### NC COASTAL RESOURCES COMMISSION (CRC)

February 18-19, 2015 Hilton DoubleTree Atlantic Beach, NC

### **Present CRC Members**

Frank Gorham, Chair Renee Cahoon, Vice-Chair

Neal Andrew

Janet Rose (present at 3:00 p.m. 2/18)

Larry Baldwin

Jamin Simmons

Suzanne Dorsey

Harry Simmons

Marc Hairston Greg Lewis John Snipes Bill White

**Present CRAC Members** 

Debbie Wilson, Chair

Spencer Rogers, Vice-Chair

Rudi Rudolph, Vice-Chair

Jett Ferebee

Kris Noble

**Bobby Outten** 

Ray Sturza

Dave Weaver

### Present Attorney General's Office Members

Mary Lucasse

### CALL TO ORDER/ROLL CALL

Frank Gorham called the meeting to order reminding the Commissioners of the need to state any conflicts due to Executive Order Number One and the State Government Ethics Act. The State Government Ethics Act mandates that at the beginning of each meeting the Chair remind all members of their duty to avoid conflicts of interest and inquire as to whether any member knows of any conflict of interest or potential conflict with respect to matters to come before the Commission. If any member knows of a conflict of interest or a potential conflict of interest, please state so when the roll is called.

Angela Willis called the roll. Gwen Baker was absent. No conflicts were reported. Based upon this roll call Chairman Gorham declared a quorum.

#### **ACTION ITEMS**

# Adopt 15A NCAC 7K .0208 Single Family Residences Exempted

### Mike Lopazanski

Mike Lopazanski stated this rule has been amended to eliminate the requirement for property owners to seek signed statements of no objection to receive the exemption which results in the property owners having to apply for a Minor Permit. This will provide consistency with other exemptions and will increase the timeframe to three years to be consistent with other permits and allows additional flexibility to the property owner to construct a perpendicular (house to water)

access. The Division has not received any comments on this proposed amendment and recommends adoption.

Harry Simmons made a motion to adopt the amendments to 15A NCAC 7K .0208. Larry Baldwin seconded the motion. The motion passed unanimously (Snipes, Lewis, Hairston, Andrew, H. Simmons, Cahoon, Gorham, Baldwin, Dorsey, J. Simmons, White) (Rose absent for vote).

# Periodic Review of 7B CAMA Land Use Planning (CRC 15-02) Mike Lopazanski

Mike Lopazanski stated the Administrative Procedures Act (APA) guides rulemaking by Commissions and State Agencies. Prior to 2013, rules did not expire. In the 2013 legislative session, changes were made to the APA requiring review of all rules in the Administrative Code every ten years. During the ten-year review, any rule deemed unnecessary will expire. Necessary rules with substantive public interest must be re-adopted by the Commission or they will expire. Any rule that is necessary without substantive public interest does not need to be readopted. The CRC's 7B Land Use Planning rules are scheduled to go through the legislatively required periodic review by December 2015. All of the other CRC rules are scheduled to go through the review process in 2017. This review process requires all agencies to review the existing rules and classify them as necessary with substantive public interest, necessary without substantive public interest, or unnecessary. The classifications that we do in this initial report will be posted for public comment for 60 days. The public comments will be reviewed and addressed. Following the public comment period, classifications of the rules can be amended. A report including the designation for each of the CRC rules will be sent to the Rules Review Commission (RRC) for review and RRC can agree or disagree with the classifications of the rules. The rule designations are then sent to the Joint Legislative Administrative Procedures Oversight Committee for a final review and determination. If the Committee does not meet within 60 days of receiving the report then the report is approved. DCM has proposed significant revisions to the 7B rules and guidelines. DCM staff met with RRC attorneys to review the proposed revisions. After consultation with RRC staff, we asked that the periodic review of 7B be moved up to June 2015. This request will be considered at this week's RRC meeting. DCM staff is requesting the CRC approve the initial classification report for the 7B rules. At the April CRC meeting we will provide any comments received and determine if any changes to the classifications need to be made. A public hearing on the amendments to the planning guidelines could be scheduled for the Commission's September meeting. At the November meeting the CRC could adopt any amendments and this would satisfy the re-adoption requirement for the periodic review process.

Renee Cahoon made a motion to approve the Periodic Review Report for Subchapter 7B and send the report out for public comment. Harry Simmons seconded the motion. The motion passed unanimously (Snipes, Lewis, Hairston, Andrew, H. Simmons, Cahoon, Gorham, Baldwin, Dorsey, J. Simmons, White) (Rose absent for vote).

#### CRC RULE DEVELOPMENT

### State Ports Inlet Management AEC – Stakeholder Feedback Heather Coats

Heather Coats stated legislation in 2012 directed the CRC to study the feasibility of creating a new AEC for lands adjacent to the Cape Fear Inlet. The CRC studied the matter and recommended a comprehensive study of all NC inlets. The resulting inlet management study recommended establishing an AEC for the two deep draft port inlets, taking into account the priority proposed on

maintaining federal channels for access to the state ports, looking at erosion control measures, beneficial use of dredge materials, and beach management. Senate Bill 74 was passed last year which removed the two Port inlets from the Inlet Hazard Area of environmental concern. We met with the local governments to identify their priorities and their needs. Carteret County wanted stronger language for beneficial use of dredged materials. Caswell Beach wanted the ability to protect Fort Caswell from erosion. The Village of Bald Head Island wanted the ability to modify sandbag rules, beach bulldozing rules and to strengthen the language for beneficial use of dredged materials. DCM developed the draft language keeping comments from the Chair and local government in mind. The current language in 7M for beneficial use of dredged materials allows for both beach disposal and shallow active nearshore disposal unless no other practicable alternative exists. Since the directive was to strengthen this language we decided to propose use language from the State's Dredge and Fill Law. This language was previously proposed and rejected by NOAA for purposes of federal consistency. We sent the draft rule language out to the local governments, the Army Corps of Engineers, State Ports Authority, Ft. Macon, and the National Park Service. We heard back immediately from the local governments, the Army Corps and State Port Authority. The Corps commented that they were extremely concerned about the lack of flexibility in the rule with regard to utilizing the offshore dredge material disposal site (ODMDS) during times of bad weather or when emergency dredging small volumes of material. They also had concerns with regard to the use of the nearshore disposal site and the potential costs of this rule. There is a fear that if this rule were implemented that it could hinder dredging efforts of these inlets and could result in the state or local government having to assume additional costs for the dredging of the inlets which are currently entirely federally funded for navigation dredging. The State Ports also submitted comments asking that we fully study the effects of this rule language before moving forward with rule development. The local governments wanted to eliminate the nearshore disposal option and mandate that all sand be placed on the adjacent ocean beaches. We presented this to the Corps and the State Ports and they are still opposed to this rule language. We met with the Corps and State Ports and most of their concerns pertain to the Morehead City Harbor Project. The Cape Fear River Inlet could also be impacted, but to a much lesser degree. The Corps has said that the cost of a single beach disposal project where all sand is placed on the beach would cost \$12 million. They have tried to eliminate the use of the ODMDS for the Beaufort Inlet project and put out request bids for projects that did not use the ODMDS and received only one bid and it far exceeded the budget for the project. They have also said that requiring all projects to be pipeline dredge projects would double the cost of the projects that are now handled by hopper dredge. Currently at Beaufort Inlet every three years the sand goes to the beaches by pipeline dredge. The other two years a majority of the sand is placed in the nearshore disposal area with less than 15% going to the ODMDS. The Corps has been working on a dredged material management plan since 2007. Other concerns include eliminating the use of the ODMDS in times of bad weather while hopper dredging creates a safety hazard and could further limit dredging efforts. The environmental window for dredging at this inlet is January 1 to March 31. The last time they dredged in November or December they had six turtle takes. Federal money cannot be spent on a navigation project unless the project meets the federal standards. The Corps contends that they have spent years developing the best solution available to dredging at this inlet. Project funding is based on tonnage at the State Port. If they can't dredge due to a lack of funding and the tonnage decreases as a result due to draft restrictions then it could reduce the ranking of the Port and could lower it below the cut line of projects receiving federal funding. The Corps asserts that they have more than offset any impacts from the Morehead City Harbor project and that they have placed more sand on the beaches than has been lost even from natural erosion. They claim that sand placed in the nearshore disposal area remains in the system and that sand placed in the ODMDS also remains confined and is available for use to be placed on the beaches. More sand has been removed from the ODMDS for beach disposal on Bogue

Banks beaches than has been deposited there by the Corps. The Corps has requested that if we plan to move forward with this rule language then we should carefully study the impacts of navigation, commerce, environment, and the mission of effected federal and state agencies before moving forward. The State Port Authority has also expressed concerns regarding any rule language that would adversely impact the Corps' ability to maintain the channel. We need to talk about AEC boundaries before moving forward. Carteret County and Caswell Beach support the inclusion of the shoals and nearshore areas adjacent to the two channels. They want all of Caswell Beach's oceanfront shoreline and Fort Caswell's entire shoreline to be included within the AEC limits. The Village of Bald Head Island expressed a desire for all of South Beach to be included in the AEC, but strongly object to including Jaybird Shoals in the AEC boundary.

Justin McCorkle, USACE Counsel, stated we appreciated the DCM staff coming to us to discuss our concerns. The Corps of Engineers, in particular the Wilmington District, is passionate about providing safe navigation and conducting our operations in a responsible manner. We have to make sure that we are providing for safe navigation and safeguarding federal taxpayer dollars. We are already conducting our operations in a responsible manner. In the past decade in Wilmington, roughly 90% of beach quality material that we have dredged has gone on the beach at 100% federal expense. In Morehead City we have placed over 16 million cubic yards on the beaches of Fort Macon and Atlantic Beach since the 1980's. Our coastal engineers tell me that during that timeframe, at 100% federal expense, that is more than those stretches of beaches have lost. Our current plan puts sand directly on the beaches of Carteret County once out of every three years. If the current proposal is going to reduce our ability to dispose of sand in the nearshore area then it will be expensive and the wrong thing to do. It is not environmentally sound and it is not sound engineering and we don't support that. We agree that there is an inlet influence area to extend to the boundary of Pine Knoll Shores and Emerald Isle. If we were to take sand from the Beaufort Inlet system and put it on the beaches of Emerald Isle that would take it out of the system just as if you were taking it to the ODMDS. If the proposed rule language is intended to change what we are doing in the nearshore area then it would force us to put all of the sand on the beaches and then for two out of every three years it would take a \$4-6 million job and make it a \$12.5-14.5 million job. It is possible that the benefit-cost ratio for Morehead City (which is ranked number 86) could serve to cut federal funding off altogether. If this rule was in effect and we were required to put all the sand on the beach then there isn't enough money and we wouldn't be able to open the channel right now. With this rule in place today our answer to Morehead City would be sit tight and we will see what we can do next winter. It takes away our flexibility.

Rudi Rudolph, Carteret County Shore Protection office, stated there are some fundamentals on which we do not agree with the Corps. It is important to try to replicate the system. I don't think the Corps is doing that now and there are rules and regulations that mandate the Corps do that. Not having enough money to do the right thing only goes so far. If you take the economic benefits of the sand on the beach then the cost benefit ratio would sing. This rule language should move forward. The State Port should get into the game more with this.

Braxton Davis, DCM Director, stated there are still a lot of parts to this rule that need to be discussed and the staff is not asking the CRC to move the rule to public hearing so we can have discussions about beneficial use, the boundary issues, and use standards. The Division's position is that the rest of the rule has not been discussed sufficiently to move forward. The Division would need to discuss the beneficial use portion with the Department to talk about the implications for the State Port.

Greg Lewis made a motion for the Division to get a DENR position on beneficial use language for inclusion in the proposed State Port Inlet Management AEC. John Snipes seconded the motion. The motion passed unanimously (Snipes, Lewis, Hairston, Andrew, H. Simmons, Cahoon, Gorham, Baldwin, Dorsey, J. Simmons, White) (Rose absent for vote).

Chairman Gorham asked Justin McCorkle to have an official meeting with Carteret County to address the issue of the local communities having the ability to fill the gap of funding for 100% sand placement. The Chairman asked for a report to the Commission on this meeting in April. The Chairman asked the CRAC to look at the sandbag provisions within this proposed rule.

Braxton Davis stated the Division is a big proponent of beneficial use and that he is currently chairing a national committee of coastal states that has passed policy language that advances the concept of beneficial use. This is a funding issue. We already have the State Dredge and Fill Act which has incredibly strong standards saying no sand can leave the system. That policy was turned down at the federal level. Since it is a national issue it will likely be turned down again. Our initial recommendation was that the Commission should not resubmit the same policy that has already been rejected. Narrowing it down to the two Ports is a difference. Looking at the nearshore piece might also be a difference. I need to know what to take to Raleigh to figure out what the State's position is on this since it has significant implications for the State Ports and therefore the State of North Carolina.

### Sea Level Rise Report – Update Tancred Miller

Tancred Miller stated the Science Panel has been meeting monthly since July of last year to work on this report. The legislation required the draft be sent to the CRC by March 31, 2015. There will be a public hearing on the draft at the April CRC meeting and the final version of the report will be due on March 1, 2016. The CRC requested the Science Panel's draft be completed by December 31, 2014. The draft was then reviewed by Drs. Dean and Houston. The Science Panel's response to Dean and Houston's comments is now due. Drs. Dean and Houston will then give another response based on any Science Panel revisions. We are on track to meet the deadlines. The report is in prerelease draft form. The legislation requires the Commission to study the economic and environmental costs and benefits to the North Carolina coastal region of developing or not developing sea level rise regulations policy. This is in addition to looking at the science and the projections. Staff is looking to the CRC for guidance on how we should accomplish this. A lot of this work has probably already been done by the Division of Emergency Management within the Department of Public Safety. They have given us a copy of a draft sea level rise impact study for North Carolina.

Chairman Gorham stated there isn't a way to do an economic impact on regulations that haven't been proposed. There is no point to do an economic study. When we get the final Science Panel report and decide if we want to propose regulations then we could look at the economic impacts at that time. We are not forced to create rules based on the report.

\*\*At this time Chairman Gorham presented the Eure Gardner Award to Robert E. Emory, former CRC Chair, on behalf of the Coastal Resources Commission. Braxton Davis presented a Certificate of Service to Mr. Emory on behalf of the Division of Coastal Management.

Renee Cahoon made a motion that the Commission go into closed session pursuant to NCGS section 143-318.11(a)(3) to consult with its attorneys regarding North Carolina Supreme

Court Docket #401A13. The parties in that case are petitioner Riggings Homeowners, Inc. and respondent North Carolina Coastal Resources Commission. The Court of Appeals case is 12-1299 and the New Hanover Superior Court Case number is 09 CVS 2761. Marc Hairston seconded the motion. The motion passed unanimously (Snipes, Lewis, Hairston, Andrew, H. Simmons, Cahoon, Gorham, Baldwin, Dorsey, J. Simmons, White, Rose).

Greg Lewis made a motion for the Commission to return to open session. Neal Andrew seconded the motion. The motion passed unanimously (Snipes, Lewis, Hairston, Andrew, H. Simmons, Cahoon, Gorham, Baldwin, Dorsey, J. Simmons, White, Rose).

### **MINUTES**

Renee Cahoon made a motion to approve the minutes of the December 17, 2014 Coastal Resources Commission meeting. Harry Simmons seconded the motion. The motion passed unanimously (Snipes, Lewis, Hairston, Andrew, H. Simmons, Cahoon, Dorsey, Gorham, Baldwin, J. Simmons, White, Rose).

### **EXECUTIVE SECRETARY'S REPORT**

Braxton Davis, DCM Director, gave the following report:

We had some changes in the agenda due to our later start time because of weather conditions, and one of the items we postponed was a refresher on CAMA and a review of 2014. We will still plan to have that series of short presentations from staff at your April meeting. As for 2015, permit activity is slightly up so far, but this cold weather may slow things down a bit. Several notable Major Permits were issued since your last meeting, including two issued to the NC Wildlife Resources Commission for construction and improvements to public boat ramp facilities in Hertford and Bertie Counties. Major Permits were also issued to the Towns of Emerald Isle and North Topsail Beach for the construction of public parking and beach access areas. A Major Permit was issued to the Town of Oak Island for the proposed dredging of Eastern Channel, with an accompanying beach nourishment project for the west end of Oak Island. That Major Permit was issued in less than 65 days, including the resolution of several unanticipated issues with the Army Corps of Engineers including changing the location of a spoil disposal site for non-beach compatible material, and analyzing potential impacts of the project to the AIWW. We have received a draft EIS for a terminal groin project at Ocean Isle Beach, and staff will be providing comments to the Corps by mid-March. Also of note, federal consistency determinations have been submitted by two companies, Spectrum Geo, Inc. and GX Technology, who are proposing to conduct separate Marine Geophysical Surveys via 2D seismic surveying off the North Carolina coast, for geological and geophysical data that could provide information on offshore oil and gas resources offshore. The Spectrum Geo survey would be conducted during the second quarter of this year, and would involve two survey vessels towing seismic airgun arrays. The GXT survey would be conducted between July and December 2015, with one vessel towing seismic airgun arrays.

On the policy and planning side of DCM, staff are proceeding with the rulemaking process and preparing fiscal analyses for several new rules, including significant changes to the 7B Land Use Planning Guidelines and 7L Planning and Management Grant rules, repeal of the High Hazard Flood AEC, and a few improvements to general and minor permits. Staff have also completed two of the major studies required by HB819 back in 2012 (Cape Fear AEC, elimination of IHAs) and rulemaking (setbacks for residential structures greater than 5,000 sq. ft.). The only remaining study required by that bill is the Sea Level Rise study update.

The Coastal Habitat Protection Plan Steering Committee met in early January for an orientation and to discuss a 5-year update to the Plan. Commissioners Baldwin and Snipes were appointed to the CHPP Steering Committee by the Chairman late last year. The CHPP plan and steering committee were established under the Fisheries Reform Act of 1997, to enhance fisheries habitat through improved communication across the key state rules commissions (MFC, CRC, EMC) and to periodically assess the status of coastal habitats and management priorities. We will keep you informed of the Committee's work.

I was able to attend the most recent meeting of the subcommittee chaired by Commissioner Baldwin that has been focused on the Division's rules and procedures for the delineation of coastal wetlands. I wanted to thank Commissioners Baldwin and Dorsey again for their work on this. I thought it was a great meeting, and we came to consensus on a number of important issues.

The Coastal Reserve program is continuing to work on the draft strategic plan for the N.C. National Estuarine Research Reserve management plan update, and incorporating input from the stakeholder engagement activities conducted in the fall of 2014. Input on the draft strategic plan will also be gathered from Local Advisory Committees for Zeke's Island, Masonboro Island, Currituck Banks, and Rachel Carson Reserve in late March and early April. After the Local Advisory Committee meetings, the next steps are to write the draft management plan, solicit input from DENR, Local Advisory Committees, and NOAA during summer 2015, and hold a 30-day public comment period and public meetings on the final draft in October 2015. The final plan will be published in January 2016.

Steve Sollod, one of our Transportation Project Coordinators located in Raleigh, has announced his retirement from the Division effective March 31st. Steve has been with the Division since 2004. He worked for CP&L for many years before moving to DCM. We all wish Steve and his wife Cynthia well as he begins his second career as a builder of custom guitars.

The 2014 Walter B. Jones Memorial Award winners were announced last month by NOAA, and include several winners from North Carolina, including Spencer Rogers, a member of the CRC Science Panel and long-time member of the Coastal Resources Advisory Council. Spencer was honored with one of two Coastal Steward of the Year awards, which recognizes an individual who has shown strong leadership in finding a balance between human use of the coast and the needs of the environment. Other NC awards included Currituck County, which was recognized with the Excellence in Local Government award for its efforts to protect natural resources while supporting development, and the Award for Excellence in Coastal and Marine Graduate Study was awarded to four North Carolina graduate students: Barbara Doll, NCSU; Justin Ridge, UNC-Chapel Hill; Paul Rudershausen, NCSU; and Sharon Settlage, NCSU. These national awards, presented every other year, honor Walter B. Jones Sr., who represented North Carolina in the U.S. House of Representative from 1966 to 1992. The Jones Awards program recognizes people and organizations for their dedication to maintain healthy coastal and ocean resources. We want to extend special congratulations to Spencer and the other North Carolina awardees on a job well done. This award is well deserved.

We are planning for the next Commission meeting to be held in Nags Head on April 29-30.

### **CHAIRMAN'S COMMENTS**

Chairman Gorham advised Commissioners if they have agenda topics they would like to see on future agendas, please send them to him to review and discuss with Director Davis.

**CRAC** Report

Debbie Smith, Chair, stated the Advisory Council would like to recommend for appointment David Moye, retired DCM employee; Michael Moore, past town manager of Surf City and former CRAC member; John Brodman, local government official in Pine Knoll Shores; and Lee Wynns, former CRC member.

Harry Simmons made a motion to appoint John Brodman, David Moye, Michael Moore, and Lee Wynns to the Coastal Resources Advisory Council. Neal Andrew seconded the motion. The motion passed unanimously (Snipes, Lewis, Hairston, Andrew, H. Simmons, Cahoon, Gorham, Baldwin, Dorsey, J. Simmons, Rose, White).

Chairman Gorham stated we have been selective in filling CRAC slots. I would like to recommend Bob Emory for consideration for appointment and if any Commissioners have recommendations for consideration please send those names to the CRAC Chair.

Chair Smith stated there was a lot of discussion in the CRAC meeting concerning the static vegetation line and the proposed development line. There was consensus that we maintain the static line but replace the static line exception with the option of a development line. There needs to be a commitment to beach nourishment or beach management with any development line. The CRC needs to be assured that the community is dedicated to maintaining a project and the management of their beach. The CRAC recommends looking at the language used to define the criteria to create the development line. This is an on-going process, but is a step in the right direction. The CRAC supports moving forward with this change.

### CRC RULE DEVELOPMENT

Static Vegetation Line Alternatives – Draft Rule Language (CRC 15-01) Frank Gorham and Ken Richardson

Frank Gorham stated I recommend that we accept the changes provided in the draft rule language with the addition of the option of a development line. What should our policy be when we have a major renourishment? In 1981, there was a major renourishment at Wrightsville Beach and this is when the CRC started looking at policies of setbacks with a manmade beach. In 1996 the static line rules were codified. The general principal is we measure setbacks from stable vegetation. When sand is placed on the beach you get a static line and setbacks are measured from the pre-project line. One of the problems with the static vegetation line concept is we don't recognize the extra beach. All of the setbacks are measured from the more landward of the two. One of the problems with this policy is that it doesn't give an incentive for communities to stabilize their beaches and do planting. The current definition of a major nourishment project and what triggers the static line is 300,000 cubic yards of sand. There are 15 communities subject to the static line. Eight of these 15 communities have a static line exception. There were four regional hearings on inlet management and one of the common thoughts is that many communities want a change to the static line. Dredging dollars are scarce, the Corps' budget is down, dredging costs are going up, dredging windows limit competition, and communities are asking for the option to have more input on their local community. If you have a project that is over 300,000 cubic yards in order to get an exception you have to show a 30-year design going forward, you have to have proof of compatible sediment, you have to have demonstration of proof of financial resources, and petition the CRC for approval and then re-approval every five years after. If a community does a major project they have to wait five years before they can apply for an exception. The provision that limits the total square footage to 2,500 square feet is hurting a lot of people. There have been four or five variances related to this. There should be a concept of a sight line or in line with adjacent structures. No one wants to have a

policy that allows new development to go in front of their neighbor. We seem to have some arbitrary setback numbers in the current rules. What was the rationale for the static line? There was a lot of undeveloped beach. It was created to address future development, and the communities did not have much expertise in dredging programs or erosion rates. There weren't many dredge projects. Today, there is significantly less dollars for dredging. The undeveloped portion of the beach is much less. The local community expertise is way up and the experience with dredging projects is way up. The option I would like to propose is the development line. The development line would allow a city or community to look at their beaches and draw a line. This line would be approved by the Division and then they wouldn't have to use the static line as their setback. They could use the more landward of the development line or the regular setback from vegetation. We are not supporting a new row of houses. We are supporting the concept of a sight line. It is optional for the community to have a development line. We would maintain the existing setbacks. New or replaced structures would be based on the vegetation line or the development line whichever is further landward. The rule amendments will prevent seaward encroachment. The 2,500 square foot maximum would be removed. There would be no square foot provision. The five year waiting period would be removed. The 300,000 cubic yard trigger would be changed. I would prefer to allow the engineers to design the project and the limit would be an average of 100 cubic yards per linear foot for the entire project.

Ken Richardson stated DCM's concern that the development line proposal which eliminates the static vegetation line has the potential for some seaward encroachment following renourishment, depending on the development line criteria. The good thing about the static vegetation line is that it is a natural feature that represents where the ocean hazard was at one time. Without that you lose the hazard reference. Without a beachfill maintenance project the hazard is likely to return. There are only a couple of communities that are lucky enough not to need to do beachfill. There are concerns with not having a community commitment to maintain the beach project. Is there enough beach quality sand to maintain the project and can it be funded? The Division can see some seaward encroachment may occur if a development line is used in place of the existing static vegetation line. Currently we have staggered development. There are different setback scenarios based on the time of development and changes in erosion rates and vegetation lines. What standards will the CRC apply when reviewing a development line? Does the CRC adopt or approve the static line? Can the development line be changed or updated? How would variances be handled? Would the variance be a local variance and then come to the CRC? We currently have rule language that addresses the landward most adjacent structure, and in peculiar situations you can take an average line of construction.

Representatives from the towns of Oak Island, Pine Knoll Shores, Holden Beach, Carolina Beach, Bald Head Island and Ocean Isle Beach spoke in support of a development line option.

Braxton Davis stated there is already a development line incorporated in the static line exception process. The development line, whether it is adopted by ordinance and surveyed in by a local government or whether it is the current standard which is to look at the adjacent neighbors and not build any further seaward, or whether the average line of construction is used, is already in existence. Staff believes there should be a static line in every case when a beach community has a significant beach nourishment project and a new vegetation line is established seaward. Setbacks should not be pulled from the new vegetation line unless the community has demonstrated a commitment to a long-range plan.

Renee Cahoon made a motion to move forward with the development line concept, establish a working group to develop criteria and present the development criteria to the Commission prior to the April CRC meeting. Greg Lewis seconded the motion. The motion passed unanimously (Snipes, Lewis, Hairston, Andrew, H. Simmons, Cahoon, Gorham, Baldwin, Dorsey, J. Simmons, Rose, White).

# Use of Sandbags for Temporary Erosion Control – Overview (CRC 15-03) Mike Lopazanski

Mike Lopazanski stated this issue will be particularly important as we begin to discuss the state port inlet management AEC because there are significant changes to how we manage sandbags. As a Commission and an agency we have devoted an enormous amount of time to the managing the use of sandbags. When the CRC began to develop the ban on oceanfront hardening we followed the recommendations of the Outer Banks Task Force, which made allowances for temporarily protecting structures that were imminently threatened by erosion. These measures included beach nourishment, sandbags, and beach bulldozing. The intent of sandbags was to allow these temporary measures to protect the structure for a short period of time to allow the structure to be relocated or for the effects of a short-term erosion event to be reversed. When the rule was first developed in 1985 it contained the provisions that we have now. The rule stated that if the bags were not covered with sand for more than six months then they were to be removed. This became an enforcement issue for the Division and it required continuous monitoring. By 1987, the use of these erosion control structures became prolific enough that the CRC began to investigate the effects of sandbags. During the 1990s, the CRC began to receive numerous complaints about sandbags - they were not being used as a temporary measure, but as a permanent solution to erosion problems. In addition to the complaints about appearance, citizens were complaining that sandbags interfered with the public use of the beach and that they were being fortified to become massive immovable structures. In 1994, an inventory showed that there were about 15,000 linear feet of ocean shoreline protected by sandbags with some being in place for more than eight years. While most complied with the standards, there were others that did not. The analysis supplied to the CRC outlined the problems with the sandbag rules. In 1995, there were a number of amendments made to the rules to address the size and physical location of the bags and to address the time limits. Sandbags are permitted to remain in place for two years if they are protecting a structure less than 5,000 square feet or five years for structures greater than 5,000 square feet. The rules also allowed the bags to remain in place for five years if the community was actively pursuing beach nourishment. The Commission restricted the use of sandbags to one time per property. Most of the beachfront communities qualified for the beach nourishment extension, but some of the sandbag structures in the unincorporated areas were subject to removal in 1997. The hurricanes of 1996 and 1998 caused the CRC to extend the deadline to September 1998 for the counties that were declared federal disaster areas. The CRC granted variances to several property owners in Onslow County extending their deadline to August 2001. Since most of the sandbags were to be removed in 2000, the Division began to prepare to notify these property owners. Records indicated that 141 sandbag structures were to be removed, but that number was believed to be low, since prior to 1995, sandbag permits were processed by local governments. In January 2000, Dare County submitted a petition for rulemaking that requested that properties that were protected by sandbags in communities that were pursuing beach nourishment be given additional time for removal. After discussion with the Science Panel, it was recommended to grant the extension but only to sandbag structures that conform with the size limits. The CRC also refined what was meant by a community "actively pursuing beach nourishment". The CRC granted a coast-wide extension until May 2008 on sandbag permits in areas pursuing beach nourishment. By 2005, the extent of beach nourishment along the coast presented compliance and enforcement challenges since many of the sandbag structures were not removed

prior to beach nourishment. Many of the structures were buried, but were technically out of compliance because there were not vegetated. It also became common to find sandbag structures that were interlaced along properties with varying expiration dates. In 2006, the six foot height limitation became an issue. At the time, property owners were allowed to maintain the six foot height of the bags as they sank into the sand. In response the CRC directed staff to measure the structure from the base as opposed to the sand. As May 2008 approached, DCM began preparing to notify property owners that sandbag structures needed to be removed. In addition to time limits and removal deadlines, the Commission also discussed the use of degradable materials as a way of ensuring the eventual removal of sandbags from the oceanfront. This revealed a number of issues associated with biodegradable textiles for sandbags primarily over the length of time these bags could remain in the coastal environment. The CRC ultimately decided to enforce the current rule. We sent letters to 371 property owners notifying them of the deadline for removal. In 2008, DCM developed an inventory of sandbag structures and prioritized these structures for removal based on their compliance with the rules and their impediment to beach access. Also during this time the CRC denied a petition for rulemaking that would have allowed special provisions for commercial structures and denied an additional petition for rulemaking that sought to remove time limits for sandbags. In considering these petitions, the CRC found some merit in making allowances for sandbags located in inlet areas where beach nourishment was not as successful. We started to receive variance requests for sandbags. We notified 21 property owners that they had exceeded their time limit and we sent notices of violation to owners that had been notified but did not comply. The Commission implemented the provision that sandbags could remain in place in the inlet hazard area for eight years if the community was pursuing an inlet relocation project. The CRC also allowed for sandbags to be used multiple times in the inlet hazard area recognizing that the inlet may again move closer to the houses after being relocated. In 2009, House Bill 709 established a moratorium on enforcing the removal of sandbags in communities that were pursuing beach nourishment or inlet relocation; however the moratorium did not prevent the CRC from pursuing enforcement of other rule provisions. We developed a protocol for non-compliance. The CRC formed a sandbag stakeholder committee, but could not come to consensus about what to do. Further amendments were made to the sandbag rules, the time limit of eight years was extended to the oceanfront, and the one time per property limitation was removed. Most of our issues with sandbags had been in Dare County. The result of the Nags Head nourishment project was dramatic. The beach was very wide post-project and a lot of the Commission's issues with sandbags in Nags Head were resolved. There are still some problem areas and there are still a substantial number of sandbag structures in inlet areas.

Ken Richardson stated in 2008 the Division completed an inventory to see how many sandbag structures are out there and what had been removed. There are 349 structures, including those that have been permitted since the inventory was taken, in our mapping database. Of those we have 49 structures out there that are buried and vegetated. There have been 56 sandbag structures removed. There are about 283 structures on the beach, stretching approximately seven miles total, and that includes those that are buried.

## **Temporary Erosion Control Structures Design Considerations Spencer Rogers**

Spencer Rogers stated one of the earliest installations of sandbags was at the Cape Hatteras lighthouse in the 1960s. North Carolina is one of the largest markets for sandbags in the country, primarily because of CRC regulations. It is important to understand why we got involved in sandbags. It goes back to long-term erosion problems and shoreline hardening. In the early days of

CAMA there was a contrived debate between geologists and engineers on whether seawalls caused erosion or not. The two groups can debate this question forever, but the important question is if you harden the shoreline what are the consequences? There was consensus by all that this was a potential problem. If you have an area that is losing a couple of feet per year over time then the beach will exist as long as it keeps eroding back into existing dunes. If you draw a line with a hard structure then the beach will disappear. In order to avoid shoreline hardening there was a feeling that the State wanted to offer a limited protection to existing short-term threatened buildings. The fabric technology has changed a lot since sandbags have been in use. The original bags were very puncture prone and had a lightweight tensile strength. Today's fabrics are much stronger. The main problem area with them is ultraviolet sunlight resistance and decay. In some cases these bags can decay in as little as a month. The bags have always been filled from beach sand. The bags are filled hydraulically. The size limits were to reduce potential impacts on the beach and the neighbors. Litter and debris have also been an issue. It is crazy to put a time limit on the removal of sandbags. The lifetime of a sandbag is between one and ten years. You should put a time line on maintenance as opposed to removal. If you look at the older structures that have been exposed for a number of years, almost all of the structures that were once considered to be a problem are deteriorating and scattering on the beach. Other states have used other approaches over time. At one time, South Carolina had a five gallon bag requirement for sandbags. These bags would be carried miles away from where they were installed. South Carolina now uses a cubic yard container filled with off-site sand filled mechanically. I would not recommend going in this direction. About five years ago the Science Panel was asked to address geotextile tubes. Mason's inlet was moving at about a foot per day towards the Shell Island Resort. They built a temporary structure to buy time while the inlet relocation was built. Most of this structure is still in place. Under the right design and application the geotextile tube can be a functional alternative. In this case it was a temporary structure and did what it was supposed to do. The groin field on Bald Head Island is another example. There is a series of groins on the south facing beach that were installed using geotextile tubes. They have had their share of damages due to fabric decay and have been replaced a couple of times. The difference between the sandbags and tubes are the tubes are in 300 foot lengths and the dimensions can be custom built. The advantage over sandbags is the impact on the beach since it is a smaller structure. The use of the tubes also reduces the debris that can end up on the beach. The dimensions can be specified so width and height can be defined. The problem with the tubes, particularly on steeper sloping beaches, is they tend to roll. You can stabilize them with a scour apron that uses a smaller tube that is attached to the larger tube and as it settles over time it reduces the chances of it rolling. The effective protection provided by this is much greater. The Commission's rules would have to be modified to allow for geotextile tubes.

Chairman Gorham asked staff to come back to the Commission with more information on geotextile tubes.

#### **Public Input and Comment**

Renee Lewis commented in opposition to the Town of Carolina Beach boardwalk extension (written comments provided).

Mark Richard commented in opposition to the Town of Carolina Beach boardwalk extension (written comments provided).

Donald Motsinger commented in opposition to the Town of Carolina Beach boardwalk extension (written comments provided).

Cathy Lane commented in opposition to the Town of Carolina Beach boardwalk extension (written comments provided).

Public Hearing - 15A NCAC 7H .1500 GP for Excavation of Upland Basins

Tancred Miller stated 7H .1500 is the CRC's General Permit for the excavation within or connecting to existing canals, channels, basins or ditches in estuarine waters, public trust waters and estuarine shoreline AECs. This GP authorizes excavation within these areas for the purpose of maintaining previous water depths and creating new boat basins from non-wetland areas that will be used for private, non-commercial activities. This permit is limited to development off of existing manmade systems. The proposed amendments will provide financial and administrative relief for applicants who wish to perform upland excavation in conjunction with stabilization of the adjacent shoreline by allowing both activities to occur under a single GP instead of two. The amendments also make the combined GP valid for 120 days instead of 90.

No comments were received.

With no further business, the CRC adjourned.

Respectfully submitted,

Braxton Davis, Executive Secretary

Angela Willis Recording Secretary