

Coastal CURRENTS

News from the South Carolina Coastal Management Program

Winter/Spring 2014

A Note from the Deputy Director



On the heels of our recent visits from the polar vortex and disruptive winter storms, the thought of a day at the beach is tantalizing, though still a bit out of reach. For many people who live along the coast, the beach defines a year-round lifestyle and permanent state of mind. Even if we are not able to visit the beach as often as we might like, simply knowing it is there provides peace of mind. Apart from recreation, we often take the most valuable aspects of

the beach for granted. Superstorm Sandy reminded us all how important the beach and dune system are for buffering storms and protecting our coastal communities – and the consequences of inadequate protection. Promoting and protecting healthy sand dunes adds real value to our coast by mitigating the impact of flooding storm surge, diminishing powerful waves and providing a bank of sand to naturally replenish eroding beaches. As feasible sand resources and financial commitment for beach renourishment become increasingly strained, our natural defenses will play an increasingly important role in our coast's ability to weather the next storm. How we plan today will affect how quickly we recover tomorrow.

Over the next several months, the SC Coastal Management Program will be quite busy. In addition to kicking off new initiatives and online applications, key regulatory recommendations from the Blue Ribbon Committee on Shoreline Management will be considered by the S.C. General Assembly. I hope you enjoy learning about our efforts to keep South Carolina's coast a beautiful place to live, work and play.

On a personal note, this edition of Coastal Currents will be my last as Deputy Director for OCRM. This spring, my family will be relocating to Florida for a new opportunity. Over the last nine years, our team has worked with many constituency groups to build programs and create strategies that have made a real difference for our shared coastal resources. I feel so much gratitude for having had the privilege of working with you and serving the state of South Carolina.

Sincerely,

Carolyn Boltin-Kelly
Deputy Director, DHEC Ocean and Coastal Resource Management

Blue Ribbon Committee on Shoreline Management

In 2013, DHEC initiated the administrative process to amend Coastal Division regulations based on key recommendations of the Blue Ribbon Committee on Shoreline Management. The recommendations supported by DHEC provide clarity and specific standards to be utilized in the evaluation of beachfront permit applications and notifications, and provide specific standards, conditions and administrative procedures for issuance of emergency orders within the state's beachfront jurisdiction.

A Notice of Drafting was published in the State Register on June 28, 2013. Subsequent regulatory text and an opportunity for public comment were published in August. After a public hearing before the DHEC Board and final approval by the Board, Document 4386 was filed with the Legislative Council for submission to the General Assembly for review during the 2014 session. Text of the proposed regulations may be viewed [online](#).





MyCoast: South Carolina

[MyCoast](#) is a web and mobile-device enabled site that allows users to upload photographs and characterize environmental conditions associated with coastal events. MyCoast houses two discrete, though functionally similar programs: [SC King Tides Initiative](#) and Storm Witness.

The SC King Tides Initiative allows users to easily submit photographs of tidal impacts along beaches, tidal creeks and low-lying areas. The application geolocates the photographer's position and the time that the photo was taken based on metadata included in the picture file. The application then appends useful information to the report, including weather conditions, tide stage and proximity to the nearest tidal gauge. Individual reports, along with photographs, are displayed via a map interface on the MyCoast website. The operational definition of a King Tide is any predicted extreme spring tide, typically equal to or greater than 6.6 ft MLLW in Charleston Harbor. DHEC has identified 28 King Tide events, occurring mostly in the late summer and early fall of 2014, and has incorporated an icon on its annual Tide Chart to assist in raising public awareness of the event and program.

Storm Witness functions similarly to King Tides, but focuses on the collection and communication of storm-related impacts to coastal structures and beach erosion. In addition to submitting photos, participants of Storm Witness are also prompted to characterize post-storm beach conditions and impacts to specific types of structures. The information collected through Storm Witness will enable DHEC to more efficiently coordinate with state and local governmental entities and prioritize storm response activities. DHEC successfully Beta-tested MyCoast:South Carolina in early 2014 during a King Tide event. A final version of the site will be launched in spring 2014.



Public Coastal Access Project Grant Opportunity

The City of Georgetown recently completed an extensive renovation of the East Bay Boat Landing on the Sampit River with funding assistance from DHEC (see photo below). Additional public coastal access projects are nearing completion.

DHEC is pleased to announce another grant opportunity for coastal municipalities. The deadline for grant applications is April 4, 2014. Visit our [website](#) for details.



Expansion of Estuarine Mapping Area

In March 2013, DHEC completed Phase I of a joint effort with the U.S. Army Corps of Engineers' Silver Jackets program and Georgia Southern University to map and characterize estuarine shorelines in southeastern South Carolina. The final report is available on our [website](#).

Phase II of the estuarine shorelines mapping project began in September 2013. The second phase picks up where Phase I left off at the South Edisto River, SC and continues north to Capers Inlet. As with Phase I, Phase II will involve digitizing shorelines from the coast to the Critical Area line, and running the Analyzing Moving Boundaries Using R (AMBUR) statistical analysis in order to estimate shoreline change rates. Results from AMBUR will be analyzed to identify potential erosion hotspots and possible natural and anthropogenic mechanisms that shape the estuarine system.

Enhanced Erosion Control Inventory

DHEC has the responsibility of regulating the maintenance and repair of erosion control devices within the state's beachfront jurisdictional setback area. In the event any existing erosion control device is impacted by a storm or other event, DHEC is required to perform an initial damage assessment to determine if an erosion control structure may be repaired or must be removed. Each year, DHEC performs an annual inventory of all beachfront erosion control devices within the jurisdictional setback area. To enhance the accuracy and validity of its inventory, DHEC will be working with an independent licensed surveyor to complete a comprehensive inventory of precise location, dimension and elevation of each structure. This effort will significantly improve the efficiency of damage analysis and regulatory decision making.

Inlet Dynamic Study

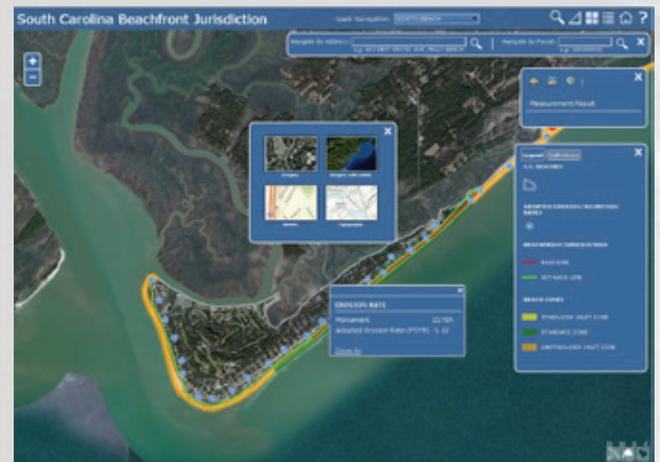
Tidal inlets are the most dynamic areas of the barrier island systems and they are delineated as special management zones. Due to this dynamic nature, inlets present a challenge for determining long term erosion rates. Through NOAA's 309 funding, DHEC applied for a Project of Special Merit to 'Evaluate tidal inlet dynamics and erosion in South Carolina'. Using shorelines digitized for South Carolina's 29 developed inlets, the contractor will be analyzing methods to calculate erosion rates using different tools, including Digital Shoreline Analysis System (DSAS), and Analyzing Moving Boundaries Using R (AMBUR). This project was awarded to Coastal Science & Engineering in June 2013.

To date, CSE has completed a review of how other east coast states handle erosion rate calculations in inlet areas, and worked with OCRM staff to select 3 inlets for initial testing. A peer review committee has been assembled, with representation from DHEC, College of Charleston, Georgia Southern University, the USGS, NOAA CSC, and Applied Technology & Management.

Shoreline Web Application

The South Carolina Beachfront Jurisdiction web application was developed to enable efficient access to key information by coastal stakeholders and decision-makers. Users of the application can quickly navigate to specific beaches or property addresses, view state jurisdictional line locations and adopted long-term erosion rates. Technical users of the site may also download survey information packets, which contain jurisdictional line coordinates and survey monument locations. The application also contains measurement tools for basic distance and area calculations. DHEC has several additional web applications in development and will continue to explore creative ways of enhancing accessibility to coastal information and data.

Learn more and interact on our [website](#).



Re-establishment of Beachfront Survey Monuments

DHEC is responsible for establishing and maintaining beach profile monitoring stations, marked by approximately 400 survey monuments. Monuments were established in 1990 by the South Carolina Geodetic Survey (SCGS), and were placed every 1000 ft along developed beaches and every 2000 ft along undeveloped beaches. Maintenance of the survey monument location has occurred over the years, though many monuments are no longer accessible due to shoreline change, development and natural vegetative growth. To re-establish the monitoring system, DHEC has contracted with the SCGS to perform a reconnaissance of all monuments to determine their status. SCGS will occupy (get a position and elevation) each station using the Real-Time Network (RTN) to verify location and elevation. For stations that are missing, the SCGS will attempt to re-occupy the historic location. If the station is unavailable, the SCGS will set a new site along the same azimuth as the historic beach profiles to preserve the profile location. The final product will be a new GIS file of all the survey monuments along the coast. This will be useful for several ongoing projects, including our annual beach erosion rate monitoring (BERM) project.



2014 Tide Chart

The 2014 DHEC Tide Tables are now available! Congratulations to Ben Sumrell who won our Coastal Photography Contest with his photo taken at Garris Landing, Cape Romain NWR. It was an extremely close competition, as there were many exceptional entries. His beautiful photo is now displayed on the 2014 Tide Tables Calendar, marking the 28th year of its production.

Please visit our [website](#) to view individual months, download a convenient desk version, or learn where to pick up your copy at any of the listed distribution locations. Quantities are limited!



Photo Courtesy of Ben Sumrell, Garris Landing, Cape Romain NWR, Awendaw, SC

Local Comprehensive Beachfront Management Plans

DHEC continues to provide technical assistance to local beachfront communities with developing and updating their Local Comprehensive Beach Management Plans. Through this process, DHEC helps our local partners identify strategies to maintain a healthy, dry sandy beach as well as identify opportunities to bolster other planning efforts, such as comprehensive planning, hazard mitigation, and FEMA Community Rating System improvements. Currently, DHEC is assisting North Myrtle Beach, Charleston County, and the Town of Seabrook Island with plan updates. Visit our [website](#) to learn more about Local Comprehensive Beach Management Plans.

Adopt-a-Beach Update



Photo Courtesy of Marriot Vacation Club

We sincerely thank our Adopt-a-Beach partners for their efforts in 2013! Volunteers removed over 3,000 lbs of debris, most of which were cigarette filters, fireworks, food wrappers, cap and lids, straw stirrers, and bags. In November, the Marriott Vacation Club on Hilton Head Island held an Adopt-a-Beach event inviting additional Adopt-a-Beach partners, and encouraging others to adopt mile long stretches of the beach.

The event was a success, with several groups expanding their mileage and new groups joining the Adopt-a-Beach program. To date, every mile of Hilton Head Island has been adopted! Thank you to all our volunteers for helping to keep South Carolina beaches debris free. May the New Year bring our groups many successful beach clean-ups.





Regulatory Update

Introducing the New Compliance and Enforcement Section

DHEC has established a new Compliance and Enforcement Section to streamline permitting inspections and potential violation investigations. This move has significantly increased the efficiency of regulatory permitting staff and bolstered the capacity of enforcement and compliance efforts. Since September, over 300 inspections have been conducted on structures constructed in the critical areas of South Carolina's coast. DHEC has determined that 85% of these structures have been built in compliance with the issued permit.

Coastal Zone Public Notices

Public Notices for regulatory and management activities within the Coastal Zone are now issued DAILY.

For additional information and to subscribe to e-mail notification, please visit our [website](#).

Legal Update – Cases before the S.C. Supreme Court

Tommy W. Berry, Sr. and Jo S. Berry v. DHEC Office of Ocean and Coastal Resource Management
(Docket No. 2010-CP-26-6091)–

This action challenges the Department's issuance of an Administrative Enforcement Order for the violation of an issued permit to construct a replacement bulkhead. The Supreme Court of South Carolina issued a published [opinion](#) on March 27, 2013. The Court affirmed the circuit court's decision to dismiss the action for lack of subject matter jurisdiction. A petition for rehearing was filed by Berry and denied by the Supreme Court.

Kiawah Development Partners II v. DHEC and S.C. Coastal Conservation League

(Docket No. 09-ALJ-07-0029-CC)–

This matter concerns an application by Kiawah Development Partners II to place a 2,783' by 40' bulkhead and revetment on the Kiawah River at Captain Sam's Spit. The Supreme Court of South Carolina issued an [opinion](#) February 27, 2013 (the Court withdrew its initial opinion published November 21, 2011). The Court affirmed an administrative law court decision authorizing Respondent to construct a bulkhead and revetment on Kiawah Island. A petition for rehearing was granted and held on June 5, 2013. No decision has been made at this time.

Legislative Update

The 2013-2014 Session of the South Carolina General Assembly commenced on January 14, 2014. The following legislation was introduced and referred to the Senate Agriculture and Natural Resources Committee:

[S890](#) is a bill that would amend portions of the SC Beachfront Management Act related the state's beachfront jurisdictional lines and activities allowed seaward of the baseline.

Information on bills carried forward from the 2012-13 session follow:

[S48](#) is a bill that would allow breached impoundments that originally impounded a parcel of tideland or marshland to be repaired or restored under certain conditions.

[S121](#) is a bill that would allow owners of property along the Atlantic Ocean to apply for a permit to protect their property and associated structures via seawall, rock revetment or other method of protection, if emergency conditions exist or have existed in the past.

[S294](#) is a bill that would allow local accommodation tax revenue to be used for beach renourishment, and allow a local government to hold this revenue for more than two years if it is designated for control and repair of waterfront erosion.

[S503](#) (similar [H3390](#)) is a bill that would allow a coastal municipality, after approval by referendum, to impose an additional 1% "beach preservation fee" on accommodations to be used for renourishment, erosion mitigation, monitoring, and other defined measures to preserve dune systems and maintain public beach access.

[H4166](#) is a concurrent resolution requesting the United States Congress revise the Outer Continental Shelf boundaries off of the Southeast coast established by the Bureau of Ocean Energy Management to the state's interest with respect to offshore commercial energy leases.

