SC DEPARTMENT *of* ENVIRONMENTAL SERVICES

BEACHFRONT JURISDICTIONAL LINES REPORT
PROPOSED BASELINE AND SETBACK LINE
HUNTING ISLAND
OCTOBER 17, 2025

This line report documents proposed beachfront jurisdictional lines (baseline and setback line) for the 2024-2027 establishment cycle.

Background

S.C. Code Ann. § 48-39-280 requires the South Carolina Department of Environmental Services Bureau of Coastal Management (SCDES BCM or Department) to establish and periodically review two beachfront jurisdictional lines, the baseline and the setback line. The baseline is the more seaward (towards the ocean) line, while the setback line is the more landward (towards the land) line. The setback line delineates the landward extent of the state's direct permitting authority for activities proposed within the Beach/Dune System Critical Area.

The South Carolina General Assembly has found that the Beach/Dune System Critical Area is of vital importance to the people of South Carolina, serving to protect life and property by acting as a storm barrier, providing the basis for a tourism industry, maintaining habitat for numerous plant and animal species, and providing a natural, healthy environment for South Carolinians to recreate.[1]

The jurisdictional lines create a state jurisdictional area where activities associated with habitable structures, pools, renourishment, landscaping, fencing, decks, service lines, and other alterations are reviewed through authorization processes to prevent unwise development and to protect resources along the beachfront. Repairs, reconstruction, and new construction of some structures are allowed under certain conditions and with proper notification to the Department as listed under S.C. Code Ann. § 48-39 and S.C. Code Ann. Regs. 30. The jurisdictional lines enable SCDES BCM to implement laws and regulations that support the state's beachfront management goals, and protect vulnerable shorelines, properties, and natural ecosystems.

[1] S.C. Code Ann. § 48-39-250(1)

In addition to the Beach/Dune System Critical Area, there are two other beachfront critical areas in South Carolina in which SCDES BCM has authority to review activities, Beaches Critical Area and Coastal Waters Critical Area.[2] It is possible for these other critical areas to extend landward of the jurisdictional setback line which would then also require coordination and authorization from SCDES BCM for any activities in these critical areas. Critical areas are dynamic, so it is important to contact SCDES BCM to help determine if there may be critical areas extending landward of the setback line. For questions, please reach out to SCDES BCM's Beachfront Management section at (843) 953-0200, or visit the Project Manager Finder Application for contact information for SCDES BCM project managers by geographic area.

Line Review Process Overview

South Carolina law requires SCDES BCM to establish and review the position of these beachfront jurisdictional lines every 7 to 10 years.[3] The average annual erosion rate (also known as the long-term erosion rate) for all oceanfront land that is developed or potentially could be developed is also reviewed during this time frame.

Using historical and present-day shoreline and beach profile information, SCDES BCM designates a baseline and setback line along the coast. The setback line's distance from the baseline is determined by calculating the long-term erosion rate in that particular area. The minimum setback distance is 20 feet.[4] For additional information on the technical process associated with establishing setback lines, please refer to the SCDES BCM Jurisdictional Lines webpage.

Timeline and Requirements

The timeline and requirements for each jurisdictional line establishment cycle are outlined in the South Carolina Code of Laws.[5] State law requires SCDES BCM to stagger the establishment of the baselines and setback lines by geographic area. To meet this requirement, the line review for the South Carolina coast has been divided into three geographic areas, and the review will occur in a phased effort (Phase I, II, and III) between 2024-2027.

SCDES BCM is also required to provide a tentative schedule of establishment for each geographic area on the Department's website at least 120 days prior to beginning a new

[2] S.C. Code Ann. § 48-39-10
[3] S.C. Code Ann. § 48-39-280(C)
[4] S.C. Code Ann. § 48-39-280(B)
[5] S.C. Code Ann. § 48-39-280(D)(1)

establishment cycle. On January 30, 2024, SCDES BCM released a tentative schedule for establishment of the new beachfront jurisdictional lines on the SCDES BCM Jurisdictional Lines webpage.

Once baselines and setback lines are proposed for a geographic area, SCDES BCM is required to publish the proposed lines on the Department's website for public input at least 120 days prior to final establishment of the lines for the geographic area. To meet this requirement, proposed lines are available for review on SCDES BCM's Beachfront Jurisdictional Lines Viewer. The Department is also required to provide notice of the publication of the proposed lines in a newspaper of general statewide circulation and a newspaper of local circulation in the geographic area. The Department fulfilled this requirement through notice in The Post and Courier, as well as local newspapers for each geographic area.

Following publication of the proposed lines, a public hearing is held (within each geographic area) at least 90 days prior to final establishment of the lines. The Department will accept and review data up to 30 days prior to the final establishment of the lines to determine if a proposed baseline or setback line should be revised. Once the jurisdictional lines are adopted as final, this line report will be updated, and final versions of the lines will be available on SCDES BCM's Beachfront Jurisdictional Lines Viewer.

Process for Establishing the Baseline Position

Procedures for establishing the baseline are outlined in the South Carolina Code of Laws and Coastal Division Regulations.[6] In 2016, Act 197 amended S.C. Code Ann. § 48-39-280, prohibiting the baseline from moving seaward from the position determined on December 31, 2017. This means that the baseline and setback line will not move seaward from their locations established during the 2016-2018 line review cycle.

To establish the baseline position, the shoreline must first be classified as an inlet erosion zone or a standard erosion zone. An inlet erosion zone is defined as a segment of shoreline along or adjacent to tidal inlets which is influenced directly by the inlet and its associated shoals.[7] Inlet erosion zone classifications are further defined as either unstabilized, or stabilized by jetties, terminal groins, or other structures.[8] All other areas are considered standard erosion zones, defined as a segment of shoreline which is subject to essentially

[6] S.C. Code Ann. § 48-39-10, et seq., S.C. Code Ann. Regs. 30-1, et seq.
[7] S.C. Code Ann. § 48-39-270(7)
[8] S.C. Code Ann. § 48-39-280

the same set of coastal processes, has a fairly constant range of profiles and sediment characteristics, and is not influenced directly by tidal inlets or associated inlet shoals.[9]

In stabilized inlet erosion zones and standard erosion zones, the baseline is established at the location of the crest of the primary oceanfront sand dune.[10] The primary oceanfront sand dune is defined as a dune with a minimum height of 36 inches, as measured vertically from the seaward toe to the crest of the dune. The dune must also form a nearly continuous ridge for 500 shore parallel feet and may exhibit minimal breaks, such as those resulting from pedestrian or emergency vehicle access points.[11] If the primary oceanfront sand dune is more than 200 feet landward of the current line of stable vegetation, then the baseline must be established seaward of the primary oceanfront sand dune at a distance equal to thirty percent of the measured distance from the primary oceanfront sand dune to the current line of stable vegetation. If there is no primary oceanfront sand dune, then the baseline must be established at whichever is further landward of the following: the baseline established during the 2016-2018 review cycle or the landward edge of the active beach.[12] The Department utilizes the best available scientific data including both field and remotely sensed data to identify and establish the location of the primary oceanfront sand dune. Remotely sensed data includes aerial imagery and LiDAR.[13] Field data includes beach topographic and bathymetric profiles, and dune measurements, which are used to compare to and ground-truth remotely sensed data.[14]

If the shoreline has been altered naturally or artificially by the construction of erosion control devices, then the baseline must be established by the department using the best scientific and historical data, as where the crest of the primary oceanfront sand dune for that zone would be located if the shoreline had not been altered.[15] The Department evaluates natural dunes in the area using remotely sensed and/or field collected data to determine the location of the primary oceanfront sand dune.

In unstabilized inlet erosion zones, the baseline is established at the most landward point of erosion at any time during the past 40 years, unless the best-available scientific and historical data of the inlet and adjacent beaches indicate that the shoreline is unlikely to return to its former position.[16] This baseline position is established by analyzing current

[9] S.C. Code Ann. § 48-39-270(6)
[10] S.C. Code Ann. § 48-39-280(A)
[11] S.C. Code Ann. Regs. 30-1(D)(45)
[12] S.C. Code Ann. § 48-39-280(A)
[13] LiDAR stands for Light Detection and Ranging. It is a method that uses laser pulses from an aircraft to precisely measure distances to the Earth's surface.
[14] Field data is collected using survey-grade GNSS (Global Navigation Satellite System) equipment.
[15] S.C. Code Ann. § 48-39-280(A)(1)(c)
[16] S.C. Code Ann. § 48-39-280(A)(2)

and historical data created from aerial photographs, topographic maps, and/or field collected data, and identifying the most landward point of erosion and/or shoreline during the 40-year time frame.

Process for Establishing the Setback Line Position

The setback line position is dependent on the baseline position and the average annual erosion rate, also known as the average long-term erosion rate. The long-term erosion rate is calculated using available current and historical shoreline data, and shoreline change software. The setback line is established landward of the baseline a distance which is 40 times the average annual erosion rate or not less than 20 feet.[17]

Hunting Island Baseline

Hunting Island is a state park located in Beaufort County between Fripp Island and Fripp Inlet to the southwest and Harbor Island and Johnson Creek Inlet to the northeast.

Southern Unstabilized Inlet Erosion Zone Adjacent to Fripp Inlet

The southern end of the island adjacent to Fripp Inlet is classified as an unstabilized inlet erosion zone which extends from Fripp Inlet to BCM Monument 1880. Near the location of BCM Monument 1890, which was the previous transition between the unstabilized inlet erosion zone and the standard erosion zone, the island was overwashed by Hurricane Matthew in October 2016. The breach became permanent after Hurricane Irma in September 2017, creating a new inlet between BCM Monuments 1890 and 1880 and separating the southernmost part of the beachfront from the rest of the island. Due to this new inlet formation, the unstabilized inlet erosion zone was extended north to BCM Monument 1880.

In this zone, the baseline is set at the most landward point of erosion in the last 40 years. Specifically, the baseline is set at the vegetation and escarpment line positions collected in the field by BCM staff in August 2016, May 2023, and April 2024. At the southern end of this unstabilized inlet erosion zone adjacent to Fripp Inlet, the baseline wraps the upland, and any land or water areas to the southwest of the wrapped baseline are considered to be located seaward of the baseline. The baseline also wraps the areas to the north and south of the new inlet formed between BCM Monuments 1890 and 1880, and the area in between the line break at the inlet is considered to be located seaward of the baseline.

Central Standard Erosion Zone

[17] S.C. Code Ann. § 48-39-280(B)

The central portion of the island from BCM Monument 1880 to a point midway between BCM Monuments 1820 and 1810 is classified as a standard erosion zone. Between BCM Monuments 1880 and 1860, there are no primary oceanfront sand dunes, so the Department reviewed the 2016-2018 baseline and the landward edge of active beach to determine which was more landward. The baseline is set at the landward edge of the active beach, as indicated by the vegetation and escarpment line positions collected in the field by BCM staff in April 2024.

From BCM Monument 1860 north to a location between BCM Monuments 1840 and 1830, the baseline is located on the crest of the primary oceanfront sand dune identified in USGS LiDAR data from 2020 and verified in the field by BCM staff in April 2024 using survey-grade GNSS equipment.[18] The baseline then transitions to the baseline established during the 2016-2018 review cycle for approximately 1,550 feet, since it is more landward than the primary oceanfront dune crest.[19] Just north of BCM Monument 1830, the baseline transitions back to the primary oceanfront dune crest identified in USGS LiDAR data from 2020 and verified in the field by BCM staff in April 2024 and remains on the primary oceanfront sand dune until the beach zone transitions from a standard erosion zone to a stabilized inlet erosion zone at a point midway between BCM Monuments 1820 and 1810.

Northern Stabilized Inlet Erosion Zone Adjacent to Johnson Creek Inlet

The northern end of the island adjacent to Johnson Creek Inlet is classified as a stabilized inlet erosion zone due to the presence of a terminal groin. From where the stabilized inlet erosion zone begins to a point approximately 160 feet south of BCM Monument 1810, the baseline is set at the crest of the primary oceanfront sand dune verified in the field by BCM staff in April 2024 using survey-grade GNSS equipment. The baseline then transitions to the baseline established during the 2016-2018 review cycle for approximately 2,880 feet, since it is more landward than the primary oceanfront dune crest. For the remainder of the shoreline along Johnson Creek Inlet, the baseline is set at the crest of the primary oceanfront sand dune as identified in USGS LiDAR data from 2020 and verified in the field by BCM staff in April 2024 with survey-grade GNSS equipment.

The proposed baseline can be viewed on the SCDES BCM's Beachfront Jurisdictional Lines Viewer.

[18] USGS stands for United States Geological Survey.
[19] S.C. Code Ann. § 48-39-280 prohibits the baseline from moving seaward from the position determined on December 31, 2017, the location established during the 2016-2018 line review cycle.

Hunting Island Setback Line

The long-term erosion rate at Hunting Island ranges from -14.6 to +36.0 feet per year, depending on location. For individual rates by location, refer to SCDES BCM's Beachfront Jurisdictional Lines Viewer. In this viewer, the long-term erosion rates are linked to the setback line. Negative long-term erosion rate values indicate erosion and positive long-term erosion rate values indicate accretion. Users should be aware that erosional values can be associated with the minimum setback. Values of -0.5 feet per year and greater have the minimum setback of 20 feet. Keep in mind that areas with erosional long-term rates may experience periods of accretion, and areas with accretional long-term rates may experience periods of erosion. These rates reflect long-term trends, rather than short-term fluctuations. Property owners and developers are encouraged to consult with SCDES BCM to understand more about erosion trends and shoreline dynamics in their particular area. For more details on the technical process, please refer to the SCDES BCM Jurisdictional Lines webpage (des.sc.gov/beachlines).