

CHAPTER 30

Department of Health and Environmental Control— Coastal Division

(Statutory Authority: S.C. Code § 48-39-10 et seq.)

Editor's Note

This chapter (Regulations 30-1 through 30-13) became effective May 29, 1978.

30-1. Statement of Policy.

A. South Carolina Coastal Zone Management Act.

(1) The South Carolina Coastal Zone Management Act was passed by the 1977 General Assembly of South Carolina to provide for the protection and enhancement of the State's coastal resources. This legislation creates the South Carolina Coastal Council which is given the task of promoting the economic and social welfare of the citizens of this State while protecting the sensitive and fragile areas in the coastal counties and promoting sound development of coastal resources. The South Carolina Coastal Zone Management Act was amended by Act 181 of 1993 which merged South Carolina Coastal Council with the South Carolina Department of Health and Environmental Control. South Carolina Coastal Council became the Office of Ocean and Coastal Resource Management (OCRM).

(2) Through the efforts of an overall coastal zone management program and permitting process, the Department seeks to guide the wise preservation and utilization of coastal resources. These rules and regulations are intended to:

- (a) aid developers and others in taking advantage of state-of-the-art techniques in developing projects compatible with the natural environment;
- (b) insure consistent permit evaluations by the Department; and
- (c) serve as a stimulus for implementation of better and more consistent management efforts for the coastal zone.

(3) These regulations are the Department statements of general public applicability that implement and prescribe policy and practice requirements of the Department. They are to be read as part of, and to be construed with, the policies set forth in the South Carolina Coastal Management Program.

B. The Value of Tidelands and Coastal Waters.

(1) The tidelands and coastal waters of the South Carolina coast are a very dynamic ecosystem and a valuable natural resource for the people of the State. The tides regularly ebb and flood through the coastal inlets, bays and marshes which constitute a fragile area, vulnerable to the impacts of many human activities. Tidelands and coastal waters are identified as "critical areas" over which the Department has direct permitting authority.

(2) The saline marshes are highly productive components of the marine food web of coastal waters and estuaries. Decaying organic material, called detritus, serves as the basis of the food web and is the major biological contribution of the saline marshes. Many commercially and recreationally important fish and shellfish species depend on the marshlands and estuaries for all or part of their life cycle. In addition, many birds and other forms of wildlife utilize wetlands as habitat as well as a source of food. Tidelands and coastal waters also have become increasingly important in recent years for the purposes of aquaculture.

(3) Among the important functions of the salt and brackish marshes is their role in protecting adjacent highlands from erosion and storm damage. Marsh vegetation absorbs and dissipates wave energy and establishes a root system which stabilizes the soils. Its effectiveness as a buffer depends on the surface area available which, combined with the composition of the underlying substrate, allows tidelands to act as "sponges," absorbing and releasing waters during storms or times of heavy riverine discharge.

(4) Marshes also perform a valuable waste treatment function since the dense vegetation acts as a filter, trapping sediments and pollutants which enter as run-off from the upland areas. The trapping of sediments helps maintain water clarity, a factor important to clam, oyster, and phytoplankton productivity. The marshes also assimilate pollutants and recycle nutrients through various biochemical processes.

(5) Coastal waters and the adjacent marshes are also significant as aesthetic, recreational and educational resources. Much of the expenditure for recreation and tourism in the South Carolina coastal zone is for purposes of enjoying outdoor activities and the aesthetic pleasures of undisturbed tideland areas. These natural areas lend themselves to meaningful and important academic pursuits such as bird-watching and wildlife population and nutrient recycling studies.

(6) These same unique natural resource areas face increasing land development pressure and negative impacts from human activities in and around them. The marshes constitute a fragile ecosystem; consequently, indiscriminate dredging and filling, degradation of water quality or unconsolidated building and development practices can have long-term detrimental effects. All development need not be prohibited; rather, the range of favorable and unfavorable results needs to be realized, and analysis made to determine priorities, evaluate alternatives, anticipate impacts, and suggest the best methods and designs to carry out wise development of these resources.

C. The Value of Beaches and Dunes.

(1) In 1977, the South Carolina General Assembly enacted the Coastal Tidelands and Wetlands Act (Coastal Zone Management Act) to protect, preserve, restore and enhance the coastal resources of South Carolina. The Act created a new state agency, the South Carolina Coastal Council, and charged it with the responsibility of administering and enforcing the statute. This legislation, however, proved ineffective for managing the beach/dune system because regulatory authority over these areas given to the Coastal Council was not sufficient. From the State's beaches, the Coastal Council could regulate landward only to the primary oceanfront sand dune or to the highest uprush of the waves where no such dune existed.

(2) Lacking adequate authority, the Coastal Council was unable to prevent structures from being sited unwisely close to the eroding shore, thus making them extremely vulnerable to the effects of storms and high tides. The owners of the structures, in most instances, quickly sought permits from the Coastal Council (herein referred to as the Department) to construct hard erosion control devices in order to protect their erosion threatened structures. Unfortunately, hard erosion control devices can result in increased erosion, a lowering of the beach profile (thereby reducing the beach/dune system's tourist and recreational value), and a decrease in the ability of the beach/dune system to protect upland property from storms and high tides. Often the result of attempting to protect upland property with hard erosion control structures is that dry sand beaches disappear, thereby placing many millions of tourist dollars in jeopardy and destroying this natural legacy for future generations.

(3) In 1986, the Blue Ribbon Committee on Beachfront Management was formed in response to the growing recognition that existing law was inadequate to protect the fragile beach/dune resource. The Committee determined that the beach/dune system of the State was in a state of crisis. The report concluded that "over fifty-seven miles of our beaches are critically eroding. This erosion is threatening the continued existence of our beach/dune system and thereby threatening life, property, the tourist industry, vital State and local revenue, marine habitat, and a national treasure". The 1988 Beachfront Management Act was enacted by the South Carolina General Assembly in response to the concerns presented in this report.

(4) It has been clearly demonstrated that the erosion problems of this State are caused by a persistent rise in sea level, a lack of comprehensive beach management planning, and poorly planned oceanfront development, including construction of hard erosion control structures, which encroach upon the beach/dune system. Sea level rise in this century is a scientifically documented

fact. Our shoreline is suffering from its effects today. It must be accepted that regardless of attempts to forestall the process, the Atlantic Ocean, as a result of sea level rise and periodic storms, is ultimately going to force those who have built too near the beachfront to retreat.

(5) There are three basic approaches to beachfront management:

- (a) armor the beach with hard erosion control devices;
- (b) renourish the beach with sand;
- (c) retreat from the beach.

(6) The 1977 Coastal Zone Management Act, as amended, rejects construction of new erosion control devices and adopts retreat and renourishment as the basic state policy towards preserving and restoring the beaches of our state. The Department, as steward of the State's coastal resources, has the responsibility under the new statute to implement the forty-year retreat policy by designating a baseline and setback line on all oceanfront properties of the State, developing a long-range comprehensive State plan for management of the beach/dune resource, and supporting the efforts of local governments in developing local long-range beach management plans. In addition, the Department shall require property owners to move new construction and reconstruction as far landward as possible, to limit the size of structures within the constraints of the Act, and to seek innovative ways to ameliorate the effects of beach erosion.

(7) In the final analysis, the long-range public good is the same as the long-range private good. If the dry sand beaches of this State disappear because of the failure of its people and governmental natural resource managers to protect the beach/dune system, future generations will never have the opportunity to use and enjoy this valuable resource.

D. Definitions:

(1) Abandoned Vessels/Structures - Any boat, barge, dock, pier or other structure/vessel in the critical areas that is no longer functional for its primary, intended purpose and for which repair or salvage activity is not actively being pursued.

(2) Active Beach - the area seaward of the escarpment or the first line of stable natural vegetation, whichever first occurs, measured from the ocean landward.

(3) Administrative Law Judge - a judge appointed pursuant to SC Code Ann. Section 1-23-510 (1976) (as amended) who is assigned a particular matter by the Chief Administrative Law Judge, or if no administrative law judge has been assigned for a particular matter, the Chief Administrative Law Judge.

(4) Baselines:

(a) Within a standard erosion zone the baseline is established at the location of the crest of the primary oceanfront sand dune in that zone. In a standard erosion zone in which the shoreline has been altered naturally or artificially by the construction of erosion control devices, groins, or other man-made alterations, the baselines must be established by the Department using the best scientific and historical data, as where the crest of the primary ocean front sand dune for that zone would be located if the shoreline had not been altered.

(b) Within an unstabilized inlet zone the baseline must be determined by the Department as the most landward point of erosion at anytime during the past forty 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. In collecting and utilizing the best scientific and historical data available for the implementation of the retreat policy, the Department as part of the State Comprehensive Beach Management Plan provided for in this chapter, among other factors, must consider: historical inlet migration, inlet stability, channel and ebb tidal delta changes, the effects of sediment bypassing on shorelines adjacent to the inlets, and the effects of nearby beach restoration project on inlet sediment budgets.

(c) Within a stabilized inlet zone the baseline location must be determined in the same manner as provided for in a standard erosion zone. However the actual location of the crest of the primary oceanfront sand dune of that erosion zone is the baseline of that zone, not the location if the inlet had remained unstabilized.

(5) Beach/Dune System - all land from the mean high-water mark of the Atlantic Ocean landward to the 40 year setback line described in §48-39-280.

(6) Best Management Practices - measures to reduce adverse environmental impacts.

(7) Boat - A vessel or watercraft of any type or size specifically designed to be self propelled, whether by engine, sail, paddle, or other means, which is used to travel from place to place by water.

(8) Boat Storage Structure - any structure associated with a dock that is used for the purpose of storing a boat out of the water and may include, but is not limited to, boatlifts, davits, and any other type of floating vessel platform. A boat storage structure is not a fixed pierhead, walkway, ramp, or gangway.

(9) Boat Yard - a facility where boats are repaired.

(10) Bridge:

(a) Non-vehicular - bridges designed for use by pedestrians, golf carts or other maintenance vehicles, but not cars and trucks; are not docks; and can have a maximum clear width on the deck surface of six feet.

(b) Vehicular - bridges with a clear width on the deck surface of over six feet and designed to support traffic by cars and trucks.

(11) Coastal Island - an area of high ground above the critical area delineation that is separated from other high ground areas by coastal tidelands or waters. An island connected to the mainland or other island only by a causeway is also considered a coastal island. The purpose of this definition is to include all islands except those that are essentially mainland, i.e., those that already have publicly accessible bridges and/or causeways. The following islands shall not be deemed a coastal island subject to this section due to their large size and developed nature: Waite Island in Horry County; Pawleys Island in Georgetown County; Isle of Palms, Sullivans Island, Folly Island, Kiawah Island, Seabrook Island, Edisto Island, Johns Island, James Island, Woodville Island, Slann Island and Wadmalaw Island in Charleston County; Daniel Island in Berkeley County; Edisto Beach in Colleton County; Harbor Island, Hunting Island, Fripp Island, Hilton Head Island, St. Helena Island, Port Royal Island, Ladies Island, Spring Island and Parris Island in Beaufort County.

(12) Coastal Waters - the navigable waters of the United States subject to the ebb and flood of the tide and which are saline waters, shoreward to their mean high-water mark.

(13) Coastal Zone - all coastal waters and submerged lands seaward to the State's jurisdictional limits and all lands and waters in the counties of the State which contain any one or more of the critical areas. These counties are Beaufort, Berkeley, Charleston, Colleton, Dorchester, Horry, Jasper, and Georgetown.

(14) Coastal Zone Management Appellate Panel - the appellate body which conducts a quasi-judicial review of decisions from the Division pursuant to SC Code of Laws, Section 1-23-610 (1993 amend.) and 48-39-150(D) (1993 amend.).

(15) Critical Areas - any of the following: (1) coastal waters, (2) tidelands, (3) beach/dune systems and (4) beaches.

(16) Department - the South Carolina Department of Health and Environmental Control (also referred to as SCDHEC).

(17) Destroyed Beyond Repair:

(a) Habitable Structures - destroyed beyond repair means more than sixty-six and two-thirds percent of the replacement value of the habitable structure has been destroyed. See R.30-14(D)(3)(a).

(b) Pools - destroyed beyond repair means more than sixty-six and two-thirds percent of the replacement value of the pool has been destroyed. See R.30-14(D)(3)(b).

(c) Seawalls and Bulkheads - damage to seawalls and bulkheads must be judged on the percentage of the structure remaining intact at the time of the damage assessment. Erosion control structures or devices must not be repaired or replaced if destroyed:

(i) more than eighty percent above grade through June 30, 1995;

(ii) more than sixty-six and two-thirds percent above grade from July 1, 1995, through June 30, 2005;

(iii) more than fifty percent above grade after June 30, 2005. See R.30-14(D)(3)(c).

(d) Revetments - must be judged on the extent of displacement of the stone, effort to return this stone to the pre-storm event configuration of the structure or device, and the ability of the revetment to retain backfill material at the time of the damage assessment. See R.30-14(D)(3)(d).

(18) Division - the Administrative Law Judge Division.

(19) Dock - All docks defined herein refer to structures that provide docking space for ten boats or less.

(a) Boat Storage Dock - a floating structure that a vessel is parked on for purposes of out-of-water storage.

(b) Commercial Dock - a docking facility used for commercial purposes. A commercial dock is not necessarily a marina, a boat yard, or a dry storage facility.

(c) Community Dock - any docking facility that provides access for more than four families, has effective docking space of no more than 250 linear feet and is not a marina. Effective docking space means adequate length and water depth to dock a 20-foot boat.

(d) Joint use dock - any private dock intended for the use of two to four families.

(e) Private Dock - any facility that provides access for one family, and is not a marina.

(20) Emergency Orders - orders issued in response to an emergency as defined in Section 48-39-10(U), by the Department or upon written notification to the Department by an appointed official of a county or municipality or of the state acting to protect the public health and safety. With regard to the beach/dune critical area, only the use of sandbags, sand scraping, renourishment, or a combination of them, in accordance with R.30-5 and R.30-15.H, is allowed pursuant to emergency orders.

(21) Emergency Repairs - repairs due to emergencies as defined in Section 48-39-10(U) to an existing bank, dike, fishing pier, or structure other than ocean front erosion control structures or devices which have been erected in accordance with federal and state laws or provided for by general law or acts passed by the General Assembly, if notice is given in writing to the Department within 72 hours of the onset of the needed repair.

(22) Erosion Control Structures and Beach Renourishment:

(a) Seawall - a special type of retaining wall that is specifically designed to withstand wave forces.

(b) Bulkhead - a retaining wall designed to retain fill material, but not to withstand wave forces on an exposed shoreline.

(c) Revetment - a sloping structure built along an escarpment or in front of a bulkhead to protect the shoreline or bulkhead from erosion.

(d) Beach Renourishment - the artificial establishment and periodic renourishment of a beach with sand that is compatible with the beach in such a way as to create a dry sand beach at all stages of the tide and/or provide some level of storm protection.

(23) Feasible (feasibility) - As used within these rules and regulations (e.g., "unless no feasible alternative exists"), feasibility is determined by the Department with respect to individual project proposals. Feasibility in each case is based on the best available information, including, but not limited to, technical input from relevant agencies with expertise in the subject area, and consideration of factors of environmental, economic, social, legal and technological suitability of the proposed activity and its alternatives. Use of this word includes, but is not limited to, the concept of reasonableness and likelihood of success in achieving the project goal or purpose. "Feasible alternatives" applies both to locations or sites and to methods of design or construction, and includes a "no action" alternative.

(24) GAPC (Geographic Areas of Particular Concern) - areas within South Carolina's coastal zone which have been identified in the State's Coastal Management Program as being of such importance as to merit special consideration during the Department review of permit applications. GAPC's consist of: (1) areas of unique natural resource value; (2) areas where activities, development, or facilities depend on proximity to coastal waters, in terms of use or access; and (3) areas of special historical, archeological or cultural significance.

(25) Garage - a structure built and used for the purpose of parking and protecting vehicles. The structure may be open or enclosed. An open parking area under a habitable structure will not be counted when computing the square footage of a habitable structure.

(26) Groin - a structure designed to stabilize a beach by trapping littoral drift. Groins are usually perpendicular to the shore and extend from the shoreline into the water far enough to accomplish their purpose. Groins are narrow and vary in length from less than one hundred feet to several hundred feet. Groin fields are a series of two or more groins which, because of their proximity to each other, have overlapping areas of influence. Consequently, the entire groin field must be considered as one system in order to accurately analyze beach response. The following is a list of the existing groins and groin fields in South Carolina as of 1991.

LIST OF EXISTING GROINS AND GROIN FIELDS IN SOUTH CAROLINA AS OF 1991

Garden City:

1. Six (6) groins south of the intersection of Yucca Street and Waccamaw Drive.
2. Two (2) groins south of the intersection of Dolphin Street and Waccamaw Drive.

Pawleys Island:

3. Twenty-three (23) groins along an area south of the northern causeway.
4. One (1) groin at the north end of the Island.

Isle of Palms:

5. One (1) groin at the north end of the Island along Dewees Inlet.
6. Two (2) groins at 42nd and 44th Avenues.

Sullivans Island:

7. Six (6) groins adjacent to Breach Inlet.

Folly Beach:

8. Forty-seven (47) groins.

Edisto Island:

9. Thirty-two (32) groins from the State Park south to Mikell Street.
10. Two (2) groins at Louise and Bailey Streets, along the South Edisto River.

Hunting Island:

11. One (1) groin at the north end of the Island.

Fripp Island:

12. One (1) groin at the north end of the Island.
13. Five (5) groins along the southern end of the Island.

Hilton Head Island:

14. Seventeen (17) groins in an area adjacent to Port Royal Sound.
15. Two (2) groins at the north end of Forest Beach, north of Yucca Drive.
16. Three (3) groins at Braddock Point, northwest of Merganser Court.
17. One (1) groin at Land's End, adjacent to Braddock Cove.

(27) Habitable Structure - a structure suitable for human habitation including, but not limited to, single or multi-family residences, hotels, condominium buildings, and buildings for commercial purposes. Each building of a condominium regime is considered a separate habitable structure, but if a building is divided into apartments, then the entire building, not the individual apartment is considered a single habitable structure. Additionally, a habitable structure includes porches, gazebos, and other attached improvements.

(28) Inlet Erosion Zone - a segment of shoreline along or adjacent to tidal inlets which is directly influenced by the inlet and its associated shoals.

(a) Unstabilized Inlets - inlets that have not been stabilized by jetties, terminal groins, or other structures.

(b) Stabilized Inlets - inlets which are stabilized by jetties, terminal groins, or other structures.

(29) Jetty - a structure that extends into the water to direct and confine river or tidal flow into a channel and to prevent or reduce shoaling of the channel by littoral material. Jetties are constructed for the purpose of stabilizing navigation channels.

(30) Joint Public Notice - a permit application public notice issued jointly between the Department and the United States Army Corps of Engineers or other agency and processed independently by the Department.

(31) Major Development Activity - any construction activity that is not a Minor Development Activity.

(32) Marinas - a marina is any of the following:

- (a) locked harbor facility;
- (b) any facility which provides fueling, pump-out, maintenance or repair services (regardless of length);
- (c) any facility which has effective docking space of greater than 250 linear feet or provides moorage for more than 10 boats;
- (d) any water area with a structure which is used for docking or otherwise mooring vessels and constructed to provide temporary or permanent docking space for more than ten boats, such as a mooring field; or
- (e) a dry stack facility.

(33) Master Plan - a document or a map prepared by a developer or a city as a policy guide to decisions about the physical development of the project or community.

(34) Minor Development Activity - the construction, maintenance, repair or alteration of any private pier or erosion control structure, the construction of which does not involve dredging.

(35) Nonwater-dependent - a facility which cannot demonstrate that dependence on, use of, or access to coastal waters is essential to the functioning of its primary activity.

(36) Normal Maintenance and Repair - work performed on any structure within the critical area as part of a routine and ongoing program to maintain the integrity of the structure provided that the structure is still generally intact and functional in its present condition and the work only extends to the original dimensions of the structure. See R.30-5(D).

(37) OCRM - the South Carolina Department of Health and Environmental Control's Office of Ocean and Coastal Resource Management.

(38) Offshore Breakwater - a structure which is designed to protect an area from wave action, is generally built parallel to the shore, may or may not be submerged, and may be built singly or in series. Breakwaters may interfere with natural wave action and wave induced currents.

(39) Party - each person or agency named or admitted as a party or properly seeking and entitled to be admitted as a party, including a license or permit applicant.

(40) Planned Development - a development plan which has received local approval for a specified number of dwelling and other units. The siting and size of structures and amenities are specified or restricted within the approval. This term specifically references multi-family or commercial projects not otherwise referenced by the terms master plan or planned unit development.

(41) Planned Unit Development - a residential, commercial, or industrial development, or all three, designed as a unit and approved in writing by local government.

(42) Pool - a structure designed and used for swimming and wading.

(43) Primary Oceanfront Sand Dunes - 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 erosional 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.

(44) Public Interest - As used within these Rules and Regulations, public interest refers to the beneficial and adverse impacts and effects of a project upon members of the general public, especially residents of South Carolina who are not the owners and/or developers of the project. To the extent that, in the opinion of the Department, the value of such public benefits is greater than

the public costs embodied in adverse environmental, economic and fiscal effects, a proposed project may be credited with net public benefits.

(45) Setback Area - the area located between the setback line and the baseline.

(46) Setback Line - the line landward of the baseline that is established at a distance which is forty times the average annual erosion rate as determined by historical and other scientific means and adopted by the Department in the State Comprehensive Beach Management Plan. However, all setback lines shall be established no less than twenty feet landward of the baseline, even in cases where the shoreline has been stable or has experienced net accretion over the past forty years.

(47) Significant Dune - A dune located completely seaward of the setback line, which because of its size and/or location is necessary to protect the beach/dune system of which it is a part.

(48) Special Geographic Circumstances - physical characteristics and land uses of surrounding uplands and waters may warrant additional consideration toward dock sizes. Special Geographic Circumstances identified by OCRM include: tidal ranges of greater than 6 feet; lots with greater than 500 feet of water frontage; and no potential access via dockage from the opposite side of the creek. At the discretion of Department staff, one or more of these circumstances may be applied to dock applications, which may allow up to an additional fifty percent (50%) to what is allowed in 30-12.A(2)(c).

(49) Standard Erosion Zone - a segment of shoreline which is subject to essentially the same set of coastal processes, has a fairly constant range of profiles and sediment characteristics, and is not directly influenced by tidal inlets or associated inlet shoals.

(50) Tidelands - all areas which are at or below mean high tide and coastal wetlands, mudflats, and similar areas that are contiguous or adjacent to coastal waters and are an integral part of the estuarine systems involved. Coastal wetlands include marshes, mudflats, and shallows and means those areas periodically inundated by saline waters whether or not the saline waters reach the area naturally or through artificial water courses and those areas that are normally characterized by the prevalence of saline water vegetation capable of growth and reproduction. Provided, however, nothing in this definition shall apply to wetland areas that are not an integral part of an estuarine system. Further, until such time as the exact geographic extent of this definition can be scientifically determined, the Department shall have the authority to designate its approximate geographic extent.

(51) Transmittal Form - the official form prepared by the agency with subject matter jurisdiction that is filed with the division notifying it of a request by any person for a contested case hearing.

(52) Water-dependent - a facility which can demonstrate that dependence on, use of, or access to coastal waters is essential to the functioning of its primary activity.

(53) Waterfront property - For purposes of these regulations, waterfront property will generally be defined as upland sites where a straight-line extension of both, generally shore perpendicular, upland property lines reaches a navigable watercourse within 1000' of the marsh critical line. Waterfront property may also be identified via an approved dock master plan where designated corridors differing from upland property line extensions are delineated.

HISTORY: Amended by State Register Volume 10, Issue No. 6, eff June 28, 1985; State Register Volume 14, Issue No. 5, eff May 25, 1990; State Register Volume 15, Issue No. 5, eff May 24, 1991; State Register Volume 17, Issue No. 2, eff Feb 20, 1993; State Register Volume 17, Issue No. 5, Part 1, eff May 28, 1993; State Register Volume 19, Issue No. 6, eff June 23, 1995; State Register Volume 23, Issue No. 6, eff June 25, 1999; State Register Volume 26, Issue No. 5, Part 1, eff May 24, 2002; State Register Volume 27, Issue No. 6, Part 1, eff June 27, 2003; State Register Volume 29, Issue No. 6, eff June 24, 2005; State Register Volume 30, Issue No. 6, eff June 23, 2006; State Register Volume 32, Issue No. 4, eff April 25, 2008; State Register Volume 40, Issue No. 6, Doc. No. 4615, eff June 24, 2016.

Editor's Note

2004 Act No. 202, § 3, provides as follows:

“Wherever the term ‘Administrative Law Judge Division’ appears in any provision of law, regulation, or other document, it must be construed to mean the Administrative Law Court established by this act.”

Law Review and Journal Commentaries

Abandoned ship!: Legal approaches to South Carolina's derelict vessel problem. Susanna Cartwright Brailsford, 62 S.C. L. Rev. 587 (Summer 2011).

30-2. Applying for a Permit.

A. Preliminary Review: The Department encourages the submission of development plans for preliminary review. If a permit is necessary, the Department will make every effort to assist the applicant in expediting the administrative aspects of filing an application.

B. Permit Application: Except for those exemptions as specified in the 1977 Coastal Zone Management Act, as amended, any person wishing to alter a critical area must receive a permit from the Department. Section 48-39-140(B) directs that certain information be included in the permit application submitted to the Department. The following minimum information shall ordinarily be required before a permit application is considered complete:

(1) Name and address of the applicant;

(2) A plan or drawing showing the applicant's proposal and the manner or method by which the proposal shall be accomplished;

(3) A plat or a copy of a plat of the area in which the proposed work will take place;

(4) A certified copy of the deed, lease or other instrument under which the applicant claims title, possession or permission from the owner of the property to carry out the proposal;

(5) A list of all adjoining landowners and their addresses or a sworn affidavit that with due diligence such information is not ascertainable. When considered appropriate by the Department, additional information may be required concerning affected landowners;

(6) A brief description of the proposed alteration, its purpose and intended use, including a drawing of the type of structure, a description of the method of construction, and identification of materials and equipment to be used. In some instances, a registered survey may be required as part of the application package, particularly those involving docks in excess of 900 feet in length.

(7) A copy of the newspaper public notice:

(a) Minor developments (see R.30-1(D)): In the case of applications for minor development permits, the applicant shall publish notice at least once in a newspaper of local circulation in the county of the proposed activity. The newspaper notice should be published within 15 days of the date of Public Notice (see R.30-2(C)). No permit shall be issued by the Department until at least 10 days following the date of newspaper publication. The following form shall be used for newspaper publication:

PUBLIC NOTICE

SC DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

OFFICE OF OCEAN AND COASTAL RESOURCE MANAGEMENT

(Name of applicant) will apply (has applied) to SCDHEC-OCRM for a permit to (description of work) for (public/private) use, at/in (location and name of waterway). Comments will be received by (insert local OCRM office address) until (insert date, 10 days after date of this newspaper notice).

(b) Other activities: In the case of applications for other than minor development permits, the applicant shall publish notice at least once in both a newspaper of general statewide circulation (*The State, Post and Courier*, or *The Greenville News*) and a newspaper of local circulation in the county of the proposed activity. The newspaper notices should be published within 15 days of the date of Public Notice (see R.30-2(C)). No permit shall be issued by the Department until at least 15 days following the date of the last published newspaper publication. The following form shall be used for newspaper publication:

PUBLIC NOTICE

SC DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

OFFICE OF OCEAN AND COASTAL RESOURCE MANAGEMENT

(Name of applicant) will apply (has applied) to SCDHEC-OCRM for a permit to (description of work) for (public/private) use, at/in (location and name of waterway). Comments will be received by SCDHEC-OCRM, (insert Charleston OCRM office address) until (insert date, 15 days after date of this newspaper notice).

(8) When considered appropriate by the Department, additional information may be required. For major development activities this additional information may include but is not limited to a stormwater management plan, approved freshwater wetland delineation, and cultural resource and endangered species survey. The plat or copy of a plat submitted for those activities subject to the Beach Management Act (Sections 48-39-270 through 350) shall show the location of the baseline and setback line, applicable to the subject property. The lines shall be derived from information available from the Department. The lines shall be part of the plat and sealed by a South Carolina Registered Land Surveyor and may not be placed on the application by anyone other than a South Carolina Registered Land Surveyor or a member of the Department staff.

(9) The administrative fees for permit applications are included in R.61-30.G(13).

C. Notification: The Department shall within thirty days of receiving either a Joint Public Notice or SCDHEC-OCRM permit application, notify in writing interested agencies, all adjoining landowners, local government units in which the land is located and other interested persons. This notice shall indicate the nature and extent of the applicant's proposal.

D. Permit Processing: Permit processing shall commence immediately upon receipt of either a Joint Public Notice or a SCDHEC-OCRM permit application and shall proceed concurrently but separately from any Federal authorization.

E. Comments on Application: All interested federal and state agencies, all adjoining landowners, local government units and other interested persons to have thirty days after the receipt of Public Notice of permit application from the Department to file written comments pertaining to the application. Only those comments received within the thirty day period must be considered in the Department's decision on a permit application. Any persons wishing to receive notice of the initial decision on a permit application shall notify the Department within this comment period. Comments on permit applications for minor development activities, as defined in Section 48-39-10(N), must be received within fifteen days after receipt of Public Notice of permit application.

F. Public Information: The complete file on each permit application, including all comments received, will be made available, upon request, for inspection by any member of the general public during regular business hours at the principal office for SCDHEC-OCRM.

G. State Comment: Issuance or denial of the permit by the Department shall be the State comment on the corresponding federal permit application.

H. Water Quality Certificate: If a water quality certificate is not required by a Federal permitting agency under Section 401 of P.L. 92-500, the Department may evaluate whether there is a reasonable assurance the project will not contravene State Water Quality Standards. The Department will not issue a separate 401 water quality certification for an activity which requires a direct permit for alteration of the critical area of the coastal zone pursuant to applicable regulations governing issuance of permits for alteration of the critical area of the coastal zone. The Department will process permit applications pursuant to applicable regulations governing issuance of permits for alteration of the critical area of the coastal zone with coordination and input from appropriate staff regarding water quality impacts. The direct permit will serve as the 401 water quality certification for an associated Federal permit.

I. Applications Involving Adjoining Landowners Claiming Ownership of Critical Area

(1) All permit applicants must provide information in writing concerning the ownership of critical area in or over which a project is to be constructed.

(2) The alleged adjoining landowner of critical area must be notified pursuant to the provisions of Section 48-39-140(C) and R.30-2.

(3) If the alleged adjoining landowner of critical area files a written objection to the permit application within the period prescribed in Section 48–39–140 (15 days for minor and 30 days for major permits) based upon a claim of ownership and indicates an intention to file a court action pursuant to Section 48–39–220, the application will be deemed incomplete and further processing of the permit will not take place until a final judicial decision is rendered by a court of competent jurisdiction. However, written proof of filing a court action pursuant to Section 48–39–220 must be received by the Department within 30 days of the date of the expiration of the comment period. If no such written proof is timely received, the permit will be processed pursuant to law.

(4) If the final judicial decision determines that the critical area in question is owned by the adjoining critical area landowner and that the critical area landowner has a right to exclude others as part of the title, the permit will not be issued unless the applicant presents the Department with a copy of a deed, lease, or other instrument from the adjudicated critical area landowner that would allow construction of the proposed project, or written permission from such owner to carry out the proposal as provided for in Section 48–39–140(B)(4).

(5) Permit applicants who are vested with the power of eminent domain shall be exempt from the provisions of paragraphs (3) and (4) of R.30–2(I).

HISTORY: Amended by State Register Volume 14, Issue No. 5, eff May 25, 1990; State Register Volume 15, Issue No. 5, eff May 24, 1991; State Register Volume 18, Issue No. 5, eff May 27, 1994; State Register Volume 19, Issue No. 6, eff June 23, 1995; State Register Volume 23, Issue No. 6, eff June 25, 1999; State Register Volume 26, Issue No. 5, Part 1, eff May 24, 2002; State Register Volume 26, Issue No. 6, Part 1, eff June 28, 2002.

30–3. Public Hearings.

Section 48–39–140(C) directs the Department to hold public hearings on permit applications if it is deemed necessary. Section 48–39–150(B) requires the Department to convene a public hearing before acting on an application if twenty or more citizens or residents of the affected county or counties request such a hearing. Each request must be in writing and on a separate sheet of paper and be received within thirty days after publication of a Public Notice of the permit application (15 days for a minor activity). In all cases, the public hearing shall be held in the county where the land is located, and if in more than one county, the Department shall determine in which county to hold the hearing or may hold hearings in more than one county. When applicable and practical, joint public hearings will be held with the United States Army Corps of Engineers and/or other agencies.

HISTORY: Amended by State Register Volume 19, Issue No. 6, eff June 23, 1995; State Register Volume 23, Issue No. 6, eff June 25, 1999.

30–4. Decisions on a Permit.

A. Permit Approval:

(1) The Department is allowed, under, Section 48–39–150(B) to issue a conditional permit approval. Under this provision, the Department may direct the applicant to amend his proposal to take specific measures necessary to protect the public interest. The Department, at its discretion, may seek additional public comment on major modifications to a permit application.

(2) If the Department has approved an application, Section 48–39–150(B) also allows the Department, at its discretion, to support the applicant in a Federal permitting process for the same activity.

B. Permit Denial: A Permit denial shall cite facts upon which the denial was based and the reasons for denial.

C. Action Upon a Permit: The Department according to Section 48-39-150.C shall act upon an application for a permit within ninety days. This ninety-day period shall begin when the application is administratively complete and filed in approved form. The file is administratively complete when all required information, including fees, newspaper notices, proof of ownership and certifications have been received. Exceptions of the 90-day deadline are applications for minor development activities on which action must be taken in thirty days. Permits are deemed issued after signature by applicant and appropriate OCRM staff. See R.61–30 for further descriptions of the administrative processes governing action on a permit.

D. Completion of Work: Section 48–39–150(F) requires a permit holder to complete work within five years from the date of permit issuance. The Department may extend this five-year period upon

showing of good cause indicating that due diligence toward completion of the work has been made, evidenced by significant work progress. The permit holder must request an extension in writing prior to the permit's expiration date. Permits which have expired may not be extended. Work shall be continuous and expeditious whenever possible.

E. Property Rights Not Affected; No State Liability; Other Permit Requirements: No permit shall convey, nor be interpreted to convey, a property right in the land or water in which the permitted activity is located. No permit shall be construed as alienating public property for private use or as alienating private property for public use. In no way shall the State be liable for any damage as a result of the erection of permitted works. A SCDHEC-OCRM permit in no way relieves the holder from responsibility for compliance with other applicable Federal, State, or local permit requirements.

F. Legally Commenced Use: Section 48-39-130(C) reads as follows, "Ninety days after the effective date of this act no person shall fill, remove, dredge, drain or erect any structure on or in any way alter any critical area without first obtaining a permit from the Department. Provided, however, that a person who has legally commenced a use such as those evidenced by a state permit, as issued by the Budget and Control Board, or a project loan approved by the rural electrification administration or a local building permit or has received a United States Corps of Engineers or Coast Guard permit, where applicable, may continue such use without obtaining a permit. Any person may request the Department to review any project or activity to determine if he is exempt under this section from the provisions of this act. The Department shall make such determinations within forty-five days from the receipt of any such request."

G. Mitigation Criteria:

(1) The avoidance of tidelands is preferable to mitigation. The mitigation of tideland impacts is considered only after the policies, law, and rules and regulations of the Department have been addressed and the tideland impacts are unavoidable and are allowed by law. Mitigation may be required for any projects impacting tidelands at the discretion of the Department.

(2) Mitigation shall take the form of wetland creation and/or wetland enhancement and restoration. Wetland creation shall be performed at a ratio of 2:1, wetland created to wetland altered, for private projects and 1:1, wetland created to wetland altered, for projects deemed in the public interest. Enhancement and restoration projects should normally be coupled with some wetland creation and must clearly be an improvement ecologically over the existing system. Approved mitigation work must be performed and completed concurrently with permitted work unless otherwise authorized by the Department.

H. Amendment to a Permit: An amendment to a permit can be made without the requirements of a new permit if the proposed change on the amendment does not significantly increase the size or change the use of the permitted project. Otherwise, the amendment proposal will require a fee, a newspaper notice and will be placed on public notice by DHEC-OCRM.

I. After-the-Fact Permits: The staff does not have authority to consider an after-the-fact application unless:

- (1) All fines are paid before application;
- (2) The permit would legitimize an activity that in the opinion of the Department appears to be a routine permitting matter that would meet all rules and regulations;
- (3) Any portion of the activity or structure that is in violation of the Act or rules and regulations is corrected prior to the application;
- (4) An after-the-fact application can not be made until conclusion of the administrative appeal, if taken.

HISTORY: Amended by State Register Volume 17, Issue No. 5, Part 1, eff May 28, 1993; State Register Volume 19, Issue No. 6, eff June 23, 1995; State Register Volume 23, Issue No. 6, eff June 25, 1999; State Register Volume 26, Issue No. 6, Part 1, eff June 28, 2002; State Register Volume 28, Issue No. 3, eff March 26, 2004.

30-5. Exceptions.

A. List of Exceptions: Section 48-39-130(D) lists several exceptions which do not require a permit. These are as follows:

- (1) The accomplishment of emergency orders issued by the Department or by an appointed official of a county or municipality or of the state acting to protect the public health and safety. With

regard to the beach/dune critical area, only the use of sandbags, sand scraping, renourishment, or a combination of them is allowed, in accordance with R.30-5.B and R.30-15.H.

(2) Hunting, erecting duckblinds, fishing, shellfishing and trapping when and where otherwise permitted by law; the conservation, replenishment and research activities of State agencies and educational institutions; or boating or other recreation provided that such activities cause no material harm to the flora, fauna, physical, or aesthetic resources of the area.

(3) The discharge of treated effluent as permitted by law; provided, however, that the Department shall have the authority to review and comment on all proposed permits that would affect critical areas.

(4) Dredge and fill performed by the United States Corps of Engineers for the maintenance of harbor channels and the collection and disposal of the materials so dredged; provided, however, that the Department shall have authority to review and certify all such proposed dredge and fill activities.

(5) Construction of walkways over sand dunes in accordance with R.30-13(B).

(6) Emergency repairs to an existing bank, dike, fishing pier, or structure other than oceanfront erosion control structures or devices which have been erected in accordance with federal and state laws or provided for by general law acts passed by the General Assembly, if notice is given in writing to the Department within 72 hours of the onset of needed repairs.

(7) Maintenance and repair of drainage and sewer facilities constructed in accordance with federal or State laws, and normal maintenance and repair of any utility or railroad.

(8) Normal maintenance or repair to any pier or walkway, provided that such maintenance or repair shall not involve dredge or fill.

(9) Construction or maintenance of a major utility facility where the utility has obtained a certificate for such facility under "The Utility Facility Siting and Environmental Protection Act" (Sections 58-33-10 through 58-33-430 of the 1976 Code). Provided, however, that the South Carolina Public Service Commission shall make the Department a party to certification proceedings for utility facilities within the coastal zone.

(10) Habitable structures and pools determined to be damaged less than sixty-six and two-thirds percent pursuant to R.30-14(D)(3)(a) and (b) may be repaired after acceptable documentation is provided to the Department.

(11) Erosion control structures or devices determined to be damaged less than eighty percent above grade through June 30, 1995, sixty-six and two-thirds percent above grade from July 1, 1995, through June 30, 2005, or fifty percent above grade after June 30, 2005, pursuant to R.30-14(D)(3)(c) and (d) may be repaired after acceptable documentation is provided to the Department.

B. Notification of Emergency Orders to the Department:

(1) As required in R.30-5.A(1) and R.30-15.H, emergency orders for sandbags, sand scraping or renourishment may be issued by an appointed official of a county or municipality or of the state provided:

(a) the emergency conditions conform with the definition of emergency in Section 48-39-10(U);

(b) the order is issued to protect health, safety or resources of the residents of the State as provided in Section 48-39-10(U); and

(c) the order is issued in accordance with R.30-15.H.

(2) The Department must be notified of the issuance of an emergency order by an appointed official of a county or municipality or of the state. Notification to the Department must be made in writing prior to commencement of the activity, if possible, and must state the following:

(a) the nature of the emergency;

(b) the substance of the emergency order;

(c) the time the order will be issued, or if circumstances preclude prior notice, when the order was issued;

(d) the name of the local official executing the order and the authority under which that person is acting;

(e) the location of the activity ordered;

(f) the estimate of when such order shall be withdrawn.

(3) The Department shall be notified within seventy-two hours of the issuance of the emergency order. If the Department is not notified the official issuing such order or ordering such emergency action shall be in violation of the Act and these rules and regulations. Within seventy-two hours after the issuance of the emergency order, the official ordering the emergency action shall put the elements under R.30-5.B(2)(a)-(f) in writing and file them with the Department.

(4) The official issuing the emergency order shall be deemed in violation of the Act if the emergency conditions do not conform with the definition of emergency in Section 48-39-10(U).

C. Emergency Repairs to any Existing Bank and Dike or Fishing Pier: As in A(6) above, notice by telephone, telegram or radio of emergency repairs to any existing bank, dike or fishing pier must be given to the Department within seventy-two hours from the onset of needed repairs. Within five days after the commencement of repairs, written notification must be filed with the Department. If such notification is not received, the person(s) performing the work will be in violation of the Act and these rules and regulations.

D. Normal Maintenance and Repair: Normal maintenance and repair applies only to work on a structure which has been previously permitted or is grandfathered or exempted and is still generally intact and functional in its present condition. The work may only extend to the original dimensions of the structure, and any expansion, additions, or major rebuilding will require either a Department permit or documentation to and written approval from the Department.

HISTORY: Amended by State Register Volume 14, Issue No. 5, eff May 25, 1990; State Register Volume 15, Issue No. 5, eff May 24, 1991; State Register Volume 19, Issue No. 6, eff June 23, 1995; State Register Volume 23, Issue No. 6, eff June 25, 1999; State Register Volume 32, Issue No. 4, eff April 25, 2008; State Register Volume 40, Issue No. 6, Doc. No. 4615, eff June 24, 2016.

30-6. Appeals of Permit Decisions.

A. A Department decision involving the issuance, denial, suspension, or revocation of a permit or certification may be appealed by an affected person with standing pursuant to applicable law, including S.C. Code Title 44, Chapter 1; Title 1, Chapter 23; and Title 48, Chapter 39.

B. Public Notice: At the same time as the Department sends the Agency Information Sheet to the Administrative Law Court, the Department shall notify in writing all interested persons that have submitted written comments. This notice shall, to the extent that the information is available, indicate the names of all parties including the agency, the petitioner(s) and the permittee(s); the initial action of the agency; and the nature and extent of the contested case.

HISTORY: Amended by State Register Volume 8, Issue No. 6, eff June 22, 1984; State Register Volume 17, Issue No. 5, Part 1, eff May 28, 1993; State Register Volume 19, Issue No. 6, eff June 23, 1995; State Register Volume 23, Issue No. 6, eff June 25, 1999; State Register Volume 32, Issue No. 4, eff April 25, 2008.

30-8. Enforcement.

A. Permit Revocation Process: All permits issued by the Department are revocable licenses. Section 48-39-50(H) provides that the Department can revoke or suspend permits of persons "who fail or refuse to carry out or comply with the terms or conditions of the permit." Additionally, the Department is charged with the responsibility in Section 48-39-50(M) to implement the state policies and in Section 48-39-50(O) to exercise all incidental powers necessary to carry out the provisions of this chapter. The Department has the right to revoke any permits where materially erroneous or fraudulent information has been provided by either the permit applicant, or resource agencies charged with the responsibility of providing background information for the permitting process. The Department may also revoke any permit where the permittee is violating the terms and/or conditions of the permit, has changed the use of the structure so as to violate the policies or rules and regulations promulgated under the Act, and for inappropriate violations of law. If a determination is made by the Department that there are sufficient grounds for revocation of the permit, the Department shall follow the following procedure:

(1) The permittee shall be notified by the Department of the grounds for revocation of the permit by certified letter or personal service.

(2) The permittee must respond in writing to the written allegations of the Department within 20 days of receipt of the Notice of Intent to Revoke. Failure to timely respond shall result in a Default Order being issued by the Department. In the event that the permittee agrees that there are grounds for revocation then the Department shall have the authority to issue an order revoking the permit, and take such other action as may be made legally authorized pursuant to the Act.

(3) Pending resolution of revocation action, the Department may suspend work on, and/or use of, the affected project.

B. Cease and Desist Directive: When any person is found altering a critical area without a permit and such activity is not exempted by Section 48-39-130(D), or is in violation of the terms and/or conditions of a permit, the Department may issue a cease and desist directive. This directive shall inform the person that he is in violation of the Act and shall cease the unauthorized activity. The Department may then order the person to restore the area to its original condition. If the person responsible for the unauthorized activity refuses to comply with the Department directive, the Department may then file suit in the appropriate circuit court as outlined in Section 48-39-160.

C. Arrest Warrants: When a person is found altering a critical area without a permit and such activity is not exempted by Section 48-39-130(D), has not been authorized by a permit, or is in violation of the terms and/or conditions of a Department permit, the Department may cause to be issued a warrant for the arrest of the violator.

D. Penalties: As stated in Section 48-39-170 any person found guilty of violation of the Act shall be punished by imprisonment of not more than six months or by a fine of not more than five thousand dollars, or both for the first offense; and by imprisonment of not more than one year or by a fine of not more than ten thousand dollars, or both, for each subsequent offense. In lieu of or in addition to any civil fine, the Department may employ other means of enforcement resolution, including but not limited to mitigation or supplemental restoration/enhancement activities.

E. Judicial Enforcement: Section 48-39-160 provides the Department, the Attorney General or any person adversely affected with a remedy to restrain violations of the Act.

F. Enforcement Orders and Enforcement Process: Pursuant to Section 48-39-170, the Department may issue administrative orders requiring persons to comply with any permit, regulation, standard, or requirement under the Act and to restore the environment when deemed appropriate. Prior to issuance of an enforcement order and appeal, the Department shall initiate the following process:

(1) If no acceptable resolution of a violation is reached, the Department shall send an Admission Letter setting forth all facts and grounds for violation.

(2) Within 15 days from receipt of the Admission Letter the responsible party must either admit the contents to be true or send the Department their version of the facts setting forth why the Department's facts are incorrect. Failure to respond shall result in a conclusion by the Department that the contents of letter are true.

(3) If no response is timely made to the Admission Letter, or if the response fails to resolve the Department's concerns, an Enforcement Order shall be issued based on the facts as stated by the Department in the Admission letter.

(4) Any persons to whom an order is issued may appeal it pursuant to applicable law, including S.C. Code Title 44, Chapter 1; Title 1, Chapter 23; and Title 48, Chapter 39.

HISTORY: Amended by State Register Volume 17, Issue No. 5, Part 1, eff May 28, 1993; State Register Volume 18, Issue No. 5, eff May 27, 1994; State Register Volume 19, Issue No. 6, eff June 23, 1995; State Register Volume 23, Issue No. 6, eff June 25, 1999; State Register Volume 27, Issue No. 6, Part 1, eff June 27, 2003; State Register Volume 32, Issue No. 4, eff April 25, 2008.

30-9. Other Provisions.

A. Savings Clause: If any provisions of the Act or of these Rules and Regulations are adjudged invalid or unconstitutional, the remainder of the Act and these Rules and Regulations and/or the application of their provisions to other persons or circumstances shall not be affected thereby.

B. Bonding by the Department: To insure that the holder complies with all limitations and conditions of the permit, the Department may, at its discretion, require a secured bond before issuance of the permit. The Department may also require the applicant to submit proof of financial responsibility.

C. Transfer of Permits: Permits are issued in the name of the applicant and may not be assigned to another without written permission of the Department.

D. Declaratory Rulings: Interested persons may petition to the Department for declaratory rulings. The Department shall rule on each petition, in writing, within 45 days of receipt.

HISTORY: Amended by State Register Volume 19, Issue No. 6, eff June 23, 1995; State Register Volume 23, Issue No. 6, eff June 25, 1999.

30-10. Critical Area Boundaries.

A. Coastal Waters and Tidelands:

(1) The Department has permit authority over the coastal waters and tidelands critical areas defined in Section 48-39-10 as follows:

(a) "Coastal waters" means the navigable waters of the United States subject to the ebb and flood of the tide and which are saline waters, shoreward to their mean high-water mark. Provided, however, that the Department may designate boundaries which approximate the mean extent of saline waters until such time as the mean extent of saline waters can be determined scientifically.

(b) "Tidelands" means all areas which are at or below mean high tide and coastal wetlands, mudflats, and similar areas that are contiguous or adjacent to coastal waters and are an integral part of the estuarine systems involved. Coastal wetlands include marshes, mudflats, and shallows and means those areas periodically inundated by saline waters whether or not the saline waters reach the area naturally or through artificial water courses and those areas that are normally characterized by the prevalence of saline water vegetation capable of growth and reproduction. Provided, however, nothing in this definition shall apply to wetland areas that are not an integral part of an estuarine system. Further, until such time as the exact geographic extent of this definition can be scientifically determined, the Department shall have the authority to designate its approximate geographic extent.

(2) Using biological field surveys and aerial photography, the Department has found the point on the upper reaches of the estuarine systems where tideland vegetation changes from predominately brackish to predominately fresh and has established a boundary using the nearest recognizable physical features within this area. This boundary has been posted on an official map in SCDHEC-OCRM'S principal offices of business and is available for public review. An approximate description of this boundary is as follows: On the south at the intersection of the South Carolina-Georgia border and the old track bed of the Seaboard Coastline (SCL), approximately 1.75 miles above the U.S. Highway 17-A bridge across the Savannah River; thence, northeastward along the track bed until its intersection with S. C. 462 near Euhaw Creek; thence, northward along S. C. 462 until its intersection with U.S. Highway 17/U.S. Interstate 95 near Coosawhatchie; thence, northeastward along U.S. 17/U.S. Interstate 95 until U.S. Highway 17 and U.S. Interstate 95 intersect at Point South, thence, northeastward along U.S. 17 until its intersection with S-15-26, approximately two miles east of Green Pond; thence, southward along S-15-26 (Bennetts Point Road) until its intersection with the old SCL track bed near Airy Hall; thence, east-northeastward along the track bed on its intersection with S. C. 174; thence, northward along S. C. 174 for approximately 1.5 miles until its intersection with S. C. 164; thence, east-northeastward approximately three miles along S. C. 164 until its intersection with S. C. 165; thence, northward along S. C. 165 (Bacons Bridge Road) until its intersection with S. C. 642 (Dorchester Road); thence, southeastward along S. C. 642 until its intersection with U.S. Interstate 26; thence, southward along I-26 until its intersection with S. C. 7 (Cosgrove Avenue); thence, northeastward on S. C. 7 until its intersection with the SCL track bed adjacent to S-10-32 (Spruill Avenue); thence, northward along this track bed until its intersection with the Charleston County/Berkeley County line, approximately one-fifth mile north of S-10-13 (Remount Road); thence, east-northeastward along the county line until its intersection with the Cooper River at Goose Creek; thence, eastward by a straight line across the Cooper River and mouth of Yellow House Creek to Jessen Road at the Cainhoy Industrial Park, thence southeastward

until its intersection with (Clements Ferry Road); thence, northeastward along S-8-33 until its intersection with S-8-100 (Resurrection Road) until its intersection with S. C. 41, thence northeastward on S-8-100 (Halfway Creek Road); thence, northeastward along S-8-100 until its intersection with S-10-98 (Guerins Creek Bridge Road); thence, southward along S-10-98 until its intersection with U.S. Highway 17; thence, northeastward along U.S. Highway 17 until its intersection with S-27-30 north of the North Santee River; thence, eastward along S-27-30 for approximately five miles; thence, northward along S-27-30 until its intersection with S-27-18; thence, northwestward along S-27-18 until its intersection with U.S. Highway 17 south of Georgetown, thence northeastward along U.S. Highway 17 (Frasier Street) through Georgetown, thence northeastward along U. S. Highway 17 until the intersection of U.S. Highway 17 Business and U.S. Highway 17 Bypass south of Murrells Inlet; thence, northeastward along U.S. Highway 17 Business (Kings Highway) through Murrells Inlet, Garden City, Surfside Beach, and Myrtle Beach until its intersection U.S. Highway 17 north of Myrtle Beach; thence northeastward along U.S. Highway 17 until its intersection with the South Carolina-North Carolina border. In determining the exact location of this boundary, only those lands seaward of the right-of-way line located on the upstream side of road beds and track beds described shall be included in the tidelands and coastal waters critical areas.

(3) All coastal waters and tidelands seaward from this boundary to the State jurisdictional limit are included within the critical areas.

B. Beaches and Beach/Dune System: The Department has permitting authority over beaches and the beach/dune system. In determining the boundaries of this critical area, the Department will be guided by Section 48-39-270, Section 48-39-280 and Section 48-39-360.

HISTORY: Amended by State Register Volume 14, Issue No. 5, eff May 25, 1990; State Register Volume 15, Issue No. 5, eff May 24, 1991; State Register Volume 19, Issue No. 6, eff June 23, 1995; State Register Volume 23, Issue No. 6, eff June 25, 1999.

30-11. General Guidelines for All Critical Areas.

A. Preface: The critical areas are of vital importance to the State, and there is strong and growing pressure for the development of these areas. The Department has established these rules and regulations for permit applications in an effort to reduce the irreversible loss of productive tidelands, coastal waters, beaches, and dunes while meeting long-range State development needs.

B. General Considerations: In assessing the potential impacts of projects in critical areas, the Department will be guided by the policy statements in Sections 48-39-20 and 48-39-30 and the following ten considerations in Section 48-39-150:

(1) The extent to which the activity requires a waterfront location or is economically enhanced by its proximity to the water;

(2) The extent to which the activity would harmfully obstruct the natural flow of navigable water. If the proposed project is in one or more of the State's harbors, or in a waterway used for commercial navigation and shipping, or in an area set aside for port development in an approved management plan, then a certificate from the South Carolina State Ports Authority declaring that the proposed project or activity would not unreasonably interfere with commercial navigation and shipping must be obtained by the Department prior to issuing a permit;

(3) The extent to which the applicant's completed project would affect the production of fish, shrimp, oysters, crabs, or clams or any marine life or wildlife, or other natural resources in a particular area, including but not limited to water and oxygen supply;

(4) The extent to which the activity could cause erosion, shoaling of channels or creation of stagnant water;

(5) The extent to which the development could affect existing public access to tidal and submerged lands, navigable waters and beaches, or other recreational coastal resources;

(6) The extent to which the development could affect the habitats for rare and endangered species of wildlife or irreplaceable historic and archeological sites of South Carolina's coastal zone;

(7) The extent of the economic benefits as compared with the benefits from preservation of an area in its unaltered state;

(8) The extent of any adverse environmental impact which cannot be avoided by reasonable safeguards;

(9) The extent to which all feasible safeguards are taken to avoid adverse environmental impact resulting from a project;

(10) The extent to which the proposed use could affect the value and enjoyment of adjacent owners.

C. Further Guidelines: In the fulfilling of its responsibility under Section 48-39-150, the Department must in part base its decisions regarding permit applications on the policies specified in Sections 48-39-20 and 48-39-30, and thus, be guided by the following:

(1) The extent to which long-range, cumulative effects of the project may result within the context of other possible development and the general character of the area.

(2) Where applicable, the extent to which the overall plans and designs of a project can be submitted together and evaluated as a whole, rather than submitted piecemeal and in a fragmented fashion which limits comprehensive evaluation.

(3) The extent and significance of negative impacts on Geographic Areas of Particular Concern (GAPC). The determination of negative impacts will be made by the Department in each case with reference to the priorities of use for the particular GAPC. The priorities of use are found in Chapter IV of the Coastal Management Program.

D. General Guidelines for Beaches and the Beach/Dune System: In addition to the provisions of the South Carolina Coastal Management Act of 1977, the policies of the South Carolina Coastal Management Program, and applicable rules and regulations, the Department shall base its decisions on activities in the beach/dune system on the findings and policies specified in Section 48-39-250 and Section 48-39-260 of the 1977 Coastal Zone Management Act, as amended, and the following:

(1) The Department shall discourage new construction in the beach/dune system and encourage those who have erected structures within the system to retreat.

(2) The Department shall promote soft-solutions to erosion within the context of a policy of retreat of development from the shore and prevent the strengthening and enlargement of existing erosion control structures.

(3) The Department shall promote public access to the beaches of this state.

(4) The Department shall consider state and local comprehensive plans. No permit shall be issued which is inconsistent with the state plan, and all permits issued shall be consistent with local plans to the maximum extent practicable.

(5) The Department shall be guided by the prohibitions against construction contained in Section 48-39-290 and Section 48-39-300 which are based upon the conclusion that ill-planned development, whether habitable structures, recreational amenities, erosion control devices or other man-made structures, will now and in the future adversely impact the fragile beach/dune system. These structures interfere with the natural system and impact the highest and best uses of the system. In order to protect the highest and best uses of the beach/dune system, the Department, in its management capacity, shall encourage minimal development therein.

(6) The destruction of beach or dune vegetation seaward of the setback line is prohibited unless there is no feasible alternative. When there is destruction of vegetation permitted seaward of the setback line, mitigation, in the form of planting new vegetation to rectify the destruction is required as a permit condition. In no event shall any part of a building be constructed on a primary oceanfront sand dune.

E. Abandoned Vessels and Structures. Abandoned vessels and structures, as defined in R.30-1(D) have the potential to harm critical area environments through their physical presence and the release of contaminants that may be associated with them. In addition, they may also be a hazard to navigation, public access and sources of unsightly and dangerous floating debris as they deteriorate and break apart. Specific standards for abandoned vessels and structures are as follows:

(1) Vessels or structures determined to be abandoned by OCRM may be required to be removed from the critical area.

(2) Upon notification by OCRM, the owner of the abandoned vessel or structure will have 30 days from date of notification to remove it from the critical area at his or her expense.

(3) Abandoned boats, barges, or other watercraft whose ownership cannot be established may be removed from the critical area by any person, at their expense, and in accordance with Section 50-23-135 of the SC Code of Laws, 1976.

(4) Structures, other than watercraft, whose ownership cannot be established may be removed by any person, at their expense, provided notification is provided to OCRM prior to removal. Such notification shall include date and method of removal.

(5) OCRM may require a Department permit for removal of any vessel or structure if it is deemed that the removal process will significantly impact the surrounding marsh environment.

HISTORY: Amended by State Register Volume 14, Issue No. 5, eff May 25, 1990; State Register Volume 15, Issue No. 5, eff May 24, 1991; State Register Volume 19, Issue No. 6, eff June 23, 1995; State Register Volume 23, Issue No. 6, eff June 25, 1999.

Law Review and Journal Commentaries

Abandoned ship!: Legal approaches to South Carolina's derelict vessel problem. Susanna Cartwright Brailsford, 62 S.C. L. Rev. 587 (Summer 2011).

30-12. Specific Project Standards for Tidelands and Coastal Waters.

A. Docks and Piers: A dock or pier is a structure built over and/or floating on water and is used to provide access to water and for the mooring of boats. Docks and piers are the most popular method of gaining access to deep water. Docks and piers sometimes pose navigational problems, restrict public use of the water and, under certain circumstances, possess potential for creating environmental problems. This section is divided in five parts providing standards for 1) all, 2) private and joint use, 3) master planned, 4) commercial and (5) community docks. Docks are defined in 30-1.D(16) Docks. Community docks have less environmental impact than multiple private or joint use docks. One or more community dock(s) in a development will be permitted when sufficient numbers of private or joint use docks are eliminated and other applicable Department regulations are met. This section does not include standards for marinas, which are addressed in 30-12.E. Marinas by definition include docks with more than 250 linear feet of effective docking space.

(1) The following standards are applicable for construction of all docks and piers:

(a) Docks and piers shall be limited to one structure per parcel or lot and in all instances, parcels or lots must be waterfront as defined by 30-1.D(53), shall not restrict the reasonable navigation or public use of State lands and waters;

(b) Docks and piers shall be constructed in a manner that does not restrict water flow;

(c) The size and extension of a dock or pier must be limited to that which is reasonable for the intended use;

(d) Docks and piers should use the least environmentally damaging alignment;

(e) All applications for docks and piers should accurately illustrate the alignment of property boundaries with adjacent owners and show the distance of the proposed dock from such extended property boundaries. For the purpose of this section, the extension of these boundaries will be an extension of the high ground property line. The Department may consider an alternative alignment if site specific characteristics warrant or in the case of dock master plans, when appropriate.

(f) Walkways leading to the dock or pier should be elevated at least three feet above mean high water.

(g) Dry storage in uplands will be encouraged in preference to moorage in crowded areas;

(h) Developers of subdivisions and multiple family dwellings are encouraged to develop plans which include joint-use docks and/or community docks at the time of required dock master plans. Dock corridors on the approved Dock Master Plan (DMP) must be shown with bearings or State Plane Coordinates on a recordable subdivision plat for the development, and recorded in the appropriate County Office of Deeds. Subsequent re-surveys or modifications to lots shall reference the dock corridors on the recorded subdivision plat and be submitted to the Department. Reference to this DMP must be given in all contracts for lot sales.

(i) Project proposals shall include facilities for the proper handling of litter, waste, refuse and petroleum products, where applicable;

(j) Where docks and piers are to be constructed over tidelands utilized for shellfish culture or other mariculture activity, the Department will consider rights of the lessee and the public prior to approval or denial.

(k) Docks cannot be enclosed by walls or screens.

(l) Docks longer than 1,000 feet over critical area are prohibited. This is inclusive of pierheads, floats, boatlifts, ramps, mooring pilings and other associated structures.

(m) Handrails, if proposed, shall be limited to a maximum height of 36" above the walkway or pierhead decking.

(n) Docks must extend to the first navigable creek, within extensions of upland property lines or corridor lines, that has a defined channel as evidenced by a significant change in grade with the surrounding marsh; or having an established history of navigational access or use. Such creeks may only be bridged/crossed when there are rare geographic circumstances, such as very close proximity of a significantly larger creek within extensions of property or corridor lines, may warrant dock extension to a creek other than the first navigable creek. A creek with an established history of navigational use may also be considered as navigable. In exceptional cases, the Department may allow an open water channel to be bridged if current access is prohibited by other man made or natural restrictions or if site-specific conditions warrant such a crossing.

(o) This section applies to lots subdivided or resubdivided after May 23, 1993.

(i) To be eligible for a private or commercial dock, a lot must have:

(a) 75 feet of frontage at the marsh edge, and

(b) 75 feet between its extended property lines at the location in the waterbody of the proposed dock.

(ii) Joint use docks will be considered for adjacent waterfront properties each of which must have:

(a) 50 feet of frontage at the marsh edge, and

(b) 50 feet between its extended property lines at the location in the waterbody of the proposed dock.

(iii) To be eligible for a community dock, a lot must have:

(a) 50 feet of frontage at the marsh edge, and

(b) 50 feet between its extended property lines at the location in the waterbody of the proposed dock.

(iv) Lots less than 50 feet wide at the marsh edge are not eligible for a dock.

(p) No docks, pierheads or other associated structures will be permitted closer than 20 feet from extended property lines with the exception of joint use docks shared by two adjoining property owners. However, the Department may allow construction closer than 20 feet or over extended property lines where there is no material harm to the policies of the Act.

(q) If a dock is destroyed, the dock may be rebuilt to its previous configuration so long as reconstruction is completed within five years of the date of the event unless there are extenuating circumstances justifying more time.

(r) In the event that a dock owner intends to change the use of a dock from the permitted use or non-permitted grandfathered use, a new permit must be obtained prior to the change in use. The change in use is based on the types of docks distinguished by these regulations.

(2) The following standards in addition to those in R.30-12(A)(1) are applicable for the construction of private and joint use docks:

(a) Storage on docks will be limited to a bench-like locker no larger than 3 feet high, by 3 feet deep, by eight feet long.

(b) Walkways leading to a dock or pier shall not exceed 4 feet in width. For handicapped access, the Department may utilize The Americans with Disabilities Act (ADA) recommendations for walkway width and other structural configurations. Reference 28 CFR Part 36.

(c) The Department sets forth the following standards for size and use of pierheads and floating docks based on creek widths. Total allowable dock square footage as used in this section includes the areas of any fixed pierheads, floating docks, the area of boat storage docks, additional areas covered by a roof, and areas bounded by an unroofed boatlift, davit or similar structure; and excludes walkways, catwalks, ramps, mooring buoys, and mooring piles. For purposes of determining creek width, if marsh vegetation does not exist, the Department will utilize other indicators of channel width such as changes in grade and the critical area boundary. Lots in subdivisions with approved DMPs as of May 24, 2002, are exempt from R.30-12.A(2)(c)(i) and (ii) as amended on May 24, 2002. R.30-12.A(2)(c)(i) and (ii) as amended on May 24, 2002, does not apply to lots of record that existed as of May 24, 2002, until the later of July 1, 2007, or the expiration of any permit issued prior to that date.

(i) Docks will not be permitted on creeks less than 10 feet wide as measured from marsh vegetation on each side.

(ii) Docks will not be permitted on creeks less than 20 feet wide as measured from marsh vegetation on each side unless one of the following two special geographic circumstances exists: a lot has greater than 500 feet of water frontage or no potential access via dockage from the opposite side of the creek. If special geographic circumstances exist, total allowable dock square footage will be restricted to 50 square feet. Boat lifts, davits, and boat storage docks will not be permitted on any dock allowed in creeks less than 20 feet wide.

(iii) On creeks between 20 and 50 feet, as measured from marsh vegetation on each side, total allowable dock square footage shall be restricted to 120 square feet unless special geographic circumstances and land uses warrant a larger structure.

(iv) On creeks between 51 and 150 feet, as measured from marsh vegetation on each side, total allowable dock square footage shall be restricted to 160 square feet unless special geographic circumstances and land uses warrant a larger structure.

(v) On creeks larger than 150 feet, as measured from marsh vegetation on each side, total allowable dock square footage shall be restricted to 600 square feet unless special geographic circumstances and land uses warrant a larger structure;.

(vi) The Department will allow additional square footage for joint use docks above and beyond the size allowed for individual docks, not to exceed 2 times that allowed in subsections R.30-12.A(2)(c)(i) through (v); contingent upon the sharing of the walkway and pierhead.

(vii) Grandfathered or previously permitted fixed and floating docks which are larger than allowed in R.30-12(A)(2)(c)(ii-v) may not be enlarged.

(viii) Enclosed boathouses are prohibited.

(ix) Boats moored at docks cannot restrict the reasonable navigation or public use of State lands and waters. Under no circumstance are live-aboards allowed at private docks. Commercial activities are prohibited at private docks unless they are water-dependent and approved by the Department. Illegal use of a private dock is grounds for permit revocation.

(x) Boat storage structures will not count against the total dock square footage as outlined in 30-12.A(2)(c)(ii-vi) if the size of the structure is 8 feet by 20 feet or less. The area of any larger structure greater than 160 square feet will count against the total allowable dock square footage.

(d) Roofs on private docks will be permitted on a case-by-case basis, with consideration given to the individual merits of each application. Precedent in the vicinity for similar structures will be considered as well as the potential for impacting the view of others. Roofs that have the potential to seriously impact views will not be allowed, while those that have minimal impact may be allowed. The following standards will be used in evaluating applications for roofs.

(i) Roofs shall be clearly shown on the public notice application drawings, and described in the written description of the project. Attics or enclosed ceiling storage on roofed docks are prohibited.

(ii) Flat roofs are prohibited. Where a roof is otherwise permissible, maximum allowable roof height shall be 12' as measured from the floor decking of the dock to the highest point of the roof including any ornamental structures.

(iii) Rails on decks are not to be incorporated into roofs and no steps, ladders or other means of accessing the roof on a permanent basis are allowed.

(e) Boat storage structures are allowed, provided the entire docking system is limited to the minimum structure size needed to accomplish the intended use. The following standards will be used in evaluating applications for boat storage structures:

(i) Single family docking facilities will be limited to one boat storage structure per docking facility on creeks between 20 feet and 50 feet; and a maximum of two boat storage structures will be allowed on creeks wider than 50 feet.

(ii) Hull scraping, sandblasting, painting, paint removal, and major engine repair are prohibited on lifts and davits.

(iii) Boatlifts must be open sided with no enclosures. Catwalks are allowed to provide access on one side and shall be a maximum of 3 feet wide.

(3) The following procedures in addition to those in R.30-12(A)(1) will be followed for docks covered by Dock Master Plans (DMPs):

(a) A permit may be issued for docks covered by a DMP, as outlined in CH.III.VI.D of the Coastal Zone Management Plan. This permit for multiple docks must be placed on public notice and processed as a major application. If a DMP is approved by the Department, but no permit is applied for or issued, the approved DMP will be used as a framework for future permitting decisions, subject to comments received during the public review process.

(b) Before individual structures covered by the permit are constructed, written notice must be given to and a construction placard received from the Department to insure the docks are built according to the plan.

(c) Major modifications of individual structures that would require a new public notice will not be permitted; however those modifications that are minor in nature will be considered as long as the request is in keeping with the spirit of the DMP.

(d) If the permit expires before all of the docks permitted have been constructed, subsequent permit applications for the remaining structures will be reviewed for consistency with the DMP unless the DMP no longer reflects Department policies and regulations.

(e) Extensions of permits for multiple docks will be issued upon a showing of significant activity under the permit.

(4) The following standards in addition to those in R.30-12(A)(1) apply to construction of commercial docks that are not marinas:

(a) The size and extension of the dock must be limited to that which is reasonable for the intended use and the geographic circumstances of the site. However, no docks will be permitted in creeks less than 20 feet wide as measured from marsh vegetation on each side.

(b) Each applicant for a commercial dock must submit an Operations and Maintenance Manual with the permit application.

(c) New commercial docks are not allowed in waters classified for shellfish harvesting if their proposed uses would result in the closure of additional waters for shellfish harvesting.

(d) Commercial docks should be located in areas that will have minimal adverse impact on wetlands, water quality, wildlife and marine resources, or other critical habitats.

(e) Where commercial dock construction would affect shellfish areas, the Department must consider the rights of the lessee, if applicable, and the public, as well as any possible detrimental impacts on shellfish resources.

(f) Project proposals shall include facilities for the proper handling of litter, waste and other refuse in accordance with DHEC regulations.

(g) Adequate parking for users of the commercial dock shall be demonstrated.

(h) The criteria for determining roof construction described in 30-12A(2)c apply to commercial docks.

(5) The following standards in addition to those in R.30-12(A)(1) apply to construction of community docks that are not marinas:

(a) The size and extension of the community dock must be limited to that which is reasonable for the intended use.

(b) No leasing or other transfer of space to individuals who do not reside in the community or other commercial uses are allowed at community docks.

(c) Community docks are strongly encouraged and will only be permitted in lieu of multiple single-family docks. Eliminating private docks on small creeks in exchange for permitting of community docks on larger waterbodies minimizes environmental impacts. If a sufficient number of private docks are eliminated, the Department will consider permitting more than one community dock for a subdivision provided no applicable Department regulations are contravened. The ratio for determining community dock size (or slip moorage) in exchange for single-family docks will be 2 to 1 or 40 feet of community dock length for each private dock that is eliminated. If a joint use dock is eliminated, the number of lots served by the dock will count as the number of docks eliminated.

(d) No section of any community dock (pierheads or other associated structures) will be permitted closer than 20 feet from extended property lines. However, the Department may allow construction closer than 20 feet or over extended property lines where there is no material harm to the policies of the Act.

(e) Community docks will be prohibited on creeks less than 20 feet in width, however on creeks larger than 20 feet the size of the structure will be determined by the language in 30-12.A(5)(a) as well as (c).

(f) Walkways leading to a dock or pier shall not exceed 6 feet in width. For handicapped access, the Department may utilize The Americans with Disabilities Act (ADA) recommendations for walkway width and other structural configurations. Reference 28 CFR Part 36.

B. Boat ramps:

(1) Boat ramps provide access to the water for those who do not have water access by means of docks, piers, or marinas. However, boat ramp construction may require filling or, in some cases, dredging of wetland areas.

(2) Specific standards which shall apply are as follows:

(a) Filling or excavating of vegetated wetlands for boat ramp construction is prohibited unless no feasible alternatives exist in non-vegetated wetland areas. In addition, the area to be filled or excavated must be limited to that which is reasonable for the intended use;

(b) Boat ramps must consist of environmentally acceptable materials, demonstrate sound design and construction so that they could reasonably be expected to be safe and effective, and minimize adverse effects.

(c) Justification for boat ramp construction in environmentally sensitive areas shall be considered using the following priorities:

(i) Public use - open to all citizens;

(ii) restricted use - open to citizens of a particular area or organization only;

(iii) private use - use for one citizen or family;

(d) In cases where private use is necessary, siting of ramps must, wherever feasible, be located in areas where the least environmental impact will accrue to the area and be limited to 12 feet in width;

(e) Boat ramp location requiring dredging or filling of wetlands to provide deep water access to the ramp, parking areas for the ramp, or other associated facilities are prohibited unless no feasible alternatives exist and environmental impacts can be minimized;

(f) The siting of “public use” boat ramps is encouraged in easily accessible areas such as bridges and existing, abandoned causeways, provided that these sites comply with other applicable regulations.

C. Bulkheads and Revetments (Rip-rap) (Other than ocean front, as covered under R.30–13(N)):

(1) In an attempt to mitigate certain environmental losses that can be caused by these structures, the following standards are adopted:

(a) Structures must be designed to conform to the critical area line (upland boundary), to the maximum extent feasible, and constructed so that reflective wave energy does not destroy stable marine bottoms or constitute a safety hazard;

(b) Structures may be constructed up to 18 inches from the existing escarpment. In situations where this is not feasible, Department staff will determine the location of the bulkhead or revetment on a site by site basis;

(c) Bulkheads and revetments will be prohibited where marshlands are adequately serving as an erosion buffer, where adjacent property could be detrimentally affected by erosion or sedimentation, or where public access is adversely affected unless upland is being lost due to tidally induced erosion.

(d) Bulkheads and revetments will be prohibited where public access is adversely affected unless no feasible alternative exists.

D. Cables, Pipelines, and Transmission Lines:

(1) Installation of cables, pipelines, and transmission lines is preferred in non-wetland areas. Excavating activities in critical areas are sometimes required with the preferred alternative being directional boring. Excavation and filling also are sometimes required to construct foundation structures attendant to the installation of overhead transmission line crossings. These installations shall be designed to minimize adverse environmental impacts.

(2) In addition to standards for dredging and filling, the following standards are applicable:

(a) To the maximum extent feasible, alignments must avoid crossing the critical areas;

(b) Creation of permanent open water canals to install pipelines is prohibited since such projects usually interfere with drainage patterns and may adversely affect water quality through accelerated bank erosion;

(c) Dimensions of temporarily excavated canals for cables and pipelines should be minimal. Silt curtains are required for all excavations;

(d) Wherever feasible, all excavations in wetland areas must be backfilled with the excavated material after installation of the appropriate structure, while being careful to maintain the original marsh elevation. In addition, excavated material must be stockpiled on highground whenever feasible;

(e) Appropriate erosion control measures shall be employed during the crossing of wetland areas. Where appropriate, revegetation with suitable wetland species will be required;

(f) Alignments of new projects should be designed to utilize existing rights-of-way and topographic features, wherever feasible;

(g) The extension of public services, such as sewer and water facilities, involving the expenditure of public funds or issuance of government revenue bonds to previously undeveloped barrier islands will not be approved unless an overriding public interest can be demonstrated.

E. Marinas, including commercial and community docks with more than 250 linear feet of effective docking space.

(1) In addition to standards applicable for bulkheads and seawalls, dredging and filling, and navigation channels and access canals, the following standards apply to all structures defined as marinas in 30-1(D):

(a) Each applicant for a marina must submit an Operations and Maintenance Manual with the permit application. This Operations and Maintenance Manual must be in accordance with 30–12(E)(3), and approved in writing by the Department staff. The requirements for the Operations and Maintenance Manual may be modified if deemed necessary by the Department.

(b) All marinas affect aquatic habitats to some degree, but adverse effects can be minimized by utilizing proper location and design features. Applications for marinas shall include a comprehensive site plan showing location and number of all water-dependent and upland facilities such as parking and storage facilities.

(c) New marinas, which includes all structures defined as marinas in 30-1(D), are not allowed in waters classified for shellfish harvesting, except for any locked harbor, dry stack or expanded existing marina that does not close any additional waters for shellfish harvesting.

(i) An applicant for any marina in waters classified for shellfish harvesting, can request that the S.C. Department of Natural Resources (DNR) comment in writing on whether the area around the proposed marina is suitable or not suitable for the natural growth and propagation of shellfish. The permit shall not be issued unless the Department, after giving great weight to the comments of the DNR, determines that natural physical conditions in the area surrounding the proposed marina preclude the natural propagation of shellfish.

(ii) The DNR's comments shall be based on criteria including:

(1) intertidal bottom types (including shell matrix depth and composition - shell, clay, silt);
(2) density of naturally occurring oyster beds (oyster strata types, bottom coverage, acreage);

(3) presence or absence of significant subtidal oyster populations;

(4) water depth;

(5) oyster population elevations;

(6) salinity regimes (including a review of historic data and recognition of possible future changes that could affect hydrography);

(7) presence or absence of significant clam populations;

(8) potential for expansion of existing natural oyster beds through cultivation;

(9) potential for shellfish production with non-traditional methods;

(10) the current shellfish management and water quality classifications;

(11) and any other factors relating to the natural physical conditions in the area deemed appropriate by the DNR including whether the area is likely to support the natural growth and propagation of shellfish in the reasonably foreseeable future.

(iii) This determination in no way affects or limits the ability of DNR to comment on the entire permit application before the Department.

(d) Marinas should be located in areas that will have minimal adverse impact on wetlands, water quality, wildlife and marine resources, or other critical habitats;

(e) Marinas must extend to the first navigable creek, within extensions of upland property lines or corridor lines, that has a defined channel as evidenced by a significant change in grade with the surrounding marsh; or having an established history of navigational access or use. Rare geographic circumstances, such as very close proximity of a significantly larger creek within extensions of property or corridor lines, may warrant marina extension to a creek other than the first navigable creek. A creek with an established history of navigational use may also be considered as navigable. Such creeks cannot be bridged in order to obtain access to deeper water. However, pierheads must be located over open water and floating docks which rest upon the bottom at mean low tide will not normally be permitted. In exceptional cases, the Department may allow an open water channel to be bridged if other man made or natural restrictions prohibit current access or if site-specific conditions warrant such a crossing.

(f) To be eligible for a marina, a lot must have a minimum of 150 feet of frontage at the marsh edge, and 150 feet between its extended property lines at the location in the waterbody of the proposed structure.

(g) No marinas or other associated structures will be permitted closer than 20 feet from extended property lines with the exception of common marinas shared by two adjoining property owners. However, the Department may allow construction closer than 20 feet or over extended property lines where there is no material harm to the policies of the Act.

(h) Existing permitted and grandfathered marinas as of the effective date of these regulations may be maintained and rebuilt to their pre-existing size and configuration if damaged or destroyed. However, these marinas cannot expand beyond their current footprint if such expansion violates the requirements of 30-12.E(1)(f) and (g). Marinas that do not meet the frontage and offset requirements of 30-12.E(1)(f) and (g) may expand channelward provided all other applicable Department standards are met. Additionally, at such time as these marinas expand, even when remaining within their existing footprint, a permit will be required and applicable Department standards, including 30-12.E(2) and (3) relating to operation and maintenance, must be met.

(i) Marinas proposed for the exclusive use of occupants of the adjoining development will only be permitted in lieu of multiple private docks. Eliminating private docks on small creeks in exchange for permitting a marina with private slips on a larger waterbody is the preferred alternative of the Department. To determine the number of slips allowed within this type of marina, a ratio of 2.5 to 1 or 50 feet of slip length for every private dock (or lot served by a joint use dock) eliminated will be utilized. No leasing, or other transfer of space to individuals who do not reside in the community or other commercial uses are allowed at these marinas.

(j) Marinas shall not restrict the reasonable navigation or public use of State lands and waters.

(k) Marinas shall be constructed in a manner that does not restrict water flow and must avoid or minimize the disruption of currents. Dead-end or deep canals without adequate circulation or tidal flushing will not be permitted.

(l) The size and extension of the marina must be limited to that which is reasonable for the intended use.

(m) Marinas should use the least environmentally damaging alignment.

(n) Where marina construction would affect shellfish areas, the Department must consider the rights of the lessee, if applicable, and the public, and any possible detrimental impacts on shellfish resources.

(o) Marinas should be located in areas where the least initial and maintenance dredging will be required. New marinas that require initial and maintenance dredging must provide a permanent, dedicated spoil area capable of holding both the initial dredge volume and all anticipated maintenance needs. This spoil area must be reserved using deed restrictions or other legal instruments.

(p) Marinas must avoid or minimize the disruption of currents. Dead-end or deep canals without adequate circulation or tidal flushing will not be permitted.

(q) Marina design must minimize the need for the excavation and filling of shoreline areas;

(r) Open dockage extending to deep water is preferable to excavation for boat basins, and it must be considered as an alternative to dredging and bulkheading for marinas;

(s) Turning basins and navigation channels shall be designed to prevent long-term degradation of water quality. In areas where there is poor water circulation, the depth of boat basins and access canals should not exceed that of the receiving body of water to protect water quality.

(t) Project proposals shall include facilities for the proper handling of petroleum products, sewage, litter, waste, and other refuse in accordance with Department regulations.

(u) Dry storage type marinas are preferred whenever feasible, and an applicant for a marina permit will be required to show why a dry storage facility is infeasible, in whole or in part. Infeasibility may be shown where the applicant seeks a facility for large boats that cannot be accommodated in a dry storage facility or where there is inadequate upland space for the facility.

(v) Applications for marinas must include maintenance dredging schedules and dredged material disposal sites when applicable.

(w) Adequate parking for users of the marina shall be demonstrated as either one parking space for every three wet and/or dry slips or the spaces required by the applicable local government parking regulation, whichever is greater.

(x) Mooring fields associated with marinas are encouraged in place of pierheads and floating docks where the size of the waterbody and other site specific conditions are suitable. These mooring fields must be in compliance with R.30-12(P).

(2) The following standard conditions, along with any special conditions that may be appropriate, will be included in all permits for marinas unless the Department determines that such standard conditions are inappropriate

(a) The operations of the marina shall be reviewed by the Department as deemed appropriate, but at least every five years. Based on this review, the Department may require, among other things, changes or additions to the Operations and Maintenance Manual to address any water quality or other environmental problems, and a reduction in the size of, or a change in the configuration of, the marina. Such action may be taken at any time the Department determines that significant state water quality compliance problems exist, at the time the Department enlarges the closure area, or at the time of a review.

(b) A water quality sampling program must be instituted and results submitted to the Department. This sampling program must be performed prior to construction and as specified in 30-12(E)(3)(c) below. This sampling must be performed by a Department certified laboratory at the expense of the permittee. If water quality monitoring indicates a decline in water quality, remedial action will be required.

(c) Dredging must be performed in accordance with 30-12(E)(3)(d) and 30-12(G).

(d) A stormwater plan for the marina and associated parking areas, including runoff from the permanent spoil disposal area and adjacent highland development, must be submitted to and approved in writing by the Department staff before any work is performed under the Department permit.

(3) The Operations and Maintenance Manual shall be submitted with the application and placed on public notice. This requirement may be waived at the discretion of the Department upon a determination that the uses of the facility warrant such a waiver. Depending on the type of facility, it shall contain the following information:

(a) Marina Operations

(i) An experienced operator shall be in charge of the marina. The permittee and its agents are responsible for compliance with the issued Operations and Maintenance Manual and with all conditions of the permit.

(ii) The marina permittee must include in the lease agreement with boat owners a provision requiring that boat owners comply with all applicable State and federal regulations. The marina permittee shall ensure that violations are reported promptly to the proper authorities.

(iii) A complete copy of the marina permit, including any required marina report, the Operations and Maintenance Manual, all conditions or requirements placed on the permit and copies of all water quality monitoring reports required pursuant to the permit, shall be readily available at the marina.

(iv) The marina permittee shall prominently display and distribute material pertaining to the maintenance of water quality standards at the marina and report violations of such standards to the proper authorities.

(b) Water Quality Management:

(i) Adequate working wastewater pump-out facilities shall be provided at each marina (unless specific exceptions are allowed in writing by the Department). These facilities must be adequate to handle all wastewater generated at the marina. The marina operator may charge a reasonable fee for the use of the pump-out facilities.

(ii) Adequate bathroom facilities must be provided in order to discourage any overboard discharge of sewage from boats. The number of toilets required for any given marina shall be determined by the nature and size of the marina and by its specific site location. However, two toilets and one lavatory for women and one toilet, one urinal, and one lavatory for men shall be required for all marinas with one hundred or fewer slips, and unless there are mitigating circumstances, the Department shall require one toilet and one lavatory for women and one toilet, one urinal, and one lavatory for men for every additional 100 boat slips or fraction

thereof. Toilet facilities shall be constructed in a location to encourage their use. Additional facilities may be required where restaurants, motels, laundries, and other nonwater-dependent structures are located in close proximity to the marina. All pump-out and sewage facilities must be included in the public notice and certified in writing by the Department.

(iii) Plans for potable water supplied to the marina docks must be approved in writing by the Department.

(iv) Marina boat fueling systems must be equipped with emergency cutoffs at the harbor master's office, at the tank, at the pump and at the dock's edge.

(v) Depending on the size and type of boats using the marina, adequate booms must be available to isolate any oil spill around the fuel dock, a leaking boat, or a sunken boat.

(vi) Absorbent pads must be available at the marina for boat use and for removing incidental spills during fueling operations.

(vii) The discharge of sewage from boats is prohibited unless it is treated by a Marine Sanitation Device and complies with all applicable federal laws and regulations. The discharge of any other kind of waste into state waters, including, without limitation, garbage, refuse, trash or debris, is prohibited.

(viii) Adequate separate refuse containers for garbage shall be available at the marina and maintained daily. Containers for toxic substances shall not be placed over or near the water.

(ix) Boat repairs, paint scraping, boat painting, and other activities that may result in a discharge of waste or pollutants into State waters are prohibited;

(x) One reasonably sized dock master's office may be constructed within a permitted marina. This office will be limited to water dependent uses only such as fuel sales. Restroom facilities may be placed in this office, however, food and beverage services, clothing sales and other non-water dependent uses are prohibited.

(c) Water Quality Monitoring Requirements The specific program shall be determined by the Department. Any changes in requirements must be approved in writing by the Department. Sampling results must be supplied to the Department. The program may be discontinued or waived by the Department upon a showing that such information is not necessary to insure adequate protection of coastal resources.

(i) Monitoring requirements shall be tailored to the marina based on factors such as flushing, existing water quality, presence of shellfish, number of slips, and presence of fueling facilities.

(ii) A minimum standard monitoring program will consist of an annual sediment analysis. These samples shall be taken once a year between June and August with a minimum of one composite sample taken within the confines of the marina and one sample taken outside the marina. All sampling sites must be approved in writing by the Department staff and the DNR. Samples will be analyzed for polyaromatic hydrocarbons, copper, zinc, lead, cadmium, chromium, and any other parameters required by the Department

(iii) Marinas in poorly flushed areas may be required to sample other parameters such as dissolved oxygen and/or fecal coliform bacteria. These monitoring requirements will be determined on a site-specific basis using the factors presented in (i) above.

(iv) Sampling requirements will be periodically reviewed and may be increased or reduced as conditions warrant.

(d) Dredging:

(i) Unless otherwise allowed by permit, all initial and maintenance dredging shall take place between December 1 and March 1, and all dredging shall be performed by hydraulic dredge.

(ii) Agitation dredging is prohibited.

F. Transportation:

(1) There is often a strong public need for transportation projects. Unfortunately, such projects can pose a significant risk of environmental degradation. However, careful consideration of environmental factors can guide development toward more favorable results. To the maximum extent possible, environmental considerations shall be harmonious with public safety considerations.

(2) The specific standards are as follows:

(a) In the planning of major transportation routes and airports, these projects should be sited for location inland from the critical areas;

(b) The location and design of public and private transportation projects must avoid the critical areas to the maximum extent feasible. Where coastal waters and tidelands cannot be avoided, bridging rather than filling of these areas will be required to the maximum extent feasible;

(c) Where wetlands will be destroyed, their value as wetlands will be assessed by the Department and weighed against public need for their destruction;

(d) To the maximum extent feasible, transportation structures must be designed so as not to alter the natural water flow and circulation regimes or create excessive shoaling or erosion. Where applicable, adequate clearance for commercial and pleasure craft must be provided;

(e) Where feasible, maximum care shall be taken to prevent the direct drainage of runoff water from transportation routes and associated facilities from entering adjacent water bodies;

(f) Where appropriate, bridges and approaches should be designed to provide for the enhancement of public access by the utilization of fishermen, catwalks, boat launching ramps, bike lanes and other structural features;

(g) During the planning of a multi-lane widening or improvement project, it is preferable to follow the existing alignment in wetland areas. Existing causeway and fill areas must be utilized wherever possible. The degree to which any existing causeway through wetlands can be widened must be reasonably proportionate to the expected traffic load of the causeway in the near future and the size and use of the area being provided access. The width of medians of divided highways must be reduced as much as possible wherever they cross wetland areas;

(h) Roadway embankments and fill areas shall be stabilized by utilizing appropriate erosion devices and/or techniques in order to minimize erosion and water quality degradation problems. Culverts shall be required, where appropriate, in order to maintain normal tidal influence and minimize disruption of drainage patterns;

(i) The Department will require applicants for transportation project permits to consider the accommodation of other public utilities in facility design, thus avoiding unnecessary future alteration such as that caused by the laying of cables or transmission lines in wetlands adjacent to an existing roadway;

(j) New road or bridge projects involving the expenditure of public funds to provide access to previously undeveloped barrier islands will not be approved unless an overriding public interest can be demonstrated.

G. Dredging and Filling:

(1) Development of wetland areas often has been considered synonymous with dredging and filling activities. Dredging and filling in wetlands can always be expected to have adverse environmental consequences; therefore, the Department discourages dredging and filling. There are cases, however, where such unavoidable environmental effects are justified if legitimate public needs are to be met.

(2) The specific standards are as follows:

(a) The creation of commercial and residential lots strictly for private gain is not a legitimate justification for the filling of wetlands. Permit applications for the filling of wetlands and submerged lands for these purposes shall be denied, except for erosion control, see R.30-12(C), or boat ramps, see R.30-12(B). All other dredge and fill activities not in the public interest will be discouraged;

(b) Dredging and filling in wetland areas should be undertaken only if that activity is water-dependent and there are no feasible alternatives;

(c) To the maximum extent feasible, dredging and filling activities should be restricted in nursery areas and shellfish grounds and during periods of migration, spawning, and early development of important sport and commercial species;

(d) Dredging and excavation shall not create stagnant water conditions, lethal fish entrapments, or deposit sumps or otherwise contribute to water quality degradation;

(e) Designs for dredging and excavation projects shall, where feasible, include protective measures such as silt curtains, diaphragms, and weirs to protect water quality in adjacent areas during construction by preventing the dispersal of silt materials;

(f) Dredged materials shall be deposited and contained in such a manner so as to prevent dispersal into adjacent wetland areas and, in all cases, new facilities must have permanent upland disposal sites. Existing facilities must have either permanent upland disposal sites or EPA approved ocean disposal sites;

(g) Applications for dredging in submerged and wetland areas for purposes other than access, navigation, mining, or drainage shall be denied, unless an overriding public interest can be demonstrated. Dredging permits for mining will be issued only as specified in (2)(h) below. Drainage permits must be consistent with the provisions in R.30-12(L);

(h) Applications for dredging for mining activities within the critical areas will be denied unless a significant portion of the resource is located in the critical area, extraction of the resource is clearly necessary, and benefits derived from extraction would outweigh resultant detrimental impacts on coastal ecosystems. For any permit issued to allow dredging for mining operations in the critical areas, a complete site reclamation plan shall be required;

(i) Wetlands shall not be utilized as depositories for waste materials except as discussed in R.30-12(I and J);

(j) In all cases, dredging activities shall not be approved until satisfactory disposal sites have been acquired.

(k) Only hydraulic dredging is permitted unless the material is being placed in a hopper barge for offshore disposal or unless the applicant can show that hydraulic dredging is infeasible in a site-specific application.

(l) Marinas will usually not be allowed in areas that require maintenance dredging more often than once every four years.

H. Navigation Channels and Access Canals:

(1) Certain dredging activities involve the creation and maintenance of navigation channels and access canals. These activities have a potential for severe environmental impacts and should meet a demonstrated public need.

(2) Where the Department determines that such activities are justified, the following standards will be applied:

(a) Dredging for establishment of new canals which involves permanent alteration of wetland habitats will be prohibited unless no feasible alternative exists. Establishment of canals for purposes of creating waterfront lots from inland property will be prohibited unless it can be demonstrated that there will be no significant environmental impacts on critical areas;

(b) To the extent feasible, project plans must utilize piers or catwalks, rather than channels or canals, to reach deeper water areas;

(c) Access canals shall be designed to insure adequate flushing and shall not create dead-end or stagnant water pockets. Open-ended, U-shaped, or semicircular canals are generally preferred over dead-end canals, since they usually provide better water circulation;

(d) Highland waterway construction that is slated to be tied into wetland areas shall be constructed in the dry, if feasible, so that sloping and stabilization of the banks can be completed before the plug is removed for the connection to open waters. Where dry construction is not possible, temporary plugs or silt curtains at the end of canals connected to waterways should be maintained until all sediment settles out;

(e) The sides of navigation channels and access canals should be gently sloping rather than vertical to facilitate biological as well as physical stabilization of the canal banks;

(f) When several landowners are to be served by a project, dredging for navigation channels and access canals should be well planned to prevent unnecessary excavation. Tributary canals in the highlands leading to a central navigation channel should be utilized rather than separate channels for each waterfront landowner;

(g) The berm of access canals should be raised so that there is a gradual slope away from the canal edge. This will help prevent introduction of contaminants into adjacent wetland areas;

(h) Alignment of channels and canals should make maximum use of natural or existing channels. Alignment of channels and canals should avoid shellfish beds, nursery areas, and spawning areas in wetlands.

I. Deposition of Dredged Material:

(1) The deposition of dredged materials resulting from numerous dredging activities along the coast has serious environmental effects separate from the original dredging activity. Thousands of acres of productive wetland habitat have been destroyed by such deposition. Recognizing that additional disposal sites will be required, it is important that site acquisition proposals include plans for mitigating any adverse impacts upon the environment.

(2) The following standards are to be utilized:

(a) Upland disposal of dredged material shall always be sought in preference to disposal in wetlands. Vegetated wetlands and mudflats shall not be utilized for disposal of dredged materials unless there are no feasible alternatives. Any other wetlands should not be utilized for disposal of dredged materials when other alternatives exist;

(b) Open water and deep water disposal should be considered as an alternative if highland alternatives are not feasible. However, open and deep water disposal sites should be seriously considered only after careful consultation with the Department and other relevant State and Federal agencies;

(c) Dredged materials containing hazardous levels of toxic material must be disposed of with extraordinary caution. These materials shall never be disposed of in wetland areas and only in highland areas which are lined and diked with impervious materials. These materials will only be disposed in open water ocean dumping sites when maximum safety has been demonstrated after thorough review by the Department and other appropriate state and federal agencies;

(d) Dikes surrounding disposal areas should be shaped and vegetated immediately to minimize erosion, with outfalls positioned to empty into non-wetland areas;

(e) Future disposal sites shall be reviewed on a case-by-case basis;

(f) Wherever feasible, existing disposal areas shall be utilized to the fullest extent possible; this would include raising the height of the embankments to increase the holding capacity of the disposal area;

(g) Consideration must be given to the temporal aspects of spoil deposition - for example, impacts on spawning, fish migrations, shellfish harvesting, waterfowl nesting and wintering areas, and mosquito control. Attention must be given to possible adverse impacts of various alternative sites on the public health and welfare as well as on critical fish and wildlife areas;

(h) In all cases, dredging activities shall not be approved until satisfactory disposal sites have been acquired.

J. Waste Treatment Systems:

(1) The Department regulates the installation and operation of waste water treatment facilities, septic tanks, and landfills. Normal maintenance and repair of sewer facilities are exempted from the Department permit requirements by Section 48-39-130(D). The discharge of treated effluent is also exempted; provided, however, that the Department shall review and comment on these discharges. The Department is concerned primarily with wetland degradation problems which could involve commercially important shellfish, recreational fisheries, and critical wildlife habitats.

(2) Standards applicable to these installations are as follows:

(a) Applications for the construction of lagoons or impoundments for waste treatment facilities, solid waste disposal sites and similar activities in the critical areas shall be denied unless there are no feasible alternatives and it can be demonstrated that there will be no significant environmental impacts;

(b) Wherever feasible, construction and design of waste treatment facilities shall be accomplished in such a manner that no effluent will be discharged into areas where shellfish and other marine resources would be adversely affected. Where waste treatment facilities would affect open,

productive shellfish harvesting areas, the Department must consider the rights of the lessee, if applicable, or the public in the case of public oyster grounds, as well as impacts on shellfish resources;

(c) The siting of sewage treatment systems should avoid the critical areas. The location of structures other than actual pipelines, such as pump or lift stations, in critical areas will be prohibited unless no feasible alternatives exist;

(d) The construction of sewage treatment facilities and associated discharge pipes should be located and designed so as not to have adverse impacts upon areas of significant public use.

K. Marsh Impoundments for Recreational and Commercial Activities:

(1) Marsh impoundments totaling nearly 69,000 acres comprise a significant portion (approximately 16 percent) of our coastal wetlands. An additional acreage, perhaps equaling this figure, has been impounded in the past but consists today of tidally influenced areas where embankments are no longer maintained. Once important rice growing areas, the majority of these impoundments are managed primarily for recreational waterfowl hunting, wildlife sanctuaries, and other commercial, agricultural, and preservation uses.

(2) Proposals will be reviewed on a case-by-case basis according to the following standards:

(a) Permit applications to impound previously unimpounded wetlands or areas inundated by Outstanding Resource Waters shall be denied unless an overriding public interest is clearly demonstrated.

(b) The following factors will be considered in the review of permit applications for the impoundment of wetlands:

(i) Condition of existing dikes. Projects should require a minimum of new bank construction in wetlands.

(ii) Amount of wetlands proposed to be impounded.

(iii) The extent to which the project would block waters presently used for recreation or navigation by the public.

(iv) Degree of salinity of waters impacted by the proposed project.

(v) Quality of waters affected by the proposed project.

(vi) Primary purpose of the impoundment.

(c) All applications for the impoundment of wetlands must be accompanied by a detailed management plan setting forth the intent and method of managing the impounded areas. The management plan must be approved by the Department prior to permit issuance and shall become a condition of the permit. This plan must contain, but not necessarily be limited to, the following information:

(i) Applicant's objective(s) for the impoundment.

(ii) Schedule of water level manipulations.

(iii) Methods of pest and predator control (i.e., use of pesticides, prescribed burning, etc.).

(iv) Water quality management plan.

L. Drainage Canals or Ditches:

(1) Drainage canals or ditches should follow the least damaging alignment and should meet one or more of the following needs:

(a) insect or vector control as a public health necessity;

(b) other public health purposes;

(c) the control of runoff as part of a comprehensive flood plain management plan. Upland treatment of runoff is required if new drainage ways are permitted in critical areas.

(2) In addition to the application standards for dredging and filling and navigation channels and access canals, the following standards shall apply:

(a) Drainage canals and ditches shall not create dead water or stagnant pockets;

(b) To the extent feasible, the alignment of drainage canals should avoid the more productive wetlands;

(c) To the extent feasible, alignments of canals shall make maximum use of existing deep water channels to avoid unnecessary excavation;

(d) To the extent feasible, the quantity and quality of any discharged waters shall not result in extensive alteration of wetlands or the quality of coastal waters;

(e) All dredged material must be disposed of in accordance with the regulations under R.30-12(I).

M. Nonwater-Dependent Structures:

(1) Nonwater-dependent structures, as defined in Section R.30-1(D), have been built in the past on pilings, moored or in other ways situated over coastal water and/or tideland critical areas. These structures are a serious threat to the values set forth in Section 48-39-20(E).

(2) Nonwater-dependent structures, including buildings, houses, or offices that float shall be prohibited from being constructed, moored, or otherwise placed in or over tidelands and coastal water critical areas unless there is no significant environmental impact, an overriding public need can be demonstrated, and no feasible alternatives exist.

(3) The Department shall at its discretion determine on a case-by-case basis whether or not a floating structure is a boat and thus exempt from the Act or in fact is a nonwater-dependent structure. This shall be based upon the primary function of the floating structure. The mere fact that a structure is registered as a vessel or capable of being propelled does not mean it is exempt from the Department regulations.

N. Access to Coastal Islands. This section applies to applications for permits for bridges and docks as a means of obtaining access to coastal islands.

(1) Purpose and Intent:

(a) South Carolina has several thousand coastal islands, including barrier islands, sea islands, back barrier islands and marsh hammocks. Almost all of these islands are surrounded by expanses of salt marsh, occasionally bordered by tidal creeks or rivers. Historically, few of these islands have been built upon or altered, and most have been protected by their remoteness and inaccessibility. In recent years, however, a trend toward greater potential for development of these islands has stimulated questions and concerns about the ecological significance of these islands. The South Carolina Department of Natural Resources conducted a field study of a number of non-barrier islands. Their report, *An Ecological Characterization of Coastal Hammock Islands*, December, 2004, has shown that these islands are unique ecosystems with diverse flora and fauna. That study recommends protection and buffering of important habitats and resources associated with these islands.

(b) Access to coastal islands by bridges or docks involves the placement of structures into critical area coastal tidelands and waters that are protected by the statute, the critical area regulations, and by the public trust doctrine.

(c) Construction of bridges within critical area tidelands and waters involves impacts on critical area coastal tidelands and coastal waters, including temporary damages to salt marsh and shellfish beds, temporary increased turbidity, permanent displacement of marshes by installation of pilings, and permanent shading of marsh.

(d) The requirements of R.30-12.N apply only to islands for which a bridge or dock permit is issued, and are not intended to apply to upland areas or to otherwise modify, alter, conflict, create precedent or otherwise impact existing regulations and law.

(2) Eligibility to apply for a bridge permit.

(a) The decision on whether to issue or deny a permit for a bridge to a coastal island must be made with due consideration of the impacts to the public trust lands, critical area, coastal tidelands and coastal waters, weighed against the reasonable expectations of the owner of the coastal island. Giving due consideration to these factors, the Department has determined that some islands are too small or too far from upland to warrant the impacts on public resources of bridges to these islands, and thus no permit for a bridge shall be issued.

(b) Bridge permits, other than non-vehicular bridges for access by the general public, will not be issued in areas of special resource value unless they qualify under the special exceptions in R.30-12.N(10). These are the ACE Basin Taskforce Boundary Area, the North Inlet National Estuarine Research Reserve, and the Cape Romain National Wildlife Refuge.

(c) The Department will not consider applications for bridge access to islands less than two acres in size.

(d) The Department will, however, consider applications for bridge access in the following instances:

(i) Bridges not exceeding 15 feet in total width

(a) where the size of the island is two acres or greater, but less than or equal to three acres, and the distance from the upland and the length of the bridge does not exceed 200 feet;

(b) where the size of the island is greater than three acres but less than or equal to five acres and the distance from the upland and the length of the bridge does not exceed 300 feet;

(c) where the size of the island is greater than five acres, but less than or equal to ten acres and the distance from the upland and the length of the bridge does not exceed 500 feet.

(ii) Bridges may be constructed exceeding 15 feet in total width

(a) where the size of the island is greater than 10 acres, but less than or equal to 30 acres, and the distance from the upland and the length of the bridge does not exceed 500 feet;

(b) where the size of the island is greater than 30 acres and the distance from the upland and the length of the bridge does not exceed 1,500 feet.

(e) Notwithstanding the provision of R.30-12.N(2)(c), the Department shall consider applications for bridge access to coastal islands greater than one acre in size if the distance from the upland is 100 feet or less in distance.

(f) All measurements to coastal islands for the purpose of establishing whether an island may qualify for a bridge permit are taken from upland as defined in this section.

(i) Upland is:

(a) the naturally occurring mainland, and

(b) Waites Island in Horry County; Pawleys Island in Georgetown County; Isle of Palms, Sullivans Island, Folly Island, Kiawah Island, Seabrook Island, Edisto Island, Johns Island, James Island, Woodville Island, Slann Island and Wadmalaw Island in Charleston County; Daniel Island in Berkeley County; Edisto Beach in Colleton County; Harbor Island, Hunting Island, Fripp Island, Hilton Head Island, St. Helena Island, Port Royal Island, Ladies Island, Spring Island and Parris Island in Beaufort County.

(ii) The length measurements for all proposed bridges will be taken from a current Department approved critical area line. The length of a bridge is defined as the distance between critical area lines at each end of the bridge.

(g) In order to apply for a bridge permit, the applicant must submit a survey, produced and stamped by a registered surveyor licensed to practice in South Carolina, showing that the length of the proposed bridge will not exceed the lengths allowed in these regulations.

(3) Dock and Bridge Construction Standards Associated with Coastal Islands.

(a) Docks.

(i) The following standards apply to docks in projects associated with applications for bridge access to coastal islands. The project standards in this section are in addition to the other Department standards applicable to docks.

(ii) The application for the project shall reflect that the applicant has eliminated 75 percent of the number of private residential docks allowed by the Department's critical area permitting regulations as they existed on September 1, 2005. The dock reduction shall be made binding on the land by a conservation easement meeting the requirements of R.30-12.N(4).

(iii) Docks longer than 500 feet over the critical area are prohibited. This is inclusive of pierheads, floats, ramps, mooring piles and other associated structures.

(iv) No boat lifts, davits or similar structures are allowed.

(v) Roofs are not allowed on private docks, but are allowed on community docks.

(vi) All docks proposed for an island must be shown on a dock master plan that is submitted with the bridge application.

(b) Development Plan.

(i) All bridges shall be the minimum possible size and height to accommodate the intended use, aligned to minimize environmental damage, and constructed of materials approved for marine applications.

(ii) The applicant must submit a site development plan.

(c) Lighting on bridges must be designed with the minimum illumination necessary to meet local, state, or federal requirements for safety and navigation.

(d) All utilities servicing the island must be located within the footprint of the bridge and attached to the bridge if feasible, but must not be placed overhead.

(e) Onsite Disposal Systems (OSDS). If the island is to be served by OSDS, all alternative systems must meet a horizontal setback requirement of 150 feet from any part of the OSDS to the Department critical line.

(4) Conservation easements. Whenever a reduction in environmental impact is either required or offered, the affirmative commitment must be accomplished by a conservation easement, the conservation easement must meet the requirements of this part.

(a) The conservation easements shall be prepared in accordance with the South Carolina Conservation Easements Act of 1991, S.C. Code Ann. Section 27–8–10 through 27–8–120, and any amendments thereto (the “Act”).

(b) The conservation easements must provide for permanent protection in perpetuity that will run with the title to the land.

(c) The conservation easement must incorporate by reference a recorded plat that depicts the environmental impact reduction. Once the conservation easement and associated plat are properly recorded in the chain of title, the failure to show the required delineations on a future plat shall not affect the validity of the conservation easement.

(d) The conservation easement must be held by the state or a land trust with a proven track record in the region and with the resources to enforce the terms of the easement. The conservation easement must provide for rights of enforcement by the Department and by any organization authorized to be a “holder” under the Act, provided that any legal action by a party other than the Department taken to enforce the terms of the conservation easement must include the Department as a party, and no such action may be settled without the written consent of the Department.

(e) Draft conservation easements must be submitted to the Department for review to determine compliance with the Act and the applicable limits and commitments related to the permit at issue, prior to issuance of the bridge permit.

(f) Prior to commencement of any work under a permit issued under this section, the recorded conservation easement must be filed with the Department, accompanied by an opinion of an attorney duly licensed to practice in South Carolina, certifying that the instrument has been duly executed by the fee simple owners of the property, that the individual signers of the instrument have full legal authority to execute the instrument, that the instrument has been properly recorded and indexed in the office of the county Register of Deeds, and that all holders of prior mortgages or other liens on the property have consented to the instrument and have subordinated their liens to the conservation easement.

(5) The owners of bridges are entitled to repair and maintain existing bridges as allowed under R.30–5.D and any applicable county or municipal regulations.

(6) If an existing bridge to a coastal island is destroyed or rendered unusable by natural causes or accidental destruction, the owner shall be entitled to a permit to replace the bridge with a like bridge that imposes no greater adverse impact on the critical area as the one destroyed.

(7) Permits for expansion of existing bridges will be processed as new bridges and must meet all applicable standards.

(8) Causeways.

(a) Permanent filling of critical areas for access to coastal islands is prohibited, except for fill associated with existing useable causeways.

(b) Existing useable causeways are defined as those causeways that have a drivable lane above the critical area.

(i) Permits for fill associated with existing usable causeways shall be granted only for minor fills that are minimized by use of containment structures to limit to the maximum extent feasible the square footage of fill, and where the fill would cause less damage to the critical area than would be caused by construction of a new bridge or other access structure.

(ii) Mitigation for critical area fill at a ratio of 2:1 will be required for fill associated with existing usable causeways.

(9) Non-vehicular bridges to be utilized by the general public on publicly owned lands for purely recreational, educational, or other institutional purposes will be exempt from all other sections of R.30-12.N and will be allowed by the Department provided there is no significant harm to coastal resources and the following minimum standards are met.

(a) The applicant must demonstrate that the structure is necessary for the overall planned use of the site.

(b) The structure must be aligned to minimize environmental impacts.

(10) Special Exceptions.

(a) Islands one acre or larger that do not qualify for a bridge permit under these regulations may apply for a special exception. To receive a special exception, the applicant shall present clear and convincing evidence that granting the bridge permit will serve an overriding public interest.

(b) For an application to meet the overriding public interest test, it must demonstrate by clear and convincing evidence that it will create overriding public benefits resulting from mitigation and diminished impacts to public trust resources compared with development that would likely occur without the bridge.

(c) All public benefits considered under this exception must be secured by a permanent conservation easement meeting the requirements of R.30-12.N(4) on all affected property.

(d) Impact reductions that the Department may consider are:

(i) permanent protection of habitat,

(ii) major reductions in building density,

(iii) major reductions in subdivision rights,

(iv) major reductions in docks,

(v) major increases in riparian buffers,

(vi) other architectural and site design improvements, and

(vii) minimization of bridge impacts to environmental and visual resources.

(11) Severability Clause. In the event that any portion of these regulations is construed by a court of competent jurisdiction to be invalid, or otherwise unenforceable, such determination shall in no manner affect the remaining portions of these regulations, and they shall remain in effect, as if such invalid portions were not originally a part of these regulations.

O. Mariculture:

(1) Mariculture means the confined cultivation of aquatic species in the marine environment, including the spawning and rearing of juveniles and adults, either alone or in combination with other species, and the trafficking in said species.

(2) Mariculture activity is increasing in the coastal waters of the State and it can be expected to grow considerably in the coming years. Overall mariculture activities have the potential to increase food supplies and provide employment and with proper management can be a compatible activity for the coastal critical areas. As with all activities in these sensitive areas, there need to be controls to

insure that disruptions caused by such operations are minimized or eliminated and public trust issues are properly addressed.

(3) Specific standards which shall apply are as follows:

(a) No commercial mariculture operation will be allowed within 50' of an existing dock or block access to such dock unless conducted by the dock owner or with the dock owner's permission. If a dock is later permitted and constructed in a mariculture area, any affected mariculture operation must be moved to comply with this regulation.

(b) Each mariculture activity must file an operations plan as an addendum to its permit application. This plan must be complete and in the approved format before the application will be placed on public notice. Written confirmation of this by the Department is required. The applicant is advised this list is not all inclusive and other sections of SCDHEC, as well as other agencies, may have additional requirements. The plan must address:

(i) Description of proposed activities, including intended use of products, with maps showing actual coverage of critical area.

(ii) Potential environmental impacts and their mitigation.

(iii) Potential conflicts with existing co-users and their mitigation.

(iv) Navigational issues and plans for marking areas and identifying confinement structures.

(v) Steps taken to guarantee removal of mariculture structures in case of abandonment.

(vi) Storm damage plan.

(c) All structures, such as holding pens, shall be designed to be as unobtrusive visually as possible, with navigational markers meeting Coast Guard requirements, if any.

(d) All mariculture permits will be conditioned to require the permittee to agree to adopt Best Management Practices (BMP's). These BMP's must be updated as industry standards and technology changes.

(e) Private, non-commercial mariculture operations will be limited to no more than two hundred square feet of growing surface. These operations will be permitted only if the permittee owns the adjacent highland and is a riparian property owner.

(4) If a proposed mariculture activity complies with the standards stated in this regulation, a permit shall be issued unless the Department concludes that the activity is inconsistent with the basic state policies contained in Section 48-39-30, or that the activity is contrary to the public interest in that the proposed activity would unreasonably conflict with existing public uses; the proposed activity would unreasonably interfere with navigation; or the proposed activity would be otherwise inconsistent with the Coastal Zone Management Program.

P. Mooring Buoys:

(1) Mooring buoys provide moorage for vessels in open water areas. Mooring buoys, however, may cause navigational problems and hazards.

(2) Specific standards which shall apply to the placement of mooring buoys are as follows;

(a) Mooring buoys may be used to moor private or commercial vessels. Mooring buoys for private waterfront property owners shall be limited to one buoy per property, must be placed within extended property lines and placed on the same side of the channel as the property. No more than two vessels may be moored to the buoy at any time;

(b) With the exception of pumpout facilities, no commercial activity including, but not limited to, food services, T-shirt sales, concessions and boat maintenance services, may be allowed on or around moored vessels;

(c) There shall be no discharge of waste from vessels moored to buoys. Examples of such waste includes, but is not limited to, sewage, garbage and debris;

(d) Permits for private mooring buoys will only be issued to adjoining highground property owners. The mooring diameter (extent of vessel swing) does not allow the moored vessel to swing within 20 feet of extended property lines;

(e) The mooring buoy's anchor(s) must be of a type and or weight to prevent drag of the buoy and must be clearly indicated in the permit application;

(f) The mooring buoy shall be a minimum of 18 inches in diameter, be made of pliable material and have sufficient reflective material so it may be seen at night. The buoy shall have the owners name, address and permit number placed on the buoy with at least one inch letters and must be legible at all times;

(g) If the mooring buoy becomes an impedance or hazard to navigation, it must be removed or relocated by the permittee upon request by the Department. Failure to remove a mooring buoy shall result in permit revocation.

(3) The cumulative impact of private, single family mooring buoys may lead to navigational impedance and these concentrations may be considered a marina type facility. Therefore, developers and communities are encouraged to create and utilize limited mooring fields for the restricted use of the community property owners. These limited mooring fields should be in conjunction with a community docking structure and/or boat ramp for access.

HISTORY: Amended by State Register Volume 8, Issue No. 6, eff June 22, 1984; State Register Volume 9, Issue No. 6, eff June 28, 1985; State Register Volume 17, Issue No. 2, eff Feb 26, 1993; State Register Volume 17, Issue No. 5, Part 1, eff May 28, 1993; State Register Volume 18, Issue No. 5, eff May 27, 1994; State Register Volume 19, Issue No. 5, eff May 26, 1995; State Register Volume 19, Issue No. 6, eff June 23, 1995; State Register Volume 21, Issue No. 6, Part 2, eff June 27, 1997; State Register Volume 23, Issue No. 6, eff June 25, 1999; State Register Volume 26, Issue No. 5, Part 1, eff May 24, 2002; State Register Volume 27, Issue No. 6, Part 1, eff June 27, 2003; State Register Volume 29, Issue No. 6, eff June 24, 2005; State Register Volume 30, Issue No. 6, eff June 23, 2006; State Register Volume 32, Issue No. 4, eff April 25, 2008.

30-13. Specific Project Standards for Beaches and the Beach/Dune System.

A. Normal Maintenance and Repair of Habitable Structures: Normal maintenance and repair of habitable structures is allowed without notice to the Department. See R.30-5(A)(10) and R.30-1(D)(33).

B. Construction of New Habitable Structures: If any part of a new habitable structure is constructed seaward of the setback line, the owner shall certify to the Department that construction meets the following requirements:

(1) The structure is located as far landward on the property as practicable.

(2) That portion(s) of the habitable structure seaward of the setback line is no larger than five thousand square feet of heated space.

(3) A drawing has been submitted to the Department showing a footprint of the structure on the property, a cross section of the structure, and the structure's relation to property lines and setback lines which affect the property.

(4) No erosion control structure or device is incorporated as an integral part of the habitable structure pursuant to Section 48-39-290.

(5) No part of the building is being constructed on the primary oceanfront sand dune or seaward of the baseline or on the active beach.

(6) When required, all mitigation meets the standards of the Mitigation Policy adopted as part of the State Beachfront Management Plan.

C. Additions to Habitable Structures: Additions located wholly or partially in the setback area are allowed provided the following requirements are met:

(1) The additions together with the existing structure do not exceed five thousand square feet of heated space seaward of the setback line.

(2) Additions to habitable structures comply with the conditions of new habitable structures as set forth in R.30-13(B).

(3) The additions must be located no farther seaward than the existing structure, i.e. must be landward or upward of the existing structure. The linear footage of the structure, parallel to the coast, cannot be increased.

(4) Additions constructed totally landward of the setback area do not require any notice to the Department.

D. Repair and Renovation of Habitable Structures: Repair and renovation of a habitable structure located wholly or partially in the setback area damaged but not destroyed beyond repair, due to natural or man-made causes is allowed after notice and written documentation to the Department.

E. Replacement or Rebuilding of Habitable Structures: A habitable structure located wholly or partially in the setback area which has been destroyed beyond repair due to natural causes may be replaced or rebuilt provided all of the following requirements are met:

(1) The total square footage of the replaced structure seaward of the setback line does not exceed the total square footage of the original structure seaward of the setback line.

(2) The linear footage of the replaced structure parallel to the coast does not exceed the original linear footage parallel to the coast.

(3) The replaced structure is no farther seaward than the original structure.

(4) Where possible, the replaced structure is moved landward of the setback line or if not possible, then as far landward as practicable, considering local zoning and parking regulations.

(5) The reconstruction is not seaward of the baseline unless permitted elsewhere in Section 48-39-250 through 48-39-360.

(6) Replacement of a habitable structure destroyed beyond repair due to man-made causes is allowed provided the rebuilt structure is no larger than the original structure it replaces and is constructed as far landward as possible, but the new structure must not be farther seaward than the original structure.

F. Landscaping, Earthmoving and Fill for Landscaping: Seaward of the setback line, the installation of materials and associated amenities, moving of earth and placing of fill to accomplish these installations are allowed provided all of the following requirements are met:

(1) A comprehensive landscaping plan is submitted to and approved in writing by the Department.

(2) The construction of a retaining wall which extends below existing grade will not be allowed;

(3) No sand from the beach shall be used as backfill;

(4) No native plant material growing on the frontal dunes may be disturbed unless it can be demonstrated that the condition of the dune will be improved;

(5) Only native salt tolerant plant species may be planted on dunes and shall be approved by the Department staff;

(6) Adequate measures shall be taken to contain fill and irrigation runoff;

(7) Construction shall not alter or impact existing primary oceanfront sand dunes;

(8) All work shall be in compliance with applicable local ordinances.

G. Fences, Lighting, Trash Receptacles, Sidewalks, and Signs. Seaward of the setback line the placement, maintenance and repair, and replacement of fences, lighting, trash receptacles, sidewalks, and signs are allowed provided all of the following requirements are met:

(1) Construction shall not alter or impact existing sand dunes, dune vegetation, or the beach;

(2) New sidewalks may not exceed six feet in width. New residential or private sidewalks must be constructed of wood. Existing concrete sidewalks attendant to public streets may be replaced within their original footprint;

(3) Trash receptacles (not dumpsters) may be attached to access ways or placed on the beach when the local government determines there is a need for such receptacles;

(4) Signs are limited to only those attached to attendant structures or mail receptacles or informational signs deemed necessary by federal, state, or local government for public health and safety. Advertisements are not allowed except on the walls or roofs of commercial structures;

(5) No fence may be used as a retaining wall;

(6) Any additional lighting seaward of the setback line shall be designed to shield the beach from illumination.

H. Emergency Vehicle Access Ways, Small Wooden Decks, Gazebos and Other Structures Which Enhance Beach Access. Seaward of the setback line the placement, maintenance and repair, and

replacement of emergency vehicle access ways, decks, gazebos, and other structures which enhance beach access are allowed provided all of the following requirements are met:

- (1) Emergency vehicle access ways shall:
 - (a) Be constructed at sites which preclude alteration of existing sand dunes and dune vegetation to the maximum extent practicable;
 - (b) Be constructed above the existing grade except for points of entry and exit;
 - (c) Be constructed of wood or other approved material.
 - (d) Be located at least one-half mile from any other vehicle access to the beach unless, after review by the Department, this provision is determined to be unreasonable due to site specific circumstances concerning health and safety needs;
 - (e) Be approved by the local government with jurisdiction;
 - (f) Provide for pedestrian access use.
- (2) Small wooden decks are allowed provided the following criteria are met;
 - (a) Be constructed of wood.
 - (b) Roofs will be allowed.
 - (c) Not exceed one hundred forty-four square feet inclusive of an associated walkway (this square footage is not included in the five thousand square-foot limitation on habitable structures);
 - (d) Be limited to no more than one of these structures per lot unless a limit of one would cause an unnecessary hardship as determined by the Department;
 - (e) These structures may not be constructed on the active beach or over primary oceanfront sand dunes, and if they ever become situated on the active beach they must be removed.
 - (f) These structures may be attached to the habitable structure provided they are not made an integral part of the habitable structure.
 - (g) These structures may not be enclosed or screened.

I. The Construction and/or Repair of Drives and Parking Lots. Within the setback area, the construction and/or repair of drives and parking lots is allowed provided all of the following requirements are met:

- (1) On front row lots, new driveways and/or parking lots shall not extend seaward of habitable structures;
- (2) Existing drives and/or parking lots may only be expanded on the landward side;
- (3) No sand from the beach may be used during construction and/or repair;
- (4) No alteration of the primary oceanfront sand dune or its dune vegetation is allowed;
- (5) At the Department's discretion, a Stormwater Management Plan may be required;
- (6) The work shall comply with applicable local ordinances;
- (7) Best Management Practices (BMP's) such as hay bales, silt fences, mulches, or other appropriate measures shall be used as necessary during the construction phase to prevent sedimentation reaching adjacent waters and wetlands. Upon project completion the disturbed areas shall be stabilized as soon as possible with grass or other appropriate vegetative cover;
- (8) No new driveway or parking lot may be constructed seaward of the baseline unless a special permit as provided in Section 48-39-290(D) is obtained.

J. Installation or Repair of Underground and Overhead Water, Sewer, Gas, Electrical, Telephone Lines and Cable Service Lines. Within the setback area the placement, maintenance, repair, and replacement of service lines are allowed provided the following requirements are met:

- (1) All service lines shall be located as far landward as possible on each individual lot;
- (2) Lines, junction boxes, poles, and accessory features will be relocated landward as far as possible in the event there is a need for replacement;
- (3) Dunes allowed to be altered during construction shall be reconfigured and revegetated to preconstruction conditions;
- (4) All work shall be in compliance with applicable local ordinances;

(5) A comprehensive plan for new or replacement utilities shall be approved in writing by the Department.

K. Drainage Structures. Within the setback area the placement, maintenance and repair, and replacement of drainage structures are allowed provided the following requirements are met:

(1) For new construction, the structures shall be part of the Department approved storm water management plan or drainage plan which must be submitted either prior to or at the time the permit application is submitted.

(2) The replacement of drainage structures shall not involve an increase in the size of the existing structures, unless this change is approved by the Department as a part of the Stormwater Management Plan or drainage plan.

(3) Any disturbance to the dunes and dune vegetation shall be restored to pre-project conditions as soon as possible, and the restoration shall be approved by the Department staff.

(4) The drainage structure shall comply with the local drainage plan for the area seaward of the setback line.

(5) New drainage structures may be placed on the beach only if:

(a) Existing structures are eliminated;

(b) No feasible alternative exists.

(6) All work shall be in compliance with applicable local ordinances.

(7) Areas disturbed during construction shall be revegetated to the Department's satisfaction.

L. Sand Fences, Minor Beach Renourishment, Dune Revegetation. In an effort to provide beachfront property owners with passive, low-cost dune stabilization methods, the placement, maintenance and repair, and replacement of sand fencing, dune revegetation, and minor renourishment may be allowed seaward of the setback line under the following conditions (Note: These steps may not be viewed as being undertaken for erosion control but rather as dune enhancement and stabilization measures. Since a broad beach and a healthy dune provide a storm buffer, these methods should aid the natural processes affecting the beach/dune system.

(1) Sand fencing requirements:

(a) The fence material shall be biodegradable.

(b) The fences shall be installed according to plans established by the Department staff.

(c) The fences shall be installed in a manner so as not to impede turtle nesting. The Department may require sand fences be moved or removed entirely if the fences are found to impact turtle nesting activities or, in the Department's opinion, have the potential to impact turtle nesting activities.

(d) The fence shall be placed above the highest up rush of the waves as determined by the Department staff.

(e) The fencing shall not impede public access.

(f) The fence shall be installed with the understanding that this is a temporary measure.

(g) If fence material is damaged, debris shall be removed expeditiously from the beach area by the owner.

(h) If the Department determines that the fence has a detrimental impact to the beach/dune system, it shall be removed by the owner as directed by the Department.

(2) Revegetation requirements: Property owners are encouraged to plant vegetation as a means of stabilizing oceanfront dunes. The roots of plant material tend to bind sand to dunes, while plant foliage serves to trap wind blown sand. Suggested plant varieties include, but are not limited to, American beach grass (*Ammophila breviligulata*), bitter panicum (*Panicum amarum*), and sea oats (*Uniola paniculata*).

(a) Vegetation may be planted any time during the year and shall be planted, irrigated and fertilized according to nursery instructions or the Department's "How to Build a Dune" booklet.

(b) The Department staff shall inspect the site first and determine that there is a need for vegetative stabilization.

(3) Minor renourishment is allowed in an attempt to build and maintain healthy dunes. Minor renourishment requirements are:

- (a) Sand shall be compatible in size and grain color, shall be from an upland source, and its use approved in writing by the Department staff.
- (b) Minor renourishment shall be performed between November 1 and May 15.
- (c) The Department staff shall inspect the site and establish that there is a need for the project.
- (d) All projects shall be in compliance with applicable local ordinances.

M. Returning Sand to the Beach/Dune System. Seaward of the setback line sand that has drifted out of this critical area may be returned to it if the following requirements are met:

- (1) A description of the proposed work shall be submitted to and approved in writing by the Department prior to any initiation of work;
- (2) Work is pursuant to R.30-13(L)(3).

N. Erosion Control.

(1) Jetties and offshore breakwaters interfere with the natural transport of sediment and therefore require special permits. They shall only be permitted after thorough analysis of the project demonstrates that there will be no negative effect on adjacent areas. The following standards shall apply:

- (a) A bond may be required to ensure that necessary remedial steps are taken to alleviate any adverse effects on adjacent areas caused by the installation of these structures. These remedial steps may include redesign and reconfiguration of the structures or even complete removal.
- (b) A monitoring plan to assess post-project impact on adjacent areas must be approved by the Department prior to the issuance of a permit.
- (c) Construction activities shall be scheduled so as not to interfere with nesting and brood-rearing activities of sea birds, sea turtles, or other wildlife species.
- (d) Where feasible, jetties shall be designed to provide public recreational fishing opportunities.
- (e) The applicant must have written approval from the local government which has jurisdiction in the area where the project is proposed.

(2) Protection of Beaches and Artificial Beach Nourishment: The following requirements apply to the Department's consideration of projects for the renourishment of beaches:

- (a) Careful study shall be given to the type (grain size and quality) of material most suitable for nourishment of a particular beach area;
- (b) Borrow areas and sand for artificial nourishment shall be carefully selected to minimize adverse effects. Where possible, artificial beach nourishment shall be performed in concert with inlet stabilization or navigation projects;
- (c) Dredging in the borrow areas shall not be in conflict with spawning seasons or migratory movements of significant estuarine or marine species. Nourishment of beach areas shall be scheduled so as not to interfere with nesting and brood-rearing activities of sea birds, sea turtles, or other wildlife species;
- (d) All policies concerning dredging and filling cited at R.30-12(G) shall be applied to beach nourishment proposals;

(3) Erosion Control Structures or Devices

- (a) No new erosion control structures or devices are allowed seaward of the setback line except to protect a public highway which existed as such on June 25, 1990.
- (b) No erosion control structures or devices may be incorporated as an integral part of a habitable structure.
- (c) Erosion control structures or devices must not be enlarged, strengthened, or rebuilt but may be maintained in their present condition if not destroyed more than the percentage allowed in Section 48-39-290(B)(2)(b)(i), (ii) and (iii). Repairs must be made with materials similar to those of the structure or device being repaired.

(d) Erosion control structures or devices determined to be destroyed more than the percentage allowed in Section 48-39-290(B)(2)(b)(i), (ii) and (iii) must be removed at the owner's expense. Nothing in this section requires the removal of an erosion control structure or device which existed on July 1, 1988, that protected a public highway.

(e) Erosion control structures or devices which existed on June 25, 1990, must not be repaired or replaced if destroyed:

(i) more than eighty percent above grade through June 30, 1995;

(ii) more than sixty-six and two-thirds percent above grade from July 1, 1995, through June 30, 2005.

(iii) more than fifty percent above grade after June 30, 2005. [See R.30-14(D)(3)(c) and (d) for damage assessment.]

O. Sand Dune Management.

(1) Walkways over dunes, as provided in §48-39-130(D), shall meet the following requirements:

(a) All components must be constructed of wood;

(b) Have a maximum width of six feet;

(c) Conform with the contour of the dunes with a 2 foot vertical clearance between the surface of the dune and top of the walkway;

(d) Displace no sand in a critical area;

(e) Be constructed with as little environmental damage as possible;

(f) Not be located within fifty feet of another walkway on the same parcel of property;

(g) Be limited to no more than one of these structures per lot unless a limit of one would cause an unnecessary hardship as determined by the Department.

(h) Be shore perpendicular, except as necessary for handicapped access.

(2) Projects to protect, restore, or build dunes shall conform to the following standards:

(a) The use of natural beach vegetation to trap wind blown sand is encouraged. Where pedestrian traffic has destroyed natural vegetation, the use of temporary sand fencing or its equivalent may be permitted.

(b) The construction of a dune by using beach sand and mechanical equipment shall be permitted only for restoration after unusual damage, such as that caused by a hurricane.

(c) Artificial dunes shall not be constructed seaward of the normal spring high-tide line.

(d) Any artificially constructed dunes shall be aligned to the greatest extent possible with existing dune ridges and shall be of the same general configuration as adjacent dunes.

P. Nonwater-dependent Structures. Nonwater-dependent structures, including but not limited to residences, restaurants, motel/hotel facilities, other commercial activities, and parking facilities, have been constructed in the past within the beach/dune system. The siting of new nonwater-dependent structures seaward of the baseline is prohibited unless a special permit is obtained pursuant to Section 48-39-290(D) and R.30-15(F) herein.

Q. Golf Courses.

(1) Golf Courses are allowed seaward of the baseline because they can adjust to a changing shoreline more readily than other types of land uses. The use of sandbags is allowed as temporary protection for golf courses located seaward of the baseline if the golf course existed prior to May 24, 1991 and if the emergency condition conforms with the definition of emergency in Section 48-39-10(U), in accordance with R.30-15.H(1). Sand scraping or renourishment may be used as temporary protection for golf courses in accordance with R.30-15.H(4) and (5).

(2) Specific standards which shall apply are as follows:

(a) Leveling or damaging of dunes or dune fields is prohibited.

(b) Golf courses should be located as far landward as practicable to minimize encroachment into the setback area.

(c) Any lighting seaward of the setback line must be low intensity and adequately shielded to prevent impact on sea turtle nesting.

(d) Measures must be taken to protect the integrity of the primary oceanfront sand dune from foot traffic. These measures may include:

- (i) courses designed in a manner that will minimize adverse effects on the sand dunes;
- (ii) physical barriers such as sand fencing placed at the landward trough of the dune;
- (iii) certain types of vegetation that would discourage pedestrian traffic, or;
- (iv) any other measures the Department may deem necessary.

R. Fishing Piers:

(1) New fishing piers are allowed seaward of the baseline in order to provide public access to our coastal resources.

(2) Specific standards which shall apply to the construction of new piers or the alteration of existing piers are as follows:

(a) New piers must be dedicated to public use. A reasonable fee may be charged to the public but the general public may not be excluded from use.

(b) No restaurant, arcade or other nonwater-dependent structure shall be placed on the pier seaward of the baseline or over the active beach.

(c) The height of the pier stringers and spacing of the piles must be able to accommodate vehicular traffic associated with emergency operations and renourishment projects.

HISTORY: Amended by State Register Volume 14, Issue No. 5, eff May 25, 1990; State Register Volume 15, Issue No. 5, eff May 24, 1991; State Register Volume 17, Issue No. 2, eff Feb. 26, 1993; State Register Volume 17, Issue No. 5, Part 1, eff May 28, 1993; State Register Volume 19, Issue No. 6, eff June 23, 1995; State Register Volume 23, Issue No. 6, eff June 25, 1999; State Register Volume 27, Issue No. 6, Part 1, eff June 27, 2003; State Register Volume 40, Issue No. 6, Doc. No. 4615, eff June 24, 2016.

30-14. Administrative Procedures.

A. Procedures for Local Beach Management Plan Approval and Amendments [Section 48-39-350(A)].

(1) South Carolina local governments with jurisdiction fronting the Atlantic Ocean shall submit to the Department by no later than July 1, 1990, a local beach management plan after the local government has afforded the opportunity for adequate public review.

(2) Upon receipt of the local plan, the Department shall:

- (a) Afford the public a thirty day comment period;
- (b) Afford the opportunity for a public hearing on the local beachfront management plan;
- (c) After considering all comments, approve, modify or remand the local beachfront management plan.

(3) The Department shall issue a public notice of the approval of any local beach management plan or amendment thereto. The implementation date of the local beach management plan or amendment thereto will be specified in such public notice.

B. Procedures for State Implementation of Local Responsibilities [Section 48-39-350(B)].

(1) If a local government fails to develop and implement a local beach management plan as required by §48-39-350, the Department shall implement the local government's responsibilities by:

- (a) Issuing public notice that the Department has found that the local government has failed to develop and implement a local beach management plan as required;
- (b) Carrying out the tasks enumerated in §48-39-350(A)(1-10);
- (c) Providing a thirty day public comment period for public review of the Department's proposed local beach management plan;
- (d) Affording the opportunity for a public hearing;
- (e) After reviewing all public comments, modify and/or adopt and implement the local plan.

(2) The Department may delegate responsibility for the implementation of the Department sponsored and approved local beach management plan to the local government, but the Department shall have the right to assume responsibility for administering and enforcing the plan if the local government fails to do so.

C. Procedures for State/Local Coordination During and in Response to Emergency Situations (Section 48–39–320 & 350). The issuance of the Department emergency order automatically supercedes any local emergency order for the same emergency situation.

D. Procedures for Determining Destroyed Beyond Repair (Section 48–39–290(B)).

(1) The Department shall be required to make a determination as to whether or not a structure is destroyed beyond repair under Section 48–39–290 in any of the following cases:

- (a) Upon the written request of an owner of the structure or local government official;
- (b) Upon its own election;

(c) As part of a damage assessment effort conducted solely by the Department or in cooperation with a local government in response to an emergency situation.

(2) The Department shall provide a copy of its determination of whether a structure is destroyed beyond repair to the property owner and the local government with jurisdiction over such structure.

(3) The Department shall employ the following procedures in determining whether a structure is destroyed beyond repair: See also R.30–14(D)(4) and (5).

(a) Habitable Structure:

(i) Following a natural disaster, the Department shall coordinate a post-storm damage appraisal with the affected unit of local governments. Pursuant to Section 48–39–270(11) the Department staff shall make the initial damage appraisal. When appropriate, the Department may use the property owner's insurance adjustor's figures to determine the damage.

(ii) If an owner disagrees with the appraisal of the Department, he may obtain a second appraisal to evaluate the damage to the building. An owner who disagrees with the appraisal of the Department must notify the Department in writing, within 90 days of receipt of the Department's determination that he intends to obtain an appraisal. If the two appraisals differ, then the two appraisers must select a third appraiser. If the two appraisers are unable to select a third appraiser, the Clerk of Court of the county in which the structure lies must make the selection. All third appraisers must be registered, professional engineers, registered architects or licensed adjustors. All third appraisers must not have been involved in either the insurance adjustment of the property or the first or second appraisal and the cost of the third appraisal will be divided equally between the Department and the property owner. In no event may the property owner begin rebuilding or repairing (other than emergency repairs) a structure until the appraisal process described herein has been completed. Nothing in this section prevents a court of competent jurisdiction from reviewing, de novo, the appraisal upon the petition of the property owner.

(b) Pools:

(i) Following a natural disaster, the Department shall coordinate a post-storm damage assessment with the affected unit of local government. Pursuant to Section 48–39–270(11) the Department shall make the initial assessment.

(ii) If an owner disagrees with the appraisal of the Department, he may obtain an appraisal to evaluate the damage to the pool. An owner who disagrees with the appraisal of the Department must notify the Department in writing, within 90 days of receipt of the Department's determination, that the owner intends to obtain an appraisal. If the two appraisals differ, then the two appraisers must select a third appraiser. If the two appraisers are unable to select a third appraiser, the Clerk of Court of the county where the pool lies must make the selection. All third appraisers must be registered, professional engineers and the cost of the third appraisal will be equally divided between the Department and the property owner. In no event may the property owner begin rebuilding or repairing a pool (other than emergency repairs) until the appraisal process described herein has been completed. Nothing in this section prevents a court of competent jurisdiction from reviewing, de novo, the appraisal upon the petition of the property owner.

(c) Seawalls and Bulkheads: In determining whether a seawall or bulkhead as defined in Section 48-39-270(1)(a) and (b) is destroyed more than eighty percent above grade through June 30, 1995, more than sixty-six and two thirds percent above grade from July 1, 1995, through June 30, 2005, and more than fifty percent above grade after June 30, 2005, the damage assessment shall be accomplished as follows:

(i) Damage to seawalls and bulkheads will be judged on the percent of the structure remaining intact at the time of damage assessment. The portion of the structure or device above grade parallel to the shoreline must be evaluated. The length of the structure or device parallel to the shoreline still intact must be compared to the length of the structure or device parallel to the shoreline which has been destroyed. The length of the structure or device parallel to the shoreline determined to be destroyed divided by the total length of the original structure or device parallel to the shoreline yields the percent destroyed. Those portions of the structure or device standing, cracked or broken piles, walers, and panels must be assessed on an individual basis to ascertain if these components are repairable or if replacement is required.

(ii) If the property owner disagrees with the assessment of a registered professional engineer acting on behalf of the Department, he may obtain an assessment by a registered professional engineer to evaluate, in the same manner set forth herein, the damage to the structure or device. An owner who disagrees with the assessment of the Department must notify the Department in writing, within 90 days of receipt of the Department's determination, that he intends to obtain an independent assessment. If the two assessments differ, then the two engineers who performed the assessment must select a registered professional engineer to perform the third assessment. If the first two engineers are unable to select an engineer to perform the third assessment, the Clerk of Court of the county where the structure or device lies must make the selection of a registered professional engineer. The cost of the third engineer will be equally divided between the Department and the property owner. The determination of the percentage of damage by the third engineer is conclusive. In no event may the property owner begin rebuilding or repairing a seawall or bulkhead until the appraisal process described herein has been completed. The determination of the degree of destruction must be made on a lot by lot basis by reference to county tax maps.

(d) Revetments: Revetments must be judged on the extent of displacement of the stone, the effort to return these stones to the pre-storm event configuration of the structure or device, and the ability of the revetment to retain backfill material at the time of the damage assessment. If the property owner disagrees with the assessment of a registered professional engineer acting on behalf of the Department, he may obtain an assessment by a different registered professional engineer to evaluate, as set forth in this item, the damage to the structure or device. An owner who disagrees with the appraisal of the Department must notify the Department in writing, within 90 days of receipt of the Department's determination, that the owner intends to obtain an appraisal. If the two assessments differ, then the two engineers who performed the assessment must select a registered professional engineer to perform the third assessment. If the first two engineers are unable to select an engineer to perform the third assessment, the Clerk of Court of the county where the structure or device lies must make the selection of a registered professional engineer. The cost of the third engineer will be equally divided between the Department and the property owner. The determination of the percentage of damage by the third engineer is conclusive. In no event may the property owner begin rebuilding or repairing a structure until the appraisal process described herein has been completed. The determination of the degree of destruction must be made on a lot by lot basis by reference to county tax maps.

(4) Inventory: The following steps will be taken by the Department in order to insure accurate and expeditious damage appraisals can be conducted when necessary.

(a) Structures which are affected by the setback line will be identified. If the line touches any part of the structure or an attached deck, the structure is considered affected by the destroyed beyond repair provisions of the Act and additional information must be collected. By community (city, county) a list (addresses and tax map numbers) of each structure that touches the baseline and setback line will be prepared.

(b) Staff will prepare an inventory file for all structures subject to the Department regulation within their assigned community. The file will contain information relative to the location,

ownership, persons to contact, and assessed value of the property, and a recent photograph of the front and rear sides of the structure. The completion of this task should include an inventory of swimming pools and erosion control devices where possible. An inventory of vertical erosion control devices should include a measurement of the parallel length of the structure and the elevation of the top of the structure. An inventory of a revetment will require that the seaward slope of the structure be determined by pulling a tape from the highest crest stone to the top of a representative toe stone. This is to be referred to as a revetment transect. Revetment transects are to begin at the northern property line and are to be repeated every 20 feet across the revetment to the southern property line. The frequency of these transects may be intensified to every 10 feet to encompass high or low extremes in the rock elevations. A schematic drawing shall depict the revetment by its transects. Beside each transect shall appear the letters (A) for adequate stone amounts, (D) for deficient stone amounts, and (S) for surplus stone amounts. Combinations of these letters on one transect will be separated by a short line that will distinguish one depiction from the other along the transect. The elevation of the top of the revetment must also be included.

(c) For habitable structures, the base value of each affected structure will be determined by consulting the tax appraisal records for each county. The values used by the Department will only be the assessed value for the structures on the lot and will not contain any land values. The Damage Assessment Coordinator will maintain a master list of all impacted structures.

(d) The staff person assigned the assessment responsibility for a particular beach community will periodically review the assessment sheets and coordinate with local communities. Assessments will be updated annually or as staff reassignments are made.

(e) Immediately after a damage incurring situation, the staff person will take the damage assessment file, preliminary damage evaluation forms for one and two story structures, and a camera and make a site visit to each property in their assigned area. The properties will be photographed and a preliminary evaluation completed for each property. This evaluation will be used to separate the properties into three categories: minor damage, possible destroyed beyond repair, and completely destroyed. At this time the person doing the assessment will try and locate any houses missing from foundations, and note any problems with the assessment process. Structures that are identified as having minor damage will be counted, the addresses and tax map numbers verified and a list compiled to be given to the Department offices and the local building official so that authorizations to make repairs can be issued promptly.

(f) The structures that are identified as possibly destroyed beyond repair will be listed, addresses verified and duplicate copies of the assessment sheets sent to the Department offices.

(5) Damage Assessment:

(a) Habitable Structures and Pools:

(i) The Damage Assessment Coordinator will assign properties determined from the preliminary survey to be possibly destroyed beyond repair to an insurance adjuster, or in the case of pools an engineer, who is under contract to the Department. The adjuster/engineer will make arrangements with the owner of the property to visit the site and prepare an estimate of the cost of repairing the structure to its previously existing condition. In the case of pools, the damage estimate will be determined by the sum of the following costs:

- (1) The area of damaged walls and floor, multiplied by the unit replacement costs for the walls and floor;
- (2) Demolition and removal costs;
- (3) Site preparation costs.

This estimate will be based on the amount of damage to various components of the structure, and the unit cost of repairing each component as supplied by a nationally recognized estimating firm.

(ii) The Damage Assessment Coordinator will compare the repair estimates with the base value figures. In the case of habitable structures, the base value is obtained from the tax assessor or other sources deemed credible by the Department. The base value for a pool can be obtained from any of the following sources: 1) Bills and invoices submitted to the pool owner at

the time of pool installation; 2) tax assessment figures; 3) estimate based on the size of the pool and the unit cost of pool construction as supplied by a nationally recognized estimating firm; 4) any other information that is determined to be reliable by the Damage Assessment Coordinator. If the repair cost is greater than 66 2/3% of the base value, the structure will be determined to be destroyed beyond repair (DBR).

(iii) A list of those structures that are repairable and those that are DBR will be maintained and distributed daily to the Department field offices. Authorization to repair buildings not DBR can be made as soon as the assessment process is completed. The owners of properties listed as DBR will be notified by letter by the Permitting Staff. All records and files pertaining to the buildings listed as DBR will be turned over to the Department's legal staff as soon as the process is completed. There will be no reassessments by the Department unless there is intervening damage.

(b) Erosion Control Devices

(i) Vertical walls: The following percentages will be used when conducting the destroyed beyond repair assessments for vertical walls: 1) pilings - 20%, 2) whalers - 20%, 3) panels - 60%. On walls with no whalers incorporated into the design, the percentage is to be 25% for the pilings and 75% for the panels. A vertical wall will be considered functional if it is no more than 2 feet out of alignment or 30 degrees, whichever is less. For concrete walls which have only one component, the intact portion above grade, parallel to the shoreline will be compared to the original shore parallel portion of the wall to determine if the structure is damaged beyond repair.

(ii) Revetments: To determine if a revetment is destroyed beyond repair, revetment transects must be conducted as described in the inventory section, R.30-14(D)(4). The post-damage transects will be compared to the original revetment configuration. If the revetment has slumped or stone been lost to the extent that the percentage of damaged revetment exceeds the percentages allowed in R.30-13(N)(3)(e), the structure is destroyed beyond repair.

(iii) Those structures which are a combination of vertical wall fronted by rock revetment will be assessed using both the method for evaluating walls and the method for evaluating revetments. The percent of the wall which is destroyed will be determined then multiplied by 50%. Likewise, the percentage of the revetment which is destroyed will be determined and then multiplied by 50%. The sum of the two damaged percentages is the percent of the complete structure which is destroyed beyond repair.

(iv) The determination of the percent of damage to an erosion control structure must be made on a lot by lot basis as referenced by county tax maps which existed on May 23, 1993.

(v) Effective date of damage appraisals: All appraisals are effective for 90 days from the date all concerned parties agree on the appraisal, unless otherwise determined by the Department. If the structure sustains additional damage prior to the 90 day time limit, the Department may require a new assessment. If no work has begun during that 90 days, a new damage appraisal may be required before the Department will issue another permit or release letter.

E. Procedures for Adopting Baselines and Erosion Rates (Section 48-39-280).

(1) Following the establishment of the interim baselines, erosion rates, and setback lines pursuant to Section 48-39-280(C) and any amendments or revisions thereto, the Department will adopt final baselines, erosion rates, and setback lines as part of the state comprehensive beach management plan pursuant to Section 48-39-320. The following procedure will be used for the establishment of final baselines, erosion rates, and setback lines:

(a) The proposed baseline, erosion rate, and setback line for a region, island or part thereof, or other geographic area of South Carolina's ocean shoreline shall be made available to the public for inspection at each of the Department's offices;

(b) the Department shall afford the public a thirty-day comment period;

(c) the Department shall afford the opportunity for a public hearing.

(2) The Department shall, following the consideration of all public comments, adopt in final form the baselines, erosion rates, and setback lines and shall include such information in the state plan.

F. Procedures for Appealing Baselines and Erosion Rates [Section 48-39-280(E)].

(1) Any landowner claiming ownership of affected property who feels that the final or revised setback line, baseline, or erosion rate as adopted is in error, upon submittal of substantiating evidence, within one year of the revision date, must be granted a review of the setback line, baseline, or erosion rate, or a review of all three. The Department shall hear all requests for review. The process is as follows:

(a) Upon receipt of a property owner's request for review of the setback, baseline, or erosion rate, a request will be made of the property owner to provide the Department with substantiating evidence, as required in Section 48-39-280(E). If the property owner does not respond or if there is no evidence at all to support the request, a letter will be sent to the property owner denying the request.

(b) If the Department agrees with the property owner that the lines are in error, the lines will be moved.

(c) If the Department disagrees with the property owner, and believes that the location of the lines is correct, the property owner will be notified in writing. Any appeal of the Department's decision under this section shall be made to the Administrative Law Judge Division.

(2) Appeals are governed by R.30-6.

G. Procedure for Movement of Baseline After Renourishment.

(1) The Department must receive a petition from the local government; or the landowners with notice to the local government, before the baseline can be moved pursuant to Section 48-39-280(A)(4). The petition cannot be submitted until the permitted beach nourishment project, which must have a minimum five-year design life, has been completed. The local government must certify to the Department that the proposal to move the baseline is consistent with the objectives and policies of its local comprehensive beachfront management plan.

(2) Petitioner must demonstrate an ongoing commitment to fund a future renourishment project with the same or greater design life than the original project using an acceptable funding option.

(3) The Petitioner must prove that it possesses or has obtained all necessary legal authority to perform the nourishment project in the future, excluding environmental regulatory permits.

(4) Petitioner must submit survey data in the following format to demonstrate the beach has been stabilized by the nourishment project:

(a) A minimum of three sets of survey data from the stations (monuments) designated in the project permit must be submitted. This will include all stations within the construction limits (maximum allowable profile spacing is 1,000 feet) and stations within 2,000 feet of each end of the project. These surveys will be taken at three month intervals, beginning at the time of project construction completion.

(b) Semi-annual surveys of the project beach during years two and three after project construction must be performed and submitted to the Department to document beach stability.

(5) The Department will evaluate the survey data to determine beach stability. Stability is defined in (10) below. If the beach has not stabilized in the first six months following construction, additional subsequent surveys will be evaluated to determine stability.

(6) The project must be constructed according to the permit design at an elevation which will maintain a dry sand beach. The maintenance of the dry sand beach will be evaluated in the same manner as stability, using the survey data.

(7) The Petitioner must show an ongoing financial commitment to renourishment which will stabilize and maintain the dry sand beach at all stages of the tide for the foreseeable future. The Department defines foreseeable future as at least ten years from the date the original project achieved stability.

(8) The Department will move the baseline when all of the above criteria have been met. The new baseline will be located on the landward edge of the existing erosion control device or at a position determined by the Department using the method described in Section 48-39-280(A)(1).

(9) No new construction may occur in the area between the former baseline and the new baseline for three years after the initial beach nourishment project has been completed, unless allowed by special permit. The project is "completed" when it has stabilized in the manner described in (10)

below. Reconstruction of habitable structures and pools is not considered new construction for purposes of this section. Additions are considered new construction.

(10) The following definition will be used by the Department to define "stability": A renourished beach is stabilized when field observations and quarterly surveys of the project beach, conducted for a minimum of six months following construction completion, demonstrate only normal long-term erosion patterns and losses are affecting the nourished beach. The Department may consider any or all of the following in determining stability: profile characteristics and changes (volumetric and contour changes) and sediment analyses.

H. Damage Assessment. Notwithstanding Sections R.30-14(A)-(G), Section 8 of 1990 Amendments to the 1977 Coastal Zone Management Act, states as follows. Except as otherwise specifically provided in this act, the provisions of this act shall be applied only prospectively and shall not affect any legal action commenced or any cause of action accruing as a result of an event or events which occurred before the effective date of this act. Any such action must be governed by the provisions of Sections 48-39-10 through 48-39-360, as amended by Act 634 of 1988, and in existence before the effective date of this Act.

(1) Assessment of damage to seawalls and bulkheads that occurred between July 1, 1988, and July 1, 1990, will be judged by the following criteria which shall be used to determine the percentage of damage to the erosion control device:

(a) Seventy-five percent (75%) multiplied by the length of structure remaining plus twenty-five percent (25%) multiplied by the amount of backfill remaining equals the percentage of structure not destroyed.

(2) The following portions of the structure shall not be included:

- (a) Wingwalls;
- (b) Deadmen;
- (c) Tiebacks.

(3) Assessment of damage to swimming pools that occurred between July 1, 1988, and July 1, 1990, will be judged by the following criteria. Swimming pools shall be considered destroyed beyond repair if either of the following exists:

(a) Undermining of the pool support which causes severe cracks in the pool walls and floors.

(i) Severe cracks shall be those which produce a loss of structural integrity causing a portion of a structural element (i.e. wall or floor) of the pool to be replaced rather than repaired.

(ii) Greater than ten percent (10%) of any one structural element (i.e. wall or floor) shall render the pool destroyed beyond repair.

(iii) If the addition of an insert is required to make the pool functional, then the crack shall be considered severe and the pool shall be declared destroyed beyond repair.

(iv) If a pool has been assessed and repair procedures require the removal of ten percent (10%) of any one structural element, then the pool shall be declared destroyed beyond repair at the time of the removal of the element.

(b) Hydrostatic pressure beneath the pool which causes the pool to be lifted up more than six inches. Hydrostatic pressure beneath the side of the pool produces severe cracks as delineated in (a)(iv) above shall mean that the pool is destroyed beyond repair.

I. Procedure for Removal of Structures Located on the Active Beach: The Department shall employ the following procedures for determining when a structure located on the active beach must be removed: (Note: This section only applies to those structures approved by the Department via special permit.)

(1) If a major storm event or chronic, long-term beach erosion causes a structure to become located on the active beach, as defined in R. 30-1(D)(2), the Department will monitor the beach fronting the structure for a minimum of one year.

(2) Monitoring of the beach will include the collection and analysis of beach profile data, and visual inspections.

(3) The Department will consider all available information including pending renourishment projects, long-term erosion/accretion trends for the area, and shoal attachment cycles prior to determining whether a structure will be permanently located on the active beach.

(4) Upon determining that a structure is permanently located on the active beach, the Department will notify the property owner and require that the structure be removed or relocated landward by the owner.

HISTORY: Added by State Register Volume 14, Issue No. 5, eff May 25, 1990; Amended by State Register Volume 15, Issue No. 5, eff May 24, 1991; State Register Volume 17, Issue No. 2, eff Feb 26, 1993; State Register Volume 17, Issue No. 5, Part 1, eff May 28, 1993; State Register Volume 19, Issue No. 6, eff June 23, 1995; State Register Volume 23, Issue No. 6, eff June 25, 1999; State Reporter Volume 32, Issue No. 4, eff April 25, 2008.

30–15. Activities Allowed Seaward of Baseline.

A. Wooden Walkways: Wooden walkways no larger in width than six feet are the only structures allowed seaward of the baseline that do not require a SCDHEC-OCRM permit. See R.30–13(O)(1).

B. Small Wooden Decks: Wooden decks seaward of the baseline require a SCDHEC-OCRM permit. These decks should be no larger than one hundred and forty-four square feet. See R.30–13(H)(2).

C. Fishing Piers:

(1) New fishing piers require a SCDHEC-OCRM permit and must be open to the public. See R.30–13(R).

(2) Those fishing piers with their associated structures including, but not limited to, bait shops, restrooms, restaurants, and arcades which existed September 21, 1989, may be rebuilt if they are constructed to the same dimensions and utilized for the same purposes and remain open to the public. In addition, those fishing piers with their associated structures which existed on September 21, 1989, that were privately owned, privately maintained, and not open to the public on this date may be rebuilt and used for the same purposes if they are constructed to the same dimensions. A SCDHEC-OCRM permit is required.

D. Golf Courses: Golf Courses require a SCDHEC-OCRM permit pursuant to the criteria set forth in R.30–13(Q).

E. Normal Landscaping: Normal landscaping requires a SCDHEC-OCRM permit pursuant to the criteria set forth in R.30–13(F).

F. Special Permits: The Department shall consider applications for special permits. Special permits are to be issued only in situations where without such a permit, the property owner would have no reasonable use of his property, or when an overriding public benefit can be demonstrated. When issuing special permits, the Department shall consider the legislative findings and policies as set forth in Sections 48–39–30, 48–39–250 and 48–39–260. Specifically, the following criteria shall serve as guidelines when issuing special permits:

(1) A structure cannot be constructed or reconstructed on a primary oceanfront dune or on the active beach, and in the event that the beach erodes so that in the future the permitted habitable structure is located on the active beach, the property owner agrees to remove the structure at his own expense.

(2) There shall be no adverse impact on the stated policies of the Beachfront Management Act, including the policies protecting the sand dunes and preservation of the dry sand beach.

(3) The granting of a special permit shall not create a situation contrary to the public health, safety or welfare.

(4) In determining whether or not a permit is contrary to the public health, safety or welfare, the Department shall consider:

- (a) whether or not the proposed structure would be constructed on renourished beach;
- (b) the erosion rate at the site;
- (c) how soon the structure will be located on the active beach;

(d) whether or not the proposed structure meets American National Standards Institute building standards; and/or

(e) the potential cumulative effect that similar structures will have upon the beach/dune system.

(5) Necessary components of habitable structures, such as sewer lines, septic tanks and utilities, do not require separate special permits. However, decking, patios, driveways, etc., are not considered as necessary components of habitable structures and therefore these items must be shown on the permit application.

(6) Generally, the Department considers special permits only under extraordinary circumstances. Three specific areas, however, where the Department deems that special permits are more appropriate include:

(a) **Habitable Structures Seaward of the Baseline:** The Department may grant a special permit to construct a single-family house seaward of the baseline where such permit meets the conditions of R.30-15(F)(1)-(6) and;

(i) The house is no larger than similar structures in the general neighborhood and in no case may it be larger than 5000 square feet;

(ii) The house is no further seaward than the houses on either side unless this would preclude a house from being constructed on the lot;

(iii) The permittee agrees to remove the home when it comes on to the active beach;

(iv) The permittee agrees to such other conditions as the Department deems are appropriate to promote the policies of the Act.

(b) **Pools:** No new pools shall be constructed seaward of the baseline. Pools may be reconstructed, upon obtaining an OCRM permit, if they are landward of an existing functional erosion control structure or device. The Department may grant a special permit to reconstruct a pool seaward of a habitable structure where such permit meets the conditions of R.30-15(F)(1)-(6) and;

(i) There is no other location on the property suitable for construction of a pool;

(ii) The commercial viability of the project is directly related to the presence of the proposed pool;

(iii) The pool is not constructed upon the active beach and the owner agrees to remove same when it comes onto the active beach;

(iv) The project is constructed so that there are no erosion control devices built as part of the pool structure and the design meets approval of the Department;

(v) The pool is no larger than is deemed necessary by the Department;

(vi) The permittee agrees to conditions as the Department deems appropriate to promote the policies of the Act.

(c) **Parking Lots and Drainage Devices:** The Department may grant special permits for commercial properties for reconstruction of parking lots and drainage devices seaward of the baseline which are absolutely necessary for the economic viability of the project where such permit meets the conditions of R.30-15(F)(1)-(6) and;

(i) Special permits for parking lots can only be issued for reconstruction of parking lots no larger than existed prior to destruction;

(ii) The Department can dictate the configuration of the parking lot and drainage devices and the materials used for their construction;

(iii) Construction of parking lots and drainage devices cannot take place on active beach and must be removed once they become located on the active beach;

(iv) The Department can place such conditions upon construction of the parking lots and drainage devices so as to meet the purposes of the Act.

G. **Groins.** Existing groins may be reconstructed, repaired, and maintained. New groins may only be allowed on beaches that have high erosion rates with erosion threatening existing development or public parks. In addition to these requirements, new groins may be constructed and existing groins may be reconstructed only in furtherance of an on-going beach renourishment effort which meets the criteria set forth in R.30-14.G, and in accordance with the following:

(1) The applicant shall institute a monitoring program for the life of the project to measure beach profiles along the groin area and adjacent and downdrift beach areas sufficient to determine erosion/accretion rates. For the first five years of the project, the monitoring program must include, but is not necessarily limited to:

- (a) establishment of new monuments;
- (b) determination of the annual volume and transport of sand; and
- (c) annual aerial photographs.

Subsequent monitoring requirements must be based on results from the first five-year report.

(2) Groins may only be permitted after thorough analysis demonstrates that the groin will not cause a detrimental effect on adjacent or downdrift areas. The applicant shall provide a financially binding commitment, such as a performance bond or letter of credit that is reasonably estimated to cover the cost of reconstructing or removing the groin and/or restoring the affected beach through renourishment pursuant to subsection 30-15.G(3).

(3) If the monitoring program established pursuant to subsection 30-15.G(1) shows an increased erosion rate along adjacent or downdrift beaches that is attributable to a groin, the department must require either that the groin be reconfigured so that the erosion rate on the affected beach does not exceed the pre-construction rate, that the groin be removed, and/or that the beach adversely affected by the groin be restored through renourishment.

(4) Adjacent and downdrift communities and municipalities must be notified by the department of all applications for a groin project.

(5) An adjacent or downdrift property owner that claims a groin has caused or is causing an adverse impact shall notify the department of such impact. The department shall render an initial determination within sixty (60) days of such notification. Final agency action shall be rendered within twelve months of notification. An aggrieved party may appeal the decision pursuant to the Administrative Procedures Act.

(6) In an area in which new groins have been permitted, or in an area in which existing groins have been reconstructed or repaired, access along the beach from one groin compartment to another must be maintained or improved. If access is impacted or eliminated, temporary access around or over the groin must be established immediately. Within thirty days of notification from the Department, a plan to provide permanent access around or over the groin must be submitted by the entity responsible for the groin construction. This permanent access plan must be implemented within ninety days of the Department approval.

(7) The applicant must have written approval from the local government which has jurisdiction in the area where the project is proposed.

H. Emergency Orders: Emergency situations before or after a storm event may prompt the Department, or an appointed official of a county or municipality or of the state to issue emergency orders under R.30-5, allowing property owners to construct temporary barriers against wave uprush. A structure is determined to be in imminent danger when the erosion comes within twenty feet of that structure. In an effort to protect Loggerhead turtle nesting sites, emergency orders issued between April 15th and November 1st must be reviewed by the Department prior to actual performance of the activity authorized by the emergency order. The U.S. Army Corps of Engineers must be notified within seventy-two hours of the issuance of an emergency order by the Department if the Department issued the emergency order. If the emergency order is issued by an appointed official such notification must be accomplished by the issuing official. The property owner or other recipient of the emergency order must obtain any additional permit(s) and agency review(s) that may be required by other local, state or federal agencies. All required permits and reviews must be obtained prior to the commencement of work pursuant to the issued emergency order. Unless otherwise approved by the Department, emergency sandbagging, sand scraping and renourishment shall be performed using the criteria established in this section. The Department may apply any requirements under this section to any Department-approved technology that is authorized under an emergency order.

(1) Emergency orders for sandbags may be issued by the Department, or upon written notification to the Department by an appointed official of a county or municipality or of the state acting to protect public health and safety. Sandbags shall only be used to construct temporary protection for existing habitable structures and critical infrastructure if the Department or appointed official

determines a structure to be in imminent danger and emergency conditions conform with the definition of emergency in Section 48-39-10(U), or as allowed in R.30-13.Q(1). In this section, "critical infrastructure" shall mean utilities, roadways and associated infrastructure necessary to provide for public health and safety, communication, and transportation.

(2) Emergency orders for sandbags shall be subject to the following process:

(a) The Department or an appointed official of a county or municipality or of the state may issue emergency orders for areas specifically included under a state emergency declaration or at the request of a local government or property owner.

(b) Within one hundred twenty days of the issuance of an emergency order for sandbags, the property owner may provide the Department with evidence that their community has a feasible and financially viable renourishment plan for the affected area that is consistent with their approved Local Comprehensive Beachfront Management Plan.

(c) If the property owner has not provided the Department with an acceptable plan for renourishment within one hundred twenty days of the issuance of an emergency order for sandbags, then the emergency order shall expire at the end of the one hundred twentieth day, and the sandbags shall be removed at the property owner's expense.

(d) If the property owner's plan is acceptable and calls for renourishment, then a renourishment permit application shall be submitted to the Department within eighteen months of the issuance of the emergency order.

(i) If the Department approves the renourishment permit, sandbags shall be allowed to remain in place for up to twelve months after the permit is issued to allow sufficient time for the project to be completed, but must be removed at the property owner's expense prior to the placement of renourishment sand at the property, or at the end of the twelve month period, whichever occurs first.

(ii) If the Department denies the renourishment permit application, the sandbags shall be removed within ninety days of the final agency decision, including all appeals, at the property owner's expense.

(iii) If a renourishment permit application is not submitted to the Department within eighteen months of the issuance of the emergency order, the emergency order shall expire at the end of the eighteenth month, and the sandbags shall be removed at the property owner's expense.

(3) To maintain the temporary nature that is intended for the use of sandbags, the following criteria shall be used when issuing emergency orders for sandbags:

(a) The bags shall be commercially manufactured for the purpose of holding sand. Biodegradable bags may be required if deemed appropriate by the Department.

(b) The bags, when filled, shall be a maximum size of one cubic yard.

(c) The bags may be placed no farther seaward than is necessary to protect the existing habitable structure, critical infrastructure or golf course qualified under R.30-13.Q(1). In no case may sandbags be used to protect a dune. Sandbags may not retard normal shoreline movement unless used to protect an existing habitable structure, critical infrastructure or golf course qualified under R.30-13.Q(1).

(d) All sandbags are to be placed parallel to the shoreline. Excavation shall not be allowed below existing beach grade. The toe of the sandbags shall not be buried. At no time shall the sandbags be buried or covered with sand.

(e) Sandbags shall generally be limited to a maximum height of six feet above the beach. The sandbags shall be stacked at an angle no steeper than forty-five degrees.

(f) The Department may consider site specific engineering reports which will improve the effectiveness of sandbag placement for site specific situations.

(g) Sandbag fill material must be from an upland source and compatible in grain size and color with the native beach sand and should contain no more than a minimal amount of organic material. Only clean sand may be placed in the bags.

(h) The property owner is responsible for the day-to-day maintenance of the sandbags to ensure that they remain in the location authorized by the emergency order, above grade and in good repair. Failure to maintain the sandbags may result in the Department requiring the removal of the sandbags at the property owner's expense.

(i) A copy of the issued emergency order shall be in the possession of anyone performing the placement of sandbags.

(4) Emergency orders for sand scraping may be issued by the Department, or upon written notification to the Department by an appointed official of a county or municipality or of the state acting to protect public health and safety. Sand scraping may be used to construct temporary protection if the Department or local official determines a structure to be in imminent danger and emergency conditions conform with the definition of emergency in Section 48-39-10(U). The following criteria shall be used when issuing emergency orders for sand scraping:

(a) Sand scraping may only be ordered and performed to protect existing structures. Sand scraping shall not be allowed in front of erosion control structures unless it can be proven that the erosion control structure is itself in danger of collapsing and is within ten feet of the habitable structure.

(b) Sand scraping may be used to provide temporary protection for golf courses pursuant to the requirements of this subsection.

(c) Sand may only be scraped from the intertidal beach and only between extended property lines of the structure receiving the sand. The depth of scraping may not exceed one foot below the existing beach level.

(d) Sand may be placed against an eroded scarp or to replace an eroded dune that is seaward of a threatened structure. The dune shall not exceed six feet above grade or twenty feet in width as measured from dune toe to dune toe.

(e) No sand may be placed landward of an existing, functional erosion control device.

(f) Sand scraping may be performed one time only per property for each emergency order issued by the local official without prior approval by the Department.

(g) A copy of the issued emergency order shall be in the possession of anyone performing sand scraping.

(h) Sand scraping activities shall generally be accomplished through private or local funding unless a state of emergency is declared, then state funding is not precluded.

(5) Emergency orders for renourishment may be issued by the Department, or upon written notification to the Department by an appointed official of a county or municipality or of the state acting to protect public health and safety. Renourishment may be used to construct temporary protection if the Department or local official determines a structure to be in imminent danger and emergency conditions conform with the definition of emergency in Section 48-39-10(U). The following criteria shall be used when issuing emergency orders for renourishment:

(a) Renourishment sand must originate from an upland source and be approved by the Department as compatible in grain size and color with the native beach sand and should contain no more than a minimal amount of organic material.

(b) Sand placed on the beach must be located between the extended property lines of the property receiving the sand.

(c) Sand may be stabilized with sand fencing and beach vegetation pursuant to the permitting requirements in R.30-13.L.

(d) A copy of the issued emergency order shall be in the possession of anyone performing authorized renourishment activities.

(e) Renourishment activities conducted under an emergency order may be used to provide temporary protection for golf courses pursuant to the requirements of this subsection.

(f) Renourishment activities conducted under an emergency order shall generally be accomplished through private or local funding unless a state of emergency is declared, then state funding is not precluded.

State Register Volume 23, Issue No. 6, eff June 25, 1999; State Register Volume 27, Issue No. 6, Part 1, eff June 27, 2003; State Register Volume 32, Issue No. 4, eff April 25, 2008; State Register Volume 40, Issue No. 6, Doc. No. 4615, eff June 24, 2016.

30-16. Documentation Requirements Before Commencing Activities Between Setback Line and Baseline.

A. Notification Procedure:

(1) Activities requiring written notification to and written response from the Department:

(a) Construction of new habitable structures at least partially seaward of the forty year setback line.

(b) Additions to habitable structures.

(c) Replacement of habitable structures.

(d) Construction of new pools between the baseline and the setback line and landward of an erosion control device which existed June 25, 1990.

(e) Replacement of pools.

(2) Information required:

(a) New habitable structures and additions to habitable structures:

(i) heated square footage of the proposed habitable structure or proposed addition.

(ii) plat showing footprint and cross section showing foundation of new structure as located on lot. Also, all property lines, setback lines and any parking requirements which may be in effect must be shown. The structure or addition must be located as far landward on the property as practicable as determined by the Department.

(iii) for additions, the plat must clearly differentiate between the original structure and proposed additions.

(b) Replacement structures:

(i) heated square footage of original and proposed replacement structure.

(ii) linear footage along the coast of proposed replacement and original structure.

(iii) plat showing footprint and cross section showing foundation of proposed replacement structure.

(c) Replacement of destroyed pools will require a plat showing footprint and cross section of the original and replacement pool.

HISTORY: Added by State Register Volume 15, Issue No. 5, eff May 24, 1991; Amended by State Register Volume 19, Issue No. 6, eff June 23, 1995; State Register Volume 23, Issue No. 6, eff June 25, 1999.

30-17. Application Procedures for General Permits Pursuant to Section 48-39-290(B)(4).

A: General Guidelines: Applicants for general permits shall be required to submit the following information:

(1) Completed SCDHEC-OCRM general permit application form.

(2) Proof that the adjacent property owners and the local governmental body having jurisdiction over the site have been notified of the proposed activity by certified mail through the use of the following notification:

(Applicant) has applied to the Department for a General Permit to (description of activity) at (address or legal description of property) in (city and county). Comments on this application should be mailed to the Department at the following address: (insert local OCRM office address), by (insert date, fifteen days after date of certified mailing).

(3) The applicant must furnish the certified mail stubs to the Department at the time of mailing. The General Permit cannot be issued until the fifteen day comment period has expired.

(4) Proof of publication that the above public notice was placed in a newspaper published in the county where the proposed activity is taking place must be forwarded to the Department office processing the application. General Permits cannot be issued until the fifteen day comment period as advertised in the newspaper has expired.

(5) A brief description of the proposed work, its purpose and intended use. A drawing or plat may be required as well as a description of the method of construction, and identification of materials and equipment to be used.

(6) Information on activities eligible for General Permits may be obtained from the Department.

HISTORY: Added by State Register Volume 15, Issue No. 5, eff May 24, 1991; Amended by State Register Volume 19, Issue No. 6, eff June 23, 1995; State Register Volume 23, Issue No. 6, eff June 25, 1999.

30-18. Beach Restoration Fund.

A. Funding for Projects: Beach restoration projects will follow a cyclical pattern that is conditioned by the availability of funds. The Department will make an initial announcement when applications are to be submitted. The announcement will specify the time of submission and the format to be used. There will be at least a 90 day period for receiving applications. Projects that are not funded during the initial cycle will be eligible for consideration at the next cycle which will start when additional funds become available. Communities will be given the opportunity to update their applications for subsequent cycles to show any changed conditions.

B. Application Process: Applications for beach nourishment must be submitted to the Department. The applications will be reviewed by the staff for completeness and eligibility requirements. Input from the applicant and the public will be solicited and considered. In evaluating the project applications the Department will be guided by the legislated criteria and guidelines, and, the following consideration:

- (1) Environmental impact of the project.
- (2) Public recreational benefit.
- (3) Expected useful life of project.
- (4) Protection benefit of project.
- (5) Extent of support for project.

C. Necessary Permit Application Information: Any eligible local government desiring to submit an application for Beach Restoration Funds should submit a completed permit application to the Department. The following information should be submitted on or attached to the permit application form.

- (1) The name, address, and telephone number of the local government making the application and the name and telephone number of the designated liaison agent.
- (2) The name, address, and telephone number of the project consulting engineer or other agent.
- (3) A resolution adopted by the applicant's governing body approving the submittal of an application for beach restoration funds, and committing to the local funding requirements necessary to complete the project.
- (4) The Chief Executive Officer of the governing body should sign the application.
- (5) A narrative description of the project to include:
 - (a) Project limits.
 - (b) Quantity of fill.
 - (c) Borrow sites.
 - (d) Expected design life of project.
 - (e) Project construction duration and time of year.
 - (f) Estimated first cost and annual maintenance costs.
 - (g) A statement as to the source and availability of all local, state, and federal funds for the project.
 - (h) Benefits to be realized by the project.
 - (i) Environmental impacts.
 - (j) Public access to renourished area.
- (6) Map or maps showing:

- (a) Project site plan and borrow area locations.
- (b) Upland ownership of property, indicating federal, state, local, or private ownership.
- (c) Public access points.
- (d) Public parking areas.
- (e) Private parking areas.
- (f) Baseline and setback line(s).

(7) Any engineering studies that have been completed concerning the project, and plans for post-project monitoring.

(8) Approved beach restoration plan for the community which includes an analysis of beach erosion control alternatives.

D. Minimum Regulatory Requirements: All applications will be evaluated to determine if the project meets the minimum regulatory requirements and then ranked on a relative basis according to the five considerations listed in R.30-18(E). The minimum regulatory requirements are:

(1) Prior to July 1, 1991:

(a) A state-approved shorefront management plan or a state-approved local nourishment plan, and

(b) A state and locally approved beach access plan with an implementation schedule. The plan must include an inventory of current access and parking, an analysis of current and future demand, and a strategy for enhancing public access and parking, and

(c) A complete application.

(2) After July 1, 1991:

(a) A state approved beach management plan developed in accordance with Section 48-39-350 of the South Carolina Coastal Zone Management Act, as amended, and

(b) A complete application.

E. Project Evaluation Considerations: If the project meets the minimum regulation requirements, the project is then evaluated and ranked using the following considerations:

(1) Environmental impact of project.

(2) Public recreational benefit.

(3) Expected useful life of project.

(4) Protection benefit of project.

(5) Extent of support for project.

F. Administration of the Project: The execution and administration of the project will be coordinated by the Department according to regulations of the State Budget and Control Board regarding procurement of architectural/engineering services and for construction of permanent improvements projects.

HISTORY: Added by State Register Volume 13, Issue No. 6, eff June 23, 1989; Amended by State Register Volume 19, Issue No. 6, eff June 23, 1995; State Register Volume 23, Issue No. 6, eff June 25, 1999.

30-21. Beachfront Management Plan.

(Statutory Authority: 1976 Code § 48-39-320(B))

A. Introduction

(1) In July, 1988, the South Carolina Beachfront Management Act became law. The Act was subsequently amended in the 1990 session of the legislature. This law is a complex piece of legislation, requiring the use of scientific studies of coastal processes to establish precise building setback lines along the coast. In addition, the Act bans the future construction of seawalls, limits the size of buildings within the predicted erosion zone and adopts a policy of retreat away from the erosional beach.

The Act is intended to protect both life and property, protect unique habitats and preserve the beach for future use by all citizens. These visitors bring millions of dollars into the state's economy. A

number of provisions in the Act address the preservation of a dry-sand beach and public access opportunities, measures to renourish eroding beaches, and the protection of natural vegetation within the beach/dune system. One important provision of the Act specifically requires the adoption of local beachfront management plans by local governments.

(2) Adoption of Local and State Management Plans

If a local government wishes to participate in the state bonding programs available for beach renourishment or other beach funding programs, the governing body must adopt and enforce a local beachfront management plan that is consistent with the Beachfront Management Act. Likewise, the State must also adopt a “long-range and comprehensive beach management plan” (Section 48-39-320A) specifically addressing the following items:

- (a) Development of a data base necessary for maintaining and enhancing the beach/dune system.
- (b) Development of guidelines and their coordination with appropriate agencies and local governments for the accomplishment of:
 - (i) Beach/dune restoration and renourishment.
 - (ii) A beach access program to ensure full and complete access to the beach.
 - (iii) Maintenance of a dry-sand and ecologically stable beach.
 - (iv) Protection of all sand dunes seaward of the setback line.
 - (v) Protection of endangered species.
 - (vi) Regulation of vehicular traffic upon the beaches and beach/dune system.
 - (vii) Development of a mitigation policy for construction occurring seaward of the setback line.
- (c) Formulation of recommendations for funding programs to implement the goals of the plan.
- (d) Development of a public education or an awareness program.
- (e) Assistance to local governments in developing their local beachfront management plans.

(3) This document comprises the State’s long-range beachfront management plan. Local beachfront management plans have been developed by local entities under guidance of the South Carolina Coastal Council. The local plans, once approved by the Council, become part of the state plan.

B. Goals, Objectives and Policies of the South Carolina Beachfront Management Plan

(1) Introduction

This section of the plan contains goals, objectives, and policies that will be used to guide the management of the State’s beach during the future. The planning period is ten (10) years; every five (5) years the plan is to be reviewed and, if needed, revised. Revisions may include changes based on technical data gathered from the ongoing monitoring of the beachfront changes in the local beachfront management plans, or changes in State law.

The goals, objectives, and policies outlined in this document are organized in a hierarchical manner. First, broad goal statements derived from Section 48-39-260 of the Beachfront Management Act are listed. These goals are intended to be nonspecific and to represent broad courses of action or direction for the plan to follow. Second, the plan’s objectives are defined to identify strategies that will be addressed to implement the goals. These objectives are more specific than a goal but do not describe the specific actions the Council will take in order to accomplish the objective. Lastly, a number of specific policy statements are listed under each objective to identify specific courses of action that will be used to implement the Beachfront Management Plan. These policy statements will be used in the Council’s day-to-day actions which will implement the plan.

Following the section on goals, objectives and policies is a section describing plan implementation. State Comprehensive Beach Plan

Goals: (References to the South Carolina Coastal Zone Management Act, as amended, are given in brackets):

Protect, Preserve, Restore and Enhance the Beach and Dune Systems. [48-39-260(1)(a)(b)]

Implement the Policy of Retreat. [48-39-260(2)]

Improve Public Access. [48-39-260(6)]

Protect Endangered Species Habitat. [48-39-260(1)(d)]

Develop an Organized Disaster Response Plan. [48-39-260(8)]

Improve Data Base of Coastal Processes. [48-39-260(7)]

Improve Public Awareness of Coastal Issues. [48-39-260(1)(c); 48-39-260(2)]

(2) Goal: Protect, Preserve, Restore and Enhance the Beach and Dune Systems

(a) Objective 1: Protect all sand dunes seaward of the setback line. [48-39-320(2)(D)]

(i) Policy: All beachfront lots proposed for development will be inspected by Council staff in order to identify sand dunes. Council staff will locate and flag all sand dunes on the lot. All sand dunes must be indicated on the plats. [48-39-310; 48-39-320(2)(D)]

(ii) Policy: Within the setback area, the disturbance of sand dunes must be avoided where possible. Sand dunes proposed for alteration must be indicated on the submitted permit drawings. The stated reason why alteration is required must be included. Consideration in the building and site design plans to relocate or redesign the building to avoid alteration of sand dunes and vegetation must be addressed. [48-39-320(B)(4); 48-39-310; 48-39-320(2)(D)]

(iii) Policy: Important dunes significant to the health of the beach will be protected even if the boundary of the dune extends landward of the setback line. These significant dunes will be identified by the Council staff from site visits and survey information. [48-39-320(2)(d)]

(iv) Policy: Within the setback area, mitigation in the form of constructing a new dune and replanting with beach vegetation where feasible, should be included for permitting an alteration of a dune. Off-site mitigation will be considered on a case-by-case basis. [48-39-310]

(b) Objective 2: Promote renourishment by providing funding and technical assistance where feasible. [48-39-260(5)]

(i) Policy: Use the state plan as a guide to fund renourishment projects based upon the state renourishment plan (adopted as a part of this plan). Renourishment projects will be funded based upon erosion rates, benefits to the community, improvement of public access and likelihood of success. [48-39-320(A)(2)(a)]

(ii) Policy: Technical assistance for renourishment projects is available from Council staff. Surveys developed as a part of coastal monitoring projects will be made available to local governments. Additional periodic surveys for proposed renourishment projects may be requested by a local government, and the Council will attempt to address these requests. [48-39-260(5)]

(c) Objective 3: Encourage the construction and planting of new sand dunes within the area between the active beach and the setback line. [48-39-310; 48-39-320(2)(D)]

(i) Policy: The construction of new sand dunes to provide erosion protection and wildlife habitat is encouraged on beachfront lots. In order to encourage this activity the Council has issued a general permit which enables local property owners to build these dunes without obtaining an individual Council permit. [48-39-320(2)(D)]

(ii) Policy: The construction of new sand dunes may be used as mitigation for other construction activity occurring within the setback area. The Council will assess each mitigative activity individually, based upon the extent of construction on the lot, nature and location of the proposed dune. (48-39-310)

(3) Goal: Implement the Policy of Retreat

(a) Objective 1: On erosional beaches, limit the size of structures within the setback area. [48-39-260(2); 48-39-350(A)(9); 48-39-280(A)]

(i) Policy: Within the 40-year setback area, buildings will be located as far landward as practicable. Local roadside setbacks will be the minimum necessary to allow development to occur while still allowing the construction of a building of a reasonable size for the intended use. The Council, in cooperation with local governments in developing their beachfront management plans, will determine the minimum roadside setbacks allowable within the setback area. Practical considerations such as the need for off-street parking spaces, drain fields, and storm water

retention ponds will be considered during the review of these local plans. [48-39-350(A)(9); 48-39-260(2)]

(ii) Policy: In cooperation with local governments, the Council will attempt to develop a system to allow larger buildings within a portion of the setback area provided the buildings are located farther landward on the lot than they would normally be allowed by existing local or State regulations. Each proposal will be reviewed on a case-by-case basis.

(b) Objective 2: Implement a policy of retreat to move buildings away from active beach. [48-39-260(2); 48-39-350(A)(9)]

(i) Policy: Buildings seaward of the setback line that are destroyed beyond repair for any reason (whether by Act of God or man) can only be replaced by a structure no larger than that of the original building. [48-39-290(B)(iv)(a)]

(c) Objective 3: Implement mitigation guidelines/regulations.

(i) Policy: The Beachfront Management Act requires the Council to adopt mitigation guidelines for any construction activity occurring, as well as for any destruction of beach/dune vegetation, seaward of the setback line. (48-39-310; 48-39-320) In order to implement these guidelines the Council has determined that local mitigation programs, similar to impact fee programs would be the most efficient way to establish and implement this program. Accordingly, the Council has developed guidelines for mitigation programs and distributed these to local governments.

(4) Goal: Improve Public Access

(a) Objective 1: Develop programs to acquire public access improvements. [48-39-320(2)(b); 48-39-350(A)(2); 48-39-350(A)(10)]

(i) Policy: The Council has surveyed the coast of South Carolina and determined that several public access problems exist in some areas of the coast. Specifically, Georgetown County, Hilton Head Island, and southern Charleston County (Seabrook and Kiawah) have identified access problem areas. It is the policy of the Council that in these areas local governments, or the applicant, are encouraged to improve public access as permits to renourish the beach, relocate inlets, or undertake any alterations within the coastal waters or sand dunes are considered. [48-39-320(2)(b)]

(ii) Policy: The Council will request funding from the Federal government and the State to develop a source of funds to acquire beach property. [48-39-320(A)(g)]

(iii) Policy: The Council will use its permitting and certification authorities to encourage developers, homeowners' associations, or local governments to make efforts to provide public access onto beaches where access is limited or completely restricted. [48-39-320(2)(g)]

(b) Objective 2: Use public funds for renourishment projects only where full and complete access is provided. [48-39-320(3)]

(i) Policy: A community must demonstrate that the entire renourishment project area subject to State cost-shared funding has full and complete access existing as of the date of the award and that the entire project is a complete and viable project as defined in the Council's regulations for renourishment projects and adjusting baselines. The Council's public access guidelines will be used as the evaluating document in deciding if a beach has full and complete access and in designing public access improvement projects. [48-39-320(3); 48-39-120(D)]

(c) Objective 3: Coordinate with S. C. Department of Parks, Recreation and Tourism and local governments to develop new access sites. [48-39-320(2)(B)]

(i) Policy: The Council will coordinate with Parks, Recreation and Tourism and local governments to identify potential beach access sites. Regional, community, and neighborhood facilities should be considered. [48-39-320(2)(B); 48-39-350(A)(2); 48-39-350(A)(10)]

(ii) Policy: The Council will request funding from the Federal government and the State Legislature to develop a joint funding program to acquire and develop parks along with Parks, Recreation and Tourism. Joint use of funds will be explored when feasible. The inventory of need will be used as a key factor in selecting site locations for public access improvement projects. [48-39-320(3)]

(5) Goal: Protect Endangered Species Habitat

(a) Objective 1: Continue coordination with S. C. Wildlife and Marine Resources Department to better identify endangered species and habitat sites. [48-39-320(2)(E); 48-39-35(A)(4)]

(i) Policy: Local governments will be required through the local planning process to contact S. C. Wildlife and Marine Resources Department to identify endangered species habitat areas. The policies of the endangered species guidelines will be implemented by the local governments through their plans. [48-39-320(2)(E); 48-39-350(A)(4)]

(ii) Policy: The Council will coordinate with S. C. Wildlife and Marine Resources Department to prepare a list of endangered species habitat areas. The list will be updated annually and used by Council staff in the permitting and certification processes. A staff member will be assigned as coordinator. [48-39-320(2)(E); 48-39-350(A)(4)]

(b) Objective 2: Include an endangered species impact review as a part of the permit and certification processes administered by the Council and Council approval of local beachfront management plans. [48-39-320(2)(E)]

(i) Policy: All sites identified by S. C. Wildlife and Marine Resources Department will become Geographic Areas of Particular Concern (GAPC's) and be protected under the Coastal Zone Management Program. This list will be updated annually by the Wildlife Department. [48-39-90(D); 48-39-250(A)(4)]

(ii) Policy: In areas that do not have an approved local beachfront management plan, each individual permit or certification request located along the beachfront will be evaluated as to its impact on endangered species. If an impact is determined, the guidelines for protection of endangered species will be implemented through conditions placed upon the permit or certification. [48-39-350(B)]

(c) Objective 3: Limit man's impact to sea turtle nesting areas by use of ordinances at local and state government levels. [48-39-350(A)(4)]

(i) Policy: Local plans will be required to comply with the guidelines for endangered species in order to be approved by the Council. [48-39-350(A)(4)]

(ii) Policy: The Council staff will implement the intent of the lighting ordinances along the beachfront, for areas that do not have approved local beachfront management plans, through the enforcement provisions of the Coastal Zone Management Program and the review of individual permit applications. [48-39-350(B); 48-39-350(A)(4)]

(iii) Policy: Sand fencing and dune construction projects will be conducted in accordance with the adopted guidelines and regulations for the protection of sea turtle nesting areas. [48-39-350(A)(4)]

(d) Objective 4: Limit the destruction of dune systems from development activity to protect habitat. (48-39-310)

(i) Policy: The policies of protecting sand dunes from alteration will be implemented along the coast through the local beachfront management plan and staff review of individual projects in areas that do not adopt approved plans. (48-39-310)

(ii) Policy: If a dune is located in an area determined to be a habitat for an endangered species no alteration will be allowed. [48-39-350(A)(4)]

(6) Goal: Develop an Organized Disaster Response Plan

(a) Objective: The Council will develop and implement, as a part of this plan, a disaster response plan describing the actions that the Council will follow in preparing for a major disaster both before and after the storm event. [48-39-350(A)(8); 48-39-260(8)]

(i) Policy: The plan will be adopted by the Council and used as the agency's strategy for responding to disasters. [48-39-260(8)]

(ii) Policy: The plan will be reviewed and updated annually and changes made as needed. [48-39-260(8)]

(7) Goal: Improve Data Base of Coastal Processes

(a) Objective 1: Develop a method to collect information on beach erosion and accretion that is capable of collecting historical information and monitoring long-term trends. [48-39-320(A)(1)]

(i) Policy: A monitoring program must be developed to periodically survey beach profiles along the coast. Each station will be surveyed at least twice each year. [48-39-320(A)(1)]

(ii) Policy: A system for archiving the information will be developed. Information will be stored on computers in Council offices. [48-39-320(A)(1)]

(b) Objective 2: Use the information in developing setback lines, erosion rates, and renourishment projects. [48-39-320(A)(1); 48-39-280(A)]

(i) Policy: The Council will analyze all information for historic trends to determine erosion rates, setback lines, etc. Lines will be evaluated every eight years. Renourishment projects will be evaluated as to the success of the project. Baselines and setback lines can be adjusted in accordance with the adopted guidelines. [48-39-280(C)]

(c) Objective 3: Make the information available to engineers, planners and all interested parties along the coast. [48-39-320(A)(4)]

(i) Policy: All information will be released annually to local governmental planning departments. In addition, any engineering firms doing beach renourishment or coastal projects can receive copies of the monitoring results upon request. An annual "State of the Beach Report" identifying trends and erosion rates along the coast will be prepared and made public in April of each year. [48-39-320(A)(2); 48-39-320(A)(5); 48-39-350(A)(1)]

(d) Objective 4: Fund monitoring projects to improve knowledge. [48-39-320(A)(3)]

(i) Policy: When feasible, the Council will fund hydrographic surveys, research projects, special studies, etc. to improve knowledge of coastal processes. The Council will work with the Sea Grant Consortium and other appropriate agencies to try to identify needed research projects. [48-39-320(A)(3)]

(8) Goal: Improve Public Awareness of Coastal Issues

(a) Objective: The Council will undertake a public education and public participation program in an effort to make the public more familiar with the methods used to manage the coast and the natural processes that are shaping the beach. [48-39-320(A)(4)]

(i) Policy: The staff will prepare brochures/pamphlets on coastal processes (the protection of sea turtles, building methods, dunes, etc.). [48-39-320(A)(4)]

(ii) Policy: The staff will utilize the media to explain coastal processes. [48-39-320(A)(4)]

(iii) Policy: The Council will release informative studies so that the general public can understand issues related to beach management. [48-39-320(A)(4)]

(iv) Policy: The Council will develop ways (advisory committees, etc.) for the public to become involved. [48-39-320(A)(4)]

C. Implementation of the Plan (A Summary of Measures to be Used to Implement the Beachfront Management Plan)

(1) The plan will be implemented through a variety of measures designed to promote beach renourishment, limit the size and location of construction allowed in erosion prone areas, promote public access opportunities, and control reconstruction after natural disasters.

The following procedures will be used to implement the policies of the Beachfront Management Act.

(a) The changing nature of the shoreline or long-term stability of beachfronts can now be documented by use of the monitoring and archival system now in place. Twice a year beachfront profile stations, established to third order survey accuracy, will be surveyed and the results recorded and stored. Comparing these surveys seasonally and over the years will provide a long-term view of what is happening at a particular point along the coast. This information will be the cornerstone for the development of a scientific method for locating baselines and establishing erosion rates.

(b) The Council will permit development within the setback zones by issuance of regular permits, a notification system in cooperation with local governments, and by issuance of "special

permits” in the area seaward of the baseline. Each of these permits is subject to a number of conditions dealing with the size and location of new buildings, rebuilding, renovation, and the replacement of pools and seawalls. The goals, objectives, and policies, guidelines, and rules and regulations will be used as the basis for making the hundreds of individual permit decisions required to implement the plan.

(c) The Council does not have the authority to permit any new seawalls or other erosion control devices within the 40-year setback zone. This prohibition will limit the nature of development in these areas.

(d) The Council will review and approve all local beachfront management plans. The Council has prepared guidelines and sample maps to acquaint local governments with the minimum requirements of the Act. The review and approval of the local plans will be considered through the Council’s Management Committee subject to the minimal elements required for each plan as specified by the South Carolina Coastal Zone Management Act, as amended.

(e) The long-range planning process required by the South Carolina Coastal Zone Management Act, as amended, will be implemented through the local beachfront management plans and through the state comprehensive plan. An attempt will be made to move development proposed within the 40-year setback line as far landward as practicable through the implementation of the policies during the permit review system.

(f) The policy of retreat will be promoted through the local beachfront plans, through the notification system, and the special permitting process. These processes will be designed to limit the size of new construction and move any construction as far landward as practicable as specified by the Act.

(g) The plan’s public access provisions and requirements to protect sand dunes will be furthered by exempting all walkways less than six feet in width from permit or notification requirements. It is hoped that this will encourage the construction of more walkways to the beach over healthy sand dunes.

(h) The beach renourishment bond fund which provided more than \$10 million for local renourishment programs has been used by many local governments to renourish beachfront areas following Hurricane Hugo. Hopefully, funds through this or other funding programs will become available in future years to renourish other areas.

(i) The Council has adopted guidelines for the relocating of baselines following a renourishment event. Rules and regulations addressing how renourishment projects will be permitted have been in place for a number of years as a part of the Council’s Permitting Rules and Regulations.

(2) Specific Implementation of Goals

This section describes the specific methods that will be used to implement the goals, objectives, and policies established in the preceding section.

(a) Goal: Protect, Restore and Enhance Natural Beaches and Dunes

Policies can be implemented through the permitting and certification processes that are in use by the Council. The review and approval of the local beachfront management plans can also be used to implement these policies.

Several beachfront management guidelines, developed in accordance with Section 48-39-320, address renourishment programs and maintenance of a dry-sand beach. These guidelines are:

- (i) The Guidelines for Beach Restoration and Renourishment.
- (ii) Maintenance of a Dry- Sand and Ecologically Stable Beach.
- (iii) Protection of Sand Dunes.
- (iv) Guidelines for the Regulation of Vehicular Traffic.

The Permitting Rules and Regulations also address the maintenance of beach and dune systems. (Reference Section 30-13, Specific Project Standards for Beaches and Dunes.)

The local beachfront management plans will also be used to implement these goals, objectives, and policies. Each local beach management plan must be reviewed and approved by the Council based upon the guidelines provided by the Council and the requirements of the local beach management plans set forth in Section 48-39-350. (See Appendix 2 for these requirements.)

(b) Goal: Implement a Policy of Retreat

These policies will be implemented through the permitting and certification systems presently in effect. All permits and project notifications that are received by the Council, located within the 40-year setback line, will have to meet these policies. Local beachfront management plans can be required to implement Council policies within the setback area. Local plans must be approved by the Council.

Several beachfront management guidelines can be used to implement the policy of retreat during the Council's day-to-day review activities and the review of local beachfront management plans. These are (See Appendix 4 for Guidelines):

(i) The Guidelines for Maintaining a Dry-Sand Beach.

(ii) The Mitigation Guidelines for Construction Activity Occurring Seaward of the Setback Line.

The Permitting Rules and Regulations also address the implementation of a policy of retreat (see Section 30-13).

The local beachfront management plans will also be used to require local development ordinances to implement a policy of retreat within the 40-year setback area. (See Section 48-39-250, Appendix 5.)

(c) Goal: Improve Public Access

The Council will seek additional funds for access improvements through the annual grant request and recommendations for funding developed with S. C. Parks, Recreation and Tourism. Council funds could also be used to match funds acquired from Parks, Recreation and Tourism for the development of new beach access sites.

The mitigation guidelines will be used to provide a source of funds not matched by other state or federal funds to improve and create new public access sites. Local governments will be required to improve public access as a condition to local plan approval. Additional funds for public access should be requested from NOAA in the Council's annual grant request. The permitting and certification review procedures and local plan approval can be used to implement public access policies.

The guidelines that will be used to implement public access improvements are (see Appendix 4 for Guidelines):

(i) The Public Access Guidelines.

(ii) Beach Restoration and Nourishment (Beach Restoration Fund).

(iii) Mitigation Guidelines.

The Council's Permitting Rules and Regulations under Section 30-13, Specific Project Standards for Beaches and Dunes, can also be used to preserve some existing public access sites.

The development of a public access plan as part of this beachfront management plan will be used to identify areas where improvements are needed, to make recommendations on where new sites should be developed, and to identify recommendations for funding these new acquisitions. This plan is to be developed in consultation with the S. C. Department of Parks, Recreation and Tourism.

(d) Goal: Protect Endangered Species Habitat

These policies will be implemented through the review of the local beachfront management plans and through the Council's permitting and certification processes.

The following guidelines will be used to implement these goals, objectives and policies (see Appendix 4 for Guidelines):

(i) The Guidelines for Protecting Endangered Species.

(ii) Protection of Sand Dunes.

(iii) Guidelines for Maintenance of a Dry-Sand Beach.

(iv) Guidelines for Beach Restoration and Nourishment.

The Permitting Rules and Regulations also address the protection of endangered species and will be used to implement the policies during day to day review of requested activities within the setback.

All local beachfront management plans must contain an element designed to protect endangered species, and this element must be reviewed and approved by the Council in order for a community to have an approved plan.

(e) Goal: Develop an Organized Disaster Response Plan

The plan, adopted as an element to this beachfront management plan, will be implemented by the staff of the Council. The plan will be updated annually and changes made as needed. Each year the plan will be reviewed, procedures evaluated and corrections made as needed. This will be the Council's plan of action for making preparations before a major damage event and after the event has occurred.

(f) Goal: Improve Coastal Data Base

These policies will be implemented by Council staff who will conduct the beach surveys and enter the results of each survey into a computerized data base. This will be an ongoing activity that the staff of the Council will continually upgrade. The monitoring plan will provide the Council with a means to establish historic trends and to establish setback lines and better regulate development along the coastline. Data obtained from the monitoring program will be used to adjust the lines and evaluate the success of renourishment projects as required under Section 30-14 of the Administrative Procedures Section.

(g) Goal: Improve Public Awareness of Coastal Issues

These policies will be implemented by the staff of the Council as part of the long-term implementation of the Beachfront Management Act. These activities are ongoing and will continue to be met as the need arises.

D. Program Plans

The following section contains the component programs that will be used to implement strategies required by the State Beachfront Management Plan. These programs will be implemented through the goals, objectives, and policies and through the rules and regulations and guidelines that have been adopted by the Council to administer the South Carolina Coastal Zone Management Act, as amended.

The following program elements are addressed: Beach Monitoring Plan; Beach Erosion Analysis and Nourishment Plan; Public Access Plan; Disaster Response Plan; Public Education and Awareness Plan;

(1) Beach Monitoring Plan

The South Carolina Coastal Council's Beach Monitoring Program was established in 1985. At that time the purpose of the program was to study erosion and accretion along the state's beaches. The program was upgraded in 1987 in anticipation of the 1988 amendments to the South Carolina Coastal Zone Management Act, as amended. Except in areas designated as Unstabilized Inlet Zones under the amended Act, baselines and setback lines are formulated primarily on the basis of data collected at beach survey stations.

(2) Beach Profile Surveying System

Beach profile monitoring stations, marked by a survey monument, are located every 1,000 feet along developed beaches and every 2,000 feet along undeveloped beaches. These monuments consist of a brass cap on a 36 inch breakaway tube, surrounded by PVC pipe and concrete. The brass caps are at ground elevation and are inscribed with identifying information and a specific four-digit number. Sites for survey monuments are chosen for accessibility and the degree to which any given site represents the beach under study. In establishing the Council's network of beach profile monitoring stations an effort was made to recover survey points where data existed from previous studies. Nearly eighty percent (80%) of South Carolina's developed shoreline had been monitored at some time in the past and much of the data has been archived as part of the program.

The specifications for accuracy in the location and elevations of Council monuments were determined by the South Carolina Geodetic Survey. As they are key elements in the determination of setback lines the accuracy of these monuments must be above reproach in a court of law. Third-order control, a term referring to survey accuracy, was selected as meeting the necessary stringent requirements. As a result, the location and elevation of these monuments are more accurate than necessary for property boundary surveys or flood elevation determination. Monuments which were destroyed by Hurricane Hugo have been replaced by the National Geodetic Survey using a new technology, global positioning satellites (GPS). Monuments established with the GPS system are second order in some cases of first-order accuracy. In either case, Council monuments are more accurate than most other monuments used for measuring beach movement in any coastal region.

Beach profiles are developed to satisfy three levels of need:

The profiles are surveyed every six months, spring and fall, to insure regular information flow and to document the normal condition of the beaches.

The profiles are surveyed following a significant storm to assess erosion and recovery.

The profiles are surveyed site-specifically to facilitate Council permitting or planning.

Of course, the beach profile monitoring stations are also available for any other surveying or civil engineering purposes. Most houses in the coastal zone are within 500 feet of a survey monument making the monuments a convenient survey reference. In future years these monuments will provide an accurate system for measuring the changes taking place along the South Carolina coast.

(a) Location of Existing Monuments

The location of coastal survey monuments are depicted on a variety of maps at Council offices. Maps exist of monuments by Northern, Central and Southern beaches. Maps of monuments by island or municipality are also available and are the type most often used by independent surveyors. (See figures 1–30 for a general representation of the location of these monuments along the South Carolina coast.) The most accurate and useful maps for determining monument locations are the Council's orthophoto maps which are rectified to a scale of 100 feet per inch. These photographic maps are based on aerial photographs flown in July of 1988. The orthophoto maps are essential to the Council's Permitting, Planning and Enforcement divisions. Copies of the maps are available to the public at a modest price from Duncan-Parnell, Inc. of Charleston.

The above described maps will indicate to the user the locations of monument or monuments of interest. Data sheets are also available for each monument. The sheets are indexed by number and contain the following information: the four-digit identifying number; latitude; longitude; northing; easting; elevation; nearby monuments; a verbal description of, and to, the monuments; and a schematic map of the site. This information is contained as an appendix to this report, or is available upon request form the Council.

The Council has prepared a collection of data called Surveyor's Packages. These information packets are divided by island or community and contain maps, monument data, and baseline and setback line information. They are available upon request from the Council.

(b) Future Plans

The beach monitoring network is essentially complete as of July, 1990, with a total of approximately 400 beach profile monitoring stations installed. Over the years new stations will be needed for site specific needs or where currently unexpected shoreline changes develop. These types of shoreline changes are not common but can occur around large or dynamic inlets. The Beach Monitoring Program should account for 6–10 new monuments per year for this contingency. Another 6–10 monuments per year should be budgeted for those monuments lost in storms or to other causes. In the past, costs of installing new monuments have averaged about \$300 per monument.

Beach monuments are presently surveyed twice a year to a depth of -5 MSL. The beach profile data gathered from these surveys is used to establish the location of the baseline and to determine the long-term erosion rate used to establish the setback line. The total annual cost for two surveys per year at all 400 monuments is presently about \$35,000. It is planned to continue these beach

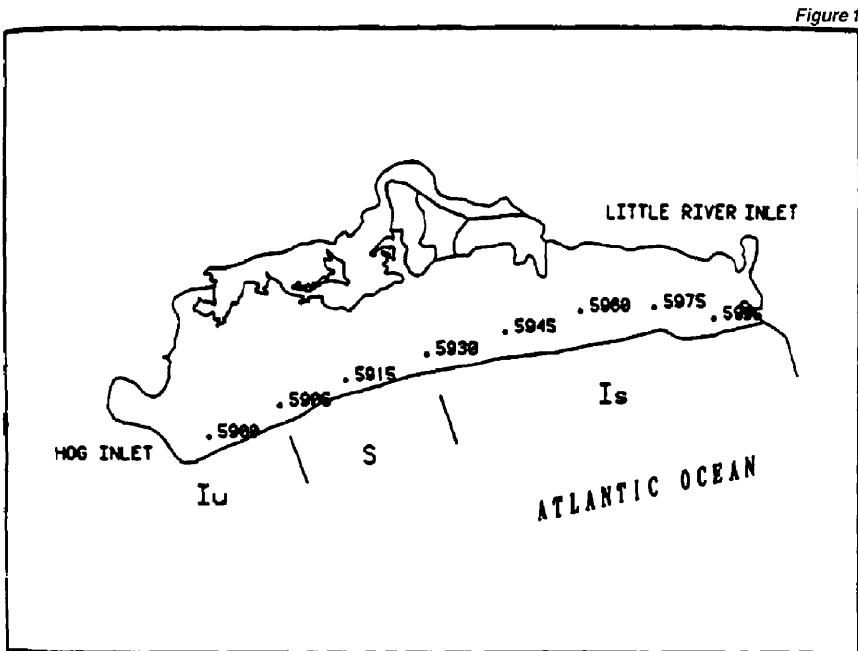
surveys in the future and to use the data collected to generate an annual "state of the beaches" report which will document changes to the state's beaches on an island-by-island basis.

In addition to the twice yearly survey of beach profiles, the Beach Monitoring Program is intended to include two additional types of monitoring. Approximately every two years surveys of selected beach profiles will be extended seaward to -20 feet (MSL). This offshore data gives a better representation of sediment movement within the entire littoral zone. Hydrographic surveys of selected inlet systems will be performed, ideally on a five-year cycle. This additional monitoring will fulfill our information needs regarding the presence, movement, and availability of sand and other sediment in the coastal waters.

The orthophotographs which are presently used to document the location of the survey monuments, baseline, setback line, and oceanfront structures were prepared in 1988. In areas impacted by Hurricane Hugo, many of the sand dunes, shore protection devices, and habitable structures which appear in the orthophotographs have been destroyed. As additional development occurs in the future these maps will become even more out of date. It is anticipated that new orthophotographs will become necessary for much of the State some time within the next 5-10 years, at an estimated cost of several hundred thousand dollars.

(3) Current Maps

Waites Island
Horry County



South Carolina beachfront jurisdictional lines approved - 4/20/90

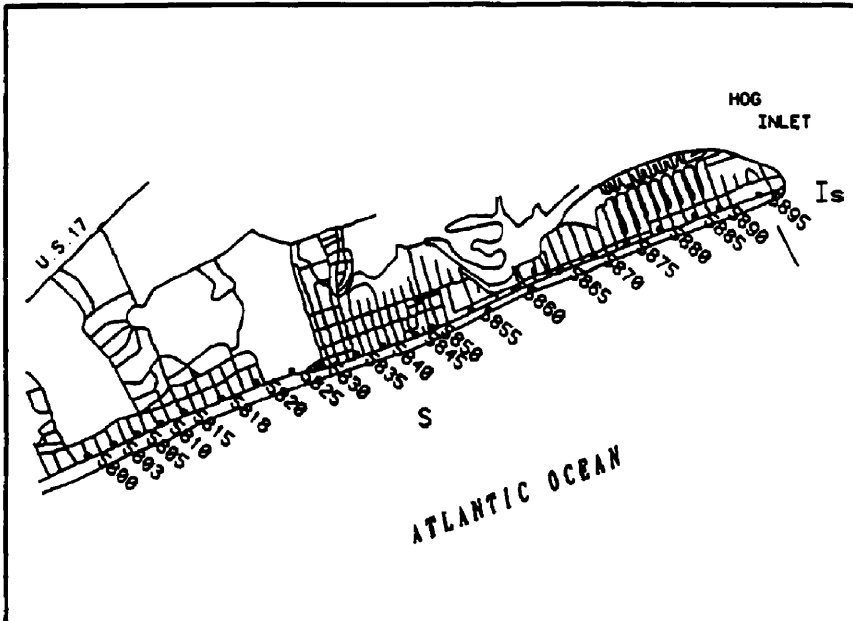
reference orthophotographs: #433 through 439

monument numbers refer to the SCCC beachfront monument network

notes:

*North Myrtle Beach
Horry County*

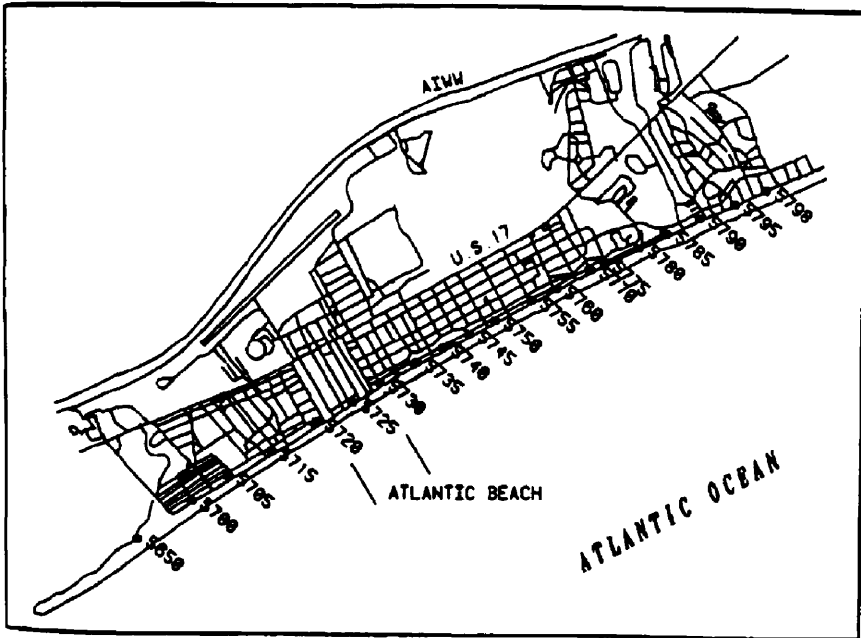
Figure 2



South Carolina beachfront jurisdictional lines approved - 2/16/90, 6/16/90,
reference orthophotographs: #412 through 432
monument numbers refer to the SCCC beachfront monument network
notes:

North Myrtle Beach, Atlantic Beach
Horry County

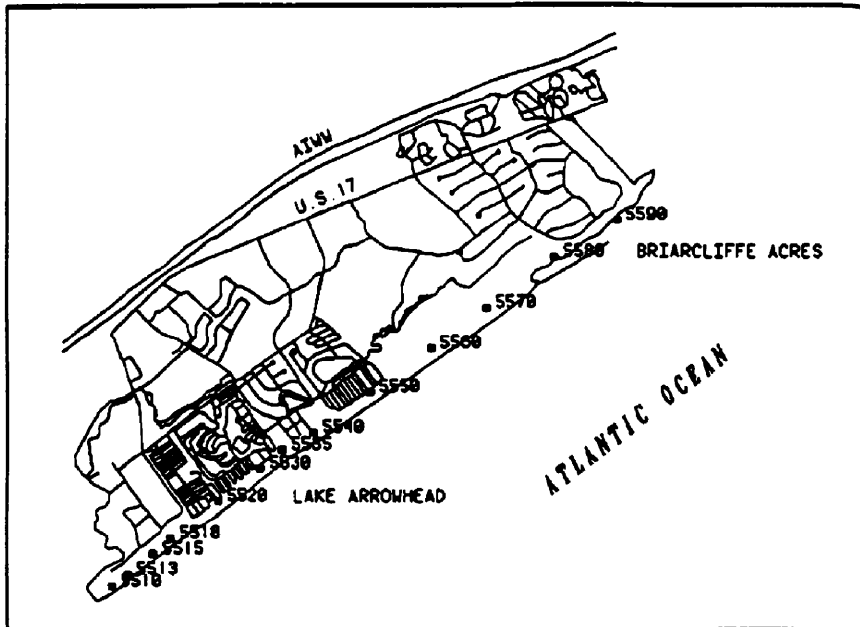
Figure 3



South Carolina beachfront jurisdictional lines approved - 2/16/90, 6/16/90,
reference orthophotographs: #412 through 432
monument numbers refer to the SCCC beachfront monument network
notes:

*Lake Arrowhead, Briarcliffe Acres
Horry County*

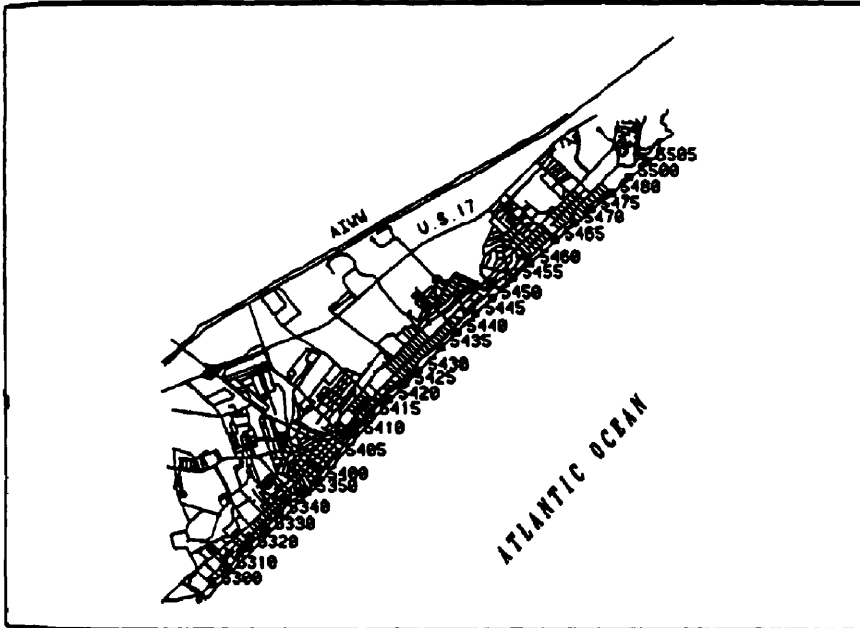
Figure 4



South Carolina beachfront jurisdictional lines approved - 2/16/90, 6/16/90
reference orthophotographs: #403 through 4111
monument numbers refer to the SCCC beachfront monument network
notes:

*Myrtle Beach
Horry County*

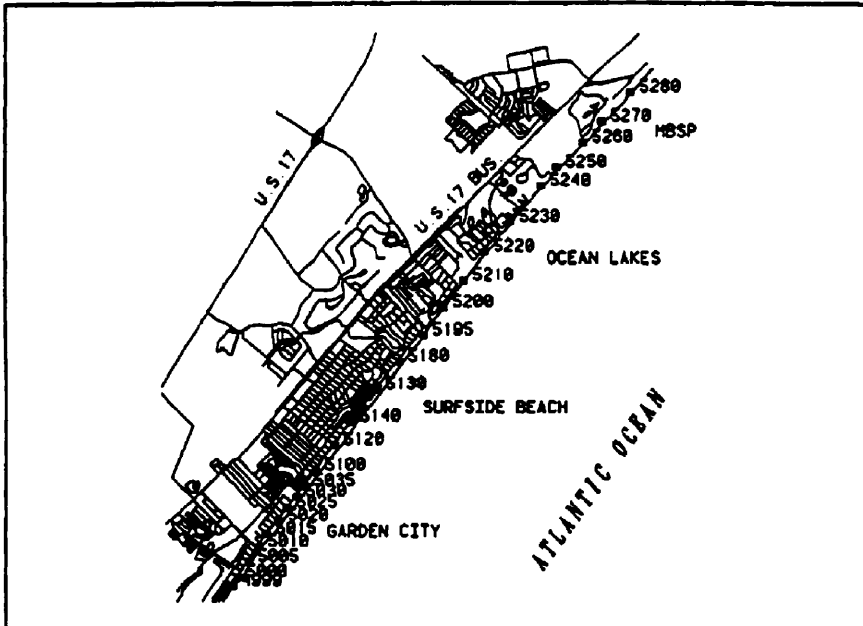
Figure 5



South Carolina beachfront jurisdictional lines approved - 2/16/90, 6/16/90
reference orthophotographs: #243 through 262; 400 through 402
monument numbers refer to the SCCC beachfront monument network
notes:

*Garden City, Surfside Beach, Ocean Lakes
Horry County*

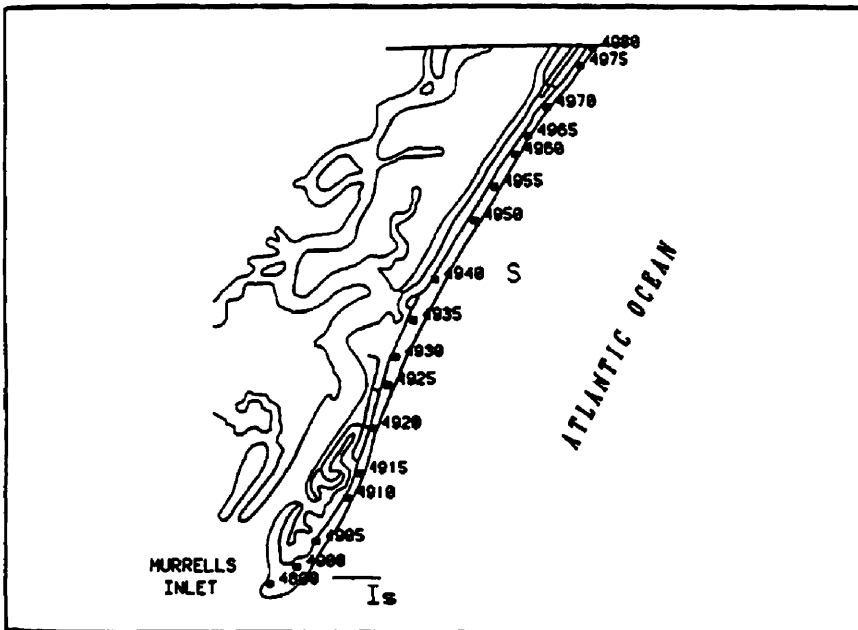
Figure 6



South Carolina beachfront jurisdictional lines approved - 2/16/90
reference orthophotographs: #224 through 242
monument numbers refer to the SCCC beachfront monument network
notes:

*Garden City
Georgetown County*

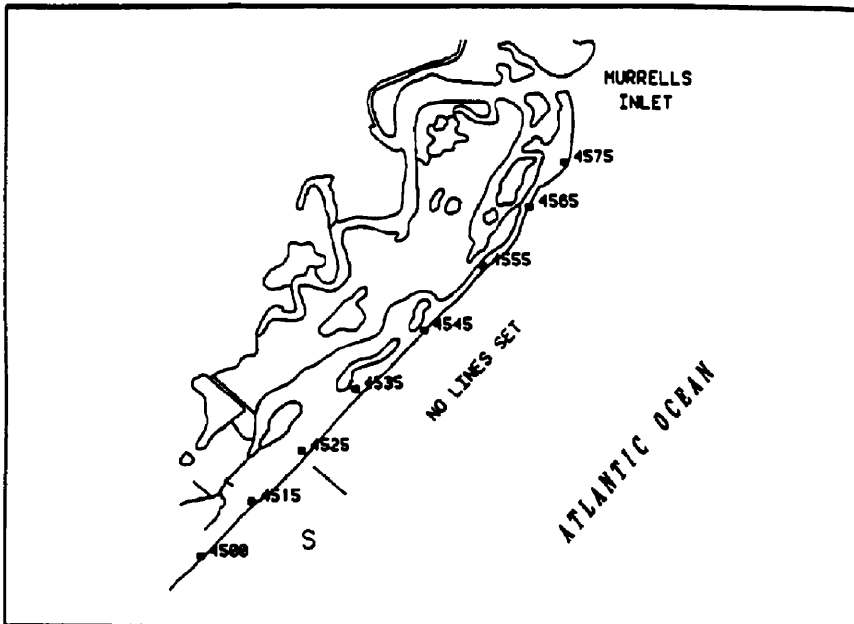
Figure 7



South Carolina beachfront jurisdictional lines approved - 12/16/90, 10/3/90, 2/16/90
reference orthophotographs: #216 through 224
monument numbers refer to the SCCC beachfront monument network
notes:

*Huntington Beach
Georgetown County*

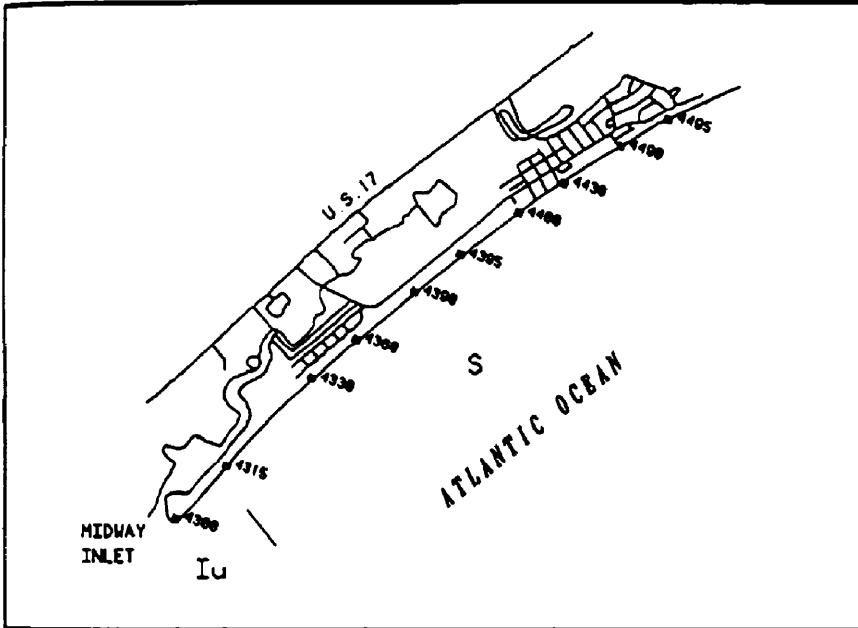
Figure 8



South Carolina beachfront jurisdictional lines approved - 1/19/90
reference orthophotographs: #207 through 210
monument numbers refer to the SCCC beachfront monument network
notes:

Litchfield Beach
Georgetown County

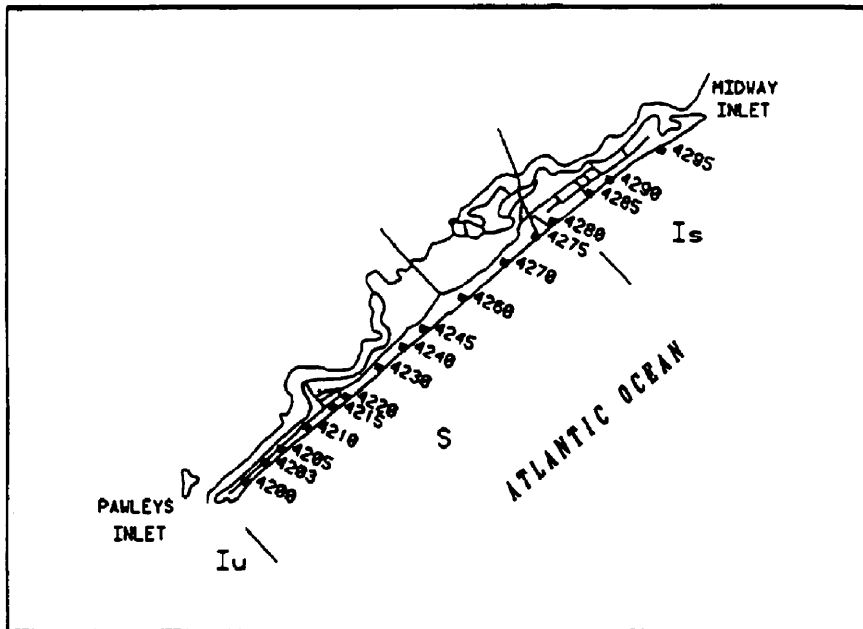
Figure 9



South Carolina beachfront jurisdictional lines approved - 1/19/90
reference orthophotographs: #198 through 207
monument numbers refer to the SCCC beachfront monument network
notes:

*Pawleys Island
Georgetown County*

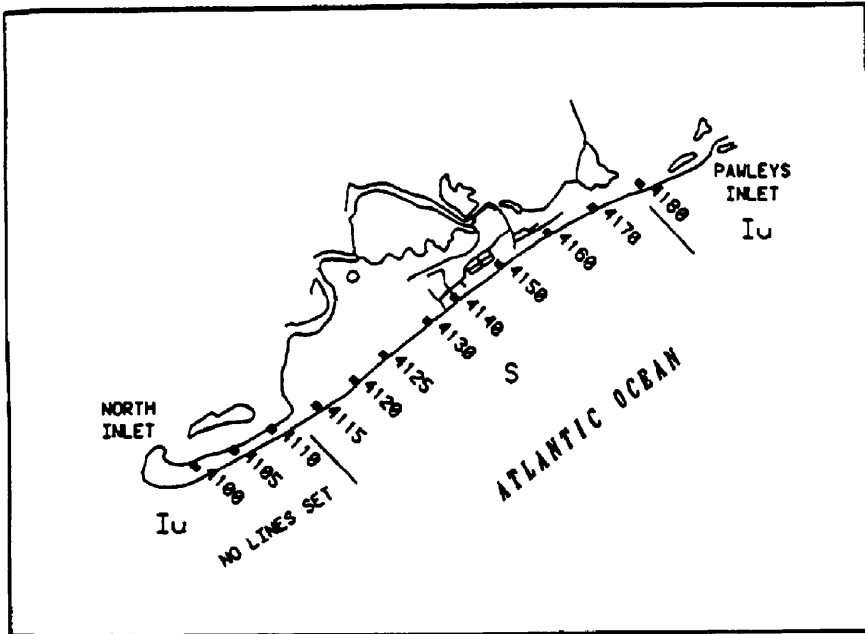
Figure 10



South Carolina beachfront jurisdictional lines approved - 1/19/90
reference orthophotographs: #189 through 196
monument numbers refer to the SCCC beachfront monument network
notes:

*Debidue Beach
Georgetown County*

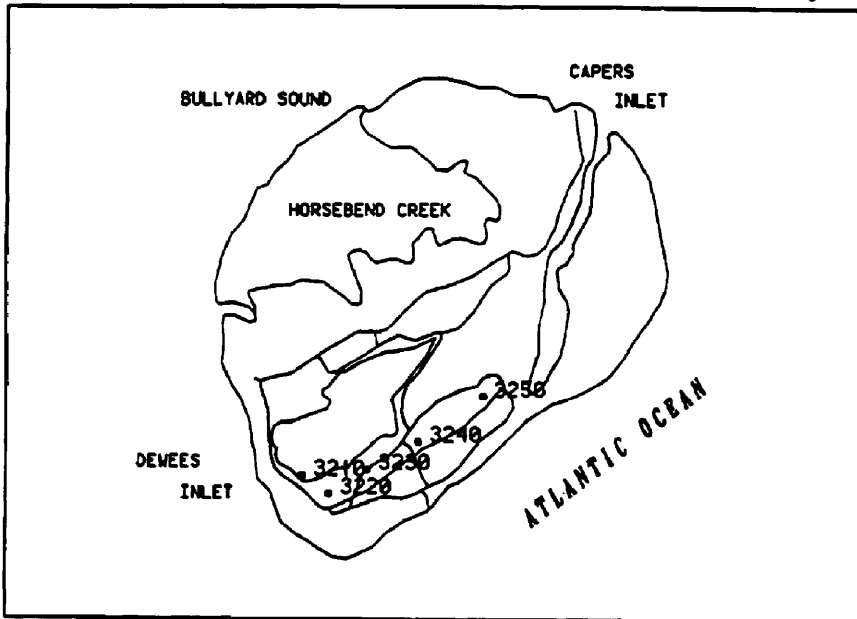
Figure 11



South Carolina beachfront jurisdictional lines approved -3/16/90, 1/19/90
reference orthophotographs: #180 through 189
monument numbers refer to the SCCC beachfront monument network
notes:

Dewees Island
Charleston County

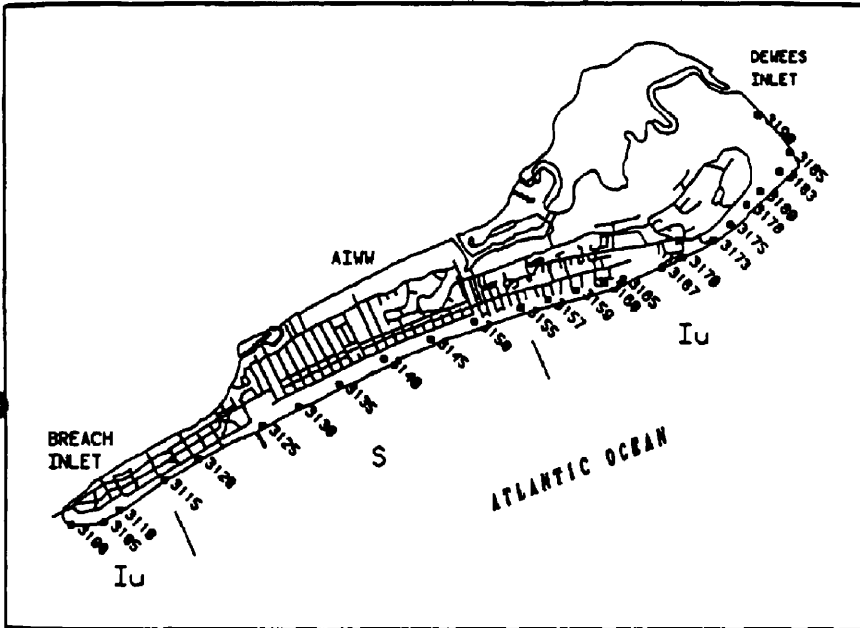
Figure 12



South Carolina beachfront jurisdictional lines approved -3/16/90
reference orthophotographs: #501-508
monument numbers refer to the SCCC beachfront monument network
notes:

Isle of Palms
Charleston County

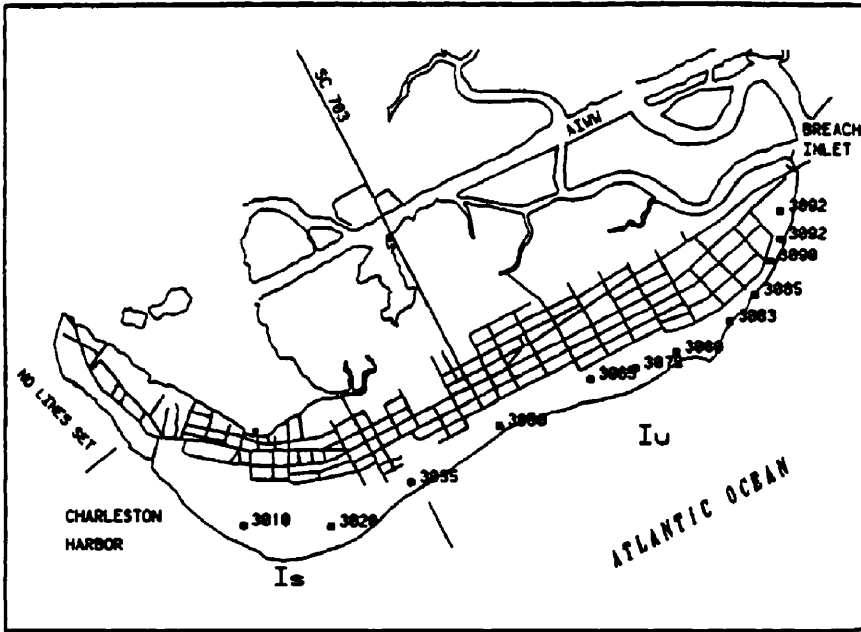
Figure 13



South Carolina beachfront jurisdictional lines approved - 11/18/90, 4/21/89, 2/17/89
reference orthophotographs: #163 through 179
monument numbers refer to the SCCC beachfront monument network
notes:

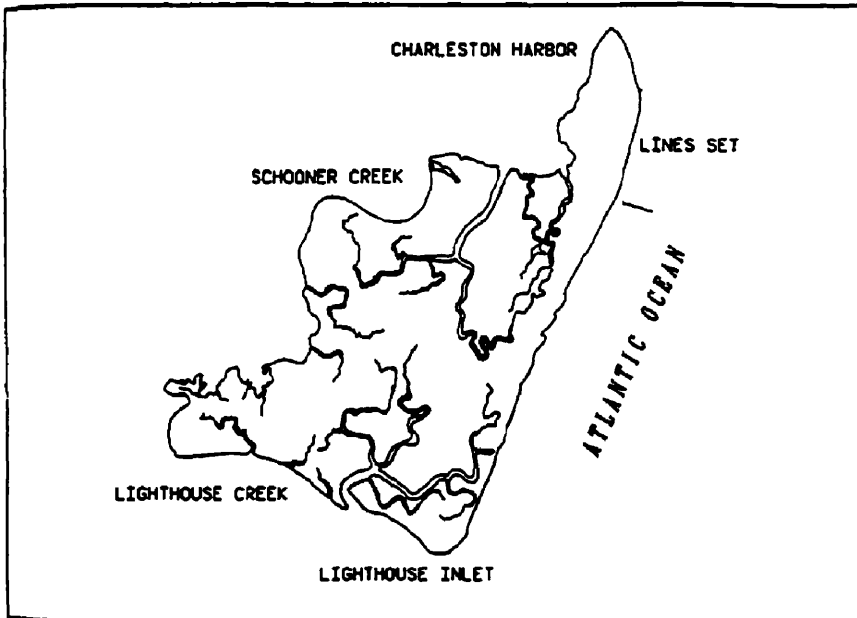
Sullivan's Island
Charleston County

Figure 14



Morris Island
Charleston County

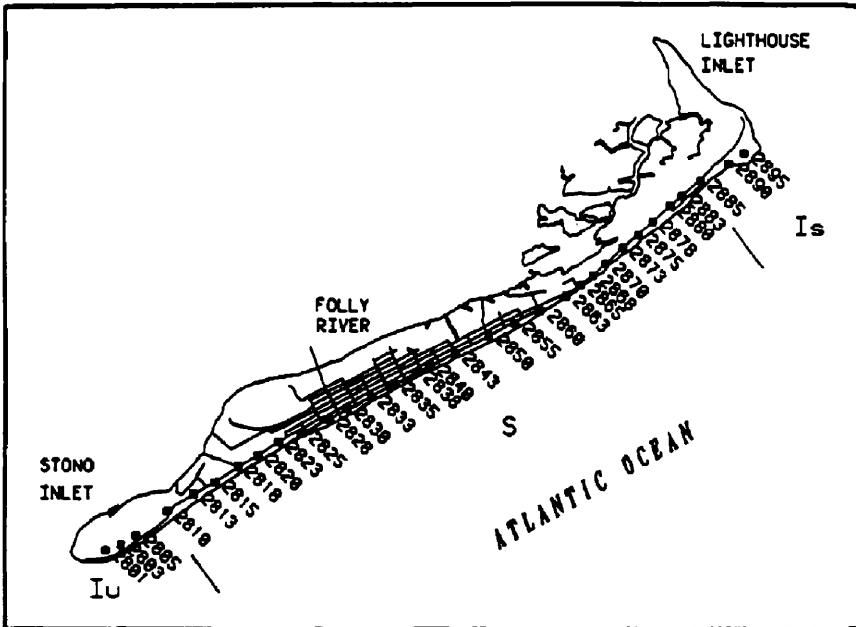
Figure 15



South Carolina beachfront jurisdictional lines approved - 4/20/90
reference orthophotographs: C.O.E map
monument numbers refer to the SCCC beachfront monument network
notes:

*Folly Island
Charleston County*

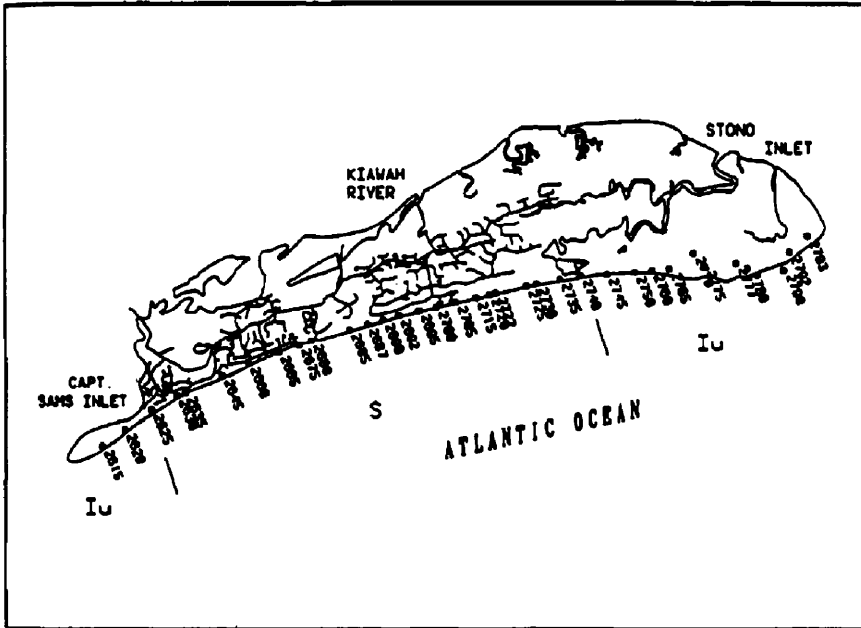
Figure 16



South Carolina beachfront jurisdictional lines approved - 1/19/90,
reference orthophotographs: #127 through 142
monument numbers refer to the SCCC beachfront monument network
notes:

Kiawah Island
Charleston County

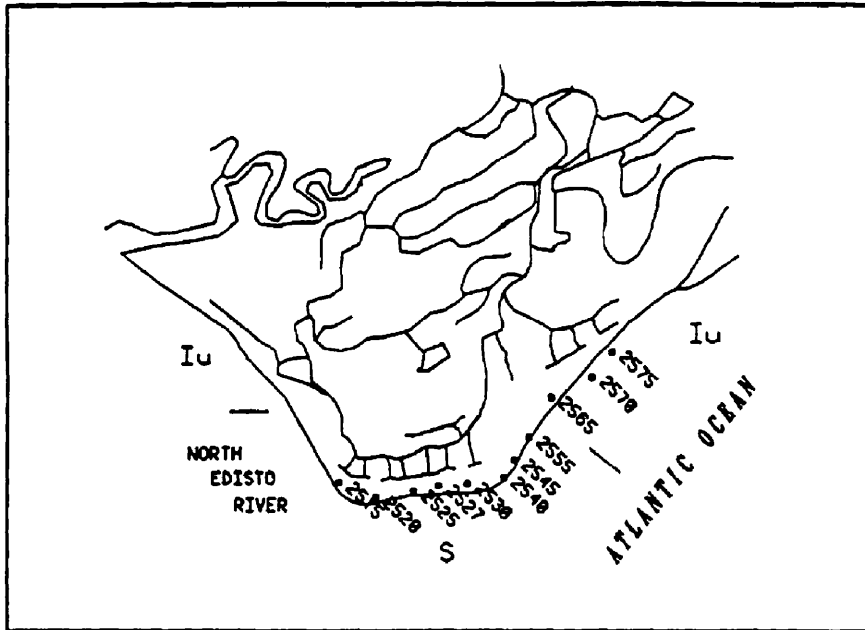
Figure 17



South Carolina beachfront jurisdictional lines approved - 7/21/89, 1/19/89
reference orthophotographs: #309 through 333
monument numbers refer to the SCCC beachfront monument network
notes:

Seabrook Island
Charleston County

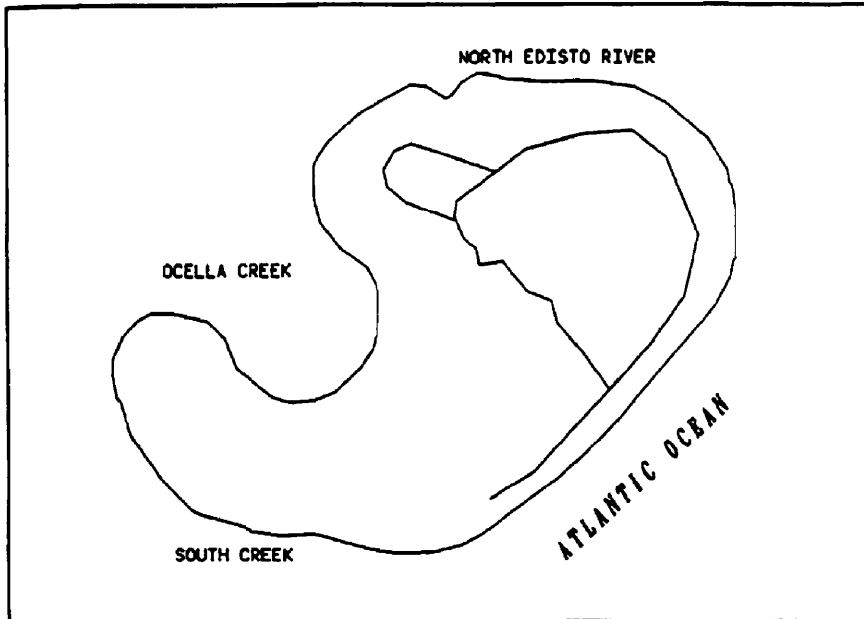
Figure 18



South Carolina beachfront jurisdictional lines approved - 2/16/90
reference orthophotographs: #300 through 308
monument numbers refer to the SCCC beachfront monument network
notes:

*Botany Bay Island
Charleston County*

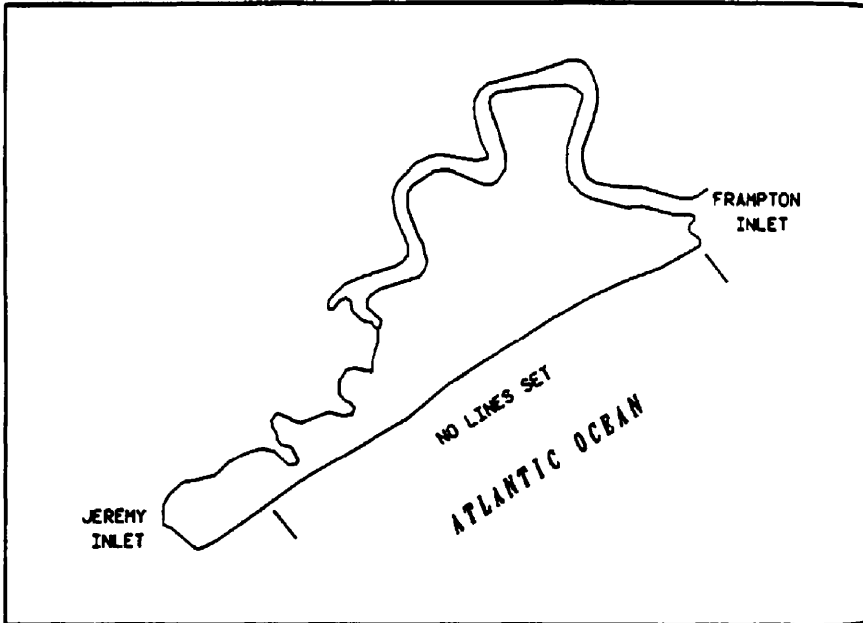
Figure 19



South Carolina beachfront jurisdictional lines approved - 4/20/90
reference orthophotographs: plat #1
monument numbers refer to the SCCC beachfront monument network
notes:

Eddingsville Beach
Colleton County

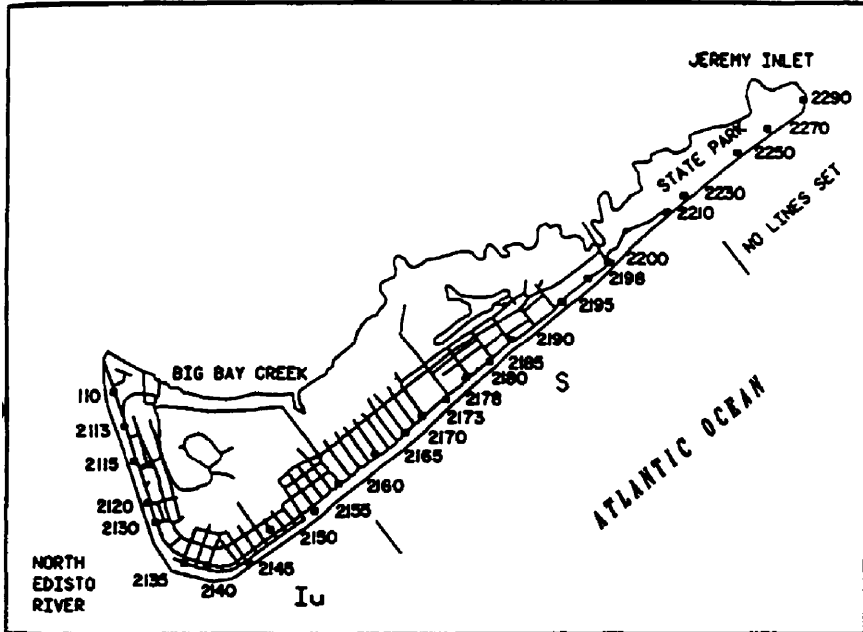
Figure 20



South Carolina beachfront jurisdictional lines approved - 6/16/89
reference orthophotographs: #95
monument numbers refer to the SCCC beachfront monument network
notes:

*Edisto Beach
Colleton County*

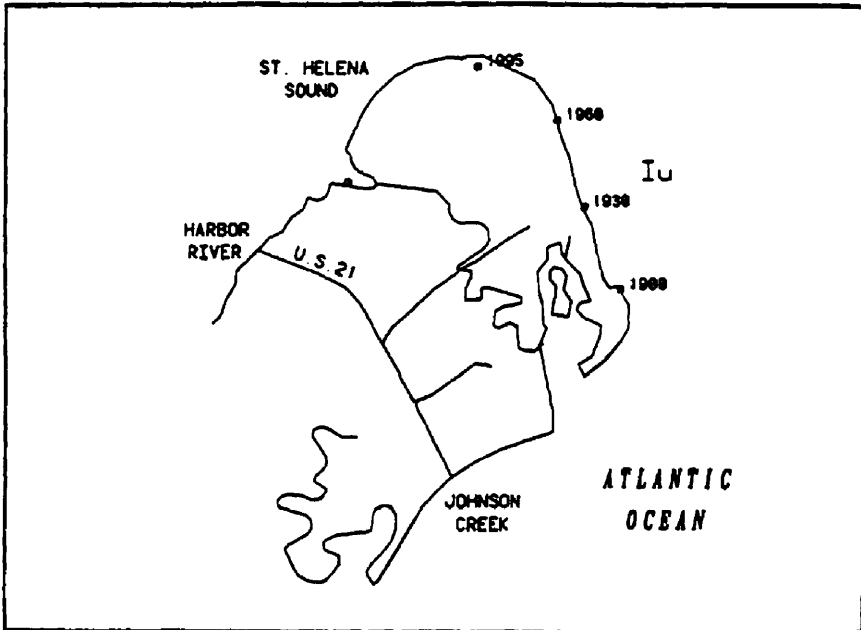
Figure 21



South Carolina beachfront jurisdictional lines approved - 8/18/89, 5/15/89, 11/17/89
reference orthophotographs: #81 through 92
monument numbers refer to the SCCC beachfront monument network
notes:

Harbor Island
Beaufort County

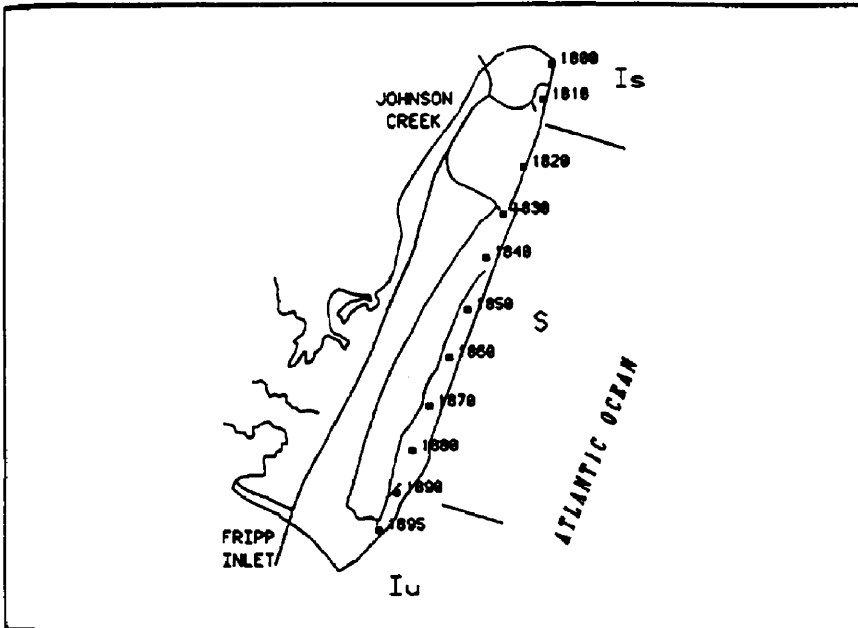
Figure 22



South Carolina beachfront jurisdictional lines approved - 9/15/89
reference orthophotographs: #77 through 80
monument numbers refer to the SCCC beachfront monument network
notes:

Hunting Island
Beaufort County

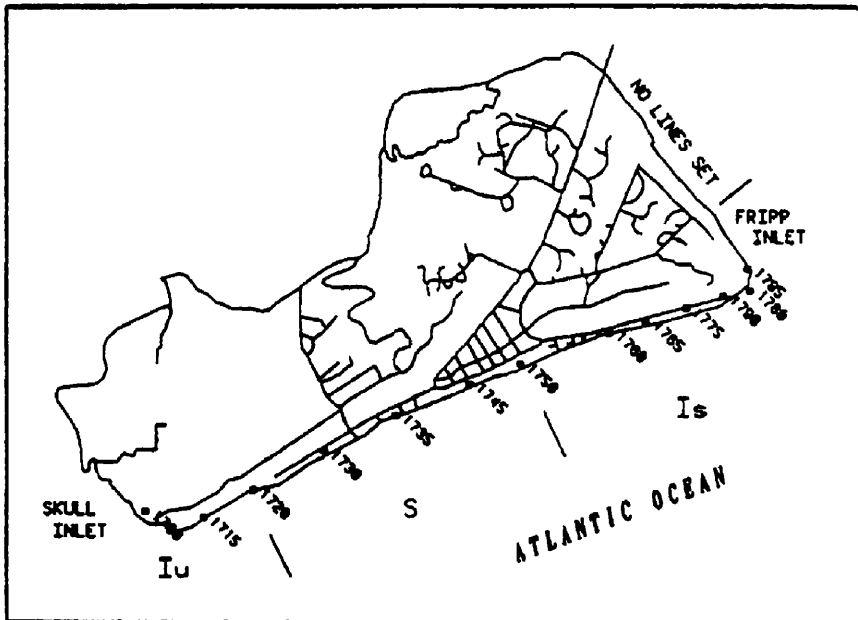
Figure 23



South Carolina beachfront jurisdictional lines approved - 3/16/90
reference orthophotographs: #122, 137, 152
monument numbers refer to the SCCC beachfront monument network
notes:

Fripp Island
Beaufort County

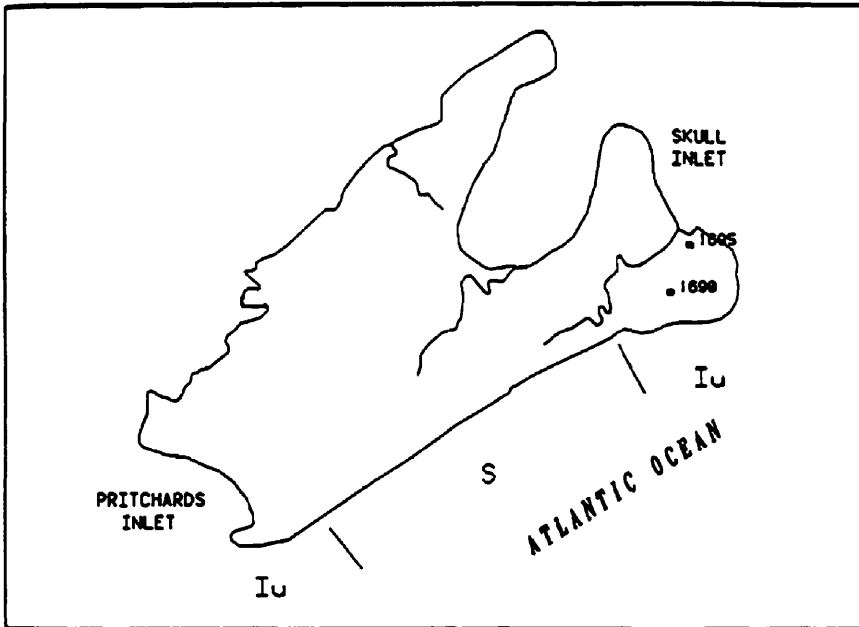
Figure 24



South Carolina beachfront jurisdictional lines approved -12/15/89
reference orthophotographs: #57 through 65
monument numbers refer to the SCCC beachfront monument network
notes:

Pritchards Island
Beaufort County

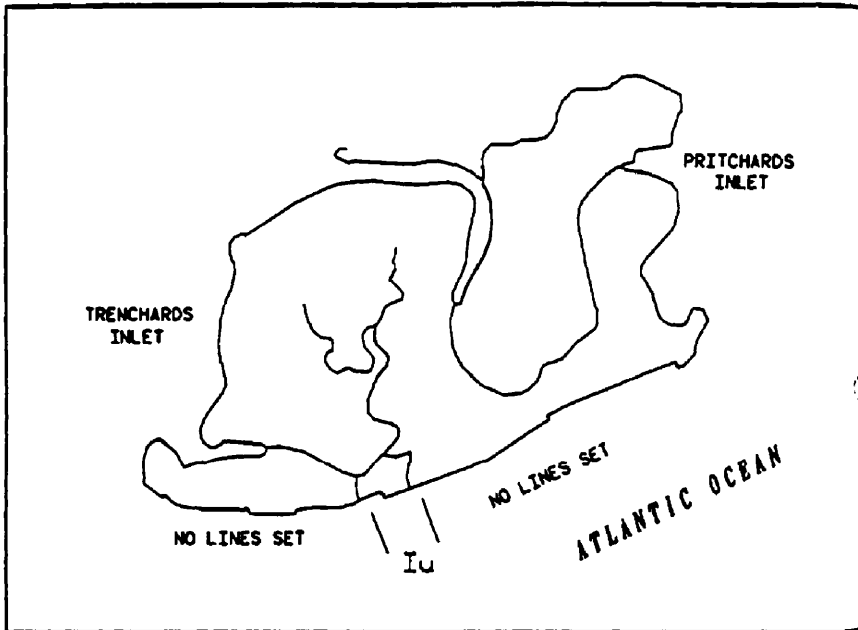
Figure 25



South Carolina beachfront jurisdictional lines approved - 3/16/90
reference orthophotographs: #167, 168, 185
monument numbers refer to the SCCC beachfront monument network
notes:

Little Capers Island
Beaufort County

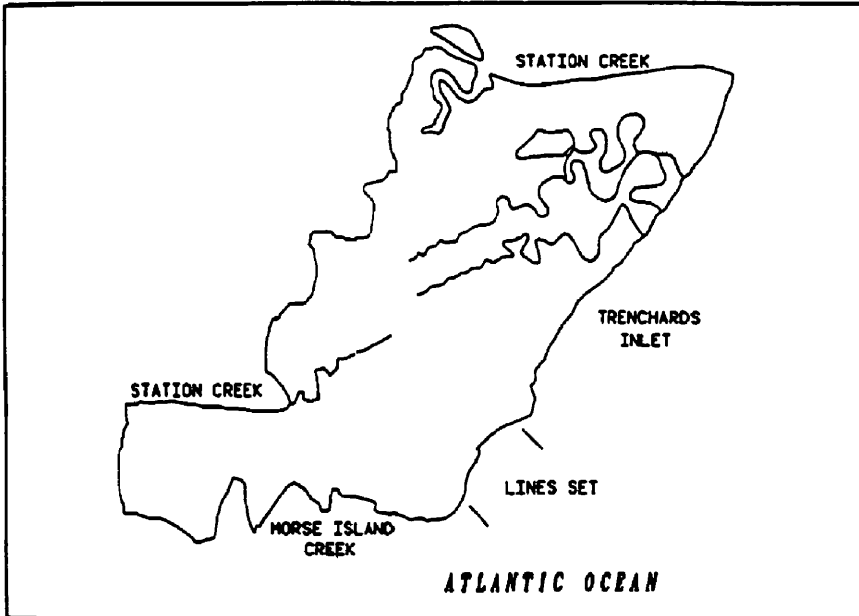
Figure 26



South Carolina beachfront jurisdictional lines approved - 3/16/90
reference Beaufort County orthophotographs: #189
monument numbers refer to the SCCC beachfront monument network
notes:

St. Phillips Island
Beaufort County

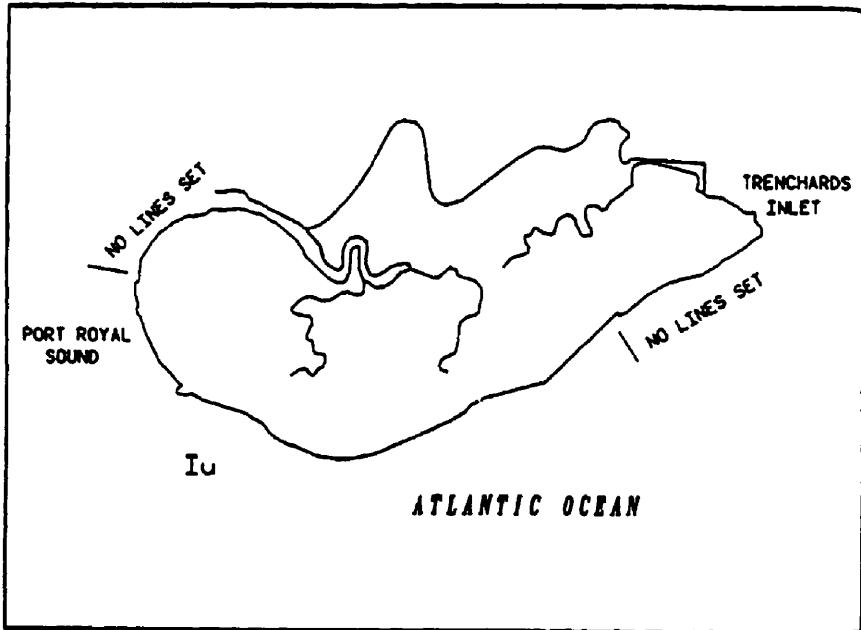
Figure 27



South Carolina beachfront jurisdictional lines approved - 3/16/90
reference orthophotographs: #183
monument numbers refer to the SCCC beachfront monument network
notes:

Bay Point Island
Beaufort County

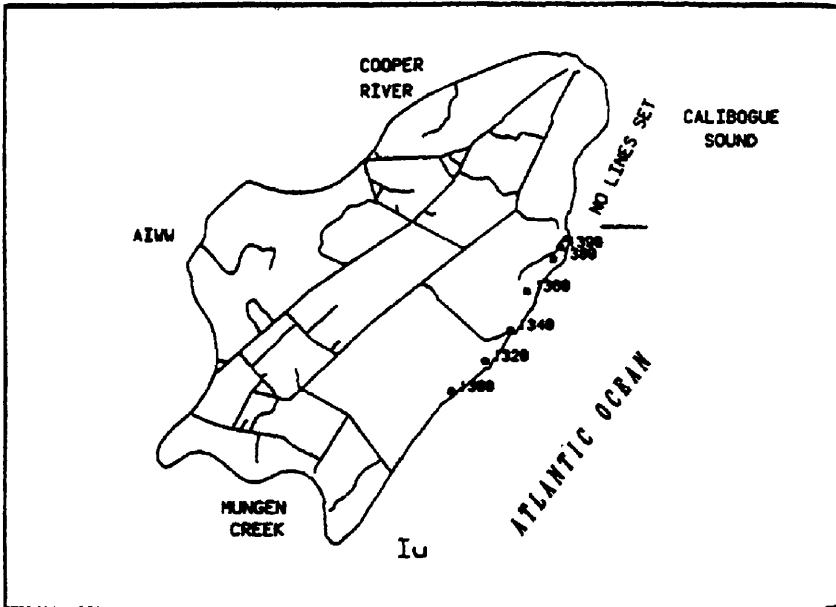
Figure 28



South Carolina beachfront jurisdictional lines approved - 3/16/90
reference Beaufort County orthophotographs: #199
monument numbers refer to the SCCC beachfront monument network
notes:

*Daufuskie Island
Beaufort County*

Figure 30



**South Carolina beachfront jurisdictional lines approved - 4/20/90
reference orthophotographs: #1 through #10
monument numbers refer to the SCCC beachfront monument network
notes:**

(4) Beach Erosion Analysis and Nourishment Plan

The Beachfront Management Act established a state policy of promoting “carefully planned nourishment as a means of beach preservation and restoration where economically feasible.” The planning process must consider the following factors: The condition of the beach; The threat presented by continued erosion; The technical feasibility of the project, including the source of fill material; The initial cost and maintenance of the project; The availability of adequate funding on a continuing basis;

(a) Beach Condition and Erosion Rate

A wide dry-sand beach and a well-formed vegetated sand dune offer protection to the land behind them. A history of accretion or very low erosion would tend to reduce the risk of erosion damage. Conversely, the lack of a dry-sand beach and protective dune leave the property vulnerable. A severe episode of erosion could then cause serious damage in a short time. A recent (1990) report by Coastal Science and Engineering (CS&E) to the Council identified 18 locations that are endangered by erosion (Table 1). These locations total 54 miles of coastline. The U. S. Army Corps of Engineers “National Shoreline Study,” completed in 1973, identified 57 miles of South Carolina shoreline that were critically eroding. Although the methodologies were different, the two results are similar. For planning purposes, the CS&E report will be used as a guideline.

This method selected areas that were deficient in sand volumes and needed nourishment to provide a 50-foot dry-sand berm. A ten-year reserve based on erosion rates was included.

Table 2 shows the sand deficits of South Carolina beaches.

(b) The Threat of Continued Erosion

In order to evaluate the benefits of a nourishment project, the value of projected losses needs to be determined. For developed beach communities, the assessed value of beachfront land and improvements provide a measure. For parks and public accesses the cost of purchasing replacement facilities could be used. Direct comparisons are difficult to make, but several published Corps of Engineers benefit/cost figures and an informal Council staff estimate, using unpublished data from several county tax offices, give the following range:

TABLE 1. South Carolina beach nourishment requirements—estimated 10-year project needs (1990+).

Locality	Length (ft)	Volume (cy)	Unit Cost	Total Cost	Cost/ft	Method (Source)
North Myrtle Beach	35,000	665,000	6.50	4,322,500	123.50	DR/TR (E/AS)
Briarcliff/Horry County	10,000	210,000	8.50	1,785,000	178.50	TR (E)
Myrtle Beach*	25,000	250,000	7.00	1,750,000	70.00	TR (E)
Surfside/Horry County	15,000	277,500	7.50	2,081,250	138.75	TR (E)
Garden City	13,500	513,000	5.00	2,565,000	190.00	DR/TR (E/AS)
Huntington Beach*	5,000	100,000	4.00	400,000	80.00	TR (AS)
Pawleys Island	15,000	570,000	3.50	1,995,000	133.00	TR (AS)
DeBordieu Island ⁽¹⁾⁺	8,000	356,000	5.00	1,780,000	222.50	TR (E)
Isle of Palms	4,000	120,000	2.50	300,000	75.00	TR (AS)
Sullivan's Island	2,500	117,500	2.50	293,750	117.50	TR (AS)
Folly Beach/FB Park**	20,000	1,840,000	5.00	9,200,000	460.00	DR (E/AS)
Seabrook Island ⁽¹⁾ (south beach)	6,000	738,000	2.50	1,845,000	307.50	DR (E)
Seabrook Island (north beach)	17,000	168,000	3.00	504,000	42.00	Inlet Relocation
Edisto Beach	15,000	645,000	5.00	3,225,000	215.00	DR/TR (E)
Hunting Island**	16,500	3,300,000	2.50	8,250,000	500.00	DR/TR (E/AS)
Fripp Island ⁽²⁾	12,000	1,800,000	2.50	2,700,000	225.00	DR/TR (E/AS)
Hilton Head Island**	35,000	2,940,000	4.50	13,230,000	378.00	DR (E)
Daufuskie**	9,000	594,000	2.50	1,485,000	165.00	TR (AS)
Contingency	26,500	1,516,000	4.80	7,288,500	275.04	
[54 mi]	285,000 ft	16,000,000 cy	\$4.86/cy	\$65,000,000	\$228.07/ft	

DR = dredge. TR = trucks. E = external source. AS = accredited shoals. [Source: Coastal Science & Engineering, Inc., March 1990]
 *Maintenance nourishment only; no initial requirement.
 **High erosion rates in these areas suggest groins/breakwaters should be considered.
 (1) In construction, March 1990.
 (2) A larger scale dredging project involving 1,500,000 cy at a cost of \$4.5 million has been proposed by CSE to develop a longer term solution.

Table 2. Sand Deficits at South Carolina Beaches

Beach	Deficit CY/FT	Annual Loss CY/FT
Seabrook, South Beach	123	0
Folly Beach/Folly Beach Park	65	3
Fripp Island	45	5
Hunting Island	38	18
Hilton Head	30	6
Daufuskie Island	30	4
Edisto Beach	25	2
DeBordieu	22	2.5
Sullivan's Island (Breech Inlet)	20	3
Pawleys Island	20	2
Garden City	20	2
Briarcliff	12	1
North Myrtle Beach	10	1
Surfside Beach	5	1.5
Huntington Beach	0	2
Myrtle Beach	0	1
Isle of Palms	0	3

Source: Coastal Science and Engineering Report, 1990

Note: The erosion rates shown in this table may differ slightly from the rates approved from each station by the S. C. Coastal Council.

Low (Folly Beach) \$500/ft.

Medium (Edisto/Pawleys Island) \$2,000/ft.

High (Grand Strand) \$14,000/ft.

Specific project evaluations should require updated, standardized assessments from the county tax office. The total value of all beachfront lots within the project limits would be reviewed and adjusted as necessary if the date of assessment is not current. At the present time, standardized assessments are not available, and it would not be cost effective or practical to incorporate dollar figures in this plan. However, at the first five-year update of local plans, each community shall be required to report the value of beachfront property and improvements as indicated in the county tax records for use in evaluating nourishment projects.

(c) Technical Feasibility

In order for a project to be considered, it must be shown that the project can succeed using known, available technology. There must be a borrow source of suitable material and an economic means to move it. The suitability of borrow material includes grain size, distribution, and freedom of unwanted material. Also, the environmental effects of removing the material from its existing location should be considered. The project needs to be clearly permissible and there should be no legal or administrative problems that could bar it. Of the 18 potential projects, CS&E identified seven as private (Table 4). Those projects would not be eligible for state funding.

(d) Initial and Maintenance Costs

The cost listed by CS&E (Table 1) is an estimate that is not far different from the Corps' "National Shoreline Study" if the latter were adjusted for inflation. The numbers are also close to a 1980 South Carolina Coastal Council staff estimate similarly adjusted. The numbers are quite reasonable for planning purposes; however, it should be clearly understood that bid prices can vary.

(e) Funding Availability

At the present time there is no firm state source of funds for beach nourishment. There are federal projects in various planning states for Folly Beach, the Grand Strand and Edisto Beach (Table 3). The first three projects shown in the table have been combined as a Grand Strand project proposed to renourish the beach from Hog Inlet to Garden City Beach. Real estate acquisition could start in 1994 and construction in 1995. These dates are subject to the federal budget process. The Folly Beach project has reached the point where real estate acquisition can begin provided the non-federal funding share money is available. This project could start within a year; however, this also is not certain. The Seabrook Island private project has been completed; however, additional renourishment is needed. The Hilton Head Island project has also been completed. The Folly Beach Project is the furthest along the approval process and could take place within the next two years. The federal share is expected to be about 75% of the \$5.6 million project, leaving a \$1.4 million non-federal share. The state has provided money for erosion control to local governments, in the past, on a 60%/40% basis. This would result in a state cost of about \$840,000. The Grand Strand project is not as far along the approval process, but an estimate of the project shows a \$45.3 million project with the federal share at 65%. This leaves a \$15.9 million non-federal cost and a \$9.5 million state cost using the 60%/40% state, local sharing method. The total state money for matching pending federal projects would total approximately \$10.4 million. The remaining projects on Table 1, after eliminating the private projects and using the 60%/40% match (except for state parks), would cost about \$10.2 million in state funds. Adding 10% for contingencies, the state total would be \$23.1 million. A continuing requirement for maintenance will exist, estimated at about \$1.5 million. This should be refined as information becomes available.

TABLE 3. Beach nourishment projects planned (circa 1988-1995).

Funding	Locality (Design Date) Source	Length (ft)	Volume (cy)	Total Cost	Cost/cy	Cost/ft	Method
Federal(65%)/state/local	North Myrtle Beach ⁽¹⁾ (1987) USACE	42,768	1,776,000	17,311,000	9.75	404.77	TR (E)
Federal(65%)/state/local	Myrtle Beach ⁽¹⁾ (1987) USACE	46,464	1,931,000	16,856,000	8.73	362.78	TR (E)
Federal(65%)/state/local	Surfside/Garden City ⁽²⁾ (1987) USACE	30,096	1,250,000	11,081,000	8.86	368.19	TR (E)
Federal(>75%)/local	Folly Beach ⁽²⁾ (1987) USACE	16,860	1,038,000	5,562,500	5.36	329.92	DR (E)
Private	Seabrook (1989) CSE	6,000	700,000	1,500,000	2.15	250.00	DR (E)
State/local	Hilton Head Island ⁽³⁾ (1988) Town OA	35,000	2,036,000	9,700,000 (est)	4.76	277.14	DR (E)
	{23.5 mi}	177,188 ft	8,731,000 cy	\$62,010,500	87.10/cy	\$349.97/ft	

TR = trucks. DR = dredge. E = external sand source. ⁽¹⁾Totals for the 5-year project - first costs only (USACE 50-year storm design criteria). ⁽²⁾Totals for the 5-year project - first cost plus one 5-year renourishment (USACE 50-year storm design criteria). ⁽³⁾Totals for an 8-year project - annual erosion rate criteria plus initial deficit for north Forest Beach. Sources: U.S. Army Corps of Engineers (USACE); Coastal Science & Engineering, Inc. (CSE); Olsen Associates (OA)

TABLE 4. Beach nourishment needs in the 1990s--private projects.*

Locality	Length (ft)	Volume (cy)	Cost/cy	Total Cost	Cost/ft	Method (Source)
DeBordieu Island	8,000	356,000	5.00	1,780,000	222.50	TR (E)
Wind Dunes (Isle of Palms)	4,000	128,000	2.50	300,000	75.00	TR (AS)
Seabrook Island	6,000	738,000	2.50	1,845,000	307.50	DR (E)
Seabrook Island	12,000	168,000	3.00	504,000	42.00	Inlet Relocation
Fripp Island	12,000	1,080,000	2.50	2,700,000	225.00	DR/TR (E/AS)
Palmetto Dunes (Hilton Head Island)**	35,000	2,940,000	4.50	13,230,000	378.00	DR (E)
Daufuskie	9,000	594,000	2.50	1,485,000	165.00	TR (AS)
Subtotal	66,000 ft	4,316,000 cy	\$3.31/cy	\$14,284,000	\$216.00/ft	
(Percent total)	(23)	(27)		(22)		

DR = dredge. TR = truck. E = external source. AS = accreted shoals.

[Source: Coastal Science & Engineering, Inc., March 1990]

*Defined as sites where beach access is restricted from the land side.

**Pro 121a - Palmetto Dunes - 43 percent of total project.

(f) Recommended State Renourishment Plan

The state plan for beach renourishment is to accomplish the nourishment requirements of Table 1 by the year 2000. The sixty-five million dollar cost can be reduced provided planned federal

projects are carried out. A revolving fund at the fifteen million dollar level would allow beach nourishment projects to be planned on a two to three year schedule.

Considering the preceding factors, the Council will have to allocate funds as they become available and comply with whatever restrictions or priorities the General Assembly attaches. Beyond that, the most effective allocation would be to help match federal projects that are already approved. The next choice would be for non-federal projects where expensive property is imminently threatened and all the technical conditions are favorable. It would be a mistake to undertake a project that does not have a high probability of success. A final goal is for the Council to seek a long-term funding source so that projects can be scheduled and designed on a rational basis.

(g) Financing For Beach Renourishment Projects

Beach renourishment projects may be financed through the following state, federal, local or private sources. Projects often include a combination of several financing sources. The following section describes some of the funding options that are available.

(h) Federal Funding Assistance

The existence of federal interest in protecting property and lives from flooding and storm damage reduction can qualify a project for federal funding assistance from the U. S. Army Corps of Engineers.

Under existing shore protection laws Congress has authorized federal participation in shore protection projects to prevent or reduce damages caused by wind and tide generated waves and currents along the Nation's coasts and shores.

The types of improvements that fall within the intent of the shore protection legislation are generally structural measures including such features as beach fill, groins, seawalls, revetments, breakwaters, and bulkheads. Nonstructural measures, within the generally accepted definition, such as property acquisition, also are appropriate shore protection measures when they prevent damage caused by storms or erosion. (See Table 5.)

Table 5. Shore Ownership and Levels of Federal Participation

Shore Ownership and Project Purpose	Maximum Level of Maintenance	Federal Participation Construction
Federally Owned		
Hurricane and Storm Damage Reduction	100%	100%
Loss of Land	100%	100%
Recreation		
(Separable Costs)	100%	100%
Publicly and Privately Owned		
(Protection Results in Public Benefits)		
Hurricane and Storm Damage Reduction	65%	None
Loss of Land	50%	None
Recreation		
(Separable Costs)	50%	None
Privately Owned, Use limited to private Interests		
Hurricane and Storm Damage Reduction	None	None
Loss of Land	None	None
Recreation	None	None

(i) State Funding Assistance

(i) General Obligation and Revenue Bond Funding

Funding can be provided through bonded indebtedness at the State level with bond sale proceeds going to beach renourishment project funding, with or without local matching requirements. The bonds can be retired and debt repaid through general appropriations or revenues earmarked from project user fees and returned to the State. General obligation bonds funded \$10.0 million in 1988 for beach renourishment in South Carolina.

(ii) General Appropriations Funding

The General Assembly may appropriate funds on an annual basis for renourishment projects with funds to come from state tax revenues or other state income sources. Provisions of the

General Appropriations Bill may specify repayment. This alternative is not commonly used for construction or permanent improvement projects. Supplemental appropriations and/or surplus revenues may be another source for funding at the end of the fiscal period.

(iii) State Low-Cost Infrastructure Loans

Although restricted at this time in South Carolina to public sewer projects, revolving loan funds for public infrastructure can be used for financing renourishment projects, as is done in other states. Legislative affirmation of this project purpose for South Carolina would be necessary.

(iv) State Grants

The State Division of Local Government also provides grants to local governments for public infrastructure projects. At this time, the priorities established for this program are for water and sewer projects, although other purposes could be funded depending upon public interest and need. The discretionary funds available to the State Budget and Control Board may also be another grant source.

(v) State Pooling of Local Indebtedness

The State Treasurer's Office can assist local governments by pooling local bond issues in order to gain more advantageous interest charges for the bonded debt.

(j) Local Government Financing Options

(i) Bond Issue

Local governments can issue general obligation or revenue bonds for funding renourishment projects with the debt to be repaid through general local tax revenues, user fees and special tax assessments on property taxes, or special tax districts for project beneficiaries.

(ii) General Appropriations

Local government annual budgets can appropriate tax revenues or other income to project financing on an annual basis.

(iii) Accommodations Tax Revenues

The local government share of the state accommodations tax revenues may be allocated to renourishment as a means of promoting tourism. These revenues can also be used to retire debt from loans or bond issues for the same purposes.

(iv) Special Tax Assessment District

Under proposed state law, special tax assessment districts can be enacted in order to finance and maintain renourishment projects and to assess beneficiaries within a project area for repayment purposes. Revenues can be gathered by the district by property tax assessment, direct bill to members, or other means. State legislation is needed to establish this process.

(v) User Fees

Local governments may finance renourishment project construction through a charge to the public for using the area through an admissions fee or other fees.

(vi) Private Funding

Renourishment projects can be paid for directly by the private sector through assessment of beneficiaries.

(5) Public Access Plan–

(a) An Inventory and Assessment of Access Problems and Potential Development Opportunities for South Carolina Beaches

There are areas of the South Carolina coast where the public has lost the ability to reach the beach. The people of South Carolina, through a legal principle known as the public trust doctrine, own all land below the mean high water mark and consequently most of the beach. The development of restricted access communities and towns prevents public access to areas which the public has traditionally used for recreational purposes. Many local governments, either because of financial constraints or the desire to keep beaches private, will not support or maintain facilities designed to provide access to the general public. The population of the coastal region is also

increasing; many of the fastest growing sections of the state are located in the coastal zone. For these reasons there is a great need for the State of South Carolina to provide the direction to preserve existing public access sites by regulatory control and to require that development projects in beachfront areas allow the public the right to reach the beach. A great need also exists for the State to develop new state park facilities which will provide access opportunities to large numbers of residents and visitors. These facilities have been shown to be of importance for attracting visitors to beachfront communities. Additional funding sources to develop smaller day-use parks are also needed. The state in requiring local governments to provide public access sites in order to receive renourishment funds has linked renourishment to public access. Coastal property is expensive and a need exists for the State to assist in these improvements. Following is a beach-by-beach assessment, from north to south, of public access needs and opportunities.

(b) Assessment of Beach Access

Waites Island

At the North Carolina border is located one of the coast's last undeveloped, readily accessible barrier islands. This island is approximately two miles long, three-quarters of a mile wide and about 800 acres in size. Waites Island is currently under private ownership and is presently tied up in an estate, pending final resolution of probate. Because of the island's size and location, it is obviously a very valuable piece of property. The South Carolina Department of Parks, Recreation and Tourism is interested in obtaining a portion of the property and has been in negotiations with the owners regarding the possibility of obtaining a portion of the estate for use as a park facility. Access to the island is achieved through use of an unpaved dirt road from the mainland. The island is presently protected under the Coastal Barriers Resources Act which will limit the development potential of the island. This classification, however, would not rule out the development of a park facility. Building would, however, be severely restricted by the classification, and federal funds for construction of buildings, roads, water and sewer lines, etc. could not be used.

Figure 31

Public Access Sites - North

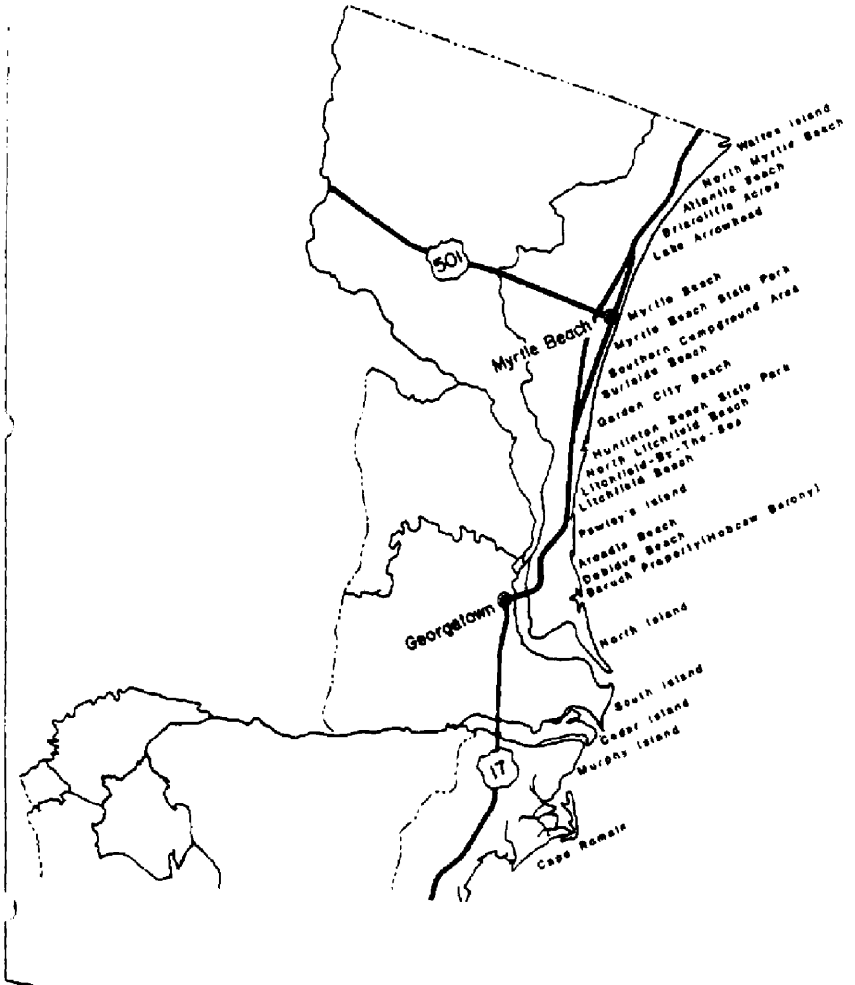
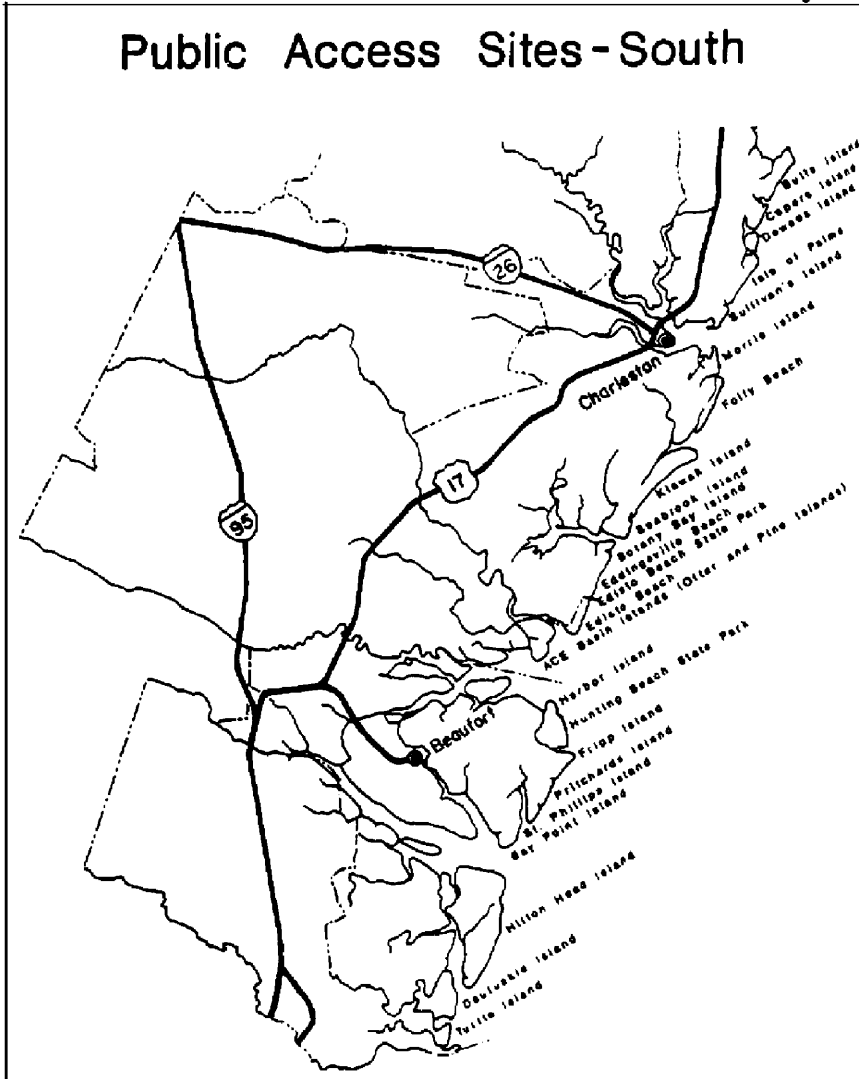


Figure 32



Waites Island is not located in the City of North Myrtle Beach, but is a part of Horry County.

Assessment. This island is an excellent opportunity for development of a park facility. Acquisition costs would be expensive because of the location. However, the restrictions of the Coastal Barriers Resources Act (COBRA) might work to reduce the value of the land. Development of facilities will also be limited by the COBRA, and if the beach is used at all it would have to be in a natural and unimproved building style.

North Myrtle Beach

North Myrtle Beach consists of four beach communities that consolidated and formed a city. The city limits begin at Hog Inlet, just south of Waites Island and run to Briarcliffe Acres on the south. Beginning at the northern boundary the communities are Cherry Grove Beach, Ocean Drive Beach, Crescent Beach, and Windy Hill Beach.

Public access to the beach in the City of North Myrtle Beach does not appear to be a problem. A majority of the people visiting this beach stay along the coast and use the parking provided by the hotels and beach cottages. There is also some on-street parking located adjacent to street ends and along the roadside of Ocean Drive and the many streets that run perpendicular to the ocean. Hundreds of free or metered spaces are available and within easy walking distance of beach access points.

Beach access points are numerous. Pedestrian access in the Cherry Grove Section is excellent with access points usually at one-half block intervals. In the Cherry Grove Section alone there are seventy-one (71) access points, many with boardwalks and several designed for handicapped access. The Ocean Drive Section has access points at approximately one block intervals, many of which are improved with walkways and some handicapped facilities. Some access points also provide some limited amounts of on-site parking. In the Ocean Drive Section of North Myrtle Beach, forty-nine (49) different public access points are available. The Crescent Beach Section also contains many access points at spacings generally about a block apart. Most of the access points have been improved with walkways. Parking is on-street when available. The Windy Hill Section of North Myrtle Beach has fourteen (14) accessways, most with boardwalks. Several have on-site parking. However, parking, as with most places along the beach, must be acquired on the street at off-site locations.

The beaches in the North Myrtle Beach area are generally very wide and relatively stable. In most cases along the beachfront, beach widths are greater than 200 feet. Erosion rates in most cases are also well below a foot a year, so these beaches are considered some of the most stable along the coast.

In many sections of the City, facilities such as life guards, concessions, and other facilities are provided by the City. These facilities are not available at all sites, and there are probably areas which could be improved. Public restrooms, likewise, are not available over most of the beachfront, although many hotels and businesses make restroom facilities available.

Assessment. Public access along the City of North Myrtle Beach is in very good shape. The access points are plentiful and well-located. Parking is a problem along some areas and can be improved by marking on-street spaces and providing more off-site parking. Additional public restrooms need to be provided as well as minor improvements such as additional boardwalks or other facilities at the street-end access points.

Atlantic Beach

Atlantic Beach is a small city located between the Crescent Beach and Windy Hill Sections of North Myrtle Beach. The Town is only three (3) blocks in length, but a public access point is available at each street end. Parking is on-street with no spaces marked. Lifeguards are available along sections of the beach as are concessions. No public restrooms are available; however, plans are underway to develop these facilities.

Assessment. Public restrooms are needed as are additional public parking facilities. Signs and boardwalks are also missing from this beach and would improve access and use of the beachfront.

Briarcliffe Acres

Briarcliffe Acres is a small beachfront residential community that incorporated into a town. The Town of Briarcliffe Acres is located south of the Windy Hill Section of North Myrtle Beach above an unincorporated section of Horry County known as the Lake Arrowhead Campground area. The property owners association owns all property along the beachfront. There is no development along the beachfront except for several beach walkover structures owned by the property owners association. No public access facilities are provided and the Town is not interested in providing any public facilities.

Assessment. The Town of Briarcliffe Acres is not submitting a local beachfront management plan. Because of the undeveloped nature of the beach, very little of the Town is affected by the Beachfront Management Act. The Town is consequently not eligible to receive funds for renourishment. Opportunities for improving public access are very limited.

Lake Arrowhead

This section of beach is undeveloped but will be developing in the future as the campground changes over from the existing use to a more dense land use pattern. Public access is not presently provided although there are several walkovers through the campground.

Assessment. This area, because of its undeveloped nature, could provide opportunities for public access improvements, and measures to provide public access as the land use pattern changes should be included in the Horry County Beachfront Management Plan.

Myrtle Beach

Myrtle Beach is the Grand Strand's best known beach resort community. It is truly a destination resort serving as the vacation center for thousands of beach users each season which stretches from spring to fall. Along the beachfront there are many high-rise hotels, small "Mom and Pop" motels, condominiums, rental units, campgrounds, and dwellings occupied by permanent residents of the area. The city boundaries cover a prime piece of beachfront real estate, occupying approximately 10 miles of the Grand Strand. Tourism is the key industry of this community, and almost all of the community's economy derives from service industries related to tourism.

Myrtle Beach has recognized the need to provide access opportunities for people wishing to reach the beach. Accordingly, the City has approximately 150 public access points as well as hundreds of private access points from individual motels, condominiums and businesses. Many of the accessways provide boardwalks and small amounts of parking. Several provide landscaped areas for sitting and viewing. Some are associated with the central pavilion and amusement areas. Lifeguards and concession facilities are provided at many areas along the beach, especially those associated with the pavilion and hotel areas.

Parking for public and day use is limited in many areas, and the beach using public must compete for spaces with the business traffic. The City has provided public parking facilities in some areas, and there are several public parking garages along the beachfront.

Assessment. Public access in Myrtle Beach and the upper Grand Strand is much better than in most of the rest of the State. However, there remains a need to improve parking and some access areas along sections of the City. A shortage of public restroom facilities also exists, and this need also requires attention.

Myrtle Beach State Park

Myrtle Beach State Park is located at the southern boundary of the City of Myrtle Beach and provides 350 camping spaces, day use, and fishing (formerly from a 750-foot fishing pier destroyed by Hurricane Hugo). The Park is 312 acres in size and has a swimming pool, public restrooms and beach area and concession facilities. Approximately 400 public parking spaces are available for day-use visitors. The pier was destroyed September 1989 by Hurricane Hugo but is being rebuilt and scheduled for opening in early 1992.

Assessment. This park provides excellent access opportunities for the southern Myrtle Beach area. Improvements are not necessary.

Southern Campground Area

Between Myrtle Beach State Park and the Town of Surfside Beach are located several large undeveloped pieces of land that are presently used for campgrounds. One subdivision has also been built in the area. This area covers about 3 miles of beachfront. There are several pavilions and other structures associated with these campgrounds; however, the beachfront is mostly undeveloped.

Assessment. In the future this area will probably be developing into a hotel, condominium, high-rise type of land use pattern. As this development has not yet occurred, this would be a good area in which to investigate the possibility of acquiring a portion of land for a public access site.

Surfside Beach

Surfside Beach is an oceanfront community that, until a few years ago, consisted of mostly beachfront cottages. In recent years small condominiums and high-rise buildings have been built along the beachfront. Almost without exception most of the construction is well setback. Public access to the beachfront exists at each street end running perpendicular to the beachfront. There are 33 of these street ends. Parking is a problem; most parking is on-street with a few off-street areas available. There are no public restrooms.

Assessment. It is recommended that restroom facilities be pursued as well as the development of additional public parking areas.

Garden City Beach

A portion of Garden City Beach is located in Horry County, but most of it is located in Georgetown County. The Horry County beachfront section has developed into mostly high-rise hotel projects built on narrow pieces of land very close to the beach. The beach is very erosional and narrow. During Hurricane Hugo a great deal of damage took place at Garden City Beach, and one contributing factor was the lack of sand in front of the beach. Public access in this area is a problem. Parking and traffic circulation problems during the summer months are severe. Traffic moves very slowly down South Waccamaw Drive, the only street. Off-street parking for public day use is limited to only the area around the King Fisher Pier. There are 44 street-end access points along the Garden City area which the public can use to reach the beach. In the Georgetown County section, street-end access points are the only access for the public to reach the beachfront. There is no off-street parking available, and on-street parking is extremely limited by the development pattern.

Assessment. Because of the development pattern, major improvements to public access opportunities will be difficult. It is recommended that several lots be acquired for use as a park providing both an access site and parking area. Restrictions on building might make some of this land available in the future. Parking is very much needed as are several public restroom facilities.

Huntington Beach State Park

Huntington Beach State Park is a state park facility located just south of Murrells Inlet on the ocean. The park is about 2500 acres in size and provides 200 camp sites, wildlife observation, beach day use and fishing opportunities via a walkway constructed over the south jetty protecting Murrell's Inlet. A paved parking lot for 275 cars is available as are restrooms and concession facilities. The park is heavily used, especially during the summer months. The park is leased to the State from Brookgreen Gardens.

Assessment. The park has ample area to expand parking if need be. This is a very important resource to the State and it provides the only large-scale public access opportunity for the Waccamaw Neck and Grand Strand areas.

North Litchfield Beach

North Litchfield Beach is a residential area of mostly beachfront houses. There are seventeen public accesses and approximately 110 parking spaces along North Litchfield Beach. All parking is off-street. There are no restrooms.

Assessment. Improvements to on-street parking are needed. Off-street parking facilities are also needed. It is recommended that accessways be clearly marked at the beach and from Highway 17.

Litchfield-by-the-Sea

Litchfield-by-the-Sea is a private development. Access is controlled by a security gate. Public access does not exist at Litchfield-by-the-Sea. In order to use any of the community access facilities to the beach, residency or rental of one of the units is a requirement.

Assessment. Access opportunities, because of the developed nature of this community, are very limited.

Litchfield Beach

Litchfield Beach is a mixture of mid-rise condominiums and beach cottages. Beach access is limited. There are seven public access points and approximately 24 public parking spaces along Litchfield Beach. Access to the beach is reached via seven 10-foot wide walkways and one five-foot wide path. The southern end of Litchfield Beach, or Litchfield Spit, is under the COBRA and would be an excellent site for an unimproved access point with services provided by a shuttle system from the mainland.

Assessment. Recommended improvements for additional parking spaces and better marking of access points is needed. This area could also be an excellent opportunity for creation of an access point by improving access (with very limited facilities to the Litchfield Spit). It is recommended that the opportunities for expanding access into this area be further investigated.

Pawley's Island

Pawley's Island is an incorporated town located just south of the Litchfield Beach Area. In recent years, Georgetown County has made improvements to public access by providing a parking area on the southern tip of the island. This area contains parking for 101 cars. There is no access along the middle section of the island, a very narrow row of houses one lot wide. In the upper central section of the island a few small access points with several off-street spaces are available. There is no access on the northern end of the island. There are no public restroom facilities on the island.

Assessment. There are several areas where steps could be taken to improve access. Restrooms could be added to the park on the southern end. This facility could also be increased in size. A walkway to the beach should be acquired in the middle section of the island with parking provided at some interior location. Additional walkways along with on-and off-street parking facilities could be acquired especially in the middle and northern sections of the island.

Arcadia Beach

Arcadia is an undeveloped piece of land between Pawley's Island and Debidue.

Assessment. Arcadia is a very large undeveloped piece of land. Because of the growth rate taking place in the Waccamaw Neck area, this large piece of land will eventually be developed. It is recommended that some governmental unit, whether it is the State or County, acquire a portion of this land to develop a public beach facility.

Debidue Beach

Debidue is a private beach community. Access is controlled by a security gate. The entire beach is developed, and public access is nonexistent. The island is highly erosional in areas.

Assessment. Very little can be done to improve access to Debidue Beach because of its private and closed status.

Baruch Property (Hobcaw Barony)

The Baruch property is used for research purposes and has several miles of excellent beaches. The property is undeveloped with the exception of several laboratories and buildings remaining from the time when the Baruch family occupied the property. Public access to the beach is nonexistent.

Assessment. It might be possible to dedicate a certain portion of the property for public beach use and improvement under the authority of the University of South Carolina provided that the research goals and objectives of the property are not compromised. Any access improvements would have to be under those guidelines. Access would have to be provided by ferry because the beachfront tract is not accessible by land. It is recommended that this possibility be investigated.

North Island–South Island

These islands are known as the Yawkey Center and are dedicated to wildlife preservation and research. They are operated and managed by the South Carolina Wildlife and Marine Resources Department. Access is managed by the South Carolina Wildlife and Marine Resources Department.

Assessment. It is recommended that the South Carolina Wildlife and Marine Resources Department explore the possibility of increasing public beach access while keeping with the management objectives of the Wildlife Reserve.

Cedar Island–Murphy Island

These are undeveloped barrier islands owned by the State of South Carolina and controlled/managed by the South Carolina Wildlife and Marine Resources Department. Public access is managed by the South Carolina Wildlife and Marine Resources Department.

Assessment. It is recommended that the South Carolina Wildlife and Marine Resources Department explore the possibility of increasing public beach access while keeping with the management objectives of the Wildlife Reserve.

Cape Romain–Bulls Island

The Cape Romain National Wildlife Refuge consists of 34,000 acres of barrier islands, sand spits, and marshlands. Bulls Island, located on the southern end of the complex, is six miles long and 5400 acres in size. There are over twenty (20) miles of undeveloped beaches in this complex. The area is accessible by boat, and while access is allowed to private boats, there is only one concessionaire providing day-trip visitation to Bulls Island. Camping is generally not allowed except in specific areas on Bulls Island during designated times.

Assessment. Public access opportunities to Bulls Island and Cape Island and several other areas in the Cape Romain complex should be expanded. Chiefly, these improvements should involve improving the facilities on Bulls Island to accommodate new visitors and providing a means of transportation to enable visitors to reach these areas through the use of ferries and similar systems. The development of public access improvements should not be allowed to have a detrimental impact on the maintenance of the natural characteristics of this property. Any attempted improvements must carefully balance the need for improvements with the need to protect these islands and marshlands.

Capers Island

Capers Island is an undeveloped barrier island located south of Bulls Island. It is owned and managed by the South Carolina Wildlife and Marine Resources Department. The Wildlife Department operates the island as a wildlife preserve and recreational area. Access is limited; the island must be reached by private boat. Few facilities are available on the island.

Assessment. It is recommended that Parks, Recreation and Tourism and the Wildlife Department look into ways to improve access. By providing a regularly scheduled ferry (possibly from the Isle of Palms or Charleston Harbor area) and making additional improvements, such as restrooms and changing facilities, to accommodate day visitors to the beach, many more residents of the State could enjoy this resource. The area provides an excellent opportunity for improvements.

Deweese Island

Deweese Island is a private island of about three (3) miles in size located between Capers Island and the Isle of Palms. There is no bridge or ferry system; access must be reached by private boat. The island is mostly undeveloped with only a few houses on the northern end. There are plans to develop the island in large-lot, low-density houses.

Assessment. Because of the difficulty of reaching this island the development might not be successful. If the anticipated development does not occur, S. C. Parks, Recreation and Tourism should look into acquiring all or most of this island for the development of a beach access park. Access could be provided by shuttle ferry from Charleston Harbor or the Isle of Palms and could also service Capers Island. Additional facilities to accommodate day or possibly overnight visitors would need to be developed if the decision is made to acquire and develop the property.

Isle of Palms

The Isle of Palms provides a great deal of access for the Charleston area. Wild Dunes, a private resort development, covers the eastern end of the island. Public access to this section of the beach is nonexistent. The remaining portion of the island is about three (3) miles in length and is completely open to the public through forty-four beach access walkways, on-street parking and two very large public parking areas located in the central business district. The Town of the Isle of Palms and Charleston County are in the process of constructing public restrooms in the central business district. Also a new county park is under development in this area.

Assessment. Public access along the Isle of Palms beaches with the exception of the Wild Dunes area is excellent. With the construction of the public restroom facilities, few if any improvements other than marking access points and parking areas are recommended.

Sullivan's Island

Sullivan's Island also provides some beach access for the Charleston area. Access to the beach is provided by twenty-four (24) access points located at every block and street-end along the beachfront. Parking is in short supply and most parking occurs on-street in unmarked spaces. No restrooms are provided other than those at Fort Moultrie.

Assessment. Access ways to the beach are sufficient to serve the day use demand. However, additional improvements are needed to improve parking facilities along the beachfront. It will be

necessary in future years to provide additional on-street parking as well as some off-street lots. It is also recommended that public restrooms be provided.

Morris Island

Morris Island is an undeveloped barrier island located on the south side of the Charleston jetties. A large portion of the island is diked to form a disposal area for sediment dredged from the harbor channels. The remaining sections of the island are a small area of highland and a very erosional washover terrace/sandbar that changes shape seasonally. The entire area is located in the COBRA. Public access is nonexistent.

Assessment. It is recommended that the potential for acquiring this area by Parks, Recreation and Tourism or the Heritage Trust be investigated. A limited system of providing public access to the beach should be developed. While this area should remain in its natural state and facilities should not be constructed, it is recommended that it be acquired for public use purposes.

Folly Beach

Folly Beach is a barrier island located on the south side of the Charleston Harbor jetties. The island is very erosional. Public access is provided all over the island by twenty-eight (28) access ways located at street ends along the five miles of beachfront. A public park has been built on the southern end of the island.

Assessment. Public parking is very limited along most of the beachfront. Only on-street spaces are available in most areas and those are unmarked and difficult to use because of planting in the road right-of-way and the sandy surface of the roadway. Additional parking needs to be developed. There are no public restrooms on Folly with the exception of those located at the park. The Coast Guard Base at the northern end of the island is being abandoned. There is a possibility that this site could be acquired and developed into a regional beach access facility. This opportunity should be further pursued by Parks, Recreation and Tourism or Charleston County Parks and Recreation Commission.

Kiawah Island

Kiawah Island is a closed beachfront community. As a condition to the initial development approval, land for a county beachfront park was set aside for development. This park is managed by Charleston County Parks and Recreation Commission and is open seasonally. There is no other public access on Kiawah Island.

Assessment. The Beachwalker Park on the end of the island needs to be expanded and opened more than seasonally. This area is providing the only access into this section of the county, and it is not presently meeting access needs. It is recommended that, if additional land cannot be acquired adjacent to the site, an off-site parking area with shuttle service should be established. This would enable more people to reach the beach.

Seabrook Island

This is a private resort community. There is no public access on Seabrook.

Assessment. There is very little likelihood that public access could be acquired on Seabrook unless Parks, Recreation and Tourism is given the power to use eminent domain to condemn land for public access purposes. The likelihood of any facilities developed here is low.

Botany Bay Island

Botany Bay Island is located just across the North Edisto River from Seabrook Island and is mostly undeveloped with the exception of a few large lots and scattered houses. The Nature Conservancy purchased the development rights to the island several years ago, and the island will remain undeveloped.

Assessment. Public access is limited and probably will not take place because of the protected nature of the property and the inaccessible location of the island.

Eddingsville Beach

This is a very erosional section of the coast where very little highland exists. It is under private ownership and difficult to reach. The South Carolina Department of Parks, Recreation and Tourism is interested in the possibility of acquiring this land and using it as an addition to the Edisto Beach State Park.

Assessment. Public access improvements within this area are a possibility. The Department of Parks, Recreation and Tourism is interested in acquiring this site.

Edisto Beach State Park

Edisto Beach State Park covers 1225 acres on Edisto Island and provides access to the beach for day visitors as well as camping, wildlife observation and many other activities. The park has 103 camp sites and five (5) cabins. The park provides about 250 parking spaces and can easily accommodate any overflow in other areas of the park. Restrooms and concessions are available.

Assessment. The park provides good access for day use visitors and campers. Any improvements needed are minor in nature.

Edisto Beach

The Town of Edisto Beach is a beach community characterized by one-and two-story beach houses. There is a lot of public access to the beach along Palmetto Boulevard, the main street parallel to the beach. There are many footpath access-ways to the beach, approximately one access-way for every 400 feet. Palmetto Boulevard is a very wide street, and on-street parking is available along the entire length. The pier/pavilion area located adjacent to the State Park also provides some off-street parking. There are no restrooms available to the public along the beachfront.

Assessment. Only minor improvements to beach access are needed along Edisto Beach. These improvements would involve better marking of the access-ways and on-street parking areas. As demand increases in future years long-range planning measures should include the development of public restroom facilities and off-street parking lots.

ACE Basin Islands (Otter and Pine Islands)

These very remote islands are located in the ACE Basin and are designated to be part of the National Estuarine Reserve System.

Assessment. Because of the remote nature and protected status of this area, public access improvements are not needed or recommended in this area.

Harbor Island

Harbor Island is a private resort development. Public access to the island is not allowed. Access is controlled by a security gate.

Assessment. Because of the private nature of the island, the prospects of improving public access are very limited.

Hunting Island State Park

This island is owned by the State of South Carolina, and a park covers most of the island. Day-use beach access, camping, cabin rentals, wildlife observation, and a fishing pier are available to the public for use. The park has 200 campsites, fifteen (15) cabins, and provides parking for 400 plus cars. There are public restrooms and concession facilities. When the park was created in the 1930's, a tract of land on the south beachfront was divided into lots and leased for private beach homes. The private lots limit the potential for public beach access from the park. The Department of Parks, Recreation and Tourism is trying to purchase the homes and reclaim the lots for future use by the public. This park is heavily used. The beach has experienced severe erosion in past years, but in 1990 was renourished with sand dredged from offshore sources to create a wide, more stable beach.

Assessment. Hunting Island is one of the most important public beach access facilities for the State. Additional improvements are not needed at this time. However, a beach usable to the public should be maintained through continued renourishment and/or a gradual retreat and establishment of a natural beach. Also, the land to the south of the park should be gradually acquired to expand the park.

Fripp Island

Fripp Island is a private resort community. There is no public access to Fripp Island. The beach is very narrow because of extreme erosion.

Assessment. Opportunities for improving access onto Fripp Island are very limited. It is unlikely that these facilities will be provided.

Pritchards Island/St. Phillips Island/Bay Point Island

All three islands are owned by private individuals. Pritchards and St. Phillips Islands are protected from development and have been designated to the University of South Carolina for research purposes. Bay Point Island has been proposed to be developed under several different proposals, none of which has ever come to pass. All three are difficult to reach because of their remote location and lack of land access.

Assessment. The feasibility of acquiring some form of right to access Pritchards or St. Phillips should be looked into by the State. This would require a joint use arrangement with the University and development of a ferry system. Also, the Department of Parks, Recreation and Tourism or Beaufort County should look into acquiring Bay Point Island and the possibilities of developing a park on the island. This island has many historical and natural resource features and would make an excellent park facility.

Hilton Head Island

This island is 28,000 acres in size and contains more than thirteen (13) miles of beachfront area. Much of the island is private and accessible only by security gate. Sections of the beachfront are very erosional. The island attracts thousands of visitors each year as well as a growing resident population.

Assessment. While large sections of Hilton Head Island are restricted by security gates and cannot be reached by the public there have been many improvements made to provide day-use facilities, and there are many more improvements on the drawing board. Access points and public parking are problems. The development of the mid-island parks and creation of new access points will greatly increase access. However, this island is heavily used and concentrating all day-use visitors in one section of the island will create problems. It is recommended that new public access sites be developed and spread out as much as possible over the entire island.

Daufuskie Island

Daufuskie Island is a 5000 acre island separated from the mainland and Hilton Head by the Intracoastal Waterway and Calibogue Sound. Large scale resort development has recently begun on the island by several large development companies. Public access to the beachfront existed through access ways and easements to the beach and have been retained by the new development.

Assessment. As this island increases in population there will be a greater need to provide public access to the beachfront. Development projects located along the beachfront should be required to set aside land for public access purposes. There will be a need for additional access points, small parking areas, and restroom facilities in future years. Beaufort County or Parks, Recreation and Tourism should investigate the feasibility of building a park on part of the beachfront.

Turtle Island

Turtle Island is almost entirely marsh or spoil area. It is managed by the Wildlife and Marine Resources Department.

Assessment. Because of the location and nature of the island (marsh), this island does not offer any potential for increased public access opportunities.

Recommendations

The inventory of access sites identified several potential sites which, if the money to acquire and develop them were available, could be added to the coast's access areas. The S. C. Department of Parks, Recreation and Tourism has reviewed the list and has approved it as a good starting point. During the next year, 1991-1992, the Council and Parks, Recreation and Tourism will prioritize the list and try to develop an action plan for coastal public access improvements. This plan will examine each proposal more closely to determine cost estimates for the projects which might be undertaken during the next five-year period. Proposed funding methods will also be investigated.

State/Regional Parks

The following regional impact potential park site recommendations were identified:

Development of a park on Waites Island.

Improve access to North Island by a ferry system.

Improve access and facilities to Murphy Island.

Provide better day-use beach access to the Cape Romain area.
Provide access and improvements to Bulls and Capers Island.
Acquire public access sites on Dewees Island.
Acquire and develop access improvements on Morris Island.
Acquire and develop a park on the abandoned Coast Guard Base on Folly Island.
Acquire and develop a regional beach park on Bay Point Island.

Local Parks

The following are sites where smaller community-serving beach access facilities might be developed or existing facilities significantly improved:

- North Myrtle Beach.
- Myrtle Beach.
- Surfside Beach.
- Garden City Beach (new facilities needed).
- Pawleys Island.
- Litchfield Beach (new facilities needed).
- Isle of Palms.
- Sullivans Island.
- Folly Beach.
- Edisto Beach.
- North Beaufort County (new facilities needed).
- Hilton Head Island (new facilities needed).
- Daufuskie Island (new facilities needed).

(c) Funding Alternatives

Federal Beach Access Programs

306-A Funds

Section 306-A of the Coastal Zone Management Act has been used in past years to improve public access opportunities throughout the coastal zone. While in past years all types of access projects have been funded, it would be possible to give priority to beach access projects. Types of facilities that are eligible are land acquisition costs, walkovers, parking lot improvements, development of restrooms, and so forth.

(d) Purchase of Damaged Property Under the National Flood Insurance Program

Under Section 1362 of the National Flood Insurance Program (NFIP), the Federal Emergency Management Agency (FEMA) can purchase previously damaged property to reduce loss of life and property in high flood risk areas. Under this program FEMA provides the money to buy the property and use the land for open space or nondevelopment purposes. The property owners can either agree to sell the land and buildings to FEMA for demolition and removal or they can transfer title to the property and retain ownership in the buildings to move them to another non-flooding property.

In administering the program, FEMA assigns an appraiser to determine a fair market value for the property and establishes a price that FEMA is willing to pay. If the property owner accepts, a real estate purchase agreement is executed. There are provisions in the law to provide additional appraisals to negotiate a fair sales price, and as much as possible, to satisfy the property owner. Participation in the process is completely voluntary. Benefits to the property owner are a fair compensation for his property and relief from land that is subject to flooding. Local governments are relieved of the costs of providing emergency services and are able to use the acquired property to provide land for public recreation. This program seems especially well-suited to acquiring oceanfront property that is located seaward of the baseline.

(e) State Programs For Improvement of Beach Access Facilities

South Carolina Parks, Recreation and Tourism (Three Programs)

Land and Water Conservation Fund.

This is a 50/50 matching grant program to acquire and develop outdoor recreation areas. It is available to state, local and special purpose districts.

This fund has provided over \$88 million for development of facilities. The demand in recent years has far exceeded the amount of available money. The Department of Parks, Recreation and Tourism uses a ranking system to prioritize grant requests using a point system to compare applications. In 1990, South Carolina had available approximately \$300,000 in Land and Water Conservation fund money. Under the current regulations, no project can take more than 10% of the total available amount. All Grants are awarded annually.

(f) South Carolina Recreation Land Trust Fund.

This fund was created in 1976 to assist in acquiring state level recreational sites. Funds for local governments are limited to the costs of actually acquiring the property and cannot include incidental costs such as appraisals, surveys and legal fees. A maximum of \$25,000 per project is available unless the project is of regional or statewide significance. Then the project is eligible for up to 50% of the total site acquisition costs.

(g) South Carolina Parks and Recreation Development Fund (PARD).

This program is a noncompetitive grant program providing funds to local governments for the planning and development of new parks and recreation facilities or for the renovation and improvement of existing facilities. Grant awards are made on a case-by-case basis at a rate of up to eighty percent of the total project costs. Each application must have the endorsement of a majority of the legislative delegation members of the county. All local match shares (20% non-funded share) must be in the form of cash, force account labor or equipment used in the construction of the park. Costs for administration, acquisition of real property, or interest on borrowed funds are not eligible to be used for matching PARD funds.

The following activities are eligible for PARD Funds.

- (i) Planning activities for developing park and recreational facilities.
 - (1) Master planning for future park and recreational facilities and programs.
 - (2) Updating existing master plans.
 - (3) Evaluating specific portions of existing plans for future recreation facilities and programs to determine their current status.
 - (4) Environmental impact studies of existing or proposed recreational facilities.
 - (5) Site specific evaluations of existing facilities for purposes of handicapped accessibility, safety and management techniques.
 - (6) Surveys and marketing studies to determine the need for future recreational facilities and programs.
- (ii) Development assistance for site-specific improvements on public land for recreational purposes. New construction of facilities which do not exist, including:
 - (1) Development of outdoor recreational facilities.
 - (2) Development of indoor recreational facilities.
 - (3) Development of roads, parking areas, support facilities and utilities for public recreation purposes.
 - (4) Improvement of natural resource features.
- (iii) Renovation assistance for site-specific improvements on public lands for recreational purposes.
 - (1) Renovation of existing structures to make them accessible to the handicapped.
 - (2) Altering existing structures so as to increase their utility as recreational facilities.
 - (3) Modifying existing structures which are not currently used for recreational purposes such that after alteration their primary use will be for public recreation.
 - (4) Replacement of permanent improvements which have outlived a reasonable lifetime.

(5) Repairs to natural resource structures.

(h) Local Methods for Funding Access

(i) Tax Revenues

A local government can always utilize property tax revenues to finance renourishment projects, acquire property or improve public access sites.

(ii) Creation of Special Purpose Districts

Another method of financing a project is to establish special purpose districts along the beachfront to fund ongoing renourishment projects or to acquire and develop public access sites. Several areas along the coast presently have special purpose districts that have been used to fund and administer renourishment projects and erosion control projects. These special purpose districts have the authority to assess all property located within the district at the same rate to fund beach erosion prevention projects. However, under the present legislation, these districts do not have the authority to assess individual property at a rate in proportion to the benefits received from renourishment projects. For this purpose, a new special purpose district chartered through the general assembly can be used to issue and retain bonds, assign cost shares, and design and implement beach nourishment or improvement projects.

(iii) Local Option Sales Tax Revenues

The newly-passed local option sales tax provides another option for new funds which could be used for beach renourishment or access improvement projects. While a sizeable portion of these funds is required by law to be used to roll back property taxes, additional remaining revenues could be used to fund beach projects.

(iv) Accommodations Tax

Local governments in counties collecting more than \$50,000 annually are required to spend a portion of the accommodations taxes collected on tourism-related expenditures. These expenditures include advertising and promotion of tourism, the arts, and cultural events; civic and cultural related construction activities; basic services when required to serve tourists (based on estimated percentage of cost directly related to tourists); public facilities; tourist transportation; beach renourishment; and visitor information centers.

(v) User Fees

Parking fees and fees to use beach access facilities could be used for underwriting operating expenses, improvements to existing facilities or the development of new facilities.

(i) Funding Methods

In order to develop access opportunities funding will always be needed. Beachfront property has for many years been one of the most expensive types of land to purchase. Governments at all levels face financial constraints which require other priorities such as landfills, jails, maintenance of police and fire services to be addressed before some of the less immediately demanding community needs. However, as history has indicated, unless beachfront access problems are addressed when opportunities present themselves, the land and access opportunities are frequently lost. Funding measures must be constantly pursued, and many times combined funding sources will be the only means available to provide the money needed to acquire and develop access sites. Several possibilities exist:

1. A portion of any renourishment grant could be earmarked to be used solely for access improvements.
2. A mitigation bank, similar to an impact fee, could be established. This bank would require any construction activity taking place within the Council's setback line to pay a fee that could be used for renourishment or access improvements.
3. The accommodations tax within coastal counties could be amended to provide a source of money that could be used to fund access improvements, renourishment or similar projects.
4. Other federal and state programs presently in existence could be used to purchase and develop new access sites. These include programs of the State Parks, Recreation and Tourism, funds from NOAA (administered by the Council), FEMA funds and local funds.

It should be noted that the programs presently in existence are not keeping up with the demand for access sites. Clearly there is a need to provide additional money to make these improvements.

(j) Conclusion

Priorities are difficult to establish because of financial considerations and opportunities to acquire land present themselves at different times. The Council has, through its policies for improving public access, committed to identifying problem areas, working with state and local governments to improve public access, and linking its funding programs for beach renourishment to insuring that the public has the means to reach any renourished beach. The Council is committed to working for new sources of money to acquire new access sites and funds that can be passed through to local governments which will allow them to acquire and improve new access sites. The Council is also committed to working with the South Carolina Department of Parks, Recreation and Tourism to develop programs for acquiring and improving new access facilities along the coast as opportunities present themselves.

(6) Disaster Response Plan

The most likely disaster to affect the South Carolina Coastal Council will be the landfall of a hurricane, such as occurred with Hurricane Hugo on September 21, 1989. Damage and destruction to buildings, pools, seawalls and roads located within the coastal setback can be extensive. At the same time, the Council's office facilities, equipment, vehicles and communications can be seriously degraded. Emergency orders that cancel or modify some normal procedures will probably be issued by various officials. Many questions will be asked by citizens concerning what they can do to protect and restore their property.

(a) Priority Mission

The South Carolina Coastal Council will have to maintain open offices, available to the public, where the business of carrying out the State's Coastal Zone Management laws are accomplished. Staff members may be temporarily reassigned by the Executive Director to accomplish this.

A key provision of the State's beach management plan is the retreat policy. This is based on erosion and on destruction of various types of oceanfront structures. Obviously, a hurricane will be the cause of erosion and damage to structures and will therefore trigger the retreat provisions of the plan. With this in mind, the South Carolina Coastal Council will be faced with determining the amount of damage to seawalls, revetments, swimming pools, buildings and other structures. It will also be necessary to determine what work can or cannot be done either without a permit or under a general permit, a regular permit or an emergency permit. These determinations will have to be made rapidly, under adverse conditions, be accurate, well documented and reported to federal, state and local officials, as well as the owners.

(b) Readiness Conditions and Specific Tasks

The South Carolina Coastal Council will operate under four levels of hurricane readiness: Pre-Hurricane Season Activities, Condition Yellow, Condition Red and Post-Hurricane Activities. Each condition will be established by the Deputy Director or the Executive Director.

(i) Pre-Hurricane Season Activities

Within two weeks prior to the official commencement of hurricane season each year, the Deputy Director will oversee the following activities:

1. All supervisory staff and people assigned to administer the agency's hurricane plan will be notified by memorandum that hurricane season is commencing and directed to review the hurricane plan. A staff meeting of senior supervisory staff will be held as a follow-up to plan review to discuss and update the plan. Any revisions to the plan will be made and distributed to staff within two weeks of the commencement of hurricane season.

2. All contracts pertaining to post hurricane activities will be reviewed and updated, to include:

- A. Structural engineering firm and/or appraisers to assist in damage assessment.
- B. Aerial photography firm to assist in aerial documentation.

If necessary a meeting will be held with firms under contract to discuss procedures and coordination.

3. All emergency-related equipment will be inventoried, inspected, tested and put in good repair (generators, survey equipment, etc.). Additional equipment and supplies will be ordered if needed.

4. All emergency orders, post storm release letters, maps and survey forms for field damage assessment will be reviewed and updated as necessary.

5. A meeting will be held with all Field Office Coordinators, Senior Staff Coordinators and Disaster Management Team to discuss changes in the plan and possible office relocation in each area of the coast. This meeting will be followed-up by preliminary arrangements if at all possible.

6. A hurricane plotter and alternate will be named to plot and track hurricanes and tropical storms throughout the season and keep Executive Director and Deputy Director informed of the position of the hurricanes.

7. All employees will be issued photo-identification cards. Identification cards for new employees and replacement cards will be made at this time.

8. A safe storage location for cars and boats will be located for each office. All other offices are notified of the selected sites.

(ii) Condition Yellow

Condition Yellow will be established by the Executive Director or Deputy Director any time a hurricane or potential hurricane is within five days' striking distance of any portion of the South Carolina coast and shall remain in effect until a higher condition is set or the threat passes.

The following activities will take place under Condition Yellow:

1. Each office director will notify all employees that a heightened degree of hurricane awareness is in effect. A staff meeting will be called by the following work day to review general hurricane preparedness procedures with all staff.

2. The office director will meet with supervisory staff to identify specific tasks which must be completed immediately if the situation worsens. Supervisory staff will submit detailed plans of their needs. Supervisory staff will make necessary staff aware of activities which may be pending.

3. The office director will review all requests for leave and make all individuals aware of the possibility for recall from leave. All staff on leave will be notified of the Condition Yellow.

4. Each office and section will prepare a staff notification procedure, to include a backup procedure. Current telephone numbers and addresses will be verified and distributed to all staff.

5. Each office director will reinventory and evaluate all emergency supplies to make certain that they have not been removed.

6. The Damage Assessment Coordinator will reevaluate all survey forms, maps, etc. and contact each Field Office Director to make certain all maps and supplies are in place. Extra copies of the Beachfront Management Orthophotograph Maps and house address maps will be reproduced by the Cartography staff to be used during field evaluations. Copies of regulations, emergency orders and general permits will be distributed by the Permitting Section to all appropriate staff members so that consistent information will be passed on to the public.

7. The Senior Staff Coordinator will compile and confirm a list of local, state, and federal contacts.

8. Letters of identification for various state, federal and local agencies will be prepared by the Administrative Section listing all current employees and probable duties.

9. An administrative relocation "kit" will be compiled, inventoried, and made ready for rapid relocation. The "kit" will include all basic equipment and supplies to operate a temporary office, i.e. typewriter, computers, office supplies, tax/address maps, other photography, etc.

(ii) Condition Red

Condition Red will be set at the discretion of the Executive Director, preferably at least 48 hours or more before a hurricane has reasonable probability of striking South Carolina's coast.

1. The staff notification procedure will be implemented. Staff on leave will be given instructions as to when and where to report. If Condition Red is established during a weekend, a meeting time and place will be announced.

2. Each office director will establish and distribute a work schedule to best meet preparation duties, to include office shutdown, securing equipment and protection, if necessary, and to allow staff personal time for home and family preparation.

3. Final assignments and reassignments will be made by the Executive Director or Deputy Director for reorganization for disaster management (see Section IV).

4. To provide identification of staff for various state, local and federal agencies, the Administrative Section will prepare a signed letter listing all current employees. Sufficient copies should be prepared so that each staff member can carry one and copies can be given to any agency requiring one.

5. The list of local, state, and federal contacts will be distributed to all necessary staff.

6. All vehicles will be filled with gas and assigned as needed to specific individuals or removed to designated storage sites. Other necessary equipment will be inventoried and placed in good working order.

7. Each office director, after consulting with the Executive Director or Deputy Director, will give supervisory staff final detailed information for regrouping after the hurricane.

8. A final staff relocation list will be compiled and distributed which will identify the relocation destinations of each staff member in case of evacuation. If these destinations change prior to the hurricane, staff members must notify their supervisors as to their new location.

9. The administrative relocation kit, emergency supplies, computers, storage disks, etc. will be removed by the assigned persons. Each office manager must keep a list of which staff members have what pieces of equipment.

(iv) Post-Hurricane Activities

Post-Hurricane Recovery activities will begin as soon as possible after landfall of a hurricane. The Executive Director will notify the members of the Disaster Management Team that the post-hurricane recovery period has begun. It is inevitable that certain staff members will have personal responsibilities which they must deal with prior to reporting to their assigned work station. In these cases, the Executive Director or Deputy Director will make substitutions as necessary to fill gaps in staffing.

The short-term recovery period is expected to last from two to four weeks depending upon the extent of the damage caused by the storm.

1. Each staff member must check in with his or her supervisor as soon as possible after the hurricane for instructions and assignment, preferably within 24 hours. This is the responsibility of each individual staff member and is crucial.

2. Initial damage assessments will be made by the Executive Director or persons assigned by him to determine the degree and the extent of damage and areas which need specific or immediate attention.

3. Staff personnel may be assigned as needed to survey and document damage to both habitable structures, seawalls, revetments and erosion control structures. Coordination with local building officials will be made as necessary. Accurate locations should be determined (street address, tax map number, relation to baseline or setback line) and photographs taken of each structure thought to be damaged beyond repair in accordance with the provisions of the Act. Damage criteria used by local building officials, insurance companies, FEMA and the South Carolina Coastal Council are all different; it is important that this is recognized.

4. Assessments should be made according to Section 48-39-290. For purposes of administering the Beachfront Management Act only structures within the 40-year setback come under the Coastal Council's authority; therefore, priority should be given to identify damaged

structures that are affected by the law and to release properties that are not affected within Coastal Council's jurisdiction as soon as possible. It is particularly important to determine the percentage of damage to erosion control structures and whether habitable structures are destroyed beyond repair. Photographs should be taken whenever possible.

5. Staff personnel may be assigned as needed to provide special processing of general permits and to provide information to the general public. In order to provide this informational service to the public, it may be necessary to postpone regular permitting and certification projects. Working hours will be extended if necessary, and weekend work may be required.

6. The Senior Staff Coordinator, On-site Coordinator, and Field Office Coordinators will make contact with the U. S. Army Corps of Engineers, local officials, FEMA and the Governor's Office of Emergency Preparedness and coordinate recovery projects as needed.

(v) Long-Term Recovery Period

The long-term recovery period will begin after the tasks described in the Post-hurricane Recovery Activities have been completed. It is likely that the phase-in period from the post-storm period to the long-term recovery period will be gradual and be conducted by reassigning individual staff members as their duties are completed. Some will be reassigned before others. It is likely that the long-term recovery will last from three to six months.

1. After the initial damage assessments and emergency procedures have been completed and the long-term recovery period has begun, staff members will be reassigned as needed to their regular duty stations. It is probable that during this transitional period work assignments will likely involve sharing duties between hurricane response tasks and regular work assignments.

2. Reassessments of buildings and seawalls will be done under procedures developed by the legal section in coordination with the Damage Assessment Director and Permitting Administrator.

3. The Local Office Director will continue to consult with local governments to assist and deal with any problem or special circumstances. Specific problems will be brought up to the Permitting Administrator, Deputy Director or Executive Director as appropriate.

4. Coordination and post-storm cleanup activities and rebuilding activities will be maintained with the local governments, FEMA and the Governor's Office of Emergency Preparedness. Specific issues identified during this period will be brought to the attention of the Deputy Director or the Executive Director.

5. Coordination with local governments and the implementation of the local beachfront management plan will be the responsibility of the Director of Planning and Certification. Specific items identified in the approved local plan dealing with rebuilding following a storm event will be reassessed and monitored to insure compliance with the approved plan.

6. Modification or amendments to the Agency's disaster plan should be made at this time.

7. Post-storm press releases listing number of seawalls damaged, number of homes destroyed, beaches renourished, recovery programs, etc. should be prepared and released as information becomes available. A post-storm report should be prepared for historical purposes.

(c) Disaster Management

The Executive Director and Deputy Director of the South Carolina Coastal Council will assign personnel and equipment to best handle the disaster situation. Figure 33 serves as a model disaster management organization based on the experiences gained from Hurricane Hugo and evaluations of the management structure. Following is a description of the personnel positions and responsibilities, to be modified as necessary by the Executive Director.

(i) Disaster Management Team

Develops strategies and establishes priorities for addressing the emergency situation. Provides external coordination with major disaster-management related agencies (State Disaster Preparedness, Federal Emergency Management Agency, Governor's Office, U.S. Corps of Engineers, S.C. Wildlife and Marine Resources Department, and others as appropriate). The Disaster

Management Team consists of the Executive Director, Deputy Director, Public Information Director, a member of the legal staff, the Senior Staff Coordinator, and other staff as appointed. The team assembles in and operates out of the Columbia office unless otherwise directed.

(ii) Senior Staff Coordinator.

Implements the decisions of the Executive Director and the Disaster Management Team and serves as a member of the team. Coordinates the operations of the individual Field Office Coordinators and the On-site Coordinator in addressing the disaster. Directs support functions and staff to where they are most needed. Addresses specific problems that come up during the emergency period as needed.

(iii) Field Office Coordinator.

Provides support to the On-site Coordinator as directed by the Senior Staff Coordinator. Oversees all staff and operations assigned to the field office. Maintains day-to-day operations of the field offices.

(iv) On-Site Coordinator.

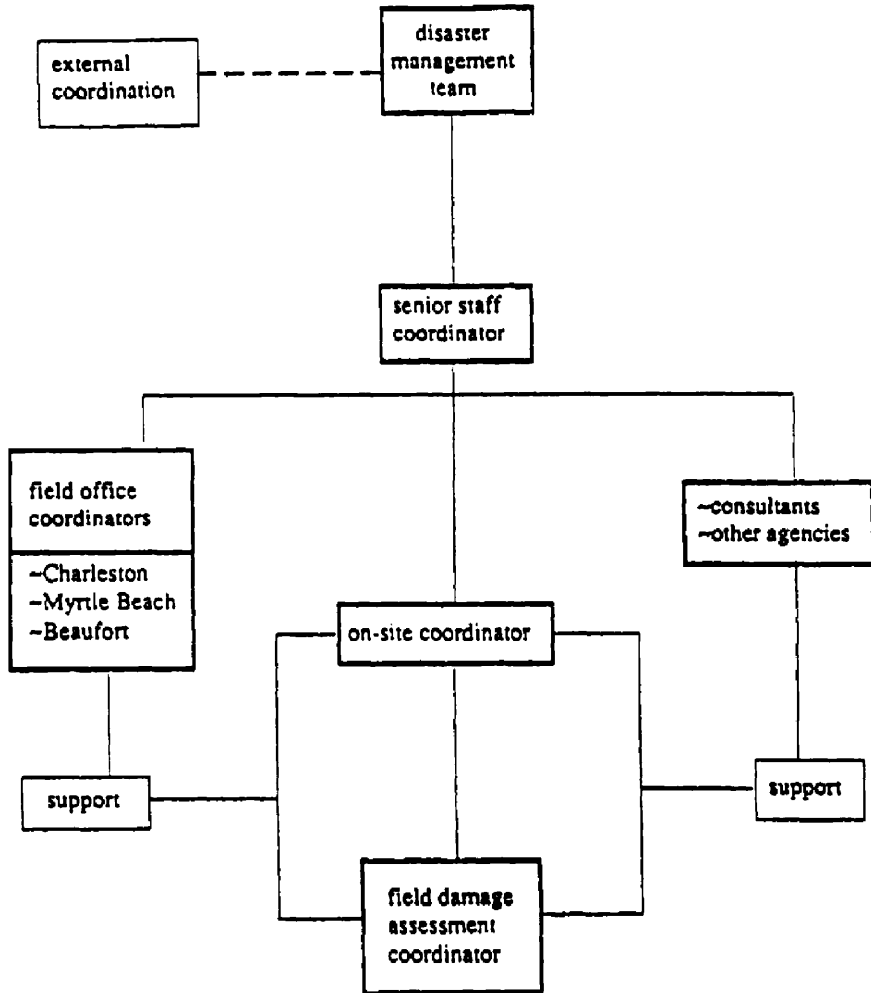
Responsible for all on-site disaster field operations to implement the Beachfront Management Act and recovery process. Recommends priorities and procedures to Senior Staff Coordinator. Coordinates with local government officials. May or may not be the Field Office Coordinator.

(v) Field Damage Assessment Coordinator.

Coordinates field survey of the beachfront area including seawalls and structures to determine which structures are damaged beyond repair in accordance with the Beachfront Management Act. Coordinates all field damage assessment staff. Ensures consistency in damage assessment procedures. Works with local building officials during damage appraisals and reports to the On-Site Coordinator.

Disaster Management Organization South Carolina Coastal Council

Figure 33



(d) Forms

Coastal Council Hurricane Response Checklist

Personnel Assignments.

Hurricane Plotter _____

Office Coordinators _____

Columbia _____

Charleston _____

Beaufort _____

Myrtle Beach _____
 Senior Staff Coordinator _____
 On-site Coordinator _____
 Field Damage Assessment Coordinator _____

Pre-Hurricane Season Activity Checklist.

1. Deputy Director notifies all supervisory staff and persons who have roles in the agency's hurricane response by memo that hurricane season has begun and requests them to review and update hurricane plan. _____
2. The Deputy Director will review all contracts relating to post-storm recovery and update meetings held with contractors, if needed. _____
3. Each Regional Permitting Director, the Charleston Office Manager and Deputy Director will inventory all emergency-related equipment, inspect and test all necessary supplies. _____

Additional supplies will be ordered, if needed.

4. The Field Damage Assessment Coordinator will review all maps, survey forms, post-storm release letters, and emergency orders and make any changes, as needed. Printed copies of each Address and Orthophoto Map will be made and copies sent to each field office and the Columbia office.
5. Meetings between Disaster Management Teams and others involved need to be held to discuss changes in plan and possible field office relocations.
6. A Hurricane Plotter and alternate are named. Plotting Maps and needed supplies are acquired. _____

- | | Cola. | Chas. | MB | Beau. |
|---|-------|-------|-------|-------|
| 7. Photo identification cards are issued or updated to all employees. New employees are issued cards. | _____ | _____ | _____ | _____ |
| 8. Safe-storage location site for cars and boats are identified. | _____ | _____ | _____ | _____ |

Condition Yellow Checklist.

1. Each office director will notify employees of Condition Yellow Status. _____
- 2A. Each office director holds a meeting to identify specific tasks, make assignments, request additional equipment, and man-power. _____
- 2B. Staff meeting held to notify staff of assignments, agency plans. _____
3. Requests for leave are reviewed. Staff on leave notified of Condition Yellow Status. _____
4. Staff notification procedure is established; current telephone numbers and addresses are verified and distributed. _____
5. Using the inventory under item 3 of the pre-hurricane checklist, each office manager will reinventory all emergency supplies on hand. Replacements are purchased. _____
6. The Damage Assessment Coordinator will reinventory all survey forms, maps, etc. Each Field Office Director will be contacted to make certain that maps, supplies, etc. are intact and safeguarded against damage. Extra copies made as needed and distributed. _____
7. The Senior Staff Coordinator will compile, confirm and distribute a list of all local, state and federal contacts. _____
8. Letters of identification for staff are prepared and updated. Additional copies are made and stored. The Senior Staff Coordinator is responsible for this task. _____
9. An administrative relocation kit is assembled. Equipment at this time does not have to be removed, but initial preparations should be started. All paper, pens and similar equipment are assembled. _____

Condition Red Checklist.

1. Staff notification procedure is implemented. Staff on leave called back; all employees contacted. _____

- | | Cola. | Chas. | MB | Beau. |
|---|-------|-------|-------|-------|
| 2. Office Directors establish work schedules and undertake final preparations for securing offices, removing equipment and releasing employees for personal preparations. | _____ | _____ | _____ | _____ |
| 3. Assignments made by Executive Director or Deputy Director for reorganization. Each office is notified. | _____ | _____ | _____ | _____ |
| 4. Letters of identification are distributed to all employees. | _____ | _____ | _____ | _____ |
| 5. List of all federal, state and local contacts will be distributed to all necessary staff. | _____ | _____ | _____ | _____ |
| 6. All vehicles filled with gas, assigned to appropriate people and removed to safe/storage as needed. | _____ | _____ | _____ | _____ |
| 7. Each Office Director after consulting with Executive Director will issue instructions for regrouping after storm. | _____ | _____ | _____ | _____ |
| 8. A final relocation list is compiled and distributed for employees. List to include addresses and phone numbers if possible. | _____ | _____ | _____ | _____ |
| 9. Administrative relocation kits, emergency supplies, records and necessary equipment are assigned and removed by staff members. | _____ | _____ | _____ | _____ |

(e) Public Education and Awareness Plan

More than one legislator called the Beachfront Management Act of 1988 “one of the most complicated pieces of legislation to come before the General Assembly in more than a decade.” To ensure compliance and support, a massive communications effort was launched. The following steps were taken.

(i) Media

The most effective way to get a message heard is through the media. Getting heard, however, is only half the story. A more difficult task is to be understood.

The Coastal Council began the educational process early. In the spring of 1986, the Coastal Council held a media day called “The Beaches of South Carolina.” Media representatives from throughout the state participated. Staff from the Coastal Council gave participants a look at then current beach policies and conditions and forecasted future problems.

Afterwards Council Chairman James M. Waddell, Jr., formed a Blue Ribbon Committee for Beachfront Management. The committee was to learn about erosion, current beach management policies, and the policies of other states. Their final recommendation was to become the framework from which new beach management policies were created.

Through press releases and personal invitations, the media became very involved with the Blue Ribbon Committee. As the committee struggled with ideas and proposals, so did the media and the public.

Interest continued as the legislation made its way through the General Assembly and continues as the Act is implemented. The Coastal Council employs a public information officer to keep the public informed through personal contact, newspapers, radio stations, wire services, magazines and television stations. The agency keeps a weekly record of all print stories related to coastal issues. The “Weekly News Summary” averages 30 articles per week. This material may be reviewed in the agency’s library.

(ii) Written Materials

Several materials are available to help the public to understand coastal processes and coastal zone management. Agency brochures include “Understanding Our Coastal Environment,” “The South Carolina Coastal Council,” “Public Access Guide to the South Carolina Coast,” and “How To Build A Dune.” In addition, a brochure that explains the Beachfront Management Act in simple terms was produced. Over 7000 copies of “The New Coastal Zone Management Act” were distributed during 1988 and 1989.

The Coastal Zone Management Act of 1977, the Beachfront Management Act of 1988, administrative interpretations, and other implementing materials are also available. The agency's newsletter, "Carolina Currents," contains numerous articles related to beaches and coastal management.

(iii) South Carolina Educational Television

South Carolina's Educational Television produced a comprehensive documentary about coastal processes and the Beachfront Management Act. Copies of the one-hour show are available in the Coastal Council's Charleston office.

(iv) Presentations

Coastal Council staff average two speeches per week. These presentations are usually accompanied by slides and address coastal processes, the functions of the agency, and the Beachfront Management Act. Audiences range from one dozen people to more than 400; groups represented include civic clubs, professional organizations, schools, conference attendees, and homeowners associations.

Staff also invited officials from each coastal community to two Coastal Council sponsored seminars. The seminars defined the role of local government and the state in administering the Beachfront Management Act. Staff also went to each coastal community to meet with appropriate officials.

(v) Future Plans

The public information office will continue to utilize the media, video tapes, written materials, and personal contact to communicate the goals of the agency and the Beachfront Management Act to the public. This communication works both ways; the public information officer and staff will continue to relay the concerns of the public to the Board.

While it is impossible to predict the future, at this point it appears as if beach nourishment, the need for coastal setbacks, and the need to take greater responsibility for the condition of the coast will be the issues of the next five years. The Coastal Council will use every means at its disposal to get the facts behind these issues to the public.

E. Coordination with Local Plans

The Act is very specific in that the management of the beachfront area will be both a local and state responsibility. Local governments are encouraged to develop Beachfront Management Plans that are designed to complement and assist in implementing the policies of the Beachfront Management Act. The law states that in order for a local government to be eligible for beach renourishment bond funds, it must develop and implement a local beachfront management plan.

(1) Requirements of the Local Beachfront Management Plans

The Act specifically lists ten elements that each local plan must address:

- a. An inventory of erosion rate data and processes.
- b. An inventory of public access points, parking and a plan for improving access and parking.
- c. An inventory of all structures located seaward of the setback line.
- d. An inventory of turtle nesting and important habitats of the beach/dune system and protection plan.
- e. A conventional zoning and land use plan consistent with the provisions of this act.
- f. An analysis of erosion control alternatives.
- g. A drainage plan for the area seaward of the setback zone.
- h. A post-disaster plan consistent with the provisions of this act.
- i. A detailed strategy for achieving the goals of this chapter by the end of the 40-year retreat period.
- j. A detailed strategy for achieving the goal of preservation of public access to assure full and complete enjoyment by all residents of this state.

(2) Assistance Provided to Local Governments

(a) Guidelines

During 1989 and 1990, many meetings were held with local government officials and planning staffs to coordinate the development of the State Plan. The guidelines required to be developed as a part of the State Plan were all prepared to meet requirements of the local beachfront management plans and the State Beachfront Management Plan. All guidelines were developed through the public notice provisions of the Coastal Zone Management Act which seek comments from the general public and allow public comment during the meetings. These guidelines have been made available to all local governments as they were adopted.

(b) Mapping

Orthophotographic maps at a scale of 1 inch = 100 feet were purchased and mylar copies given to each local government. These photographic maps show the location of all baselines, setback lines and monitoring stations and are as accurate as any planning maps presently in use. The maps will be the basic unit for mapping and analyzing the elements required for complying with the planning sections of the Act.

(c) Guide Booklet

A guide booklet for development of the local comprehensive plan was prepared by the Council staff in January 1989, and distributed to all local governments. Additionally, a set of model maps based upon a representative orthophotographic map was prepared. This map was used as a sample inventory of structures, erosion control devices, access points, parking, drainage, zoning and endangered species which illustrates the techniques that could be used to inventory and map the different items that the Beachfront Management Act requires to be addressed during the planning processes. A number of follow up meetings have been held with local government planning staffs to coordinate the preparation of these plans.

(d) Plan Adoption

The plans will be prepared by the local governments. Some governments have planning staffs and are capable of producing the plans in-house. Others are in the process of hiring consultants or are working on plans through their regional planning agencies. Once the plans have been prepared and are adopted by their jurisdictional body, they will be submitted to the South Carolina Coastal Council for review and approval. Council staff will review each plan to determine if each of the items specified in the legislation have been addressed and prepare a report summarizing the actions the local government is proposing to take. This report along with the plan will be presented to the Council's Management Committee who will make the final decision as to whether or not the plan meets all of the requirements of the Beachfront Management Act. Approved plans will then be placed upon a 30-day public comment period and follow all procedures specified under R.30-14(A) (Administrative Procedures for Local Beach Management Plan Approval and Amendments.) All plans must be approved and implementation begun before July 1, 1992.

If a local government fails to develop and implement a local Beachfront Management Plan as required under Section 48-39-350, the procedures of R.30-4(B) will be followed.

The following is excerpted from the South Carolina Coastal Council's Regulations for Permitting in Critical Areas of the State's Coastal Zone:

(R.30-14 Administrative Procedures.

A. Procedures for Local Beach Management Plan Approval and Amendments [Section 48-39-350(A)].

(1) South Carolina local governments with jurisdiction fronting the Atlantic Ocean shall submit to Coastal Council by no later than July 1, 1990, a local beach management plan after the local government has afforded the opportunity for adequate public review.

(2) Upon receipt of the local plan, the Coastal Council shall:

- (a) Afford the public a thirty day comment period;
- (b) Afford the opportunity for a public hearing on the local beachfront management plan;
- (c) After considering all comments, approve, modify or remand the local beachfront management plan.

(3) The Coastal Council shall issue a public notice of the approval of any local beach management plan or amendment thereto. The implementation date of the local beach management plan or amendment thereto will be specified in such public notice.

B. Procedures for State Implementation of Local Responsibilities [Section 48-39-350(B)].

(1) If a local government fails to develop and implement a local beach management plan as required by Section 48-39-350, the Coastal Council shall implement the local government's responsibilities by:

(a) Issuing public notice that the Coastal Council has found that the local government has failed to develop and implement a local beach management plan as required;

(b) Carrying out the task enumerated in Section 48-39-350(A)(1-10);

(c) Providing a thirty-day public comment period for public review of Coastal Council's proposed local beach management plan;

(d) Affording the opportunity for a public hearing;

(e) After reviewing all public comments, modify and/or adopt and implement the local plan.

(2) The Coastal Council may delegate responsibility for the implementation of the Coastal Council sponsored and approved local beach management plan to the local government, but the Coastal Council shall have the right to assume responsibility for administering and enforcing the plan if the local government fails to do so.)

F. Guidelines for the Implementation of the Beachfront Management Act

Along with regulations adopted by the legislature, a number of guidelines will be used by the Coastal Council to implement the various provisions of the Beachfront Management Act. The Act, as passed by the legislature, directs both the Council and the eighteen beachfront local government units to consider many issues related to beachfront development and management. These include beach access, protection of sand dunes, beach renourishment, protection of endangered species, and post-disaster planning. Seven specific guidelines were developed by Coastal Council staff, distributed for public comment and adopted by the Council's Management Committee. These guidelines provide many of the procedures and administrative actions that the Council and local governments must act upon to implement a beachfront management strategy. Some of the guidelines provide specific standards for acceptability (such as minimum number of parking spaces for a beach access point); others direct local governments to adopt ordinances controlling one thing or another (such as vehicles on the beach, leash laws, lighting ordinance); still others are strategies which must be followed (such as the mitigation guidelines). All of these guidelines appear in the following sections.

(1) Beach/Dune Restoration and Nourishment

(a) R.30-20 Beach Restoration Fund Statutory Authority

The 1988 Bond Bill, Act 63B of the 1988 South Carolina General Assembly, includes authorization for \$10,000,000 for a Beach Restoration Fund, to be administered by the South Carolina Coastal Council. The Act states that "no state capitol improvement bonds may be issued for beach renourishment projects in the absence of any provisions of law that establishes specific criteria for the distribution of bond proceeds for the projects."

(i) Beach restoration projects will follow a cyclical pattern that is conditioned by the availability of funds. The Council will make an initial announcement when applications are to be submitted. The announcement will specify the time of submission and the format to be used. There will be at least a 90-day period of receiving applications. Projects that are not funded during the initial cycle will be eligible for consideration at the next cycle which will start when additional funds become available. Communities will be given the opportunity to update their applications for subsequent cycles to show any changed conditions.

(ii) Applications for beach nourishment must be submitted to the Coastal Council. The applications will be reviewed by the staff for completeness and eligibility requirements. The applications will then be considered by the Administration and Finance Committee of the Coastal Council, where input from the applicant and the public will be solicited and considered. In evaluating the project applications the Council will be guided by the legislated criteria and guidelines and the following considerations:

1. Environmental impact of the project.
2. Public recreational benefit.
3. Expected useful life of project.
4. Protection benefit of project.
5. Extent of support for projects.

(iii) The Committee will rank the projects in priority sequence and will make a recommendation to the Council. Council approval of the Committee recommendation will establish project priorities and subsequent commitment of funds as funds become available.

(iv) Any eligible local government desiring to submit an application for Beach Restoration Funds should submit a completed permit application to the South Carolina Coastal Council. The following information should be submitted on or attached to the permit application form.

1. The name, address and telephone number of the local government making the application and the name and telephone number of the designated liaison agent.

2. The name, address and telephone number of the project consulting engineer or other agent.

3. A resolution adopted by the applicant's governing body approving the submittal of an application for beach restoration funds, and committing to the local funding requirements necessary to complete the project.

4. The Chief Executive Officer of the governing body should sign the application.

5. A narrative description of the project to include:

- (a) Project limits.

- (b) Quantity of fill.

- (c) Borrow sites.

- (d) Expected design life of project.

- (e) Project construction duration and time of year.

- (f) Estimated first cost and annual maintenance costs.

- (g) A statement as to the source and availability of all local, state, and federal funds for the project.

- (h) Benefits to be realized by the project.

- (i) Environmental impacts.

- (j) Public access to renourished area.

6. Map or maps showing:

- (a) Project site plan and borrow area locations.

- (b) Upland ownership of property, indicating federal, state, local or private ownership.

- (c) Public access points.

- (d) Public parking areas.

- (e) Private parking areas.

- (f) Baseline and setback line(s).

7. Any engineering studies that have been completed concerning the project, and plans for post-project monitoring.

8. Approved beach restoration plan for the community which includes an analysis of beach erosion control alternatives.

(v) All applications will be evaluated to determine if the project meets the minimum regulatory requirements and then ranked on a relative basis according to the five considerations listed in 20.F.

The minimum regulatory requirements are:

1. Prior to July 1, 1991:

(a) a state-approved shorefront management plan or a state-approved local nourishment plan, and

(b) a state and locally approved beach access plan with an implementation schedule. The plan must include an inventory of current access and parking, an analysis of current and future demand, and a strategy for enhancing public access and parking, and

(c) a complete application.

2. After July 1, 1991:

(a) a state-approved beach management plan developed in accordance with Section 48-39-350 of the South Carolina Coastal Zone Management Act, as amended, and

(b) a complete application.

(vi) If the project meets the minimum regulation requirements, the project is then evaluated and ranked using the following considerations:

1. Environmental impact of project.

2. Public recreational benefit.

3. Expected useful life of project.

4. Protection benefit of project.

5. Extent of support for project.

(vii) The execution and administration of the project will be coordinated by the Coastal Council according to regulations of the State Budget and Control Board regarding procurement of architectural/engineering services and for construction of permanent improvements project.

(2) Guidelines for Beach Access Programs

Section 48-39-320(2)(b) of the Beachfront Management Act requires the Council to develop guidelines for the “development of a beach access program to preserve existing public access and enhance public access to assure full enjoyment of the beach by all residents of the State.” Section 48-39-350(2) of the Act further states that local beachfront management plans must contain “an inventory of public beach access and attendant parking along with a plan for enhancing public access and parking.” This plan is to include a “detailed strategy for achieving the goals of preservation of existing public access...” [Section 48-39-350(10)].

The South Carolina Coastal Zone Management Program provides additional guidance in pursuing the development of a public access plan. The Coastal Zone Management Program states that: “Public funds can only be expended for beach or shore erosion control in areas, communities, or on barrier islands to which the public has full and complete access.” (P. IV-64) This policy is further strengthened in the 1988 Bond Bill which requires communities to provide “reasonable public access” in order to qualify for state funding for beach nourishment.

The Council has determined (Coastal Zone Management Program, p. IV-62) that a stretch of beach is accessible to the public if:

(1) Reasonable provision is made for transportation facilities, including automobile parking, boat landings, bicycle racks and/or public mass transit. Facilities must be available on a year-round basis, and fees, if charged, must be nominal and serve only to offset actual costs.

(2) Public walk-ways or access-points to the beach and lateral access to the dry-sand beach are open and readily apparent.

(3) Access to the area is actually sought by members of the general public with reasonable frequency.

The Coastal Zone Management Program further states that: “A ‘stretch of beach’ may be delineated by such factors as physical or geographical boundaries (an inlet or marsh, for example) as well as by jurisdictional borders (municipal limits, for instance). What constitutes “reasonable” for purposes of the preceding definition will be determined in part by the size and population of the surrounding area, the size of the stretch of beach itself, and the availability and nature of upland or marine rights-of-way to the general area of the beach.” (P. IV-62)

(a) Goals

The goals of the South Carolina beach access program are:

- (i) To preserve and enhance existing public access.
- (ii) To increase public access
- (iii) To define “full and complete” access for the purpose of state participation in erosion control and beach management project.

(b) Guidelines

(i) In order for a local beachfront management plan to be approved as consistent with the State Beachfront Management Plan, the community must demonstrate that the public has full and complete access to the beachfront and access facilities as defined in these guidelines.

(ii) In order to be eligible to apply for state funds for erosion control or renourishment or use of other public resources, the local government must demonstrate that: (a) the public has full and complete access to the stretch of beach receiving the benefits, or (b) the local government must demonstrate to the satisfaction of Council the means and commitment to provide such access.

(iii) Each community shall develop a public access plan in accordance with these guidelines and the Guidelines for the Development of Local Beachfront Management Plans.

(iv) Basic criteria for providing full and complete public access are contained in Table 1.

(v) All access points must possess a clear, legal means for demonstrating undisputed use for public access purposes. Prescriptive easements and unsure land claims will not be considered legal access.

(vi) Each access plan must address the provisions of public parking to serve beach access points. All parking must be within 500 feet of the landward most point of access and must be clearly marked. Consideration of parking beyond 500 feet will be made on a case-by-case basis.

(vii) All access points shall be clearly marked with an approved access sign.

(viii) However, in the event that access credit is limited by a physical barrier on either side of an access point, the Council at its discretion may adjust the access credit on the accessible side of the access point.

(ix) Complete and full public access must be obtained through a reasonable mix of access facilities and parking; for example, single access points every $\frac{1}{4}$ mile will not be considered as fulfilling the intent of these guidelines.

(x) Some stretches of beach may possess attributes or constraints which require special consideration in terms of public safety or beach protection. Examples of such areas include dangerous swimming areas, historic or archaeological sites, productive bird nesting or roosting areas, or endangered species habitat. Such areas should be identified in the local beach access plan and special management considerations recommended.

(xi) Some communities may desire to develop certain access areas beyond the minimum requirements. In such cases, the Council will consider granting increased access credits for additional improvements. Each improvement will be evaluated individually on a case-by-case basis.

(xii) Communities may charge reasonable fees in accordance with the service provided for public access.

(xiii) Communities may include access points and public parking facilities provided by hotels and resorts provided they are protected by an undisputed right to public access and the procedures for insuring this right are submitted as a portion of this plan.

Table 1. TYPES OF BEACH PUBLIC ACCESS FACILITIES

TYPE OF FACILITY	DISTANCE ON EITHER SIDE OF ACCESS POINTS WHICH WILL BE CONSIDERED AS FULL AND COMPLETE ACCESS	MINIMUM FACILITIES
Public Access Point	$\frac{1}{8}$ mile	Trash receptical, walk-over/improved surface ac-

TYPE OF FACILITY	DISTANCE ON EITHER SIDE OF ACCESS POINTS WHICH WILL BE CONSIDERED AS FULL AND COMPLETE ACCESS	MINIMUM FACILITIES
Local Public Access Park	¼ mile	cess, signage, on-street parking for 6 vehicles As above, parking for 10 vehicles
Neighborhood Public Access Park	½ mile	As above, parking for 25 vehicles
Community Public Access Park	¾ mile	As above, showers, restrooms, handicapped access and parking for 75 vehicles
Regional Public Access Park	1 mile	As above, parking for 150 vehicles and greater

(3) Guidelines for Maintenance of a Dry Sand and Ecologically Stable Beach

Section 48-39-320(2)(c) of the Beachfront Management Act requires the S. C. Coastal Council to develop guidelines which provide for the “maintenance of a dry-sand and ecologically stable beach.” A combination of measures is required to achieve this objective, to include land use controls, mitigation programs, and beach nourishment. Efforts must be made to prevent, limit and/or discourage the encroachment of development into the beachfront zone, to be combined with an active program to maintain a healthy beach profile through beach maintenance and management. These efforts require a joint state and local commitment.

(a) Land Use Controls

Beachfront communities shall develop a policy of limiting the size of buildings and encouraging building siting away from the beach front (consistent with 48-39-360 Section 1(11), and Section 48-39-360(2), Section 48-39-280(A) of the Beachfront Management Act).

(i) Local zoning ordinances, subdivision regulations and other development regulations must be reviewed with the intent of meeting the policy established in A above.

Land use plans, subdivision regulations and zoning ordinances submitted by local governments under Section 48-39-350(5) must identify means to reduce the front yard setback requirements and increase the rear yard (oceanfront) setback requirement.

Land Use Plans, subdivision regulation and zoning ordinances submitted by local governments under Section 48-39-350(5) must identify means to limit the size of structures in the setback zone. (Local regulations should be consistent with the Beachfront Management Act and limit the size of buildings to smaller than 5000 square feet in area.)

Land use plans, subdivision regulations and zoning ordinances submitted by local governments under Section 48-39-350(5) must identify means to reduce the lot area of impact (percentage of the lot covered by buildings) and provide measures to limit the size of a building footprint on the lot.

Land use plans, subdivision regulations and zoning ordinances submitted by local governments under Section 48-39-350(5) must identify means to restrict the use of impermeable surfaces covering the lot. The use of concrete, asphalt or other hard surfaces for parking areas, sidewalks, decks, patios, etc. is specifically to be discouraged and permitted only when other options are not feasible.

(ii) Local governments must include provisions in land use plans, zoning ordinances, building regulations and subdivision regulations which address structure abandonment and removal from the setback zone. At a minimum, these provisions should include procedures for abandoning existing lots of record, procedures to obtain permits to move buildings, and provisions in building codes requiring buildings to be designed so that they can be removed from existing piling foundations and moved to another location.

(b) Mitigation Measures

Several sections of the Beachfront Management Act require mitigation for unavoidable or allowable impacts to the setback zone. Mitigation may take several forms as defined by the Coastal Council's "Mitigation Policy for Construction Occurring Within the Setback Zone" (approved December 15, 1988). Local governments will examine the potential to use mitigation at the local level, to include:

(i) Use of the mitigation measures required by the State Comprehensive Beach Management Program (Section 48-39-320G) are an incentive to limit the size of buildings within the setback zone. For instance, a higher impact fee or larger scale compensatory mitigation project would be required to construct a large building within the setback zone. Reduced mitigation amounts (both rates and actual fees) could be established for smaller buildings within the setback zone. This would encourage smaller building sizes. These policies can be reflected in the Mitigation Guidelines of the State Comprehensive Beach Management Plan.

(ii) Many of the mitigation requirements of the Beachfront Management Act can be used to maintain a dry and sandy beach. These types of programs include:

Mitigation required for replacement of a habitable structure destroyed beyond repair. The Act requires that the owner of the property being replaced renourishes the beach on an annual basis of not less than one and one-half times the annual erosion rate (structures in an on-going state, local or federal renourishment area exempt). Section 48-39-290(B)(7).

Mitigation required for construction activity taking place within the Beachfront Setback Zone (Guidelines required to be developed by the Council under Section 48-39-320(g)).

Mitigation required for dune destruction. Section 48-39-310 requires that any destruction of beach or dune vegetation seaward of the setback line is prohibited as a part of permit conditions. This mitigation can require new dune construction at a size larger than that which existed prior to development of the property. This type of mitigation can be used to replenish beach sand and provide new dune fields thus assisting in the maintenance of a dry and sandy beach.

Another measure identified in the mitigation policy involves the establishment of a local mitigation program or mitigation bank whereby a monetary value would be established for the impact and the funds would be directed toward a public entity which would utilize such funds for beachfront management and access.

Each beachfront community shall identify the potential and means for establishing such a program locally as a beach resource impact fee, to include authority, administration and management.

(c) Renourishment Programs

(i) It is anticipated that some form of a State renourishment funding program will be used to help maintain a dry and sandy beach. Matching grants will most likely be available to local communities for renourishment projects. A competitive system will be established evaluating the availability of public access, economic feasibility, costs/benefits and environmental effects of each project. The state program will be administered by the Coastal Council under the funding criteria presently being developed. A category awarding communities which promote retreat and limit building sizes to less than 5000 square feet could be established as one of the funding criteria in making grant award decisions.

(ii) Local nourishment programs developed and funded solely by local governments or private developments could be used to maintain dry sand beaches.

(d) Protection of Endangered Species

The Guidelines for Protection of Endangered Species approved by the Council will be used to insure that an ecologically stable beach is maintained. These guidelines will be used by both state and local governments in the review and approval of permitting and certification decisions on the beach front.

(4) Guidelines for the Protection and Restoration of Sand Dunes

Healthy sand dunes provide a buffer between wave attack and beachfront development. It is in the property owner's advantage to maintain healthy dunes, restore eroded or damaged dunes to their natural state and to build new sand dunes where feasible. Protection of this important buffer system

is the responsibility of everyone who manages, visits, or owns property at the beach. Section 48-39-320(2)(d) of the Coastal Zone Management Act, as amended, directs the Coastal Council to develop guidelines for the “protection of all sand dunes seaward of the setback line.”

Any activity that will disturb the beach or dune vegetation within the critical area requires a Coastal Council permit. However, under certain conditions permits may be obtained which may allow disturbance of the dunes within the setback zone (between the setback line and no construction line) provided the disturbance is mitigated. The following guidelines are established for dune protection.

(a) Sand dunes shall not be altered in any form unless there is no feasible alternative to construct projects otherwise allowed under the State Beach Management Program. In such cases, it must be demonstrated that the project to be constructed cannot avoid the sand dune by relocation or realignment on the property or by reduction in size of the construction or other changes to avoid or minimize the impacts.

(b) Where unavoidable infringement in the dune system occurs, the construction must be elevated at least two feet above grade where possible.

(c) Once construction is completed, dunes that were destroyed or damaged, and were not positioned in the footprint of the structure must be restored to their original contours and revegetated. This requirement does not preclude any mitigation specified by the mitigation guidelines.

(d) Sand dunes designated as critical habitat areas in the state or local beach management plan must not be altered for any reason except as allowed in the “Guidelines for the Protection of Endangered Species and Critical Habitat”.

(e) All dune building, restoration, and revegetation must be done in accordance with the “How to Build a Dune” pamphlet provided by the Coastal Council.

(5) Guidelines for Protection of Endangered Species

Section 48-39-320(2)(e) of the Coastal Zone Management Act, as amended, required the Council to develop guidelines to accomplish “the protection of endangered species, threatened species and important habitats, such as nesting grounds.” The guidelines must be coordinated with other state agencies which share a responsibility in the management of endangered species and with the local governments which bear a responsibility for managing many development activities along the beach. As the South Carolina Wildlife and Marine Resources Department and United States Fish and Wildlife Service have overall responsibility for the management of natural predators, relocating nests, artificial hatchery construction, turtle strandings and similar tasks, these management activities will not be addressed in these guidelines. Rather the focus of these guidelines will be on management actions which can be undertaken by the Coastal Council through its permitting and certification authority and actions which the local government can undertake through its local zoning and subdivision authority to protect these animal and plant species from development-related actions.

The Council has identified a number of plant and animal species which have been placed on either federal or state lists as being either endangered or threatened. Both lists use similar definitions to describe each classification. However the listing processes are separate and distinct regulatory processes. Some species listed on the State list might not be listed on the Federal list and vice versa. Under both systems the term “endangered species” means any species which is in danger of extinction throughout all or a significant portion of its range. The term “threatened species” means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. In addition, several other species have been identified as being of special concern to the South Carolina Wildlife and Marine Resources Department because of diminished population, or loss of habitat, food sources or ranging area. Each of the species covered under these guidelines uses the beachfront for either nesting, feeding or habitat purposes. Many other marine species, some of which are classified as being endangered or threatened, also inhabit the offshore section of the coastal zone which extends to the three-mile limit. Because these species do not use the beachfront or come ashore to lay eggs or feed, they have not been listed in these guidelines. The following species have been listed:

Endangered, Threatened & Species of Special Concern Using Beachfront

<u>Name</u>	<u>Status</u>	<u>Habitat/Activity</u>
Loggerhead turtle	threatened, FS	Beaches (nesting)
Eastern brown pelican	species of special concern, S	beaches
Ipswich sparrow (or Savannah Sparrow)	endangered, S	beaches, dunes (wintering)
Least tern	threatened, S	beaches, dunes (nesting)
Wilson's plover	endangered, FS	beaches, dunes (nesting)
Piping plover	endangered, FS	beaches, dunes (wintering)
Island glass lizard	species of special concern, S	dunes
Seabeach Amaranth	species of special concern, S	dunes (plant)

F - Federally Protected Species

S - South Carolina Protected Species

Many of these plants and animals occupy different areas of the coast. Some populate the beaches on the southern part of the coast, others occupy the northern range of the coast. Periods of use also vary by species, some using the beach only during the summer months, others only in winter. Still others occupy the beach all year long. These guidelines have tried to consider the ranges of occupation and periods of use and the recommendations have been shaped accordingly.

(a) Guidelines for the Management of Turtles Using the Beaches

(i) Loggerhead turtle—*Caretta caretta*

This animal is probably the most visibly threatened animal using the coast, the one with which the public is most familiar. It frequents our coast from spring through fall months, with the females coming ashore to lay their eggs along the front beach just above the high tide line. These large turtles, most averaging 200 pounds or more, are found along the entire east coast of Florida, however, areas of South Carolina are also used regularly and frequently.

A number of factors have contributed to the decline of the turtle population resulting in its listing on the threatened species list—the development along the coast, armoring of beaches with rock revetments, disorientation caused by lighting from shorefront urban development, shrimping and fishing trawling and natural predation by raccoons, opossums and other small mammals. The United States' population is presently estimated to be 14,500 nesting females.

(ii) Site Identification

The frequency of beach use by turtles varies from beach to beach along the state's ocean shoreline. Generally, the undeveloped islands in the central portion of the state, contained within the Cape Romain/Santee Delta System have the most heavily used beaches in the state and contain the highest number of turtle nests. Other islands with heavily used beaches that are located outside of the Camp Romain Refuge are Otter, Pritchards and Bay Point Island in Beaufort County, north of Hilton Head, and South Island, Sand Island and Cedar Island near Georgetown.

The Management Policies and Guidelines for loggerhead turtles are proposed for developed or developing beaches only. Many undeveloped beaches have not been impacted by development activity and are held in either federal, state or private foundation holdings. The management of these beaches can and should continue being done by either federal or state wildlife agencies. Beach areas that have not yet been developed but which will be developed in the future are subject to these management guidelines.

Nesting activity in the Grand Strand along the beaches north of Murrells Inlet has been so infrequent that nesting figures have not been recorded and management actions for the protection of loggerhead turtles are not needed. The following communities are exempted from the management guidelines required for protecting loggerhead turtles due to the low probability of nesting: Horry County, North Myrtle Beach, Briarcliff Acres, Myrtle Beach, Atlantic Beach and Surfside Beach.

(iii) Guidelines

The following guidelines are to be enforced for all beaches south of Murrells Inlet:

1. All development projects proposed for construction along the beachfront within the 40-year setback line will be required to include measures eliminating or restricting the use of

artificial lighting along the beachfront side of the buildings. Local governments will adopt and enforce the model beach lighting ordinance (See following Model Ordinance) or a similar model approved by the Council. For local governments not choosing to prepare beachfront management plans, the provisions of this ordinance will be enforced by the Coastal Council by requiring buildings and other structures proposed for construction within the 40-year setback line to be built in accordance with the provisions of this chapter. Developed beach areas not in compliance with the ordinance will be required to bring their lighting into compliance within 5 years.

2. The local government will prohibit vehicles from using the beach during the period of May 15 through October 31 with the exception of essential vehicles as designated by the local government. For areas choosing not to prepare local plans, all vehicles with the exception of essential vehicles (as designated by the Council) will be prohibited from using the beach.

3. Local governments and/or public service organizations are encouraged to coordinate the development of monitoring programs such as “turtle watch” to protect nests in place, count turtle crawls, etc. These programs must be coordinated with the South Carolina Wildlife and Marine Resources Department.

4. Local governments must adopt and enforce leash laws in effect for the period May 15 through October 31 to control and restrict free-roaming dogs and cats on the beachfront. During this period of the year all dogs or cats on the beach must be restricted to a leash and accompanied by a responsible individual.

5. To the extent feasible, renourishment programs will be limited to only the period of the year between November 1 through May 14. In review of renourishment permit applications, the suitability of the renourishment material for turtle nesting will be considered. If necessary, to promote renesting of turtles, provisions requiring tilling or modifications of the texture of the renourishment material will be included as permit conditions. Renourishment applications should include measures to rebuild eroded dunes and revegetate with native materials as needed.

6. Sand fencing must be installed in accordance with the provisions of Coastal Council General Permit number 88-J.

7. Sand spits and offshore sandbars will not be used as borrow sources for renourishment projects if designated as a critical habitat area for an endangered or threatened species.

(b) Guidelines for the Management of Other Endangered Species Using the Beaches (Birds, Reptiles, Plants)

Site Identification

These guidelines are to be implemented along all beachfront areas of the coastal zone by both Council and local governments.

(i) Birds

(1) Brown Pelican—*Pelancus occidentalis*

This bird is found along the eastern coast of the United States from North Carolina to Texas, throughout Mexico and the Caribbean. It is now designated as a species of special concern and in past years has been on the endangered list of both federal and state governments. The reduced population of the birds is due primarily to the ingestion of pesticides and chemicals, most particularly DDT and PCBs. Sand spits and offshore bars are used extensively by pelicans for daily loafing and nocturnal roosting. The preferred sites are isolated sand bars and sand islands which are protected from predatory small mammals. Brown pelicans nest mostly in colonies and during early spring or summer. There are approximately 8,100 breeding pairs in South Carolina.

(2) Ipswich Sparrow—*Passerculus sandwichensis*

This small bird uses the beachfront and sand dunes each winter from early November to May. It tends to frequent undeveloped beaches and dune fields. It is also known as the Savannah Sparrow and has been listed as an endangered species by the State Wildlife Department.

(3) Least tern—*Sterna antillarum*

Terns and gulls are closely related groups of birds, sharing many similar body features and behavioral characteristics. Terns tend to be lighter, faster and more active than gulls. Least terns, a species on the State threatened species list, prefer to nest along beaches covered with shell during the late spring and early summer periods. Competition for nesting space with people, vehicles and predatory animals resulted in their placement on the threatened list. During recent years least terns have begun to nest on gravel covered flat roof tops of large buildings to avoid conflict with competing beach users.

(4) Wilson's Plover—*Charadrius wilsonia*

This small bird inhabits the beaches along most of the Carolina coast from March through October. The Wilson's Plover nests along sparsely vegetated beaches and along islands along the coast. The Wilson's Plover is on the State's threatened species list.

(5) Piping Plover—*Charadrius melodus*

The Piping Plover is a winter inhabitant of the coastal zone from early August to late May. These birds tend to inhabit the dryer portions of the beach and mudflats. The birds nest in late April and continue into the early summer months usually in the high beach area adjacent to the primary dunes. Human activity can disrupt their nesting.

(ii) Reptiles

Island Glass Lizard—*Ophisaurus compressus*

This is a legless lizard that inhabits coastal pine and maritime forests adjacent to beaches. The lizards are found occasionally under wrack and washed up debris along the shoreline. The lizard is currently listed as a species of special concern by the State of South Carolina.

(iii) Plants

Seabeach Amaranth—*Amaranthus pumilus*

This plant is found only on barrier island beaches and sand dunes and is listed as a species of special concern by the South Carolina Wildlife and Marine Resources Department. It is found along the east coast in eight states from Massachusetts to South Carolina. Fifty-one (51) recorded sites have been identified, 25 are considered extirpated (destroyed), 7 are of undetermined status and only 19 are still present. It occurs on beaches, primary dunes, overwash flats and generally grows in the wrack zone below the spring tide line.

(iv) Guidelines

1. The South Carolina Wildlife and Marine Resources Department will periodically survey the coast for active nesting areas, active areas of critical food source, and specific areas of habitat for endangered and threatened species.

2. Such areas identified by South Carolina Wildlife and Marine Resources Department will be delineated on a 7 ½ minute quadrangle. The South Carolina Coastal Council will be notified and provided with a copy of the delineation map and management recommendation necessary to protect the endangered or threatened species.

3. Postage of the designated area will be accomplished by local government in cooperation with the South Carolina Wildlife and Marine Resources Department with an appropriate buffer and at an appropriate spacing around the site. Signs will be one of two types, as appropriate:

a. Critical Habitat Area—Leash Law in effect beyond this point.

b. Critical Habitat Area—no trespassing beyond this point from April 1–September 1—Leash law in effect.

4. Local governments must adopt and enforce ordinances as needed to protect the species to:

a. Require all pets to be restricted by a leash in designated areas.

b. Allow no trespassing during critical seasons in designated areas.

c. Prohibit disturbance of vegetation.

5. South Carolina Wildlife and Marine Resources Department will re-inspect designated sites periodically for continued use. Sites no longer used will be delisted. South Carolina

Wildlife and Marine Resources Department will notify the South Carolina Coastal Council of areas no longer designated as critical habitat.

6. South Carolina Wildlife and Marine Resources Department and South Carolina Coastal Council will assist local governments as appropriate in implementation of management policy.

7. Areas designated as critical habitat areas will become Geographic Areas of Particular Concern (GAPCs) under the Coastal Zone Management Program and be managed through the South Carolina Coastal Council's permitting and certification review process.

8. Renourishment projects will be designed so that endangered or threatened species critical habitat will not be impacted. To the extent feasible, renourishment projects will not be undertaken during the primary use period of endangered or threatened species and habitat areas will be restored after renourishment projects have been completed.

9. Sand spits and offshore sandbars will not be used as borrow sources for renourishment projects if designated as a critical habitat area for an endangered or threatened species.

(c) Model Ordinance

Beach Lighting Ordinance

An Ordinance Relating to the Protection of Sea Turtles Creating a New Section of the Code of Ordinances for (name of beach community); Restricting Outdoor Lighting in Beach Areas Named Herein; Providing for Enforcement, Penalty and Providing an Effective Date.

Whereas, the (name of beach community) beaches serve as nesting habitat for sea turtles; and

Whereas, coastal development threatens the survival of turtle hatchlings because the artificial light causes disorientation in young hatchlings; and

Whereas, the sea turtle is an essential member of the food chain and has been identified as a threatened and endangered species; and

Whereas, the protection of sea turtle hatchlings is of significant public interest; and

Whereas, this Ordinance is necessary to protect the natural reproductive cycle of the sea turtle during the nesting and hatching season which runs from May 1 through October 31 of each year.

Now, therefore, be it ordained by the (governing body) of (name of beach community), that:

Section 1. A section of the code of ordinances for (name of beach community), is hereby created to read as follows:

Section 1. Definitions. For the purpose of the Ordinance, the following terms shall have the meaning set forth in this Section.

A. Artificial light: Any source of light emanating from a manmade device, including but not limited to, incandescent mercury vapor, metal halide, or sodium lamps, flashlights, spotlights, street lights, vehicular lights, construction or security lights.

B. Beach: That area of unconsolidated material that extends landward from the mean low water line to the place where there is a marked change in material or physiographic form, or to the line of permanent vegetation (usually the effective limit of storm waves).

C. Floodlight: Reflector type light fixture which is attached directly to a building and which is unshielded.

D. Low Profile Luminaire: Light fixture set on a base which raises the source of the light no higher than forty-eight (48) inches off the ground, and designed in such a way that light is directed downward from a hooded light source.

E. New Development: Shall include new construction and remodeling of existing structures when such remodeling includes alteration of exterior lighting.

F. Person: Any individual, firm, association, joint venture, partnership, estate, trust, syndicate, fiduciary, corporation, group or unit or federal, state, county or municipal government.

G. Pole Lighting: Light fixture set on a base or pole which raises the source of the light higher than forty-eight (48) inches off the ground.

H. Solar Screen: Screens which are fixed installations and permanently project shade over the entire glass area of the window. The screens must be installed outside of the glass and must:

1. Have a shading coefficient of .45 or less, and
2. Carry a minimum five-year warranty, and
3. Must have performance claims supported by approved testing procedures and documentation.

I. Tinted or Filmed Glass: Window glass which has been covered with window tint or film such that the material has:

1. A shading coefficient of .45 or less, and
2. A minimum five-year warranty, and
3. Adhesive as an integral part, and
4. Performance claims which are supported by approved testing procedures and documentation.

J. Shading Coefficient: A coefficient expressing that percentage of the incident radiation which passes through the window as heat.

Section 2. Purpose. The purpose of this Ordinance is to protect the threatened and endangered sea turtles which nest along the beaches of (name of beach community), by safeguarding the hatchlings from sources of artificial light.

Section 3. New Development. It is the policy of the (name of beach community) (governing body) that no artificial light illuminate any area of the beaches of (name of beach community). To meet this intent, building and electrical plans for construction of single family or multi-family dwellings, commercial or other structures including electrical plans associated with parking lots, dune walkovers or other outdoor lighting for real property if lighting associated with such construction or development can be seen from the beach, shall be in compliance with the following:

A. Floodlights shall be prohibited. Wall-mounted light fixtures shall be fitted with hoods so that no light illuminates the beach.

B. Pole lighting shall be shielded in such a way that light will be contained within an arc of three (3) to seventy-three (73) degrees on the seaward side of the pole. Outdoor lighting shall be held to the minimum necessary for security and convenience.

C. Low profile luminaries shall be used in parking lots and such lighting shall be positioned so that no light illuminates the beach.

D. Dune crosswalks shall utilize low profile shielded luminaries.

E. Lights on balconies shall be fitted with hoods so that lights will not illuminate the beach.

F. Tinted or filmed glass shall be used in windows facing the ocean above the first floor of multi-story structures. Shade screens can be substituted for this requirement.

G. Temporary security lights at construction sites shall not be mounted more than fifteen (15) feet above the ground. Illumination from the lights shall not spread beyond the boundary of the property being developed, and in no case shall those lights illuminate the beach.

Section 4. Exemptions for New Development. The provisions of Section 3 of this Ordinance shall not apply to any structure for which a building permit has been issued by the (name of beach community) County Building Official, prior to the effective date of this Ordinance.

Section 5. Existing Development. It is the policy of the (name of beach community) (governing body) that no artificial light illuminate any area of the beaches of (name of beach community), South Carolina. To meet this intent, lighting of existing structures which can be seen from the beach shall be in compliance with the following within six (6) months of the effective date of this ordinance.

A. Lights illuminating buildings or associated grounds for decorative or recreational purposes shall be shielded or screened such that they are not visible from the beach, or turned off after 10:00 p.m. during the period of May 1 to October 31 of each year.

B. Lights illuminating dune crosswalks of any areas oceanward of the dune line shall be turned off after 10:00 p.m. during the period of May 1 to October 31 of each year.

C. Security lighting shall be permitted throughout the night so long as low profile luminaries are used and screened in such a way that those lights do not illuminate the beach.

D. Window treatments in windows facing the ocean above the first floor of multi-story structures are required so that interior lights do not illuminate the beach. The use of black-out draperies or shade screens are preferred. The addition of tint or film to windows or awnings is also encouraged, as is turning off unnecessary lights if the light illuminates the beach.

Section 6. Publicly Owned Lighting. Street lights and lighting at parks and other publicly owned beach access areas shall be subject to the following:

A. Whenever possible, street lights shall be located so that the bulk of their illumination will travel away from the beach. These lights shall be equipped with shades or shields that will prevent backlighting and render them not visible from the beach.

B. Lights at parks or other public beach access points shall be shielded or shaded or shall not be utilized during the period May 1 to October 31 of each year.

Section 7. Enforcement and Penalty. This Ordinance shall be enforced in accordance with the provisions of Article _____, Chapter _____ of the Code Enforcement Board, with the penalties set forth in Section _____ of the Code.

Section 8. Effective Date. This Ordinance shall take effect pursuant to law.

Attest:

(governing body)
OF (name of beach community)

(6) Guidelines for the Regulation of Vehicular Traffic Upon the Beaches and the Beach/Dune System

Section 48-39-320(2)(f) of the Coastal Zone Management Act, as amended, requires the State to develop guidelines to accomplish the “regulation of vehicular traffic upon the beaches and the beach/dune system which includes the prohibition of vehicles upon public beaches for nonessential uses.” The guidelines must be coordinated with appropriate agencies and local governments. The following basic guidelines are established:

- (a) Vehicle shall be defined as any motorized vehicle with wheels or tracks.
- (b) No vehicle will be allowed in the dune system or in any vegetated areas.
- (c) Vehicles are prohibited upon public beaches for non-essential uses. Essential uses shall be defined by the local community.
- (d) Access for essential uses is restricted to authorized access points designated by local government in the local beach access plan.
- (e) No restrictions established herein or by local governments shall prohibit the use of motorized wheelchairs and similar transportation by handicapped individuals.

G. Mitigation Policy for Construction Occurring Within The Setback Line*

Section 310 of the legislation states that “the destruction of any beach or dune vegetation seaward of the setback line is prohibited, unless there is no feasible alternative. Where there is destruction of vegetation permitted seaward of the setback line, mitigation for the destruction is required as part of the permit conditions.” In addition, Section 48-39-320(g) of the South Carolina Coastal Zone Management Act, as amended, requires the Coastal Council to develop “a mitigation policy for construction allowed seaward of the setback line, which must include dedication of public access ways, nourishment, vegetation, and other appropriate means.”

(1) Guidelines

The Beachfront Management Act requires mitigation for destruction of vegetation and for construction taking place seaward of the setback line. The types of construction that require mitigation include the following:

- (a) New construction of habitable structures.
- (b) Replacement of habitable structures.

(c) Renovated structures where the footprint of the building is expanded beyond that which existed prior to July 1, 1988.

(d) Sidewalks/boardwalks.

(e) Decks, gazebos and similar structures.

(f) Drainage structures.

(g) Utility services lines and accessory features.

(h) Parking facilities.

(i) Septic tanks.

(j) Other construction activities as specified in Section 300 of the Beachfront Management Act.

The mitigation will, unless otherwise agreed to by the Coastal Council, take one of the following forms. The applicant may choose the form of mitigation provided the design is acceptable to the Council under the given conditions: Dedication of new public accessways or expanding and improving existing accessways; Additional beach nourishment; Dune enhancement or revegetation; Reservation of parking spaces for use by the general public; Participation in a state or Coastal Council approved local beach mitigation program; Participation in a state or local program to protect or enhance management of endangered or threatened species of plants and animals found along the beachfront.

(2) Destruction of Beach/Dune Vegetation

(a) Section 48-39-310

The destruction of any beach or dune vegetation seaward of the setback line is prohibited unless there is no feasible alternative. When there is destruction of vegetation permitted seaward of the setback line, mitigation for the destruction is required as a part of the permit conditions.

(b) Mitigation

Mitigation may take the form of creating new areas of beach or dune vegetation on-site or at a different oceanfront location in the general vicinity of the project. These areas approved for revegetation must be determined to be appropriate sites for the proposed revegetation and a plan must be submitted and approved by Council staff. A minimum mitigation ratio of 2 to 1 must be achieved by each project. Vegetated areas destroyed by construction within the setback line must be replaced by a vegetated area at least twice as large as the impacted area. Revegetation may only be used to mitigate dune or beach vegetation losses associated with unavoidable construction. Additional mitigation measures may be required for other forms of encroachment within the setback zone by the Council. Each application will be individually reviewed and evaluated.

(c) Mitigation Policy for Construction Seaward of the Setback Line

Section 48-39-320 requires that the Beach Management Plan include:

(2) development of guidelines and their coordination with appropriate agencies and local governments for the accomplishment of:

(g) development of a mitigation policy for construction allowed seaward of the setback line, which must include dedication of public accessways, nourishment, vegetation and other appropriate means.

(d) Determination of Policy Application

The Coastal Council will undertake the following steps in applying the mitigation policy:

(i) Step 1: The Council must make a determination that the construction activity will have a negative impact on one or more of the following beach processes: Public access; Beach movement; Sand budget; Beach vegetation; Dune fields; Endangered or threatened plants or animals.

If no negative impact is determined, mitigation will not be required.

(ii) Step 2: The applicant will be given the opportunity to suggest mitigation measures for the construction activity in accordance with the mitigation guidelines prepared by the Council and identify which measures will be complied with. Failure to receive approval for a mitigation plan for activities subject to permitting will result in denial of the permit.

(iii) Step 3: The Council staff will monitor the project through completion to determine that the mitigation requirements have been met.

(3) Mitigation Alternatives

(a) Dedication of Public Accessways.

A 10-foot wide beach access easement or right of way running from a public right-of-way to the mean high water line may be dedicated for public use. Beach accessways must be drawn on plats and recorded in the county land records office. All accessways must be posted with a sign or marker approved by the S. C. Coastal Council indicating the presence of a public access way. The individual property owner or local government will be responsible for maintaining the accessway and signage or marker. Maintenance responsibility will be determined and agreed to by all parties prior to acceptance of the accessway.

The Coastal Council's staff or permitting committee will evaluate the number of access points necessary as mitigation for each construction project negatively impacting the beach or its use seaward of the setback line. Larger scale projects with more extensive alterations seaward of the setback line may be required to designate more than one accessway.

(b) Beach Nourishment.

Mitigation may take the form of renourishing the beach or placing sand on the beachface in larger amounts than that which would be required by other provisions of the Beachfront Management Act. In these cases a minimum of two (2) cubic yards of sand per oceanfront foot of property may be accepted for mitigation. The Council's geologist and permitting committee will make the decisions on the appropriateness of each application. This type of mitigation will only be accepted on eroding beaches, and any renourishment material must be of a compatible sand material. Off-site mitigation may be considered by the Council if appropriate; however, mitigation will be accepted only in areas where it will be determined to be beneficial to the beach/dune system and will have a lasting effectiveness on protecting the beach. The beach profile must be maintained for a period of five (5) years.

(c) Dedication of Off-Street Parking Spaces.

The dedication of land for off-street public parking may be an acceptable form of mitigation for coastal construction within the setback zone. In all cases, parking areas must be within 1000 feet of the beachfront and be located in close proximity to existing or proposed beachfront accessways and must not negatively impact dunes or beach vegetation. The land to be dedicated for public parking areas must either be donated fee simple to a local government (or state agency such as Parks, Recreation and Tourism) or an easement providing for a certain number of parking spaces must be recorded in the county records office. Signs or other markings must be used to indicate that public parking is available. The local government must approve that additional parking is needed and appropriate for the area. The amount of land required to be set aside to serve as mitigation will be ruled on individually by Coastal Council. Specific proposals will be made for each application.

(d) Dune Creation.

Mitigation may take the form of creating new dune fields in areas where a positive benefit may be achieved. These areas proposed for new dune field construction must be accompanied by a plan for constructing and revegetating and submitted to Council staff for approval. All created dunes must be of a height and width adequate for mitigation and typical for the area as determined by Council staff.

(e) State/Local Beach Mitigation Program

The applicant may participate in a state or local mitigation program, if such a program is available; whereas, a one-time fee would be assessed in lieu of mitigation on the property.

(i) Mitigation rates for construction seaward of the setback zone will be based upon a square foot price—in other words, each square foot of encroachment into the setback zone will require payment of a fee for impact of construction within the setback zone, for example \$1.00 per square foot of impact. However, the specific amounts must be established by the unit of government administering the program.

(ii) The mitigation fee will be payable to the unit of government administering the program prior to issuance of the permit.

(iii) A local government, regional government, state agency, or branch of the federal government may petition the Coastal Council and request to be designated as the entity to be responsible for implementing, administering and maintaining the local beachfront mitigation program within a specific area. The governmental body must have a specific beach management or access program underway.

(iv) Funds collected through the state or local mitigation program may be used for: Community beach nourishment projects; Construction and revegetation of new dunes and dune fields; Acquisition of unbuildable lots for public access projects; Construction of dune walkovers, access ways, and emergency access points; Acquisition and development costs for construction or enhancement of beachfront parks, public accessways or similar facilities; Construction of buildings and facilities associated with beachfront parks; Acquisition of property for public parking lots; Services for the beachfront including lifeguards, police patrols, trash pick-up, etc; Construction and development of public oceanfront fishing piers.

(v) Coastal Council staff will monitor the beach mitigation programs and make periodic reports on the status of programs to the Administration and Finance Committee.

Table 6. Beachfront Community Management Plans

Community	Plans Developed
HORRY COUNTY	Yes
CHARLESTON COUNTY	No
PAWLEYS ISLAND	Yes
MYRTLE BEACH	Yes
SULLIVANS ISLAND	Yes
GEORGETOWN COUNTY	Yes
NORTH MYRTLE BEACH	Yes
ISLE OF PALMS	Yes
COLLETON COUNTY	No
SURFSIDE BEACH	Yes
EDISTO BEACH	Yes
BEAUFORT COUNTY	Yes
HILTON HEAD ISLAND	Yes
ATLANTIC BEACH	Yes
FOLLY BEACH	Yes
SEABROOK ISLAND	Yes
BRIARCLIFFE ACRES	No
KIAWAH ISLAND	Yes

H. Methodology and the Generation and Adoption of Baselines and Setback Lines

(1) The Beach Management Act defines three types of beach zones. Standard Erosion Zones are relatively straight shoreline segments resulting from uniform processes and sediment flow. Inlet Erosion Zones include beaches at or near inlets which are influenced by the erosion pattern of the inlet. These Inlet Erosion Zones are further divided into Unstabilized Inlet Erosion Zones and Stabilized Inlet Erosion Zones. Stabilized Inlet Erosion Zones have been armored or stabilized and are regulated as Standard Erosion Zones.

(2) In Standard Erosion Zones, the baseline is the crest line of the primary dune. If there is no natural primary dune then its location can be determined based on existing natural dunes in the area. Natural dunes are surveyed at Coastal Council monitoring stations. An average or "ideal" dune is calculated and superimposed on beaches without natural dunes. Baselines are determined the same way in Stabilized Inlet Erosion Zones. However, in Unstabilized Inlet Erosion Zones the baseline is simply the most landward position of the shoreline in the most recent 40 years. This is determined by the Coastal Council staff using representative aerial photography.

(3) The Coastal Council's permitting jurisdiction on beaches is determined by the location of the setback line. Measured landward from the baseline, the setback line is located at a distance 40 times the annual erosion rate (or at least 20 feet). For instance, if the erosion rate is two feet per year the setback line is eighty feet landward of the baseline.

(4) Erosion rates are determined by the historic trend. This is usually done by comparing shoreline location on aerial photography. However, for a variety of natural and man-made reasons, the long-term trend may change. The past forty years may not be indicative of the present condition of the beach. In these cases the results of the semi-annual beach surveys are more heavily relied upon to determine the erosion rate. Table 7 shows the erosion rates by S. C. Coastal Council stations that have been adopted for each community along the coast.

(5) Reports were generated for each beach and contain specific information regarding how and where lines were set, how zones were determined and how erosion rates were calculated. These reports were provided to all of the local governments along the beachfront to use in the preparation of their local shorefront management plans. Beachfront erosion rates are an integral part of each local shorefront management plan and, in turn, the State Comprehensive Management Plan. To satisfy this need for data at the local level, reports were sent by the Coastal Council staff to each government. These reports contained information regarding the following coastal processes: Beach Profiles, Hurricanes and Storms, Inlet Dynamics, Littoral Transport, Sediment Budget Analysis, Erosion Analysis and Shoreline Changes.

(6) In June of 1988, the Coastal Council adopted interim baselines and setback lines. These were based upon National Ocean Service Shoreline Change Maps and the best available data to date. In accordance with the Beachfront Management Act, the staff of the Coastal Council had two years to redefine the lines and erosion rates for accuracy. On a staggered schedule, these line revisions were brought before the Council by island or beach community. As all line revisions were consistent and in accordance with Section 48-39-280 of the Beach Management Act, they were adopted as new interim lines. Effective July 2, 1990, all developed beaches had updated lines. Due to legislative changes, the date for adoption of final lines was changed from July 1990 to July 1991. The final lines must then be reset over a period not less than eight years and not more than ten years from the date of the last line approval.

(7) The above described effort by the Coastal Council results in a set of maps for each beach which depict line locations, erosion rates and other data. Also, the line reports which describe the procedural methods used to establish the location of the baseline and erosion rates for each beach are available upon request from the Coastal Council offices.

(8) This information will assist planners at the local government level in evaluating their coastal resources, anticipating the effects of long-term erosion and natural disasters and otherwise fulfilling their requirements in the local shorefront management plan. Local planning staffs and building officials were also provided with copies of orthophoto maps and are always notified of any changes in lines determined by the Council.

(9) Local shorefront management plans shall be updated every five years in accordance with the Act. Information which is subject to change, such as erosion trends, storm effects, etc., shall be provided to each local government by the Coastal Council in updated reports which document the changes or new information developed through ongoing surveys or additional studies. This information, which includes beach profile survey information, hydrographic studies or special surveys will be sent to local governments as it is compiled, verified for accuracy, and recorded.

Table 7

S.C. Coastal Council Adopted Erosion Rates/By Station/
Used to Establish Line Locations.

DAUFUSKIE ISLAND

<u>MONUMENT</u>	<u>SHORELINE CHANGE RATE</u>
1380	-0.7
1360	-5.2
1340	-9.0
1320	-11.1
1300	-10.1
1165	-5.0
1167	-4.2
1170	-4.2
1172	-3.7

<u>MONUMENT</u>	<u>SHORELINE CHANGE RATE</u>
1175	-3.8
1177	-4.0
1180	-4.2
1182	-4.8
1185	-5.8
1186	-6.2
1187	-7.1
1188	-7.6
1189	-8.4
1190	-7.8
1191	-6.6
1192	-6.2
1193	-5.7
1194	-5.0
1195	-4.3
1196	-3.1
1197	-1.4

HILTON HEAD ISLAND

<u>MONUMENT</u>	<u>SHORELINE CHANGE RATE</u>
1400	S/A
1403	S/A
1406	S/A
1409	S/A
1412	S/A
1415	S/A
1418	S/A
1421	S/A
1424	+1.7
1427	+4.3
1430	+0.6
1433	+0.7
1436	-0.6
1439	-1.6
1442	-2.7
1445	-4.1
1448	-4.3
1451	-5.3
1454	-5.4
1457	-5.9
1460	-6.0
1463	-5.8
1466	-5.5
1469	-1.3
1472	S/A
1475	+2.2
1478	+2.6
1481	S/A
1484	S/A
1487	S/A
1490	-5.75
1493	-5.75
1496	-5.75

BAY POINT ISLAND

The downcoast portion of the island is accretional. Along the upcoast portion of the island, the erosion rate varies from -18 to -25 ft/yr. Refer to orthophotograph sheet 199 for exact rates on Bay Point Island.

ST. PHILLIPS ISLAND

The erosion rate for St. Phillips Island is -4 ft/yr.

LITTLE CAPERS ISLAND

The erosion rate on Little Capers Island is -25 ft/yr.

FRIPP ISLAND

All of Fripp Island has been classified as stable or accretional.

PRITCHARDS ISLAND

The inlet zone at the southwest end of the island has an erosion rate of -11.54 ft/yr. Along the central portion of the island, the erosion rate ranges from -8.69 to -11.54 ft/yr. The inlet zone at the northeast end has an erosion rate ranging from -7.65 ft/yr. to accretional. Refer to orthophotograph sheets 167, 168, and 185 for exact rates on Prichards Island.

HUNTING ISLAND

<u>MONUMENT</u>	<u>SHORELINE CHANGE RATE</u>
1800	-7
1810	-7
1820	-12.3
1830	-15.5
1840	-14.5
1850	-13
1860	-12
1870	-10
1880	-6
1890	0.0
1895	+2.0

HARBOR ISLAND

All of Harbor Island is classified as stable or accretional.

EDISTO BEACH

<u>MONUMENT</u>	<u>SHORELINE CHANGE RATE</u>
2110	+3.0
2115	+3.0
2130	+3.0
2140	+3.0
2150	+3.0
2160	+3.0
2170	+0.4
2180	+0.4
2190	+0.4
2195	+0.4
2200	+0.4
2210	+0.4
2230	+0.4
2250	+0.4

EDDINGSVILLE BEACH

The erosion rate for Eddingsville Beach varies from $-.13$ to -9 ft/yr. Refer to orthophotograph sheet 95 for specific rates.

SEABROOK ISLAND

MONUMENTSHORELINE CHANGE RATE

CSE 1	0
CSE 2505	-0.9
CSE 2A	-1.8
CSE 2510	-2.6
CSE 3	-2.6
CSE 4	-2.6
2520	-2.6
CSE 2523	-2.6
2525	-2.6
CSE 4A	-2.6
2527	-2.6
2530	-2.6
CSE 2532	-2.6
CSE 5A	-2.6
2545	0
2555	0
2565	0
2575	0

KIAWAH ISLAND

MONUMENTSHORELINE CHANGE RATE

2625	+2.5
2630	+0.04
2635	-0.06
2640	-0.28
2645	-0.53
2660	-0.68
2662	-0.91
2665	-1.25
2675	-1.45
2680	-1.32
2682	-0.98
2685	-0.50
2687	-0.50
2690	-0.50
2692	-0.50
2695	-0.50
2700	-0.50
2705	-0.50
2715	-0.50
2720	-0.50
2722	-0.50
2725	-0.50
2730	-0.50
2735	-0.50
2740	-0.50
2745	-0.50
2750	-0.50
2760	-0.50
2765	-0.50
2770	-0.50
2775	-0.50
2777	-0.50
2780	-0.50
2785	-0.50
2790	-0.50
2792	-1.64
2793	-5.36
2795	-12.63

MORRIS ISLAND

The erosion rate on Morris Island varies from -6 to -19.5 ft/yr. Refer to the map of Morris Island for specific rates.

SULLIVANS ISLAND

<u>MONUMENT</u>	<u>SHORELINE CHANGE RATE</u>
3010	S/A
3020	S/A
3035	S/A
3050	S/A
3065	S/A
3080	S/A
3090	-2.6
3095	-2.6

ISLE OF PALMS

All of the Isle of Palms is classified as stable or accretional.

DEWEES ISLAND

The erosion rate along the central portion of Dewees Island is -10.3 ft/yr., tapering to -5.2 ft/yr. at each end. Refer to orthophotographs 502–504 for specific rates.

DEBIDUE BEACH

<u>MONUMENT</u>	<u>SHORELINE CHANGE RATE</u>
4105	-11.5
4110	-11.0
4115	-10.8
4120	-10.0
4125	-8.8
4130	-6.6
4140	-2.0
4150	$+0.4$
4160	$+1.7$
4170	$+1.7$
4180	$+3.8$

PAWLEYS ISLAND

<u>MONUMENT</u>	<u>SHORELINE CHANGE RATE</u>
4200	$+0.7$
4203	$+0.7$
4205	$+0.7$
4210	$+0.7$
4215	$+1.2$
4220	$+1.2$
4230	$+1.2$
4240	$+1.2$
4245	$+1.2$
4260	$+1.2$
4270	$+1.2$
4275	$+1.2$
4280	$+1.0$
4290	$+1.0$
4295	$+1.0$

LITCHFIELD BEACH AND HUNTINGTON BEACH STATE PARK

At Inlet Point South, at the southern end of Litchfield Beach, the erosion rate is -1.7 ft/yr. From monument 4320 to 4330, the erosion rate changes from -1.7 ft/yr. to stable. The area

north of monument 4330, which includes all of North Litchfield and Huntington Beach State Park, is classified as stable.

GARDEN CITY

<u>MONUMENT</u>	<u>SHORELINE CHANGE RATE</u>
4800	0
4900	0
4905	- 1.5
4910	- 1.5
4915	- 1.5
4920	- 1.5
4925	- 1.5
4030	- 1.5
4935	- 1.5
4940	- 1.5
4950	- 1.5
4955	- 1.5
4965	- 1.5
4970	- 1.5
4975	- 1.5
4980	- 1.5
4999	- 1.5
5000	- 1.5
5005	- 1.5
5010	- 1.5
5015	- 1.5
5020	- 1.5
5025	- 1.5
5030	- 1.5
5035	- 1.25

SURFSIDE BEACH

All of Surfside Beach, from monuments 5100 through 5195, has an erosion rate of -0.9 ft/yr.

OCEAN LAKES

All of unincorporated Horry County, from monuments 5200 through 5280, has an erosion rate of -0.9 ft/yr.

MYRTLE BEACH

All of Myrtle Beach, from monuments 5300 through 5480, has an erosion rate of -0.68 ft/yr.

DUNES/BRIARCLIFF

The region between monuments 5500 and 5590 has a uniform erosion rate of -0.6 ft/yr.

NORTH MYRTLE BEACH

All of North Myrtle Beach has an erosion rate of -0.4 ft/yr.

WAITES ISLAND

<u>MONUMENT</u>	<u>SHORELINE CHANGE RATE</u>
5900	S/A
5905	- 3.2
5915	- 7.0
5930	- 9.5
5945	- 9.4
5960	S/A

I. Methods for Reviewing the Plan

(1) The Beachfront Management Act requires that the State plan and local plans be reviewed and updated every five years.

The reviews can be done to take advantage of changes in the plan caused by:

- (a) Natural events such as hurricanes, northeast storms and other weather events.
- (b) Increases or decreases in erosion rates (after July 1, 1991, the lines can only be changed every 8–10 years).
- (c) Man-made actions resulting in changes to the area seaward of the setback line.
- (d) Opportunities to take advantage of situations or new information that did not exist when the plan was being prepared.

(2) The process for updating the State plan or any local plan will be the same as the process required for the initial adoption of the plan.

HISTORY: Added by State Register Volume 17, Issue No. 5, Part 1, eff May 28, 1993.

Editor's Note

The comprehensive Beachfront Management Plan sets forth the criteria for long-range and comprehensive beach management plan for the Atlantic Ocean shoreline in South Carolina. The plan includes all requirements set forth in Section 48-39-320.