



November 25, 2019

Sandcastles, LLC
1002 Palmetto Boulevard
Edisto Beach, South Carolina

Elizabeth M. Britton, Elizabeth S. Acken, Shepard N. Dunn, and William A. Dunn
1006 Palmetto Boulevard
Edisto Beach, South Carolina

**RE: Cami Hiers, et al. v. SCDHEC
Docket No. 18-ALJ-07-0023-CC**

Dear Petitioners:

The above-referenced case has been remanded to the S.C. Department of Health & Environmental Control (the Department) for a determination of new beachfront jurisdictional lines under S.C. Code Ann. § 48-39-280. The determination takes into consideration information provided by the Petitioners during the public comment period and with their Request for Final Review and any supplemental information provided during this remand process. The information provided was reviewed, and the Department's response are summarized below.

The two properties listed above are located within a standard erosion zone and within the same general geographic area on Edisto Beach (Figure 1). Only one property, 1004 Palmetto Boulevard, lies between them. Due to the proximity, and because the Petitioners at 1006 referenced the comments associated with 1002, the Department is responding to the points raised by each of these Petitioners in a single letter. On November 17, 2017, these Petitioners submitted materials with their Requests for Final Review which included a letter from R. Cody Lenhardt, Jr. of Lenhardt Law Firm, LLC, a copy of DHEC OCRM's public notice, a letter from Bill Eiser of Eiser Coastal Consulting LLC, and letters and site photos from the Petitioners at 1002 Palmetto Boulevard and 1006 Palmetto Boulevard.

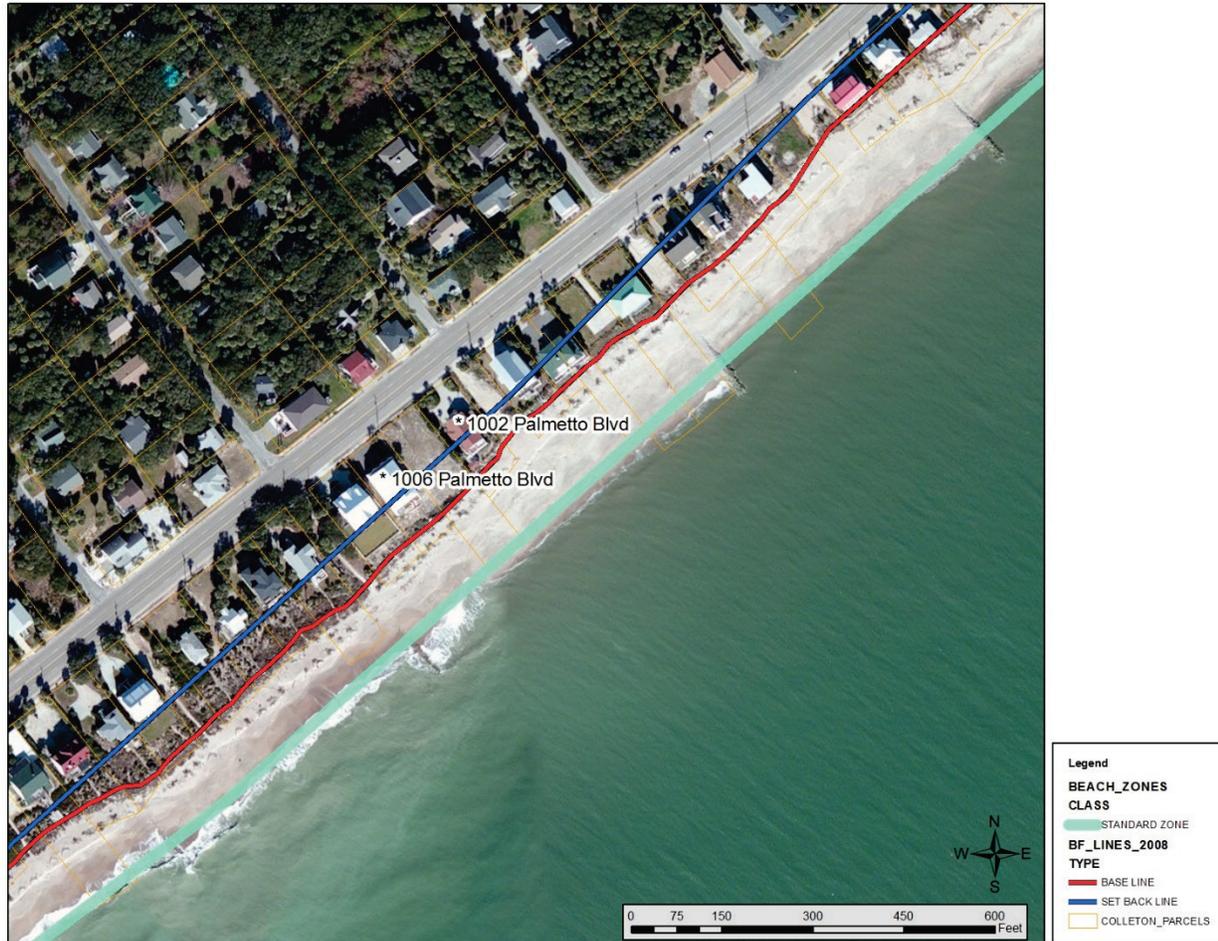


Figure 1: DHEC OCRM Current Baseline and Standard Erosion Zone Designation at 1002 and 1006 Palmetto Boulevard, Edisto Beach, SC.

Petitioners' Assertion: Petitioners assert that the baseline should be moved seaward of its current location, which was last set in 2008-2012. The letter from R. Cody Lenhardt Jr. alleges that the current baseline and the proposed landward movement of the baseline and setback line do not accurately reflect beach formation and beach stability. The letter from Bill Eiser alleges that the Department utilized field data collected in November of 2016, which was subsequent to Hurricane Matthew, and it was inappropriate to locate the primary dune following Hurricane Matthew. The letter additionally asserts that the Department should not have proposed a new baseline along the seaward edge of Palmetto Boulevard, because there is no provision in the law for doing so; the statute mandates that the baseline must be established “using the best scientific and historical data, as where the crest of the primary oceanfront sand dunes for that zone would be located if the shoreline had not been altered.” Finally, the letter asserts that the Department ignored historical sand dunes and vegetation, and the Town’s commitment to protecting the beach through renourishment efforts. Mr. Eiser also asserts that “the owners of [1002 Palmetto Boulevard] have provided extensive substantiating evidence including 15 aerial photographs, some taken with a drone, that clearly show a vegetated dune on the seaward side of the houses in this area. This is further evidence

that the baseline should remain on the seaward side of the houses, not move to the landward side as proposed by DHEC-OCRM.” The letters from the Petitioners echoed these assertions.

Department’s Response: On May 3, 2018, Act 173, the Beachfront Management Reform Act, was signed by Governor Henry McMaster. The Act established the position of the jurisdictional baselines and setback lines for the 2018 establishment cycle. Act 173 established the baseline location as the most seaward location of either the baseline established during the 2008-2012 establishment cycle, or the baseline proposed by DHEC on October 6, 2017. Similarly, Act 173 established the setback line as the most seaward location of either the setback line established during the 2008-2012 establishment cycle, or the setback line proposed by DHEC on October 6, 2017.

At these two properties, Act 173 established, for the 2018 cycle, the baseline and setback line as the ones that were set during the 2008-2012 cycle. These lines are seaward of those proposed by the Department in the 2018 cycle as shown in Figure 2.

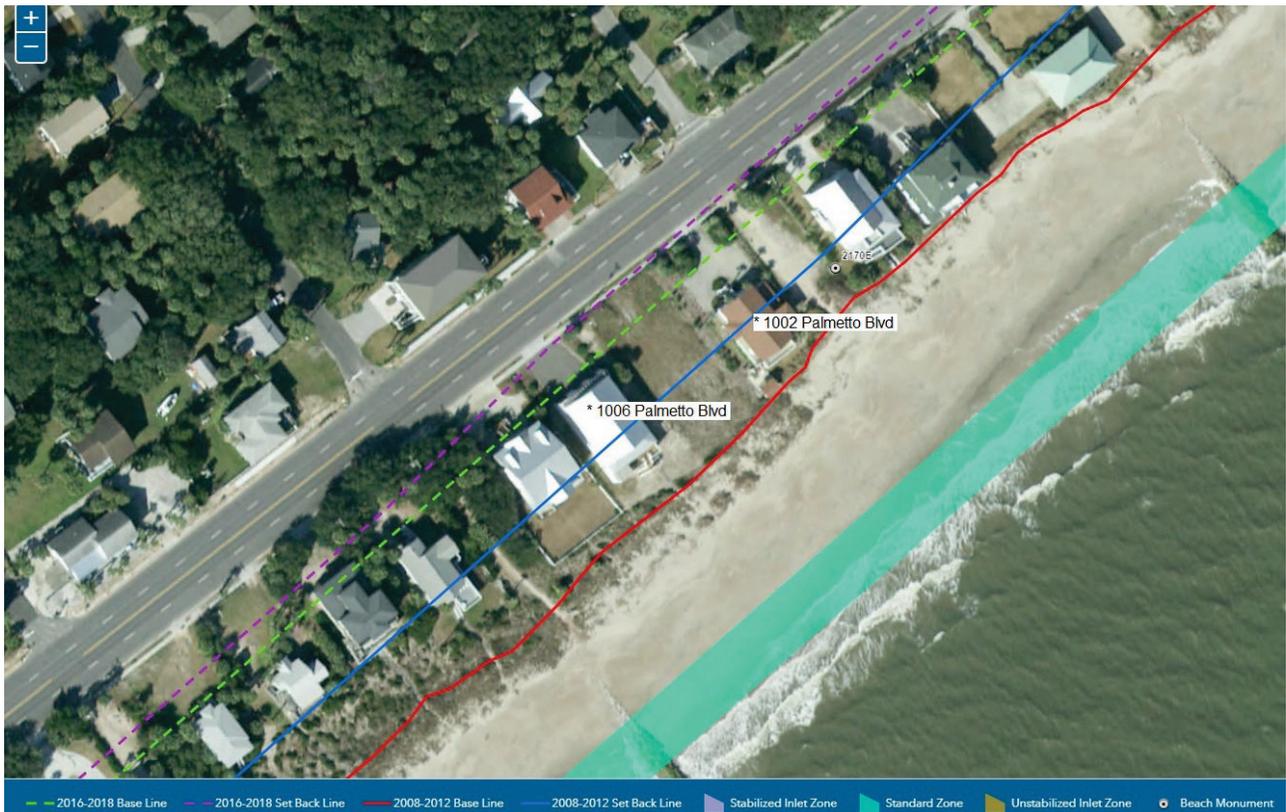


Figure 2: 1002 and 1006 Palmetto Boulevard properties, overlaid with 2008-2012 and 2016-2018 baseline and setback lines. At these properties, the 2008-2012 baseline and setback line are in effect.

The original Request for Final Review focused on the location of the baseline proposed by DHEC on October 6, 2017, which is not in effect. However, for clarification purposes, the Department is providing a response to those materials.

These two properties are located in a standard erosion zone. S.C. Code Ann. § 48-39-280(A)(1) requires the Department to establish the baseline at the location of the crest of the primary oceanfront sand dune in standard erosion zones. Petitioners, through letters written by themselves and through letters written by Bill Eiser dated November 17, 2017, state that the use of the November 2016 data, one month after Hurricane Matthew, was “not appropriate.” However, the Department did not use the November 2016 vegetation line data in establishing the proposed jurisdictional lines at these properties. The Department collected dune measurements on Edisto Beach in September 2016, prior to Hurricane Matthew. Dune measurements were also collected in July 2019, after a beach renourishment project. Neither prior to Hurricane Matthew, nor after the renourishment project was there a primary dune seaward of the currently established baseline. These measurements did not meet the regulatory definition of a Primary Oceanfront Sand Dune found in S.C. Code Ann. Regs. 30-1(D)(43):

“Those dunes which constitute the front row of dunes adjacent to the Atlantic Ocean, are partially or wholly seaward of the setback line, are not landward of an existing functional erosion control device and have a minimum height of thirty-six (36) inches, as measured vertically from the crest to the toe of the dune. For purposes of establishing the baseline, this dune must also form a continuous line for 500 shore parallel feet.”

Specifically, the measured dune was not at least thirty-six inches tall from toe to crest. It is important to note that vegetation alone does not constitute a dune feature or make a dune feature a Primary Oceanfront Sand Dune for the purpose of setting the baseline.

Regardless of the source and location of the baseline proposed on October 6, 2017, it is not in effect. The baseline established in 2008-2012 is currently in effect, which is seaward of the 2017 line. The Department did not locate a primary dune seaward of the current baseline (either prior to Hurricane Matthew or after the renourishment project); therefore, the Department does not support a seaward movement of the baseline from its currently established location.

Petitioners’ Assertion: Petitioners at 1002 and 1006 Palmetto Boulevard each assert in their letters that historical aerial photos and site photos demonstrate beach stability and growth of dunes and vegetation seaward of the existing baseline until Hurricane Matthew. They also allege that the dunes would be at least 500 continuous feet long in the area if public access paths which bisect the dunes are taken into consideration.

Department’s Response: The Department did not use data from post Hurricane Matthew in establishing the proposed jurisdictional lines at these properties. The Department collected dune measurements on Edisto Beach in September 2016, prior to Hurricane Matthew. Dune measurements were also collected in July 2019, after a beach renourishment project. Neither prior to Hurricane Matthew, nor after the renourishment project was there a primary dune

seaward of the currently established baseline. Specifically, the measured dune was not at least thirty-six inches tall from toe to crest. It is important to note that vegetation alone does not make a dune feature a Primary Oceanfront Sand Dune for the purpose of setting the baseline.

When setting the baseline, the Department acknowledges that public access paths frequently bisect the dunes at Edisto Beach and other beaches in the state. Where public access paths are present, the Department does not count those features as a break in the dune when evaluating the dune's continuity and height. Rather, the Department collects dune elevation measurements at locations where a break from a public access path is not present.

Petitioners' Assertion: Petitioners at 1002 and 1006 Palmetto Boulevard each allege in their letters that the Department employed different methods in 2017 to propose revised baseline and setback line positions than were used in the 2008-2012 cycle. They believe that different methods resulted in significantly different results for the positions of the baseline and setback line. Specifically, they question where the baseline should be placed in the absence of a Primary Oceanfront Sand Dune and whether historical pre-1900s shoreline data should be used when calculating erosion rates. Petitioners state "Visual evidence confirms superior dune formation and shoreline vegetation in 2016 compared with 2009, but the technology used by OCRM came to quite the opposite conclusion." Petitioners also state that "We understand that pre-1900 data was used despite that information being successfully challenged as unreliable on two separate occasions by the Administrative Law Court in 2009. The inclusion of this outdated and unreliable data has the effect of unfairly exaggerating contemporary erosion rates, to the detriment of property owners." Petitioners go on to state "In 2009 communities at both Seabrook Island and Kiawah petitioned to have the Administrative Law Court remove older shoreline observations as unreliable. In both cases this data was ruled to be excluded from erosion calculations. Despite the court ruling OCRM continues to use the data, boosting the erosion rates used in setback calculations."

Department's Response: The most recent beachfront jurisdictional line review cycle completed in 2017 was the most comprehensive review of the line positions performed by the Department to date. DHEC OCRM staff collected dune height measurements at approximately 400-ft spacing in every standard erosion zone of South Carolina's beaches. These measurements were made in the field using Real Time Kinematic-Global Positioning System (RTK-GPS) equipment, which results in survey-grade measurements. Precise measurements of a dune's toe elevation and crest elevation allows DHEC OCRM to determine the relative height of a dune at each location where measurements are obtained. Collecting dune height measurements every 400 feet is a significant improvement over collecting dune height measurements at every DHEC OCRM beachfront survey monument, which are spaced approximately 2,000 feet apart. As explained elsewhere in this letter, the presence of vegetation alone does not make a dune feature a Primary Oceanfront Sand Dune for the purpose of setting the baseline.

Mr. Eiser indicated that in areas where no primary dune is located, the baseline should have been established “using the best scientific and historical data, as where the crest of the primary oceanfront sand dunes for that zone would be located if the shoreline had not been altered.” This process is typically called the ‘ideal dune analysis’. The Department is confident that if the Department does a complete ideal dune analysis for this area, that the baseline will be no farther seaward than the existing 2008-2012 baseline and will likely be farther landward. However, the Department will perform a complete ideal dune analysis at the Petitioners’ request. Please advise if you would like that analysis done as part of this remand.

During the prior beachfront jurisdictional line review cycle in the 2008-2012 timeframe, some communities asserted that pre-1900s shoreline data should not be included in the analysis to calculate long-term erosion rates. Since the parties were able to settle these cases, the issue of whether the data should be excluded never reached the Administrative Law Court. Therefore, these data were not “ruled to be excluded from erosion calculations” by the Administrative Law Court as alleged by Petitioners. The Department disagrees that it is somehow inappropriate to utilize pre-1900s shoreline data to calculate long-term erosion rates, especially when the Federal government (e.g. USGS) uses these data for shoreline change analysis¹, and other researchers have evaluated and confirmed the accuracy of these data.²

Petitioners’ Assertion: Petitioners at 1002 and 1006 Palmetto Boulevard each allege in their letters that the presence of dune vegetation should be used by DHEC OCRM to set the baseline at their properties. Referring to provided photographs, they state that “Throughout the period shown [2006-2017], there are clear linear vegetation features not only for 1002 Palmetto but for at least several blocks both north and south of our property. Taking notice of the photographs from 2006 and 2011, it is evident that a historical vegetation line exists at the current baseline in 2006 but even more appropriately seaward at the sand fence line beginning in 2011.” Petitioners go on to state: “at the time of the OCRM survey there was a consistent line of vegetation along the wider beachfront approximately 40 feet in front of the existing 2009 baseline. This linear vegetation line continues for several hundred if not thousands of feet along the shoreline.”

Department’s Response: The presence of vegetation is not used by the Department to set the baseline in standard erosion zones. S.C. Code Ann. § 48-39-280(A)(1) requires the Department to establish the baseline at the location of the crest of the primary oceanfront sand dune in standard erosion zones. Likewise, a dune feature that does not meet the regulatory requirements of being at least 36 inches tall and 500 feet long cannot be used to

¹ Morton, R.A and Miller, T.L. 2005, National assessment of shoreline change: Part 2: Historical shoreline changes and associated coastal land loss along the U.S. Southeast Atlantic Coast: U.S. Geological Survey Open-file Report 2005-1401.

² Anders, F.J., Reed, D.W., and Meisburger, E.P. 1990. Shoreline Movements: Report 2, Tybee Island, Georgia to Cape Fear, North Carolina, 1851-1983. USACE Technical Report CERC-83-1.

set the baseline. Based on dune height measurements in September 2016, prior to Hurricane Matthew, and dune height measurements in July 2019, a dune that meets the regulatory criteria of a Primary Oceanfront Sand Dune does not exist on the seaward side of the current 2008-2012 baseline.

Petitioners' Assertion: Petitioners at 1002 and 1006 Palmetto Boulevard each assert in their letters that the baseline should be moved 40 feet seaward from the 2008-2012 baseline position, which also corresponds to a location 40 feet landward of the spring high-tide line. To support this assertion, Petitioners site a Coastal Science & Engineering (CSE) report dated October 30, 2017, which states "Beach profile data show that the crest of the primary dune formed approximately 40 ft landward of the spring high-tide line following nourishment. Therefore, the baseline along the front beach area could be placed approximately 40 ft landward of the stable wet/dry contour." CSE believes that the spring-tide wave run-up line elevation of approximately +7 ft NAVD should be used to approximate the location of the dune toe and that a dune with a crest elevation of + 10 ft NAVD should qualify as a 36-inch tall Primary Oceanfront Sand Dune.

Department's Response: Based on field data collected prior to Hurricane Matthew and after the renourishment, the Department disagrees that a Primary Oceanfront Sand Dune exists 40 feet seaward of the 2008-2012 baseline. Figure 3 shows that placing the baseline 40 feet seaward of the 2008-2012 baseline would result in placing the baseline on the active beach where no dunes are present. The Department also disagrees that the + 7 ft NAVD contour can be universally applied on Edisto Beach as the dune toe position. DHEC OCRM staff walk the beach with RTK-GPS equipment and collect measurements at the actual dune toe and dune crest as viewed in the field. If the difference between the dune crest elevation and dune toe elevation results in a relative dune height of at least 36 inches and the dune is also at least 500 feet long (without beach paths disqualifying the dune), then it qualifies as a Primary Oceanfront Sand Dune for the purpose of setting the baseline.



Figure 3: February 9, 2019 Pictometry aerial showing measurements of ~40 feet seaward of the 2008-2012 baseline. The green line is the 2008-2012 setback line, the red line is the 2008-2012 baseline, the shore-parallel yellow line is the standard erosion zone designation, and the shore-perpendicular yellow lines are distances of ~40 feet measured seaward of the baseline.

In summary, the Department did not use post-Hurricane Matthew dune height measurements in its analysis, did not disqualify dune continuity based on breaks at public access paths, and asserts that it continues to use the best available scientific and historical data to set the baseline and setback line. There is no Primary Oceanfront Sand Dune on the seaward side of the 2008-2012 baseline, and the Department therefore does not support a seaward movement of the baseline from its currently established location at 1002 or 1006 Palmetto Boulevard on Edisto Beach. This is the Department's final decision on remand.

Sincerely,

A handwritten signature in blue ink, appearing to read "Elizabeth B. von Kolnitz".

Elizabeth B. von Kolnitz
Chief
Office of Ocean and Coastal Resource Management

cc: Matthew J. Slagel, Beachfront Permitting Project Manager, DHEC-OCRM
Jessica B. Boynton, Shoreline Specialist, DHEC-OCRM
Sallie P. Phelan, Attorney, DHEC

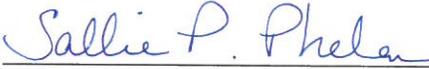
**STATE OF SOUTH CAROLINA
ADMINISTRATIVE LAW COURT**

Cami Hiers, et al.,)	Docket No. 18-ALJ-07-0023-CC
)	
Petitioners,)	
)	
vs.)	CERTIFICATE OF SERVICE
)	
South Carolina Department of)	
Health and Environmental Control,)	
)	
Respondent.)	
_____)	

The undersigned hereby certifies that she has this day served a copy of the Final Decision on Remand for the properties located at 1002, 1006, 1402 and 1504 Palmetto Boulevard, Edisto Beach in the above-referenced matter via electronic and U.S. mail on the Petitioners through counsel of record listed below:

R. Cody Lenhardt, Jr.
Lenhardt Law Firm
738 St. Andrews Boulevard, Suite C
Charleston, SC 29407
cody@lenhardtlawfirm.com

Attorney for Petitioners



Sallie P. Phelan

November 25, 2019
Charleston, South Carolina