

NC COASTAL RESOURCES COMMISSION (CRC)

February 8-9, 2012

Jennette's Pier

Nags Head, NC

Present CRC Members

Joan Weld, Vice Chair

Lee Wynns

Pat Joyce

Renee Cahoon

Charles Elam

David Webster

Veronica Carter

Melvin Shepard

Ed Mitchell

Bill Peele (absent 2/8/12)

Jerry Old

Present CRAC Members

Randell Woodruff

Bob Shupe

Charles Jones

Tim Tabak

Kristen Noble

Dave Weaver

Christine Mele

W.H. Weatherly

Bill Morrison

Wayne Howell

Carlton Davenport

Ray Sturza

Webb Fuller

J. Michael Moore

Harry Simmons

Rhett White

Debbie Smith

Judy Hills

Bryant Buck

Tracy Skrabal

Spencer Rogers

Phil Harris

Morgan Jethro

Present Attorney General's Office Members

Mary Lucasse

Amanda Little

CALL TO ORDER/ROLL CALL

Joan Weld chaired the meeting and called the meeting to order reminding the Commissioners of the need to state any conflicts due to Executive Order Number One and also the State Government Ethics Act. Chairman Weld stated 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. Bob Emory and Jamin Simmons were absent. No conflicts were reported by Commissioners. Based upon this roll call, Chairman Weld declared a quorum.

VARIANCES

Patrikios (CRC VR 11-11), Dare County, buffer Amanda Little

Amanda Little of the Attorney General's Office stated she represents the Division of Coastal Management staff in this variance request. Petitioner Patrikios is present at the meeting and will represent himself in the variance request. Mr. Patrikios is requesting relief from the 30-foot buffer requirements for property he owns in Avon. Petitioner proposes to construct a roof over an existing open deck. Petitioner proposes to enclose the deck for a physical therapy room equipped with a hot tub. On December 20, 2011, the Dare County Local Permit Officer denied Petitioner's application based on the proposed development being inconsistent with 15A NCAC 07H .0209(d)(10). Petitioner seeks a variance from this rule, specifically to allow construction of a roof over the portion of the existing open deck which lies within the 30-foot buffer of the Coastal Shoreline Area of Environmental Concern. Ms. Little reviewed the stipulated facts of the variance request. Staff disagrees with Petitioner that strict application of the 30-foot buffer causes Petitioner an unnecessary hardship because Petitioner has other alternatives which would not be inconsistent with the rule. Staff does agree that the Petitioner's property is irregularly shaped, however staff disagrees that Petitioner's hardship is caused by conditions peculiar to this property. Staff disagrees with Petitioner that any hardships are not a result from Petitioner's actions. The hardships do result from Petitioner's actions because the proposed development could be located outside the buffer and be in compliance with the CRC's rules. Staff agrees with Petitioner that the variance requested by Petitioner would be consistent with the spirit, purpose and intent of the rules; would secure public safety and welfare; and preserve substantial justice. Petitioner's existing stormwater collection system, consisting of gutter and a cistern, complies with the spirit, purpose and intent of the buffer within the AEC as well as public safety and welfare by reducing runoff pollution into the marine environment.

Robert Patrikios stated he disagrees when they say that he could move the room to the other end of the deck. The deck is very narrow due to the envelope of the building. He further stated that his health is deteriorating and he can't take the cold anymore. Mr. Patrikios stated he is a 100% disabled veteran. Every house on this canal is closer than 30 feet. The water is coming off their roofs and going into the canal. Mr. Patrikios stated his is the only one that far back, but since it doesn't meet the 30-foot criteria then it doesn't make a difference. A complete gutter system was put in and all of the rainwater is diverted away to the cistern.

Jerry Old made a motion to support Petitioner's position that strict application of the applicable development rules, standards, or orders issued by the Commission cause the petitioner unnecessary hardships. Pat Joyce seconded the motion. The motion passed with five votes in favor (Old, Joyce, Mitchell, Wynns, Elam) and four opposed (Webster, Shepard, Carter, Cahoon).

Melvin Shepard made a motion to support Staff's position that hardships do not result from conditions peculiar to the petitioner's property. David Webster seconded the motion. The motion passed with five votes in favor (Webster, Shepard, Carter, Cahoon, Elam) and four votes opposed (Old, Joyce, Mitchell, Wynns).

David Webster made a motion to support Staff's position that hardships result from actions taken by the Petitioner. Melvin Shepard seconded the motion. The motion failed with four

votes in favor (Webster, Shepard, Carter, Cahoon) and five opposed (Old, Joyce, Mitchell, Wynns, Elam).

Jerry Old made a motion to support Petitioner's position that hardships do not result from actions taken by Petitioner. Lee Wynns seconded the motion. The motion failed with four votes in favor (Old, Joyce, Mitchell, Wynns) and five opposed (Webster, Shepard, Carter, Cahoon, Elam).

David Webster made a motion to support Staff's position that hardships result from actions taken by the Petitioner. Veronica Carter seconded the motion. The motion failed with four votes in favor (Webster, Shepard, Carter, Cahoon) and five opposed (Old, Joyce, Mitchell, Wynns, Elam).

Jerry Old made a motion to support Petitioner's position that hardships do not result from actions taken by Petitioner. Ed Mitchell seconded the motion. The motion passed with five votes in favor (Old, Joyce, Mitchell, Wynns, Elam) and four opposed (Webster, Shepard, Carter, Cahoon).

David Webster made a motion to reject Staff's position that the variance request will be consistent with the spirit, purpose and intent of the rules, standards or orders issued by the Commission; will secure the public safety and welfare; and preserve substantial justice. Veronica Carter seconded the motion. The motion failed with four votes in favor (Webster, Shepard, Carter, Cahoon) and five votes opposed (Old, Joyce, Mitchell, Wynns, Elam).

Ed Mitchell made a motion to support Staff's position that the variance request will be consistent with the spirit, purpose and intent of the rules, standards or orders issued by the Commission; will secure the public safety and welfare; and preserve substantial justice. Charles Elam seconded the motion. The motion passed with five votes in favor (Old, Joyce, Mitchell, Wynns, Elam) and four opposed (Webster, Shepard, Carter, Cahoon).

This variance request was denied.

Follow up discussion on 02/09/12

Melvin Shepard made a motion that the CRC reconsider the second criteria vote and bring that vote back to the table. Charles Elam seconded the motion. The motion passed unanimously (Old, Joyce, Mitchell, Wynns, Shepard, Carter, Cahoon, Elam) (Webster, Peele abstained).

Melvin Shepard made a motion to support the Petitioner's position that hardships result from conditions peculiar to the Petitioner's property. Jerry Old seconded the motion. The motion passed with seven votes in favor (Old, Joyce, Mitchell, Wynns, Shepard, Cahoon, Elam) and two opposed (Webster, Carter) (Peele abstained).

Jerry Old made a motion that the CRC reconsider the fourth criteria vote. Ed Mitchell seconded the motion. The motion passed with seven votes in favor (Old, Joyce, Mitchell, Wynns, Shepard, Cahoon, Elam) and two opposed (Webster, Carter). Bill Peele recused himself from voting.

Jerry Old made a motion to support the Staff's position that the variance request will be consistent with the spirit, purpose, and intent of the rules, standards or orders issued by the Commission; secure the public safety and welfare; and preserve substantial justice with the requirement that the DCM's standard buffer conditions for variances be added to the permit. Lee Wynns seconded the motion. The motion passed unanimously (Old, Joyce, Webster, Mitchell, Wynns, Shepard, Carter, Cahoon, Elam).

This variance request was granted subject to the inclusion of the standard DCM buffer conditions for variances.

**Atlantic Telephone Membership Corp. (CRC VR 11-12) Caswell Beach, Oceanfront Setback
Amanda Little**

Amanda Little of the Attorney General's Office stated she represents the Division of Coastal Management. William Raney, of Wessell and Raney LLP, is present to represent Petitioners Atlantic Telephone Membership Corporation. Petitioner is a telephone company which services the Town of Caswell Beach and the Village of Bald Head Island in Brunswick County. Petitioner proposes to install a new buried fiber optic cable line within the right-of-way of Caswell Beach Road from eastern Oak Island to the eastern end of Caswell Beach where it would connect to an existing line under the Cape Fear River to Bald Head Island. On December 20, 2011, DCM denied Petitioner's CAMA Minor Permit application for the proposed work based on portions of the cable being inconsistent with the Commission's oceanfront erosion setbacks found in 15A NCAC 07H .0306(a)(2)(i). Ms. Little reviewed the stipulated facts of this variance request. Staff and Petitioners agree on all four statutory criteria which must be met in order to grant the variance.

Bill Raney represented Petitioners and stated the Petitioners agree with the Staff. Mr. Raney stated the only logical place to put this line is in the road right-of-way and there are spots where the entire road right-of-way encroaches within the ocean setback. If this service is to be provided then the only location this line can go would need a variance. It is probably just a matter of time that the updated erosion rates will be adopted and would make this variance unnecessary.

Melvin Shepard made a motion to support Petitioner's position that strict application of the applicable rules, standards, or orders issued by the Commission cause the petitioner unnecessary hardships. Ed Mitchell seconded the motion. The motion passed unanimously (Old, Joyce, Webster, Mitchell, Wynns, Shepard, Carter, Cahoon, Elam).

Veronica Carter made a motion to support Petitioner's position that hardships result from conditions peculiar to the Petitioner's property. Jerry Old seconded the motion. The motion passed unanimously (Old, Joyce, Webster, Mitchell, Wynns, Shepard, Carter, Cahoon, Elam).

Ed Mitchell made a motion to support Petitioner's position that that hardships do not result from actions taken by the Petitioner. Jerry Old seconded the motion. The motion passed unanimously (Old, Joyce, Webster, Mitchell, Wynns, Shepard, Carter, Cahoon, Elam).

Jerry Old made a motion to support Petitioner's position that that variance requested by the Petitioner would be consistent with the spirit, purpose and intent of the rules, standards or orders issues by the Commission; would secure the public safety and welfare; and preserve substantial justice. Veronica Carter seconded the motion. The motion passed unanimously (Old, Joyce, Webster, Mitchell, Wynns, Shepard, Carter, Cahoon, Elam).

This variance request was granted.

**Gardner (CRC VR 11-13) Emerald Isle, Oceanfront Setback
Amanda Little**

Amanda Little of the Attorney General's Office represented the Division of Coastal Management and stated that Mr. Kenneth Gardner is present and will represent himself in this variance request. Petitioner proposes to construct additions to his existing home located at 2311 Ocean Drive in Emerald Isle. They meet all of the requirements under the static line exception rule except that their proposed addition is further seaward than the landward-most adjacent house, which is a non-conforming structure. On December 20, 2011, the Town of Emerald Isle Local Permit Officer denied Petitioner's application based on the proposed development being inconsistent with 15A NCAC 07H .0306(a)(8)(D). Ms. Little reviewed the stipulated facts of this variance request. Staff and Petitioner agree on all four statutory criteria which must be met in order to grant the variance.

Mr. Kenneth Gardner stated we support the spirit of this particular rule as it tries to build a public corridor that protects the dune structure, the vegetation and public access to the ocean. In this particular case the hardship comes from the houses next to us. They are located so close to the street that when the Town came back and eased the setback, these homes were still not in compliance. We asked today that we be relieved of those non-conforming structures which are not in the spirit of what the Town wants to be built.

Ed Mitchell made a motion to support Petitioner's position that strict application of the applicable development rules, standards, or orders issued by the Commission cause the Petitioner unnecessary hardships. Jerry Old seconded the motion. The motion passed unanimously (Old, Joyce, Webster, Mitchell, Wynns, Shepard, Carter, Cahoon, Elam).

Renee Cahoon made a motion to support Staff's position that hardships result from conditions peculiar to the Petitioner's property. Charles Elam seconded the motion. The motion passed unanimously (Old, Joyce, Webster, Mitchell, Wynns, Shepard, Carter, Cahoon, Elam).

Renee Cahoon made a motion of support Staff's position that the hardships do not result from actions taken by Petitioner. Ed Mitchell seconded the motion. The motion passed unanimously (Old, Joyce, Webster, Mitchell, Wynns, Shepard, Carter, Cahoon, Elam).

Veronica Carter made a motion to support Petitioner's position that the variance request will be consistent with the spirit, purpose, and intent of the rules, standards or orders issued by the Commission; secure the public safety and welfare; and preserve substantial justice. Lee Wynns seconded the motion. The motion passed unanimously (Old, Joyce, Webster, Mitchell, Wynns, Melvin, Carter, Cahoon, Elam).

This variance was granted.

MINUTES

Veronica Carter made a motion to approve the minutes of the October 26-27, 2011 Coastal Resources Commission meeting. Ed Mitchell seconded the motion. The motion passed unanimously (Wynns, Joyce, Cahoon, Elam, Webster, Old, Peele, Carter, Shepard, Mitchell).

CHAIRMAN'S COMMENTS

Joan Weld welcomed and introduced Braxton Davis. Braxton grew up in Lynchburg, Virginia. His education is impressive. His Bachelor's is from the University of Virginia and his Master's is from Florida International University and his PhD is from Rhode Island in Marine Affairs. Braxton over the years ended up as research faculty at the University of South Carolina before he became the Director of Policy and Planning for the South Carolina Coastal Management Program in Charleston for six years. Since 2010, he has also served as Chair of the Coastal States Organization in Washington on coastal and ocean issues. He has also been reappointed to this by Governor Perdue and I know Braxton hopes to continue on some of these important coastal and ocean issues. He has a long list of very impressive peer reviewed publications and reports. He understands the need to get out and talk with folks and to listen. In addition to his impressive background, I think we have a person here with a fresh perspective.

Joan read remarks from Chairman Bob Emory:

I regret that I cannot join you for the meeting this week. Kill Devil Hills is one of my favorite meeting locations and I hate to miss it. For those that don't know, a couple of weeks ago I had surgery in Chapel Hill to remove a small cancerous mass from one of my kidneys. The surgeon took enough of the kidney to be sure that all the cancer was removed. I will not have to have chemo or radiation and there is a 95% chance that there will be no reoccurrence. I consider myself very fortunate. I returned to work, but still have some travel restrictions. I am not sure how much longer I can use my surgery as an excuse to avoid household chores. We have interesting times ahead of us with a new Director, different perspectives and experiences that he brings. Our continued work on sea level rise and all the challenges associated with it, a renewed focus on estuarine management, understanding the effects both positive and negative of hardened structures at inlets, and things we haven't thought about yet. We will work with all of our partners, especially local government, to ensure that coastal North Carolina continues to be the wonderful place that it is. Feel free to resolve our sandbag challenges at this meeting. I look forward to seeing you all in April.

EXECUTIVE SECRETARY'S REPORT

DCM Director Braxton Davis gave the following report.

Through my regional and national level work, I've had opportunities to work with NC DCM staff on a number of occasions, and even an opportunity to attend a few CRC meetings. I have been extremely impressed over the years with North Carolina's coastal management program and the approaches here. During my tenure in South Carolina, we were always following closely the developments in North Carolina, particularly in the beach management arena, looking to your leadership and experience in those issues in particular. I know that I have big shoes to fill in succeeding Jim Gregson as director of DCM. As you already know, staff really stepped up in the interim between Jim's departure and my start date back in December. They continue to take on additional roles under significant budget cuts and staff losses, and they continue to do an incredible job. They've also been very supportive in getting me up to speed on issues and regulations. It's a wonderful group of people who care deeply about the program and truly believe in delivering

exceptional customer service. I've also had the opportunity to meet one-on-one with some of you and look forward to meeting with the rest of the Commission and CRAC members as soon as I can get a meeting scheduled. That has been very helpful and again, thank you for your support in getting me up to speed.

CRC Membership

In recent months, Chuck Bissette and Jim Leutze have resigned from their seats on the CRC. DCM is currently working with the governor's office to solicit nominations for new commission members to fill the coastal engineering and At Large slots on the CRC. Letters went out to local governments soliciting nominations in early December with a 30-day clock. Should be in now, we've heard of a few. The Governor can also add nominees if they do not get nominees from local governments. We anticipate an update from the Governor's office soon on this. Also, a number of appointments expire this June, and are included in your packet. If your appointment expires in June and you are interested in being reappointed then you need to write a letter to the Governor's office and there is also an online application.

DCM Update

Staff Changes

DCM's budget officer, Arthur Stadiem, left the division at the end of October for a position with NCDOT's Ferry Division. We are currently hiring this position and hope to have it filled within the next month or two. The Raleigh DCM office was officially closed on December 3. Three of our policy positions were relocated to the Morehead City headquarters office. Those positions include the coastal hazards specialist, coastal engineer, and strategic planning coordinator. The three employees in those positions – Steve Underwood, Bonnie Bendell and Guy Stefanski – have elected not to move to Morehead City, and have resigned from DCM. Fortunately, we were able to hire Guy Stefanski in a temporary position to help us finish out this year's federal grant cycle. We are all sorry to see these good folks leave DCM and wish them the very best in their future endeavors.

Today's Agenda

There are a number of follow-up items from your October meeting.

- continuing progress on SLR, asking you at this point to consider releasing the draft policy for public hearing.
- continuing to monitor discussions of offshore energy development. Gary Perry will provide an update on the Governors Advisory Panel.
- based on prior variance requests, the CRC asked for a briefing on issues related to docking facilities in Primary Nursery Areas. Our Washington District Manager, David Moye is here to talk about these issues.
- Doug Huggett, Major Permits coordinator, will provide you with an update on the terminal groins permitting process based on input from the Science Panel.

We ran into a logistical issue and had to pull an item from the agenda. We had hoped to present a report back from the Science Panel on comments received on their Sea Level Rise Report.

Unfortunately, we couldn't get up with all the Science Panel members to make sure they had provided their input on the draft response. We will make the Panel's response available for review on our website as soon as it is complete. The CRC presentation has been rescheduled for April. Staff feels that you can still proceed with considering adopting the Draft SLR Policy for public hearing since these are two different things. In part, the Draft Policy calls for updating local governments on SLR information, and the Science Panel response would be part of that kind of ongoing effort.

Rule Hearings

The Rules Modification and Improvement Program (E.O. 70) expanded the administrative review of proposed rule changes. The Office of State Budget and Management must now review and approve all proposed rule changes and fiscal analyses before they can be published in the State Register. This has resulted in a significant increase in the length of time between when the Commission approves a rule for public hearing, and when public hearings can occur. Since the expanded process is still relatively new and each rule and fiscal analysis has its own level of complexity, it is difficult to predict a rulemaking timeline, except to say that we now expect the process to take at least an additional two months longer than the previous 6-9 month timeline.

Future CRC Meetings

The next two CRC meetings will be held in Beaufort. We want to move the CRC around to get public input, but also to get out and see different parts of the coast. We have run into budget constraints until we get into the new fiscal year. We hope for at least one meeting in a different location later this year and will try for even more.

Upcoming Meetings/Workshops

1) Research Symposium

Wednesday, February 22 to highlight research activities on Coastal Reserve sites

2) Funding Environmental Improvements in Your Community: Funding Agencies and Grant Writing Basics - March 28, 2012

CRAC REPORT

Ray Sturza stated the CRAC welcomed four new members to the Advisory Council. Christine Noble from Hyde County, Randall Woodruff from Beaufort County, Morgan Jethro from Gates County, and Boyd Devane our new representative from the Division of Water Resources. The first item on our agenda was a presentation from Mayor Bob Oakes and members of the Nags Head staff on their highly successful shoreline restoration program that they have done in South Nags Head. We are literally sitting atop that successful shoreline restoration program. Mayor Oakes went into detail about the way the Town put together the money to actually build the first non-federally funded shoreline restoration plan in coastal North Carolina. The federal funds that were promised back in the early part of 2001 were never forthcoming and the situation in Nags Head became critical. They moved forward on their own with non-federal money.

Then we had a discussion on which direction the Advisory Council wants to move. We have had a fragmented schedule due to budgetary constraints at the State level and we tried to put together some continuity to our Council. We honed in on two issues that we anticipate focusing on over the next few meetings. The first is public access. We want to see how we can further enhance opportunities for public access particularly with dwindling public monies being available. We are going to inventory what our access issues are in coastal North Carolina, what our success stories are, and where we need additional access. We also want to look at ways that we may be able to find funding from non-governmental agencies or from public monies to increase access to our estuarine, riverine and oceanfront water resources in coastal North Carolina. Secondly, we also talked about the important issue of structures on the beach and how we can use methodologies other than regulations to result in nuisance structures being removed by choice by the owners. For those of you who have been on the Commission for some time you know that this has always been a critical

issue when a structure finds itself in danger, in particular on our oceanfront. We then have to go to regulatory measures to remove it. There was a time when there were voluntary incentives for owners to choose to remove those structures of their own volition. We want to tackle the issue to see if we can find information on tax incentives and non-federal monies to work with our insurance agencies to find ways to remove the regulatory necessity for addressing nuisance structures and actually see some voluntary compliance.

Those of us who live here are familiar with this facility, but for those of you that are seeing it for the first time might also be pleased to know that there are proposals to build two additional similar public pier facilities in North Carolina (Carolina Beach and Carteret County). We think that would be a strong program to advocate. We also talked about the State's role in inlet dredging and a lot of our discussion was driven around the diminishing availability of federal funds and the need for state and local governments to try and pick up some of the slack where federal monies used to have a role. We also talked about the impact of wind farms on our coastal communities and our decision was to hear Mayor Perry's presentation today and see where we are with all of that. Finally, we talked about encouraging the CRC and using our own respective appointment bodies to encourage the State to continue to recognize the importance of the Coastal Resources Commission and the Advisory Council so we can have the necessary monies to meet on a regular basis. Budget restraints have made it questionable sometimes. We are trying to put together a strategy so that in the event that it isn't the case and some of our meetings have to be canceled or postponed then we can devise a strategy whereby a few of our members can attend and report back to the others or maybe we can look into some alternatives for streaming audio or video.

PRESENTATIONS

Governor's Scientific Advisory Panel on Offshore Energy – Recommendations (CRC 12-06) Gary Perry, Mayor Pro Tem Town of Kitty Hawk

Mike Lopazanski stated over the last couple of years I have updated you on various activities and groups involved in offshore energy issues and concerns. You have heard from the Legislative Research Commission Advisory Subcommittee on Offshore Energy. In the wake of the BP accident the CRC was charged with reviewing some of the state rules and federal regulations regarding oil spills and the possible effects spills could have on coastal North Carolina. The CRC was also asked to make some recommendations to the Legislature involved in the offshore wind issue by amending the rules to both allow the transmission of that energy to come ashore as well as coming up with some siting criteria for state waters and other criteria that we could use for federal consistency review. In making recommendations based on the CRC's last assignment from the Legislature, we thought it would be best to let all of these other groups run their course as well. The Legislative Advisory Subcommittee was still working on their issues when the Governor's Scientific Advisory Panel was formed, but they passed their findings and background information onto the Governor's Advisory Panel. The Governor's Advisory Panel was charged with taking a comprehensive evaluation of all the potential offshore energy resources that could be available off the North Carolina coast. They have since completed their report and delivered it to the Governor. The Governor put out a press release yesterday acknowledging the report and the recommendations in them. We asked Gary Perry to come and brief us on the recommendations and the work of the Panel.

Gary Perry stated this all started September 18, 2009. It really started because there was a move towards some offshore exploration for oil and gas off of the North Carolina coast. The Valdez spill,

which I was actually a part of as a Coast Guard inspector, made people realize that we needed energy in the form of oil and natural gas. The actual questions that were posed to the Committee were should there be wind turbines off of North Carolina's coast and should oil and natural gas drilling be permitted off of the coast? What were the limitations and conditions that should be put on these things? Should they be left to commerce alone or monitored and regulated by state or federal agencies or some other combination? This question actually recognizes the fact that exploration and associated production is very expensive. If industry is allowed to do the exploration then they have the reasonable expectation to be able to produce and profit from it. The only other option would be for government to do the exploration, find what might be there, and be able to control it. It is not likely that it will be government exploration so it will have to be done by industry. Wind became as much about job creation as it was concerning non-carbon production. We are in an economy where we need jobs. A lot of the folks that were looking at wind were thinking that wind would bring a lot of jobs to North Carolina. It may create some, but the question is how many are actually North Carolinians, how much of it is done here in North Carolina, and how much of it would be imported? The possibility of oil and gas exploration off the coast was under serious consideration, but the Gulf oil spill had a chilling effect. From the time we started until the time we finished, world events really took a lot of our considerations. Wind was to look for jobs. Oil, because of the Gulf spill, was impacted into the original thinking that got the Panel started and a lot of people became adamant against oil off of our coast. There is a host of alternative energy producing devices. The University of North Carolina has been studying wind resource and they have identified a lot of areas off of our coast that would produce wind for a wind farm in amounts that would be worthwhile. The Panel found that there were few regulatory incentives for existing wind energy. Should government incentivize and promote wind farms off of our coast? The carbon emission reduction that was anticipated requires an offset of fossil fuel. There is a problem in that the reliability of all of these alternative forms is dependent upon wind or wave action but may not be continuous, where a fossil fuel plant will form electricity. There are a lot of impediments to wind resources. There are risks to birds and bats, conflicts with commercial fishing and recreation, risks to marine life, and conflicts with military training. North Carolina, as far as the Panel is concerned, feels that there should be some law and regulation that govern development. The laws are needed to provide a framework for federal consistency. Most of that is going to be outside three miles, if not all of it. We need to be consistent with the federal law and need to have an input into that. We need to review all applicable laws to ensure that we are covering gaps. Anything mechanical is subject to failure. Windmills, even on land, would be a difficult situation. The propellers are composite material and it will burn. Gears need grease and oil. If that fails and gears initiate a fire, then what are we going to do? In 2008 the Congressional moratorium expired for offshore fuel exploration. This is what prompted this Panel's discussion. Everyone was looking towards proceeding with offshore exploration. In 2010 it was ongoing. By December 2010 the Gulf oil spill stopped it. The only way we will ever know whether we should drill or not drill off of the North Carolina coast is to drill and see what is there. Until a hole is drilled you don't know what is there. Some of the Panel thought you could separate oil drilling from natural gas drilling. You cannot do that. If you drill for one you are likely to strike the other. The quantity may be different, but you cannot separate drilling. The Panel recommended that North Carolina needs a program of research and data collection to ensure adequate information exists to assess and mitigate any impact from all potential energy sources off the outer and inner coastal waters. North Carolina needs to establish and implement a strategy for ecosystem protection and restoration that is science based. We also need to build a relationship and dialogue with federal agencies because much of the effort would be in federal and not state waters. North Carolina should work to ensure revenue and royalty sharing from federal offshore projects. Socioeconomic and environmental infrastructure costs and benefits should be fully evaluated as part of an ocean energy resource management plan in

order to prevent more harm than good from offshore energy production. North Carolina academic institutions have initiated research efforts in areas of offshore energy. The Panel recommended the state support a consolidated, focused effort to assess the contribution of any offshore energy production to North Carolina and the USA overall future energy requirements. Eight Panel recommendations encourage continued study before any exploration to ensure protection of coastal economies, ecosystems, costs to local and state governments and revenue sharing. The Panel recommended the state promote wind development through statutes/regulation, co-op with developers, utilities, federal agencies, industrial wind suppliers and allow metrological towers for feasibility study. The unique nature of current convergence off of North Carolina implies an in-depth assessment of potential wave, thermal, methane hydrates and Gulf Stream/Labrador current energy sources should be undertaken. At the conclusion of Panel meetings, I noted academia support wind and oppose oil and gas. Oil interests want to retain the ability for future exploration. Environmentalists oppose oil and gas with misgivings regarding wind and other types. The Panel's report was released yesterday and is available at www.nccommerce.com.

Science Panel Guidance for Assessing Terminal Groin Adverse Impacts (CRC 12-01)

Doug Huggett

Doug Huggett stated this is a continuing discussion of terminal groin structures in North Carolina. If you will remember, at the August meeting Jim Gregson and I both gave presentations on Senate Bill 110. SB110 modified CAMA to allow for the permitting of up to four terminal groins in coastal North Carolina. There were a lot of additional requirements that were placed into CAMA as a result of SB110. Some relatively unique requirements were placed on the Division as the regulatory agency that we have never had to deal with before in a permit process. With the CRC's permission we went to the Science Panel asking for some guidance on certain issues to help us figure out how to apply SB110 a little bit better. In developing our ideas about what we were going to ask the Science Panel, Staff developed a few assumptions. The first assumption was we believed that there is already within the existing permit process an expertise in a lot of the types of areas that we are going to have to deal with terminal groins. There was not universal consensus on this assumption that the expertise is doing an adequate job in all of the areas. We believe that we are doing what is necessary from a regulatory component, but this opinion was not shared by all of the members of the Science Panel. The next assumption is that because of the existing expertise, the expertise of the Science Panel is probably better served by answering issues specifically relating to the physical processes of a terminal groin. We wanted the guidance from the Science Panel to take the form of guidance that we can implement within our existing permit process that we have been using for inlet relocation projects and beach nourishment projects. Staff wanted the recommendations from the Science Panel to take the form of a set of tools that DCM could use to help us come up with how to deal with assessing the impacts from a terminal groin project. It was very important for us that the recommendations not be so specific that they would constitute ad-hoc rule making. The most critical part of SB110 changed CAMA to mandate that any project for a terminal groin has to develop an inlet management plan that will assess the impacts of the terminal groin. The management plan has to describe the post-construction activities that the applicant will undertake to monitor the impacts of coastal resources, define the baseline for assessing any adverse impacts and the thresholds for when the adverse impacts must be mitigated, provide for mitigation measures to be implemented if adverse impacts reach the thresholds defined in the plan, and provide for modification or removal of the groin structure if the adverse impacts cannot be mitigated or modified. On October 6, 2011, the Science Panel met and discussed monitoring boundaries, pre-project monitoring, and post-construction monitoring. There was quite a bit of desirability to have an independent third party review on each potential terminal groin permit application. The

legislation did not require this provision for a mandatory third party review. We do not have the authority to require one. It is available to have one done if the applicant and the regulatory agency agree to do it voluntarily. The cost would be the responsibility of the applicant. DCM has committed to requesting and discussing it with each community to see if they are willing to do a third party review. There was also discussion of setting up a control beach to compare the beach that is under the influence of the groin. However, at the second meeting of the Science Panel there seemed to be a consensus that the idea of utilizing a control beach is likely not practicable since such a control beach would be difficult if not impossible to locate. There was discussion about groin design alternatives. Terminal groin design alternatives should include consideration of leaky or porous groins and groins that will allow for significant sand transport into the inlet system. It may be what is ultimately chosen, but we will have this discussion with the applicant. Whatever we do in setting up monitoring plans and pre-project baselines, the first thing you have to do is see what existing data is available for that beach. You don't want to tell a beach community that they have to start from scratch. Monitoring plans should be developed by determining what existing data can be utilized to develop a pre-project baseline. You may not see a monitoring plan be the same for any two beach communities because you are trying to develop off of the existing data, but that is the best way to go from a cost standpoint for the applicant. It is also the way to get us more data to help us make better decisions. The biggest challenge we are going to have as we try to setup impact thresholds is how to separate groin related erosion impacts from other types of impacts. We can potentially examine post-project changes to sediment volumes over pre-project or baseline sediment volumes on the study area beach. You can determine a volumetric loss over a certain stretch of beach that would be expected due to natural conditions and if you exceed that threshold then mitigation would kick in. Some other ideas were to examine post-project changes to shoreline position relative to pre-project or baseline shoreline positions and/or examine post-project changes to shoreline position relative to structures and their pre-project or baseline positions. You could also examine post-project changes to beach width, vegetation line and/or erosion rates relative to pre-project or baseline conditions. Our monitoring plans are going to use multiple components of all of these various ideas. Now that we have heard these ideas from the Science Panel, DCM staff will use these ideas and work with our other agencies at the state and federal level and the applicant to develop these project-specific inlet management plans. We can permit up to four of these structures and we have four communities that have started on the permit process.

Re-Assessment of Sandbag Enforcement Priorities (CRC 12-02)

Ted Tyndall

Joan Weld advised the Commission that we do not need to focus on individual properties and that discussion should be limited to policy priorities.

Ted Tyndall stated this will focus on the big picture and update the CRC on where we are in sandbag enforcement and the priority list. The conversation should be very cautious as the Commission sits as a quasi-judicial board and will act on variances, contested cases and declaratory rulings. We do not want to prejudice any actions that may come forward in the future. The sandbag issue has been in front of the CRC for decades. It is an ongoing thing and it is a tool that the CRC uses to allow property owners to protect their property. Over the years there have been rules that have been tweaked, there have been variances granted and denied, and there have been actions taken by the Legislature. The critical thing on sandbags is that the environment is dynamic and is not a static situation. You have a set of conditions today that can change tomorrow. In 2008 we came up with a priority list of sandbags on the beach that were causing the most harm. In 2009 the Legislature passed Session Law 2009-479 that put a moratorium on sandbag removal based on time.

The biggest issue is harm and what damage is being done or impeding public access to the beach. We moved forward with enforcement with the most egregious and most of them were in South Nags Head. Staff took enforcement action by sending out letters asking for voluntary removal. We did get some voluntary compliance. What helped the situation in South Nags Head is that the moratorium allowed for the sandbags to be repaired back to their original condition. Then on September 1, 2010, the sunset of Session Law 2009-479 brought us back to enforcement for bags that had expired time periods. Nags Head was proposing a beach nourishment project and the permit addressed sandbags during the beach nourishment process. There was a condition on the Major Permit that said that the non-compliant sandbags could not be covered with sand. Staff worked with the Town and the property owners to ensure that these bags were not being covered during the beach nourishment. We had Staff out in front of the dredge marking the seaward toe of the sandbags. We didn't want to impact the integrity of the beach nourishment project and it was an excellent project. As the project completed, the sandbags were not covered. Then Hurricane Irene came through and wind-blown sand covered the bags up. We re-evaluated the priority list and had staff visit every structure. What we are seeing is that there are some sandbags that were in the middle of the priority list back in 2008-2009 that are still exposed and their time limits have expired. There are very few egregious structures. Our priority list no longer gives us a sequence to follow. Now we have 50 that are all ranked together. We may need to send this to the Ocean Hazards Subcommittee, but do we still want to make sandbags be covered with sand and stable, natural vegetation. Is there harm to sandbags that are in the base of an unvegetated dune? Or is there harm on the sandbags that are down on the toe of the face of the beach itself if they are not exposed and impeding public trust below the mean high water mark. That is one issue that is out there in trying to address the group of sandbags. The other issue is terminal groins. In 2008 and 2010 when we revisited the prioritization, terminal groins were not on the table. We didn't use them as a factor to tease out some of those that may have some factor that will come into play that will make them less harmful or that will facilitate their long-term survival. Is this something that we need to look at on our priority list to help us rank these structures?

Charles Elam said that some of these bags have been out of compliance for a long time. As we get storms like we did last year and people get new sandbag permits and they expire, are we in a mode where we are aggressively moving to get them out so they don't end up in the pile of bags that goes on and on? We can clean up the existing stuff, but I don't want the new stuff coming in to create the same monster we are trying to get our hands around now. Ted Tyndall responded that we are in litigation today on sandbags. This is a process that is long and drawn out. It is not a very good solution, but it is the only avenue we have to pursue. When you get into litigation it is a tough situation. Enforcement is only as good as the tools you have to get the enforcement done. With the resources as limited as they are, it is hard to make somebody do something.

Melvin Shepard stated the most egregious bags are the bags to be concentrated on. The bags that interfere with the public's use of the beach are something that we should consider to be changed. These should be at the very top of the list.

Renee Cahoon stated the memo to the CRC from staff talked about the Nags Head beach nourishment project. There were areas in the Town where sandbags were seaward of the mean high water mark and therefore not as much sand got placed in those areas because of condition on the permit said that the sand could not touch the bags. There are areas where we could not go as far on the beach nourishment width because of the sandbags. Ted Tyndall responded that he and Frank Jennings, Elizabeth City District Manager, went before the beach nourishment to these property owners and pleaded with them that they were not only in violation but they were also impacting the

public's quality and value of their beach. We told them that they were impacting the integrity of the beach nourishment project. Renee Cahoon stated there are areas where the highest erosion rates in Nags Head did not get as much sand as was called for in the beach nourishment project.

Lee Wynns stated that impeding access to the beach should be the biggest priority. The second biggest priority should be the aesthetics of the derelict bags.

Braxton Davis stated with this initial input we can go back and draft up a new set of priorities to bring back to the Commission as a specific proposal or discussion item at the next meeting.

PUBLIC INPUT AND COMMENT

Tom Thompson stated I am the Chairman of NC-20 and I am here to express some concerns. We are disappointed that the Science Panel did not attempt to answer our objections concerning the sea level rise projection of 39 inches by the year 2100. I have a presentation that was given in New Bern by a distinguished scientist and he did this with his partner from the Corps of Engineers. I would invite each of you to take a copy of this. In this presentation Dr. Dean states unequivocally that in a study of almost four hundred and some tide gauges around the world, including satellite gauges, that there is no acceleration in sea level rise in the 20th Century up to now from any of the data. He also lists a number of very valid studies of other researchers. It is our opinion that there is a substantial body of knowledge out there that essentially agrees with Dr. Dean that there is no acceleration. Our primary concern in objecting to a 39 inch sea level rise or any sea level projection that is based on computer models, rather than actual data, is that the economic consequences to the CAMA counties could be disastrous. Mr. Dorman will speak to you this afternoon and I have asked him the question, how many acres would be shown under a flood zone if in fact sea level rise is 39 inches? He said about 1.3 million acres. I am here to tell you that many of the towns in coastal North Carolina would be shown under a flood map. As an economic developer, I can tell you also that that would be disastrous from a marketing standpoint trying to get new homes and industries and to try to improve the economy of the East. I am here to suggest to you that we not go to public comment of any kind and my counterpart Larry Baldwin will speak to this in a minute, and that we go back and revisit this and allow some dialogue between NC-20 and the Science Panel before there is any further public discussion related to this. Thank you.

Geoff Gisler stated I am with the Southern Environmental Law Center. I just wanted to touch on a couple of points from Mr. Perry's presentation earlier. The first being the idea that you have to put a drill in the ground to really find out what is there. I just want to remind folks that exploration is not harmless. The Deepwater Horizon rig that exploded in the Gulf of Mexico was an exploration rig and so exploration is not something that can be done and it is certainly innocuous just to provide more information so there is some risk there. I also wanted to touch on Mr. Perry's comparison of the canyon off of Hatteras with Brazil and Nigeria. I just wanted to point out to the Commission that right now Brazil has shut down all of Chevron's operations in their waters because of spills there that have not been handled properly. In Nigeria late last year there was an oil spill from one of Shell's operations that covered 350 square miles. There is currently a Chevron rig that is on fire in Nigeria. There are upsides and downsides to all forms of energy. His presentation was right on that we think there are some concerns about places for wind energy and that some places it is appropriate and some places it's not. The pluses and minuses should be considered. I want to make sure that those few negatives of offshore oil and gas exploration and development were brought out just to complement the presentation. I haven't read the report yet since it came out yesterday when I was sitting in the crowd here. Those may be in the presentation. I am not sure, but wanted to

make sure that that type of information was before the Commission as you all go forward and consider policies related to offshore energy development.

Larry Baldwin stated I am also with NC-20. I think this is on your agenda to look at adopting or at least moving forward with the sea level rise policy. NC-20 would like for the CRC to at least consider delaying this until you get feedback from the Science Panel. We have sent the Science Panel a lot of information to try to complement their literature search that was not included and somehow got missed. The biggest problem with the current policy is the goal of the policy to establish a framework for planned adaption and improved resilience to rising sea levels. When you go to a planned adaption that means taking a proactive, delivered approach to promoting resiliency community ecosystems, identified hazards, and foreseeable hazards forces a response. Resilience is the ability to communities, economies and ecosystems to withstand, recover from, or adjust to disruptive influences without collapse. Naturally this is all dependent upon what the rate of sea level rise is and the science is a highly debatable topic, but until you know what these rates are I don't know how you can make a policy that can move forward on that. The other part of it is in (C) the Commission encourages coastal communities to consider regional projected rates of sea level rise in local land use and development planning and these types of things. If you don't know what the rate of sea level rise is or if it's in question then it is tough to be making policies and moving forward on that. Lastly, the Commission shall consider conservation and regulatory measures that can enhance the resilience of natural systems and habitats. There is a lot of broad language in the policy and until we know what the science is I think again the policy would probably want to be revisited. NC-20 would like for this to be put on hold until we can hear back from the Science Panel on what their findings actually are. Thank you very much.

Peregrine White stated I thought you would like to hear the thoughts of a citizen of Nags Head. I think I am probably the only one here to speak to you. First, our beach. I have been coming here for nearly three decades to Nags Head. Over two decades ago we started working on a replacement on a renourishment of our beach. I bought my place just over two decades ago. Over a decade ago I moved here. At that time Nags Head was beginning to start on a project to put sand on this beach and we knew then that the sandbags on our beach were going to impair the quality of the replacement of sand on our beach. I just sat here for the last hour and I am hearing more excuses than action. You are going to pull sandbags off the beach now. Where is the sand going to come from to fill in the hole? I am hoping you will ban beach pushes to do that because that will destroy what we have paid 37 million dollars for. That comes out of my taxes not yours. So, ban beach push. Get some real action on sandbags. I am hearing well we can rechange the list and we can rechange the list and we can rechange the list. Where have you been for over a decade? Terminal groins. They have been on other beaches where they have done renourishment. They have been put in. It's been over a year since three possible terminal groins were approved by the Legislature. What action have you taken? I haven't seen any in the press. Speaking of the press. I have over 260 people on my Facebook as friends. I have contacted almost all of them in the last week since I learned of this meeting. I asked them if they were going to come and make public comment. The usual answer is what meeting? As far as public comment goes, you gave us 15 minutes that means five speakers maximum. If we had had 10 speakers here what would you have done? If we had had 15 or 20 speakers come which we have had at county commission meetings what would you have done? I hope you can get me some of those answers. Commissioner Cahoon has my name, address and phone number and email.

PRESENTATIONS

NC Sea-Level Rise Impact Study

John Dorman, DEM

John Dorman stated I am in the North Carolina Division of Emergency Management. Emergency Management is about prevention, preparedness and protection. Everything we do is trying to do those functions for property and the people of North Carolina. Hurricane Irene was an event that the CRC had to deal with. We try to mitigate against that and we try to prevent damage and loss of lives. In our overall discussion of risk, it is in that context that we look at things. My office has been putting in place an infrastructure that will house the ability to look at risk. We have been collecting a significant amount of framework spatial data. We have been collecting, leveraging and generating all of the hazards that are in the state of North Carolina. When I say hazards I mean natural hazards. We are identifying those, but we are also identifying what is the living and built environment that would be impacted. From that, if we have probability and if we have consequences we can start defining what is a true risk to an infrastructure, a building or actually a group of individuals. We have a mitigation section in the Division that takes this information out and provides outreach and tries to work with the communities on mitigating or adapting to what the hazards or changes may be. We also take this information and apply it to real time. As Irene came into North Carolina we took the hazard data that we had and took the built environment and put it into our common operating system. Since 2008, we have been establishing projects inside our office. Our first one was funded at the federal level. This allows us to collect all of the hazards. We also have the flood risk information system that has been developing. We have also been collecting and working on the sea level rise impact study. All of this is in a digital environment that we are trying to display across the web to enable us to do improved risk management. www.irisk.nc.gov will be available within a few months that will display the hazards and convey the consequences for the hazards.

Sea level rise does not have probabilities. There is no statewide empirical impact assessment available for future flood losses that would come potentially from an increase in sea level. There is a lot of information out there about very broad, high level qualitative but there isn't much about quantitative. Another problem statement is there is no efficient methodology or framework in place to calculate and track the impacts of this. The final one is there is not efficient methodology or framework in place for assessing the cost effectiveness of specific loss avoidance strategies. These are three critical problem statements that we need to begin working towards. In 2009, working with our federal delegation this language was put into an appropriations bill and asked North Carolina to perform a risk assessment and mitigation strategy demonstration at the potential impacts of sea level rise in that state associated with long-term climate change. It also said it wanted to provide financial implications and look at the frequency and impacts of those natural disasters. With that in mind, we established a program and established a project. These are the four high level issues that we have been trying to answer for this study. What are the changes to coastal flood hazards between now and 2100 that may occur from an increase in sea level rise as well as storminess? We are also trying to answer the question of if that does occur, what built and living systems will be exposed from that? If they are exposed, what is going to be the financial implications or consequences to those systems? Finally, if that occurs, how do we have a short-term and long-term strategy for either preventing or alleviating those exposures? The study report will look at changes in sea level rise with scenarios between 0 and .40 meters between now and 2100. We will perform system-wide impact assessments for permanent flooding, for episodic flooding; we will also look at annualized damage, Hurricane Isabel, and Hurricane Fran. We will then take all of those different levels of water and apply it to four different points of development over time. What does the study

not include? We are not proving or disproving sea level rise. We are not getting into greenhouse gas emission discussions. We are not endorsing any sea level rise projection. We are not defining specific risks from sea level rise. We are not looking at inland rainfall. We are looking at winds, but only the winds that calculate into the storm surge. We are not looking at drought and heat waves. We are trying to leverage as much data that is out there as possible. This is a scenario based study. We are trying to be as impartial as possible. Whatever we do during this study has to be repeatable, defensible, quantitative, transferrable to other states, it needs to be scalable to a local level, and it has to be spatial. The source is sea level rise and storminess. Then we apply it to the coastal landscape and look at what the changes may be. The year 2050 is the first point where we will start actually seeing implications being assessed at .1 and .2. By 2075 we will apply .1, .2, and .3. By 2100 for the study purposes we will go up to .4. In the risk system we will run it up to 1.0 meters. For coastal land response at this point in time, we don't believe we are able to determine what the waters will be in 2025 and apply the same change for 2050, 2075 and 2100. Where we had shoreline change prediction we are keeping it as a static inundation. Where we had barrier island land evolution we are enforcing overtop in the model. Where we had inlet changes we are removing the relic features based on the increase in sea level. The flood projection is using what we are doing in our floodplain mapping program. That is utilizing the flood insurance study that is used for flood modeling. We are taking the twenty actual storms that have occurred over the last 67 years and are looking at the attributes associated with each storm and apply that to simulated tracks. We have been collecting a significant amount of data on structures, critical infrastructure, and the living environment. We have a lot of information about every building structure in the coastal plain. For emergency management purposes, if critical infrastructure goes down then the community has real problems. For the eighteen critical infrastructure sectors that the Department of Homeland Security sees as important we have been collecting those as well. Not all of those structures have been able to be collected, but we have done a good job on most of them. Utilizing data that we have from the Census and data at the local level we are trying to develop a personal vulnerability index, a community vulnerability index and an environmental vulnerability index in the future. There are a lot of parcels out there that are developable but have not received development. We have come up with a shadow parcel methodology and we take the house next door and apply those attributes to the parcel. We are looking at direct damages. There are models being used by FEMA and the Corps. We are using those models. We are also calculating the indirect economic impact if certain structures go down. We are taking a cost effective strategy. We will define strategies that could be implemented statewide and apply those against whether it is too costly to do. We are not producing policies or regulations from this study.

NC Coastal Reserve – Issues Update and Sea-Level Rise Activities

Rebecca Ellin

Rebecca Ellin stated the North Carolina Administrative Code directs the Division to establish a local advisory committee for each site within the Reserve program to advise Reserve staff. The Code also stipulates that the members are appointed by the Secretary of the Department of Environment and Natural Resources. The committees have operated very informally for a number of years and as the use of the Reserves has changed over time it has become apparent that a procedures document was needed to establish clear operating roles and procedures for the committees and outline committee composition. Staff reviewed how other advisory committees work and developed an operational procedures document with input from the existing advisory committees, Division staff and the Secretary's office. The focus of the committees is on their respective sites yet they may occasionally address issues that affect all Reserves across the reserve

system. We seek input from the advisory committees to recommend priority program needs, provide input on acquisition and boundary expansion, provide input on rule, policy and management plan updates, act as liaisons between staff and stakeholders, advise staff on policy matters, and identify opportunities for collaboration on future projects. The local advisory committees are comprised by three primary categories and we currently have committees for seven of the ten Reserve sites. This year we will be updating the makeup of the committees based on the new structure for the seven committees and will be creating the three remaining committees. Each committee will look different based on the individual needs of the site. We will be publishing our operating procedures later this month and it will be available on our website. For the community member and organization slots we will be hosting an application period in the month of March. The appointments need to be made by the Secretary by May. These newly revamped committees will meet in the fall to begin their work.

I came before the CRC in November 2010 and outlined the rules review process. We are still working on it. The goal is to look at our Reserve rules in the Administrative Code and seek revisions to them to accomplish promoting a more effective management of the sites, to provide clear and consistent rules for the public and to support enforcement by appropriate agencies. Our rules have been untouched for about 25 years and a lot of things have changed over the years in how the Reserves are used. We spent a significant amount of time in 2011 gathering information from other state and federal land management organizations. Draft language is under review within the Division. Our rules are Departmental rules and are not Commission rules. Our next step will be to take the language to the Department and go through a series of public input and meetings before we go through the formal rules process.

Based on our expertise and program capacities we are going to measure change in coastal habitats at reserve sites, lead by example utilizing the sites by developing and implementing adaptation strategies at reserve sites to inform protected land management, enhance coastal decision making, and to incorporate coastal hazards into education programming. The National Estuarine Research Reserve program is implementing a Sentinel Site initiative. A Sentinel Site is defined by NOAA as an area in a coastal environment that has the operational capacity for intensive study and sustained observations to detect and understand changes in the ecosystems they represent. Observational data are collected at discreet instrument and measurement stations within each site providing information and data that can be synthesized to provide an understanding of the ecological status and trends and physical and biological variables of interest. We are using these sites to address issues of concerns. The focus right now is on the impacts of sea level rise and inundation in coastal habitats. The habitats that we selected in North Carolina are marsh habitats. We are asking three questions. Is the marsh platform elevation increasing or decreasing? Is the marsh edge eroding or accreting? Is the inundation time changing? We currently have three of our reserve sites equipped with infrastructure to accomplish this. There are a number of requirements in place to meet the Sentinel Site criteria. These include marsh vegetation transects that evaluate the quantity and quality of the marsh habitats. We also measure the initial elevation and elevation change of marsh sediments through surface elevation tables. We also have groundwater wells to assess the water table dynamics. We also have water quality monitoring. We are monitoring these parameters over time and will be utilizing these data to answer these questions and to evaluate the condition of the Reserve as sea level changes and storms increase.

15A NCAC 07M .1300 Sea-Level Rise Policy – Draft for Public Hearing (CRC 12-04)

Tancred Miller

Tancred Miller stated we appreciate all of the input we have gotten from NC-20 over the course of this discussion. I would like to clarify that there is some misunderstanding in what the policy is and how it relates to the Science Panel's report. NC-20 was concerned about the use of the planning benchmark that came out of the Science Panel's report. As you recall, that was stripped out of the policy back in February of last year. There are no references to any of the Science Panel's numbers or data or findings in the draft policy. We feel comfortable recommending to the CRC to move forward with the public hearing process. This policy does not attempt to establish the science of sea level rise. It does not attempt to report the science of sea level rise. It does not attempt to communicate rates of sea level rise or projected amounts of sea level rise. It is more of a guidance and reference document and educational and outreach tool. It is not regulatory. The CRC stripped out all of the regulatory overtones that were in the original draft policy after hearing from local governments and other interested parties about their concerns. There have not been any changes to the draft policy since those changes were made. We have been taking this draft up and down the coast and we feel that we have reached a saturation point with getting feedback and comment from local governments and the public. Staff's interpretation of the Commission's intent on sea level rise was that we were to work with local governments and the public to understand the issue and potential impacts. The intent was to draw upon the best available science, but not to get ahead of the science by proposing things that the science does not justify. The intent was to focus on building awareness, understanding and building capacity internally within this program as well as at the local level.

Veronica Carter made a motion to send the draft sea level policy to public hearing. Melvin Shepard seconded the motion.

Bill Peele commented that some of the language could be softened. Renee Cahoon stated the CRC should wait until the Science Panel comes back with their responses. Lee Wynns stated there is still quite a bit in the draft policy that bothers him. There is a lot of gray area that could be misinterpreted down the line.

Renee Cahoon read a statement from Commissioner Jamin Simmons.

"I will be unable to attend the meetings, both on February 8 and 9, if you will please let the other members know that I am against taking any action on sea level rise until we have more definitive information. I have been following this debate and there is much controversy over if it is happening and if it is then at what rate. The controversies are being voiced by credible persons on both sides of the issue. Therefore, I would like to see steps taken to ensure that we are not perceived as taking a stance one way or the other. It could be detrimental to our coastal communities if non-conclusive information showing accelerated rise was adopted in any form and it was compiled with incorrect data."

Veronica Carter requested permission to withdraw her motion. **The Commission voted unanimously to allow Commissioner Carter to withdraw her motion (Old, Mitchell, Wynns, Peele, Shepard, Carter, Cahoon, Elam).**

Veronica Carter made a motion to direct Staff to take the draft policy and incorporate the comments received today by the Commission. No second was received.

Ed Mitchell made a motion to assign the draft sea level rise policy to a committee to look into it further. Renee Cahoon seconded the motion. The motion passed with six votes (Old, Mitchell, Wynns, Peele, Cahoon, Elam) and two opposed (Shepard, Carter).

Joan Weld delegated the authority to Braxton Davis to assign the draft sea level rise policy to a committee.

Docks and Deep Water Access in PNAs (CRC 12-05)

David Moye

David Moye stated if we go back to the beginning of the Dredge and Fill Law in 1969, it talked about excavation and fill in marsh lands or tide lands which we now refer to as marsh lands. It also talks about estuarine waters and state-owned waters. In 1974 the Coastal Area Management Act was adopted by the Legislature. In areas of environmental concern there is a description of primary nursery areas. That is in CAMA. This is the background within the legislation from which the CRC derives its rules. In 1974 we were the Office of Coastal Management housed within the Division of Marine Fisheries. The original implementation of the Dredge and Fill Law and the enforcement was done by the Marine Patrol officers. After CAMA, language was put in about AEC and we began to develop General Permits. Staff began to grow. Most of the original staff had a background in wildlife biology or marine fisheries. In today's Division of Coastal Management you have a lot more variation. Last year the CRC had a presentation from the Division of Marine Fisheries about primary nursery area designation. In the late 1970's when the first primary nursery areas were established, it became the standard for what all primary nursery areas are based on. A second round was done in the late 1980's. In the past year or so you have heard two variances that dealt with the issue of primary nursery areas and the water depth issue. During that same time frame we have issued hundreds of permits in primary nursery areas. The CRC didn't hear any of those because they fit the rules. What the CRC has heard are the anomalies that didn't fit in with the way the rule was written and the process is set up to then file a variance or an appeal for the applicant to come before the CRC. Do the CRC's rules allow docks and piers in primary nursery areas? Yes. There is specific language in 7H .1200 that addresses docking facilities in primary nursery areas, in submerged aquatic vegetation areas or in shellfish beds. This is a General Permit. As long as there is at least two feet of water then you can have a docking facility in a primary nursery area. If you have less than two feet of water under a General Permit then we simply confer with DMF personnel or with the Wildlife Resources Commission personnel to see if they have any outstanding issues with it. If they find that there is an issue in these areas then we elevate the proposed development to the Major Permit process. Most of these Major Permits, through meeting with the agencies and working on the project, are still issued. The next part would be pushing out the development to get to deeper water. Then we run into the quarter width of the water body rule. Years ago the distance out into the water body was allowed up to one-third. After the CRC modified its rules then it changed to one quarter. If you have a shallow water body and you need to move development out to get to deeper water then you may impact the quarter width rule. There is language in the CRC rules that talks about moving out. It is a requirement that you have to gain a foot of water depth in each 100-foot increment. If you aren't gaining any water depth then there isn't any reason to go farther out. There is also an established pier head alignment addressed in the rules. You cannot put a pier out in front of everyone else's because that could be a navigation issue. Right now the CRC rules refer to a minimum water depth for docking facilities in primary nursery areas. That appears to be working very well. We issue many permits in all the regions for structures within primary nursery areas and rarely does it get elevated to a point where the CRC will see it in an appeal or variance. The next issue that came up in the CRC's discussions was whether

dredging could be allowed in a primary nursery area. Yes. The CRC's rules discuss maintenance dredging in traditionally used areas that have been dug in the past. If they have been excavated over time then it can be allowed even in a primary nursery area. The implementation of the CHPP has had an effect on the permitting process. The agencies that comment on our CAMA Major Permit process can now comment on water quality or fisheries impacts, primary nursery areas and shellfish as a result of the CHPP. A goal of the CHPP is to protect existing fishery habitat and that includes PNA, SAV, oyster or shellfish resources. The CRC incorporated some of that language to give more protection to those areas. Many of the CRC's recent rule updates have been to try to bring some of the rules more in line with the goals of the CHPP. The end result from that is that agency comments have become much more focused on habitat issues since the CHPP was passed. The permit process works.

ACTION ITEMS

Pasquotank County/Elizabeth City Joint LUP Certification (CRC 12-07)

John Thayer

John Thayer stated there are two LUP items on the agenda. The first was an implementation report for the Town of Duck, Kitty Hawk, Camden County, Chowan County and Edenton. There is no action required from the CRC. The second item is the certification of the Pasquotank County/Elizabeth City Joint Land Use Plan. The memo that you received recommended a conditional certification, however we have received additional information from both the County and the City. Staff would like to change the recommendation to a certification of the Joint LUP. This Plan has met the substantive requirements of the 7B guidelines.

Veronica Carter made a motion to approve the certification of the Pasquotank County/Elizabeth City Joint Land Use Plan. Renee Cahoon seconded the motion. The motion passed with six votes in favor (Old, Wynns, Shepard, Carter, Cahoon, Elam) (Joyce, Webster, Mitchell, Peele absent for vote).

Fiscal Analysis Approval – 15A NCAC 07H .0304 AEC Within Ocean Hazard Areas (Erosion Rates) (CRC 12-08)

Ken Richardson

Ken Richardson stated this analysis has been approved by the Department and it has gone to the next level. The Community Rating System is what sped the review up when FEMA notified us that folks on the coast could lose points which could potentially increase their flood insurance premiums. In the fiscal analysis the focus was whether a 50 point difference would make a difference. There are two communities, based on the best available data from FEMA, Emerald Isle and Pine Knoll Shores where 50 points would reduce their class which would mean a five percent increase during the next evaluation for these communities. We ran numbers for the entire coast, but these two communities would be directly impacted so we focused on them.

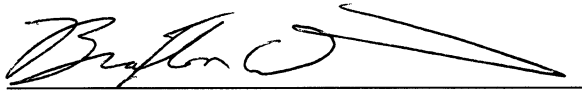
Renee Cahoon made a motion to accept the fiscal analysis for 15A NCAC 07H .0303. Jerry Old seconded the motion. The motion passed unanimously (Old, Mitchell, Wynns, Peele, Shepard, Carter, Cahoon, Elam) (Joyce, Webster absent for vote).

OLD/NEW BUSINESS

Joan Weld stated the next meeting will be April 18-19 in Beaufort.

With no further business, the CRC adjourned.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Braxton Davis", written over a horizontal line.

Braxton Davis, DCM Director

A handwritten signature in black ink, appearing to read "Angela Willis", written over a horizontal line.

Angela Willis, Recording Secretary