Climate Change, Beach Erosion and Beachfront Regulation

By Mary Shahid, Angelica Colwell and Kara Grevey

The South Carolina Department of Health and Environmental Control (DHEC) will be embarking on a legislative initiative to amend S.C. Code Ann. §§ 48-39-250 et seq., the Beachfront Management Act (BMA), based on action taken this summer by the agency’s governing Board. The Board provided approval to its staff to begin drafting revisions to the BMA that incorporate recommendations of the Blue Ribbon Committee on Shoreline Management (BRC). The BRC was created by DHEC in 2010 to review the adequacy of the BMA “to ensure the long-term health and sustainability of our coastal resources and the communities that are dependent on them.” The final report of the BRC was made available in February of 2013 and addressed the challenges that have begun to emerge along the beachfront. These challenges include chronic erosion and sea level rise.

South Carolina boasts 187 miles of Atlantic Ocean shoreline, 114 of which are accessible to the public. While the state’s coast is characterized by pristine white beaches and rolling sand dunes, the coastline itself is in a constant state of flux due to a common coastal process—beach erosion. Generally, areas that are erosional over the long-term have experienced both increases in human development and sea level rise, the two leading causes of beach migration. Tide gauges show that sea level has risen an average of 1.7 mm a year during the 20th century. Satellite data indicates an even larger increase of 3.17 mm a year since 1993. Recent studies have suggested sea level rise by the end of the century as being close to a meter or more. South Carolina is not exempt from the global trend. Sea level in the Charleston area has risen nearly a foot during the last century.

A rise in sea level may have various consequences. First, beaches and marshes adjacent to development may experience increased flooding. In addition, sea level rise has the potential to magnify the impacts of storms by raising the water level that storm surges affect. Storm surges already pose a threat to coastal regions, flooding low-lying areas, damaging property values and destroying habitats. Yet sea level rise has not been a deterrent to growth and development in South Carolina’s coastal counties. From 1990 to 2000, more than one-fourth of the state’s growth (28.1 percent) occurred in the eight coastal counties. The most recent census data indicates South Carolina’s coast now has three of the nation’s fastest growing counties and three of its fastest growing municipalities. Nor has the threat of sea level rise impacted coastal property values. In 2007 the average cost of a home on Sullivan’s Island was $905,000. Now values have increased as much as 60 percent to $1.5 million.
These trends and concerns prompted the BRC to offer 16 recommendations. The Board adopted eight of the 16 recommendations, all of which would require either a statutory amendment to the BMA or to regulations. Certain recommendations of the BRC as adopted by the Board will, at best, interfere with investment-backed expectations or cause a temporary or partial loss of use of valuable property and, at worst, lead to a denial of all economically viable use of valuable property. These include a restriction on seaward movement of the baseline and on construction of habitable structures on renourished shorelines. In addition, the Committee recommends removal of local governments from their traditional role of identifying storm-related emergency events and restricts oceanfront golf course construction. These additional recommendations warrant scrutiny from a public policy and economic perspective.


The baseline is a jurisdictional boundary line established by DHEC. The baseline is set on the landward crest of the primary oceanfront sand dune or at the most landward point of erosion at any time during the past 40 years. Since the adoption of the BMA in 1988, property owners are required to disclose the location of the baseline in any deed or purchase contract for oceanfront property. Prospective purchasers who seek information regarding the impact of the baseline on an oceanfront lot learn that the baseline and another jurisdictional line, the setback line, are reviewed and revised every eight to 10 years to reflect both erosional and accretional trends. Consequently, a property owner has a reasonable expectation of seaward movement of the baseline on a stable or accretional beach. Construction seaward of the baseline is restricted and requires a DHEC permit. The baseline position on an oceanfront lot is a significant issue for a property owner.

The BRC’s recommendation was based on the assumption that an oceanfront property owner should not expect to gain any benefit from accreted property. DHEC’s justification for adoption of the recommendation was to limit encroachment into areas considered unstable and hazardous. In both instances the underlying basis for the recommendation is flawed. The seaward boundary of most oceanfront lots is mean high water, which is a moving boundary based on shoreline change. When the lot erodes, mean high water migrates onto what was formerly private property and reduces the size of the lot. When the lot accretes, mean high water extends potentially beyond its position at the time the lot was platted. The legislature has already limited an oceanfront landowner’s ability to assert ownership to property accreting beyond the original boundary line. “[N]o property rebuilt or accreted as a result of natural forces shall exceed the original property line” and “no person … may develop ocean front property accreted … beyond the mean high water.
But an oceanfront property owner should enjoy the benefit of accretion up to the location of mean high water at the time the lot was platted. The BRC ignored these well-settled principles of boundary law in recommending that the baseline be fixed so as to prevent a landowner from enjoying the benefits of accretion up to the platted seaward boundary line.

The Board may repeat history, seeking to limit encroachment into areas presumably unstable. The underlying basis for the seminal constitutional challenge to the BMA, *Lucas v. South Carolina Coastal Council*, was that landowners shouldn’t be allowed to use property that may become unstable. The BMA initially prohibited all new construction seaward of the baseline. David Lucas’ two beachfront lots were seaward of the baseline but were entirely suitable for residential construction, although at some point during the past 40 years prior to Lucas’ ownership the shoreline had encroached on the lots. A regulatory prohibition that denies a landowner all economically viable use of property did not survive constitutional scrutiny. A newly adopted property restriction to eliminate the seaward movement of the position of the baseline to prohibit encroachment into areas that, at some time in the past, were unstable arguably amounts to a resuscitation of the same policies that were determined to be over-reaching in *Lucas*.

**Recommendation:** The Department shall consider whether a proposed structure would be constructed on a renourished beach.

The BRC recommended that “DHEC should consider historical beach nourishment in determining the vulnerability of a property during the evaluation of a special permit request.” The BRC concludes that “beach nourishment may provide a viable temporary option for restoring the beach; it is not a long-term or permanent solution.” DHEC sought Board approval of this recommendation “to potentially deny a permit application if the beach seaward of the baseline is determined to be unstable and hazardous.”

S.C. Code Sec. 48-39-290 provides for issuance of a special permit seaward of the baseline. This section is one of the substantive amendments adopted in 1990, after the *Lucas* challenge was filed. This section operates as a variance, allowing for construction seaward of the baseline including the construction of a house. Since the adoption of the amendments to the BMA in 1990, DHEC has not denied an oceanfront property owner the right to construct a residence on an oceanfront lot. However, the recommendation that DHEC consider beach nourishment in the assessment of the vulnerability of a property for the purpose of potentially denying the use of the property evokes *Lucas*. This change has a far-reaching effect. Many areas of shoreline, because of single significant storm events or episodic erosional events, have required renourishment prior to natural recovery. As the BRC noted, 116 Emergency Orders have been issued by local governments allowing a combination of renourishment and other measures to address localized erosion.

Consequently, there are numerous beachfront properties impacted by the Committee’s policy of restricting development on lots and parcels that have been renourished.

This recommendation also reflects a rejection of a long-standing policy promoted by the BMA. The BMA promotes soft-solutions to erosion. Beach renourishment is the most commonly used soft solution to restore an eroding shoreline and to protect upland development. The legislative declaration of state policy in the BMA includes “encourag[ing] the use of erosion-inhibiting techniques which do not adversely impact the long-term well-being of the beach/dune system” and “promot[ing] carefully planned nourishment as a means of beach preservation and restoration where economically feasible.”

Many beachfront communities and private developments have embraced these policies and have spent hundreds of thousands of dollars in designing and permitting beach nourishment projects. The
BRC determined that at least 25 major renourishment projects have occurred since 1985. A combined total of $233 million has been spent on renourishment. In addition, coastal communities are committed to periodic renourishment and actively explore funding mechanisms to ensure that renourishment is performed when needed. Hilton Head Island implemented an accommodations tax that provides the funding for periodic renourishment of the island's beaches and beachfront communities. Folly Beach receives federal monies for a periodic renourishment project designed to redress the negative impacts of the Charleston Harbor jetties on sand transport and sediment supply to Folly Beach. The Grand Strand has also benefitted from federal and state appropriations for renourishment. Any action discouraging the use and economic viability of renourished beachfront lots appears to be contradictory to the state policy of promoting soft solutions to beach erosion.

Recommendation: Prohibit the construction of new golf courses and the modification or expansion of existing golf course seaward of the baseline. Normal repair, maintenance and replacement to existing conditions will be allowed.

The rationale of the BRC for this recommendation was the need to “prohibit the installation of infrastructure and landscaped course features in unstable areas and to prevent the seaward expansion of golf courses in the event of natural or manmade shoreline accretion.” The Board adopted the recommendation based on its belief that “course development should occur away from highly unstable beach areas seaward of the baseline.”

Such construction has been authorized since adoption of the BMA based on the conclusion that “golf courses ... adjust to a changing shoreline more readily than other types of land uses.” Express authorization for construction of golf courses seaward of the baseline is provided for in S.C. Code Ann. § 48-39-290(A). Since the adoption of the
BMA and until the Board’s recent action, golf courses were considered to be appropriate uses of areas seaward of the baseline. The basis for this change in sentiment is the need to prevent “landscaping” and “infrastructure” from unstable areas.

South Carolina is home to notable links courses adjacent to the ocean. Wild Dunes includes two links courses. Harbour Town on Hilton Head is a links course as is the Ocean Course on Kiawah. These golf courses host major championship play, service famous resort areas and are central to the economic impacts of tourism to these resorts. Portions of these courses are located seaward of the baseline. Traditionally, in Scotland, “links” are strips of land adjacent to the ocean. The proximity of playing areas to the ocean is integral to the design of links courses. While the Board is preserving the ability to repair, maintain and replace portions of golf courses seaward of the baseline, any modification seaward of the baseline is prohibited. Such restriction could have a significant negative impact on the playability of these golf courses. And, a prohibition that results in banning construction of any new links courses needs consideration as a matter of public policy as it relates to the economic benefit derived from the ability to construct internationally recognized golf courses.

Recommendation: Eliminate local government’s role in declaring an emergency that warrants the use of sandbags to respond to erosion. DHEC will become the “sole issuance authority” for requests to use sandbags for flood control. Since the inception of coastal zone management in 1977, local governments are empowered to declare emergencies related to “damages or erosion to any beach or shore resulting from a hurricane, storm or other such violent disturbance.” Upon such declaration property owners were allowed to use five-gallon sandbags installed along the escarpment to protect improved properties. The BRC concluded that “serious deficiencies exist … pertaining to when it is appropriate to issue an Emergency Order.” This conclusion is based on a finding that there are “several reasons to restrict the use of sandbags for emergency erosion control.” As DHEC advances its cause to the legislature, inquiry is needed as to the basis for restricting the use of five-gallon sandbags, made of biodegradable material, that contain clean beach sand. The harm, if any, caused by this method of flood control may not outweigh the significant benefit to individual developed properties facing rising waters.

The Board intends to accomplish this change without a statutory amendment. Presently, the following activities are statutorily exempt from the requirement to obtain a DHEC permit: “The accomplishment of emergency orders of an appointed official of a county or municipality or of the State, acting to protect the public health and safety, upon notification to the department. However, with regard to the beach/dune critical area, only the use of sandbags, sandscraping,
or renourishment, or a combination of them, in accordance with guidelines provided by the department is allowed pursuant to this item.\(^3\)

A local official is currently statutorily empowered to issue an Emergency Order and allow a property owner to utilize sandbags in front of a structure on an eroding shoreline to combat rising water. The guidelines referenced in this exemption dictate the size and type of material utilized. To accomplish, with any clarity, what DHEC intends to accomplish would appear to require a statutory amendment. More importantly, the use of sandbags has been critical to the protection of beachfront homes during episodes of erosion. Local governments have responded at least 116 times since 1985 and issued emergency orders authorizing sandbags, sandscraping or minor renourishment, or a combination of the three permissible remedies. The BRC’s recommendation, adopted by the Board, is to divert local authorities of the ability to declare an emergency on behalf of local taxpayers and constituents and transfer that authority exclusively to DHEC.

The BMA was adopted because of the same trends, data and concerns prompting the Board’s actions in 2013. Any future proposed restrictions on oceanfront development should undergo review to determine if the land use or activity being restricted is an actual threat to the state’s beaches.

Mary Shahid is a member, Angelica Colwell is special counsel and Kara Grevey is a law clerk in the Charleston office of Nexsen Pruet.

Endnotes
1 The BMA was initially adopted in 1988 and substantively amended in 1990.
6 See id., see also Coastal Areas Impacts & Adaptation, EPA, www.epa.gov/climatechange/impacts-adaptation/coasts.html (last visited July 31, 2013) [hereinafter Impacts & Adaptation].
8 Id.
10 FAQ Beachfront, supra note v.
12 Impacts & Adaptation, supra note vi.
13 Id.
19 Final Report, supra note iii, at 8.
20 Blue Ribbon Committee on Shoreline Management, Matrix of Recommendations (July 11, 2013) (on file with author) [hereinafter Matrix].
23 Final Report, supra note iii, at 13.
24 Id.
25 Matrix, supra note xx.
26 Final Report, supra note iii, at 13.
28 Final Report, supra note iii, at 13.
29 Id.
30 Id.
31 Matrix, supra note xx.