

GRAND STRAND COMMUNITY LEADERS FORUM ON SHORELINE CHANGE

Meeting Notes

June 3, 2009 – 2:00pm-5:00pm

This document is not intended to be a meeting transcript, *per se*. It is a summary of key themes and some (though not all) of the background dialogue. The meeting summary's structure roughly parallels that of the meeting agenda but is not necessarily true to the temporal order of discussion.

In Attendance:

1) Forum attendees:

Alan Altman,	Pawleys Island Realty
Linwood Altman,	Pawleys Island Civic Association
Amy Armstrong,	S.C. Environmental Law Project
Blanche Brown,	Debordieu Community Association
Bob Cavanaugh,	North Myrtle Beach
Donald Corinna,	Georgetown County
Allen Deaton,	Surfside Beach
Nancy Edelman,	Briarcliffe Acres
Adam Emrick,	Horry County
Liz Gilland,	Horry County
Allison Hardin,	City of Myrtle Beach
Paul Huray,	Debordieu Nature Enthusiasts
Chris Klement,	Horry County
Andy Markunas,	Horry County
Clay McCoy,	Coastal Carolina University
Richard Moore,	Coastal Carolina University
Steve Moore,	City of Myrtle Beach
Skeeter Nash,	Myrtle Beach Advisory Committee
Steven Neeves,	Coastal Carolinas Association of Realtors
Bill Otis,	Pawleys Island
Gary Pell,	Briarcliffe Acres
Vickie Radvansky,	Horry County
Thom Roth,	Horry County
Nicole Saladin,	North Inlet-Winyah Bay NERR
Roy Taylor,	Horry County
David Van Hoose	Debordieu Community Association
Jack Walker,	City of Myrtle Beach
James Wood,	North Myrtle Beach

2) Shoreline Change Advisory Committee members:

Mary Conley,	The Nature Conservancy
Hamilton Davis,	S.C. Coastal Conservation League
Rick DeVoe,	S.C. Sea Grant Consortium
Paul Gayes,	Coastal Carolina University
Tara Miller,	NOAA Coastal Services Center
Fran Way,	Applied Technology and Management – <i>alt. for Chris Mack</i>

3) *S.C. Department of Health & Environmental Control:*

Braxton Davis,	OCRM Policy & Planning Director
Barbara Neale,	OCRM Regulatory Director
Will Salters,	OCRM Coastal Planner
Matt Slagel,	NOAA Coastal Management Fellow

Welcome / Overview of Shoreline Change Advisory Committee:

Braxton Davis, Director of DHEC-OCRM's Policy & Planning Division, provided a brief overview of the Shoreline Change Initiative and the purpose of the Advisory Committee. To date, there have been two orientation meetings focused on OCRM authorities and activities, the Committee work plan and process, and shoreline management in other states. The Committee has also examined research and information needs, and South Carolina's policies concerning retreat, beach renourishment, beachfront erosion control, and local beach planning.

Essentially, we've held a series of meetings to "brainstorm" ideas and issues related to beachfront and estuarine shoreline research and management, and we've asked volunteer subcommittees of the full committee to draft "policy options" that explore different ideas that have been generated thus far. These initial ideas and subcommittee lists can be found in the approved meeting minutes on the SCAC website at the following link: (http://www.scdhec.gov/environment/ocrm/science/shoreline_comm.htm)

The purpose of this initiative is to explore, in-depth, South Carolina's past experiences and continuing needs related to shoreline management in the coastal zone. To do so, we'll need significant public participation, and we're trying to provide a number of opportunities. In addition to the public comment periods at each Committee meeting, and general public hearings, we'll accept written comments at any time, and the draft report will be circulated widely for public comment. We'll also include all public comments on the draft report in an appendix of the final report.

At this stage, the Committee has been exploring different policy options, but the policy options have not been finalized and any of them may be dropped, changed, or added at any time in the coming months. Completion of the Committee's Draft Report is anticipated in late September 2009, with a tentative Final Report release of Fall 2009.

Dr. Davis' presentation can be found at the following link: (http://www.scdhec.gov/environment/ocrm/science/shoreline_comm_0609.htm)

Break-Out Session Results:

We have attempted to identify areas of apparent consensus among participants (underlined), but in most cases simply relay the suggestions of one or more individuals or break-out groups. Since no votes were taken, each suggestion described below could be a minority OR majority opinion.

Question 1:

Are South Carolina's beach and dune systems healthier today than in 1987? Are beachfront communities more or less threatened by shoreline changes today than they were two decades ago?

Some attendees suggested that:

- South Carolina's beach and dune systems are *healthier* today than in 1987 due to:
 - SC Beachfront Management Act and Local Comprehensive Beach Management Plans
 - Renourishment projects
 - Sand fencing and dune grass planting
 - Moving stormwater outfall pipes offshore to reduce erosion
 - Improved groin design and maintenance
 - Increased public awareness, including awareness of endangered species
 - Beachfront communities are *more threatened* by shoreline changes today because:
 - There are more people living along the coast and more money invested in buildings and infrastructure than 20 years ago.
 - Funding and sand resources for beach renourishment could decrease in the future.
 - Storm surge and sea level rise could flood/inundate low lying areas more frequently or dramatically.
 - Recreation and tourism are economic drivers for South Carolina but they depend on the health of the beach.
-

Question 2:

Is renourishment sustainable as a long-term solution to beach erosion/shoreline migration in South Carolina?

- a) ***What are your concerns about sediment supplies, financial support, accelerated sea level rise, and/or the severity and frequency of storms and erosion events?***
- b) ***What temporary erosion control measures (e.g. sand bags) should be allowed to provide time for renourishment projects (or natural accretion), under what circumstances, and for how long?***
- c) ***Some erosion control solutions that involve alterations to nearshore features (e.g. nearshore borrow sites, inlet relocations, groin fields, breakwaters) can cause negative impacts on adjacent or "downstream" beaches. How should the state manage these potential impacts, and what is the relative role of local and state government?***

Some attendees suggested that:

- Beach renourishment is sustainable in terms of sand availability; whereas others believed that sand is a finite resource that could run out in the future.

- Economics will drive the sustainability of beach renourishment, and there is a need for heightened state and federal commitment to maintain renourishment based on the economic benefits that these projects provide.
 - Some offshore and nearshore borrow sites may be reusable, but others may not if they refill with non-beach-compatible material. Because of this, some attendees suggested that renourishment will be more and more expensive in the future as suitable borrow sites become scarce.
 - Ebb-tidal deltas and bars should be considered a viable source for beach renourishment, and the restrictions governing the use of this material should not increase.
 - Flexible beach management solutions are needed since a “one size fits all” approach does not work along the entire coast.
 - Offshore breakwater studies should be performed in South Carolina to determine if breakwaters are a viable option for combating erosion in this state.
 - Groins should not generally be referred to as “armoring” or “erosion control structures” since they are shore-perpendicular sand trapping structures unlike seawalls, bulkheads, and revetments, which are shore-parallel hard structures.
 - The bond requirement tied to groins should remain in place so downdrift property owners are protected if it can be proven that a groin increased the erosion of their property.
 - The forum attendees generally agreed that the current policy banning new seawalls is a good one, but some attendees believed existing walls should be able to be repaired, even if damaged more than 50%.
 - “Soft” erosion control solutions such as sand fencing and dune planting and fertilizing should be more strongly encouraged and/or facilitated by OCRM.
 - Local governments should be able to issue beachfront emergency orders based on their own definition of “emergency”.
 - Sandbags should be allowed indefinitely until an emergency has been remediated (re-issued according to certain criteria); whereas others believed sandbag emergency orders should have more specific siting criteria, finite time limits, and be bonded to ensure removal when the emergency orders expire.
 - Better interagency coordination and outreach would help local communities to understand the various permitting authorities and jurisdictions in the coastal zone.
-

Question 3:

Is the state's policy of "retreat" from eroding beaches well understood by local communities?

- a) Has the policy of retreat been implemented over the past two decades?***
- b) What are the challenges to retreat, and how might they be overcome?***
- c) Are the state's beachfront "baselines" and "setback areas" effective means of:***
 - Encouraging retreat***
 - Reducing reliance on erosion control structures***
 - Reducing risks to coastal communities, and/or***
 - Maintaining the health of the beach/dune system***

Some attendees suggested that:

- The forum attendees generally agreed that the state's policy of retreat is *not* well understood by local communities. The key uncertainty surrounds the long-term goal of retreat... for example, is it:
 - Passive (allowing storms/erosion to eventually claim property with no seawalls allowed and renourishment in the interim)
 - Active (Moving all development landward of the setback line within a certain timeframe)? If so, was the target a 40-year period?
 - Is the goal simply to move structures as far landward as possible on existing lots? (some lots do not have additional space to move structures landward)
- There are many challenges to retreat, including:
 - Political will
 - Lack of incentives
 - Subsidies, such as the National Flood Insurance Program
 - Nourishment has provided a "false sense of security"
 - Shallow beachfront lots with little room left to move landward
 - Local zoning regulations (street setbacks, etc.)
 - Availability of land to relocate structures to
- More incentives for active retreat could be created, such as low density beachfront development and higher density inland development with transfer of development rights (TDR) programs.
- Current programs and activities, such as "special permits" allowing structures seaward of the baseline and moving the baseline seaward are contrary to the support of a policy of retreat.
 - If anything, we are "anti-retreating". In cases of natural accretion or following renourishment, some attendees believe the regulatory baseline should not move seaward.
 - Retreat could work if state had stronger beachfront regulations.

- Could retreat be implemented differently in different areas?
 - Charleston vs. rural areas vs. Grand Strand
- Lawsuits are critical to consider.
 - Public rights to a healthy beach vs. private rights to protect property
 - Lucas supreme court case
 - Public trust doctrine and common law
 - Is the remaining value of a non-buildable lot easily quantifiable?
 - Litigation issues
 - Limited uses
- Financial assistance should be explored and pursued to help owners retreat. For example, in Texas, oil revenue is used for mitigation. Some FEMA grants may also be available.
- Real estate disclosure is important so prospective property buyers understand the risks of oceanfront/waterfront ownership and the regulations that could impact them.
- Is the 5,000 sq ft habitable structure restriction within the setback area still acceptable? – Should this number be increased or decreased?
- The term “retreat policy” should be replaced with “stabilization policy” and renourishment should be the preferred response to erosion. Some attendees believed that standard funding for renourishment is needed, but having a state “retreat policy” sounds like renourishment is not necessary.
- Post-storm redevelopment plans should be in place before the next major storm to limit rebuilding in hazardous areas.
 - Need to be proactive instead of reactive with policies.
 - Everything speeds up and there are lower restrictions after a major storm.

Question 4:

Are estuarine or “sheltered” coastlines facing similar threats from migrating shorelines, rising sea levels, coastal storms, and encroaching development?

- a) If so, are present management authorities and planning activities sufficient in comparison with beachfront areas?*
- b) Do bulkheads along these shorelines present similar issues to those associated with beachfront seawalls? Are there better alternatives?*

Some attendees suggested that:

- The forum attendees generally agreed that yes, estuarine coastlines are facing similar threats from migrating shorelines, rising sea levels, coastal storms, and encroaching development.

- There was some disagreement over whether present management authorities and planning activities related to estuarine shorelines are sufficient.
 - The ambiguity of professional judgments regarding estuarine bulkheads should be eliminated from regulatory reviews (“adequate buffer”, etc.).
 - Estuarine shorelines need to be mapped, erosion rates monitored, and processes understood before effective policies can be implemented.
 - Different types of estuarine shorelines could be classified and paired with different erosion control options to ensure that the shoreline type and erosion control option are compatible.
 - Bulkheads should be prohibited if they would negatively impact the extent and function of salt marsh systems.
 - Salt marsh could be lost over the long term as sea levels rise and marsh migration is limited by the presence of bulkheads and other armoring.
 - Local planning options for estuarine shoreline management should be considered.
 - Vegetative buffers, additional setbacks from Critical Area lines, transfer of development rights, etc.
 - Potential for state support or incentives
 - Estuarine shoreline areas could be incorporated in Local Comprehensive Beach Management Plans.
 - The design criteria, regulations, and Best Management Practices of estuarine erosion control devices such as traditional bulkheads could be improved, and structural and non-structural alternatives could be explored further.
 - Non-structural alternatives include planting and land use planning.
 - A statewide estuarine shoreline buffer would be difficult to implement given the current level of development along these shorelines.
 - Regulating private property along estuaries vs. public ocean beaches could also prove challenging.
-

Public Comment Period:

Mr. Stan Jensen of Myrtle Beach presented his patented “Terra T” concrete elements, which he would like to use in a beachfront erosion control demonstration project. Mr. Jensen believes the interlocking T-shaped parts can be buried on the beach beneath 2 or 3 feet of sand to limit erosion during storms while still allowing for recreational use of the beach. He envisions using “Terra T” in combination with the net groins pioneered by Benedict Engineering and other firms in Florida.