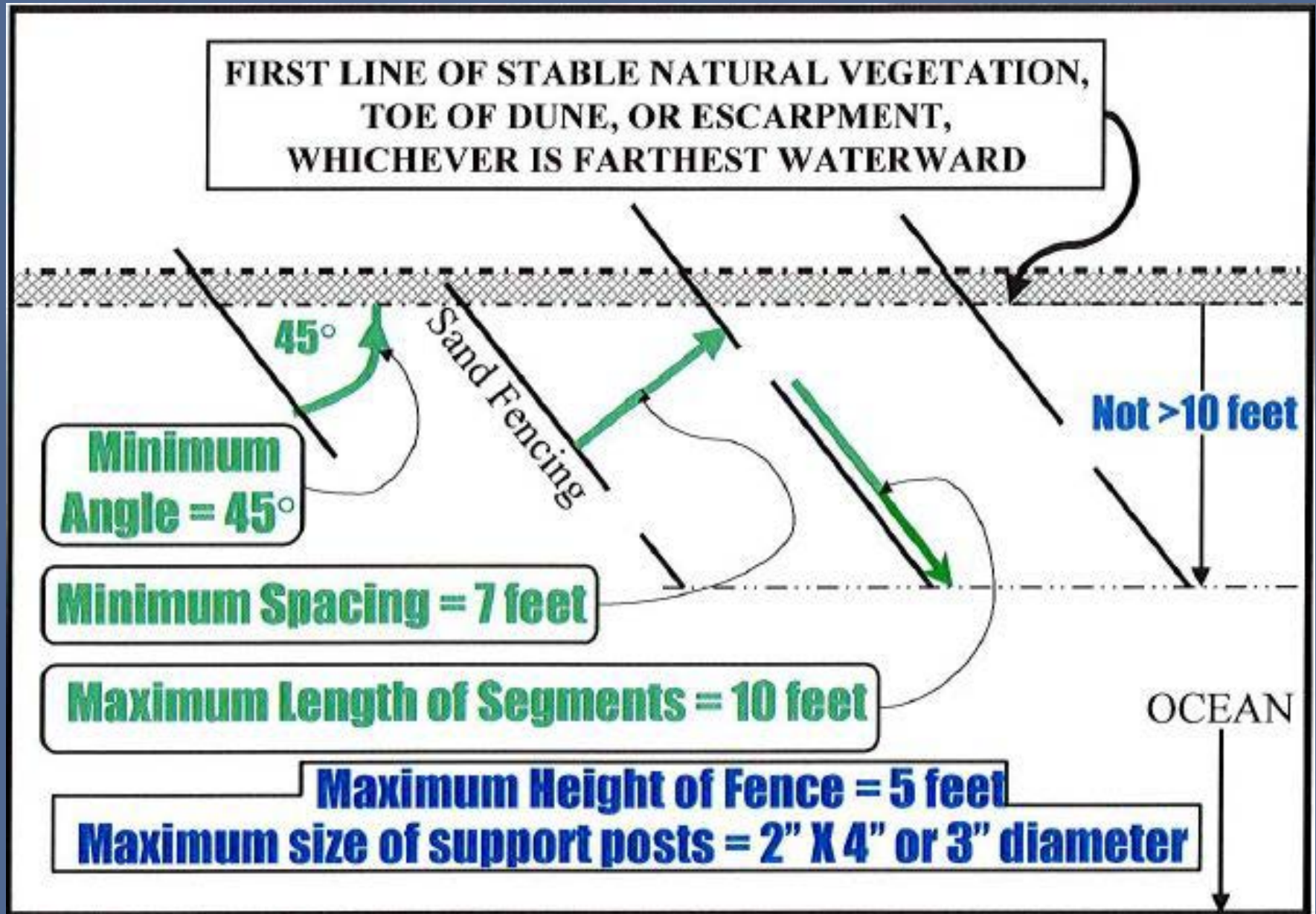


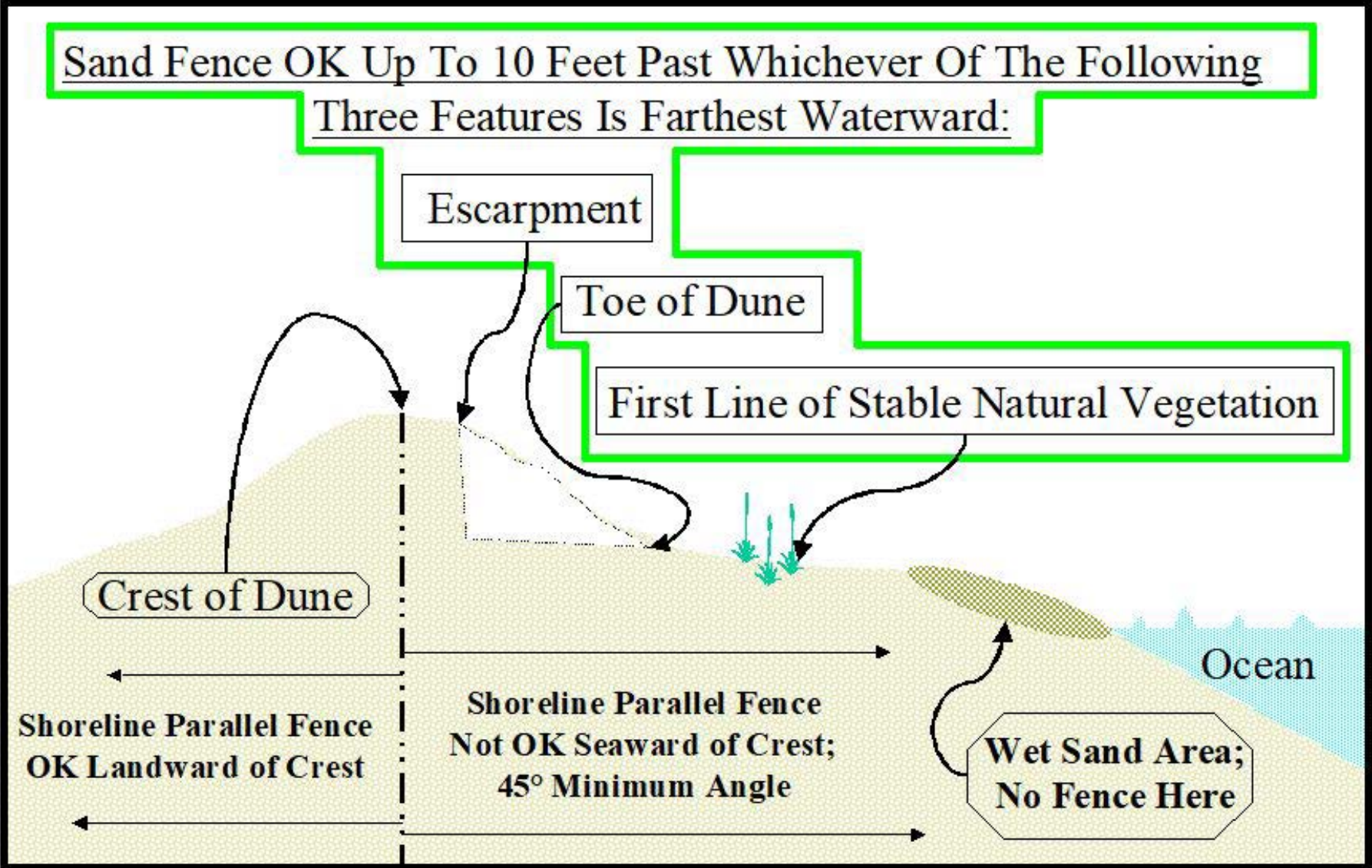
- Columbia St. Beach Access
- Proposed Hay Bales
- Approximately 233ft from toe of berm to High Water Line



Approx. Toe of Berm

- East end of E. 3rd St.
- Proposed Hay Bales
- Approximately 300ft from toe of berm to High Water Line





February 23, 2023– Petition for Variance

DCM
Division of
Coastal Management



VARIANCE CRITERIA

15A NCAC 07J.0703(f)

To grant a variance, the Commission must affirmatively find each of the four factors listed in G.S. 113A-120.1(a).

- (1) that unnecessary hardships would result from strict application of the development rules, standards, or orders issued by the Commission;**
- (2) that such hardships result from conditions peculiar to the petitioner's property such as location, size, or topography;**
- (3) that such hardships did not result from actions taken by the petitioner; and**
- (4) that the requested variance is consistent with the spirit, purpose and intent of the Commission's rules, standards or orders; will secure the public safety and welfare; and will preserve substantial justice.**