

TOWN OF SEABROOK ISLAND

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April 9, 2018

Ms. Barbara Neale
1362 McMillan Avenue
Suite 400
Charleston, SC 29405

Re: Proposed DHEC-OCRM Beachfront Jurisdictional Line Revisions
Comments Provided by the Town of Seabrook Island

Dear Ms. Neale:

On October 6, 2017, the South Carolina Department of Health and Environmental Control's Office of Ocean and Coastal Resource Management (hereinafter, "DHEC-OCRM"), pursuant to its statutory mandate, published its proposed revisions of the state beachfront jurisdictional lines (hereinafter, the "Proposed Revisions").¹ At the same time, DHEC-OCRM announced a thirty (30) day comment period which was scheduled to close on November 6, 2017. On November 3, 2017, the comment period was extended to close April 6, 2018, and, on March 12, 2018, the comment period for a number of coastal communities, including Seabrook Island, was further extended to close July 15, 2018. The Proposed Revisions on Seabrook Island are scheduled to be finalized on September 7, 2018. This letter is written by the Town of Seabrook Island (the "Town") and the Seabrook Island Property Owners Association ("SIOPA"), on behalf of the residents and property owners of the Town of Seabrook Island in response to DHEC-OCRM's request for comments.

As noted in the Seabrook Island Line Report, which accompanied the Proposed Revisions, (hereinafter, "SI Line Report") the Town is a barrier island, approximately four miles long, situated between the North Edisto River Inlet and Captain Sams' Inlet in Charleston County. Both, the southwestern portion of the island adjacent to the North Edisto River and the northeastern end of the island adjacent to Captain Sams' inlet,

¹ South Carolina Code of Laws §48-39-280.

have been classified by DHEC-OCRM as "Unstabilized Inlet Zones" while the middle portion of the island, between Camp St. Christopher and Beachcomber Run, has been classified as a "Stabilized Inlet Zone."

There are a number of single family homes and villas and one commercial structure – the Pelican's Nest restaurant and swimming pools owned by the Seabrook Island Club – on Seabrook Island that are located, wholly or partially, seaward of the proposed baseline (hereinafter, the "PBL").² In addition, there are single family homes and villas that are located, either wholly or partially, in the setback area between the PBL and the proposed setback line (hereinafter, "PSL"; together, the PBL and the PSL are hereinafter collectively referred to as the "Jurisdictional Lines").

There are two areas of Seabrook Island that will be significantly and adversely impacted by the Proposed Revisions on Seabrook Island. The first, the northern portion of the Central Stabilized Inlet Zone, between monument 2515 (Pelican Watch Villas) and monument 2535 (northeast of the Seabrook Island Club), and the second, part of the Northern Unstabilized Inlet Zone, between monument 2565 (near Seaview Drive) and the northeastern end of Oyster Catcher Court.

In a third portion of the Island, the southern portion of the Central Stabilized Inlet Zone, between a point just south of monument 2515 and Camp Saint Christopher, the Jurisdictional Lines are proposed to move seaward of the existing base and set back lines. It is noted that, in accordance with SC Code §48-39-260, seaward relocation of the jurisdictional base line subsequent to December 31, 2017, is prohibited. Hence, any property owners who would be affected by the proposed seaward shift could be negatively impacted by the delay in adoption of the proposed jurisdictional lines.

The Central Stabilized Inlet Zone, between monument 2515 and monument 2535.

This portion of the Seabrook Island beach is armored with a rock revetment. The revetment is completely exposed between monuments 2515 and 2525 and partially exposed to just south of monument 2545.

Where the revetment is completely or partially exposed, DHEC determined the baseline position using the volume calculation method relying on transects at monuments 2520 and 2525 (armored beachfront) and using as a reference a transect at monument 2570 (unarmored beachfront). Applying the volume calculations to the reference transect, it was concluded that, but for armoring, the primary dune crest at

² From the end of the Jurisdictional Lines at Privateer Creek to Captain Sams Inlet, there are twenty-nine (29) structures (including the Seabrook Island Club pools) that are wholly or partially seaward of the proposed setback line and landward of the existing setback line. In the same area, there are twenty-four (24) structures that are wholly or partially seaward of the PBL and landward of the existing baseline.

monument 2520 would be located 123 feet landward of the revetment and the primary dune crest at monument 2525 would be located 48 feet landward of the revetment. Using the offsets for monuments 2520 and 2525, the baseline location was set in the area between monument 2515 and monument 2545, essentially extending the use of the reference transect at monument 2570 throughout that area. The result is a significant shift landward of the PBL from the current base line on the basis that there is less sand on this portion of the beach now as compared with 2009 – for the reasons stated herein, we do not believe that assumption is correct.

For the reasons stated herein, the Town objects to the use of monument 2570 as a point of reference for comparison with monuments 2520 and 2525. Monument 2570 is located within an open coast shoreline; and, accordingly, the sand volume at that station would naturally have more sand in the profile than would the inlet monuments 2520 and 2525 where the profiles are much shorter and steeper. DHEC-OCRM should have taken this difference into account in making its determination and realized that monument 2570 is not an appropriate reference point for comparison with measurements at monuments 2520 and 2525.

A more appropriate reference point would have been a profile near Renken Point (monument 2532) at Amberjack Court. That profile is along the northern channel and, since around 2010, has exhibited a definable fore dune. The effect of this change in reference point would be to move the PBL seaward but still landward of the seawall crest from the Beach Club (east of monument 2025) to Beach Club Villas (south and southwest of monument 2515). Alternatively, and instead of using a single reference point, a more appropriate alternative would have been for DHEC-OCRM to have used a variable profile volume from east to west for this section of the beach (e.g., highest at Amberjack Court near monument 2532 and lowest at Beach Club Villas near monument 2515). This methodology would be consistent with the natural variation in profile volumes in the transition from ocean [front?] profiles to inlet margin profiles. We think that, had DHEC-OCRM used this alternative methodology, the result would have been a seaward shift of the Jurisdictional Lines between the Beach Club and the Beach Club Villas in the areas of monuments 2515 and 2520.

In connection with its periodic relocation of the mouth of the Kiawah River, the Seabrook Island Property Owners Association has retained Coastal Science and Engineering (“CSE”) as its consultant. In that capacity, CSE has conducted thirty (30) years of beach surveys and reports which include, among other things, graphs and tables showing sand volume changes taken from a network of thirty-three (33) beach profile stations located on Seabrook Island. As a general statement, we can say that, in the general area where both volume calculations were made (monuments 2020 and 2025), CSE’s 2017 Monitoring Report reports volume calculations dating back to 2006 significantly higher than that reflected in the SI Line Report.

We have been advised that the data used in the calculation of the "sand volume method" was collected in 2016 and 2017. Seabrook Island suffered significant weather events in 2015(Hurricane Joaquin), 2016 (Hurricane Matthew) and 2017 (Hurricane Irma). Each of these events caused substantial beach and dune erosion. Measurements taken after 2015 may not be representative of typical beach conditions given that the highly erosional effects of these storms continue to adversely affect our beaches.

There are two areas of our beach - one immediately southwest of monument 2525 and a second at Bonita Court some 400 yards southwest of monument 2545 – where the proposed Jurisdictional Lines clearly exhibit atypical "landward bulges." We have been informed that these anomalies are the result of the "buffering process" utilized by DHEC-OCRM's computer program that uses a calculated offset distance between the PBL and revetment crest to locate the Jurisdictional Lines in these areas. The Jurisdictional Lines in these two areas should be straightened out to correct the apparent anomalies.

The Northern Unstabilized Inlet Zone, between monument 2565 (near Seaview Drive) and the northeast end of Oyster Catcher Court.

In this zone, the baseline is set at the most landward point of erosion in the last 40 years. Specifically, the baseline position is comprised of a wet/dry shoreline position from 1983 and historical vegetation line positions from 1977, 1988, 1993 and 1998.

This area of Seabrook Island's beach is classified by DHEC-OCRM as an unstabilized inlet zone, in which the PBL is, by statute, required to be established "at the most landward point of erosion at any time during the last forty (40) years. [Emphasis Added]" As noted above, DHEC-OCRM has announced that the Jurisdictional Lines for Seabrook Island will be finalized on September 7, 2018. Accordingly, the collection date for data collected in 1977 clearly falls outside of the prescribed forty (40) year window and, therefore, should not have been used.

In addition, we have been advised that the metadata of a 1977 photograph, used in part to determine the historical vegetation line, indicates that the photograph was not to be used to establish measurements. If this particular photograph was used to determine the location of the Jurisdictional Lines, it was done in error.

The PBL between monuments 2565 and 2585 has been moved significantly landward of the existing baseline because a previously unused shoreline from 1977 was included in the analysis. Specifically, the SI Line Report states (SI Land Report, page 4) that the PBL was set at "the most landward point of erosion in the last 40 years"

based, among other things, historical line positions from a number of years, including 1977. As noted above, the use of the 1977 shoreline is not appropriate.

We would also note that this area of the beach has accreted over fifteen hundred (1500) feet since 1972. Documented studies confirm that at least half of this accretion occurred between 1972 and 1979. Considering the extraordinary accretion in this area and the positive sand budget along this part of the beach, there is no rational basis to move the Jurisdictional Lines landward of approximately fifteen (15) dwelling units. We do not believe that there is demonstrative evidence that the shoreline has been located anywhere near the location of the PBL since at least the early 1970's. Indeed, there is photographic evidence which show significant accretion of the beach in this area between 1972 and 1977. Considering the extraordinary accretion in this area and the positive sand budget along this part of our beach, it makes little sense to move the Jurisdictional Lines landward of about fifteen single family residences and villas. We believe there is significant doubt as to whether the shoreline will revert to its early 1970 location, particularly given the significant amount of sand on the Kiawah beaches which stabilize our beaches.

Respectfully submitted,

Town of Seabrook Island

By: 

Ronald J. Ciancio
Mayor

Seabrook Island Property Owners Association

By: 

Julie McCulloch
President

cc: Hon. Mark Sanford
Hon. George E. Campsen III
Hon. Peter McCoy