

NC COASTAL RESOURCES COMMISSION (CRC)

December 17, 2014

NOAA/NCNERR Administration Building

Beaufort, NC

Present CRC Members

Frank Gorham, Chair

Renee Cahoon, Vice-Chair

Neal Andrew

Larry Baldwin

Suzanne Dorsey

Marc Hairston

Janet Rose

Harry Simmons

John Snipes

Bill White

Present Attorney General's Office Members

Christine Goebel

Brenda Menard

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 also 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. Commissioners Jamin Simmons and Greg Lewis were absent. Chairman Gorham stated that he had no known conflicts, but disclosed that he is the President of the Figure Eight Homeowners Association. No conflicts were reported by any of the duly appointed Commissioners present. Commissioner Janet Rose read her evaluation of statement of economic interest received from the State Ethics Commission which indicated that they did not find an actual conflict of interest, but only a potential for conflict. The potential conflict identified does not prohibit service.

MINUTES

Harry Simmons made a motion to approve the minutes of the October 22-23, 2014 Coastal Resources Commission meeting. Renee Cahoon seconded the motion. The motion passed unanimously (Andrew, Baldwin, Cahoon, Dorsey, Gorham, Hairston, Rose, H. Simmons, Snipes, White).

Harry Simmons made a motion to approve the minutes of the November 19, 2014 special meeting of the Coastal Resources Commission. Renee Cahoon seconded the motion. The motion passed unanimously (Andrew, Baldwin, Cahoon, Dorsey, Gorham, Hairston, Rose, H. Simmons, Snipes, White).

EXECUTIVE SECRETARY'S REPORT

Braxton Davis, DCM Director, gave the following report:

I would like to extend a special welcome to our newest commissioner, Janet Rose, who has been appointed to the Commercial Fishing seat. Commissioner Rose, the staff and I look forward to working with you and to meeting with you soon so that we can provide an overview of the Division of Coastal Management. Please let us know if you need anything at all to help you get up to speed on the work of the Commission.

It has only been about 6 weeks since our last meeting, including the Thanksgiving holiday, so I do not have much to report on Division activities outside of what you'll be hearing during today's meeting. We recently received a response from the National Oceanic and Atmospheric Administration which approved our request to review upcoming applications for federal permits related to offshore seismic surveys associated with oil and gas exploration. We anticipate seeing those permit applications next year, with surveys commencing in mid-2015. We've issued three emergency permits in response to the ongoing erosion issues at North Topsail Beach and Oak Island, two of which were authorized through emergency variance proceedings. Also I promised that we will keep you informed on the ongoing update to the National Estuarine Research Reserve's 5-year Management Plan. The Reserve program completed a series of public meetings and local advisory committee focus group meetings in November. Three public meetings were held (Corolla, Beaufort, Wilmington) where participants learned about the purpose of the Reserve and the management plan update, and provided comments on current and emerging topics. Four local advisory committee meetings were also held (for Currituck Banks, Rachel Carson, Masonboro Island, Zeke's Island). Currently we have three surveys underway: 1. A needs assessment for coastal decision-makers for the coastal training program; 2. A needs assessment for the K-12 teacher and student education program; and 3. A partner survey for those not represented on the local advisory committees. The next steps will be to evaluate the feedback received and draft the strategic plan, which will be shared with the local advisory committees in March.

We worked with the Executive Committee to plan today's agenda, which I'll run through briefly. First, we will be continuing work to reduce regulatory burdens by moving forward in the rulemaking process required by the NC Administrative Procedure Act. We'll be seeking your approval of a fiscal analysis for one of the rule changes proposed by staff this year involving the excavation of upland boat basins. Also, we will hold a public hearing for proposed changes that increase permit exemptions related to certain types of development along estuarine shorelines. We will be holding public hearings in all eight oceanfront counties for the removal of the High Hazard AEC. We will be seeking the CRC's approval to formally begin the rulemaking process for our proposed comprehensive revisions to the Land Use Planning rules in 15A NCAC 7B and

7L. I have seen and heard numerous positive comments on the rule change package that DCM staff put together. I think they did a great job in distilling input from regional meetings and other sources over the past two years, and hopefully that is reflected in the feedback that you have received to date.

After lunch you will hear updates on both of the studies that had been assigned to the Commission's Science Panel, the Sea Level Rise and Inlet Hazard Area studies. Both were done in response to the 2012 legislative requirements in HB 819. Staff are truly appreciative of the significant volunteer work that has gone into those efforts, the timeliness of deliverables, and the patience of the Panel as we have worked through public records requests and other sometimes challenging but important parts of the process.

Later we will discuss follow-up items related to your Inlet Management Study over the past year. You will be considering a significant policy change proposal involving the beachfront "Static Line," which determines how building setbacks are measured following a beach renourishment project. We appreciate the work of the subcommittee appointed at your last meeting in developing a detailed proposal for discussion today. There are essentially three different rule change proposals right now, and I would direct you to Memo 14-42 in your packet for a description of the DCM staff proposal as well as discussion and questions that we raised concerning other alternatives. We have included draft rule language for the DCM proposal. We will need more guidance from the Commission in order to draft specific rule language for other alternatives. I want to thank the subcommittee chaired by Commissioner Baldwin that has been focused on our proposed rule changes related to the delineation of coastal wetlands. I have heard very positive comments regarding the work of that subcommittee and look forward to hearing Commissioner Baldwin's report.

Staff News

I have two new hires to announce, Shane Staples recently joined DCM after transferring over to us after 7 years with the NC Division of Marine Fisheries. Shane will be working as our Fisheries Resource Specialist for the northern region out of the Washington Regional Office. Emily Woodward has joined DCM as a new Communication and Project Management Specialist working with the Reserve program here in Beaufort. Emily will be helping coordinate the update to the Reserve Management Plan and extension activities related to Living Shorelines, a focus area we'll be bringing to your attention in upcoming meetings. We are excited to have both Shane and Emily joining DCM. We are very sad to lose one of our Fisheries Resource Specialists, Jessi Baker, who is moving to Norfolk VA to begin a new federal career with the U.S. Navy in environmental permitting. Jessi had recently joined the Division after transferring over from the NC DMF, and she brought considerable fisheries expertise to our Division, she has been exceptional in customer service, and she has been a great colleague. We wish her the very best in her new career. Finally, today is the last Coastal Resources Commission meeting for

David Moye, the District Manager in our Washington Regional Office. David is retiring at the end of the month, and it is hard for us to believe. David has been with the Department for 30 years and the Division of Coastal Management for almost all of that time. David started his career with the Division of Marine Fisheries, and he has developed in-depth knowledge and understanding of the biology and ecology of the North Carolina coast. That knowledge, and his prior experience working as a field representative, has been invaluable to the Division and to the Commission over the years. We all lean on him regularly. David is also a man of great integrity and is a friend to everyone who knows him. Saying that he will be missed is a vast understatement, and we sincerely hope that he will continue to stay involved in coastal issues in whatever ways he is willing and able. We had a great time roasting him last night at a dinner in his honor, but today we want to honor him with a certificate in recognition of his service to the State of North Carolina.

At this time Director Davis presented David Moye a certificate of Appreciation from the Division of Coastal Management for 30 years of service.

Kelly Spivey will serve as the interim District Manager for the Washington District. We are planning for the next Commission meeting to be held in Atlantic Beach on February 18-19.

CHAIRMAN'S COMMENTS

Chairman Gorham stated we had a great meeting in October. At that meeting we promised the Governor a report on the action items for the CRC's priorities. This report has not been completed, but should be available for the next meeting. Chairman Gorham told Commissioners to advise Angela Willis if they are unable to attend a CRC meeting so we can ensure a quorum.

CRAC REPORT

Debbie Smith, CRAC Chair, stated John Hughes, engineer with the City of New Bern, has resigned from the CRAC. The CRAC has discussed other skills that would be an asset to the Council and we are considering several people. By the next CRC we hope to have another recommendation for you to consider. A resume for Frank Rush, Town Manager of Emerald Isle was provided to the CRC. He has served on the CRAC previously and is a proven asset. We recommend the CRC consider approving his appointment to the CRAC. The CRAC also discussed the static line issue and supports changes to that regulation. There is a general feeling that local input is valuable and one size does not fit all in every community. The CRAC feels a proper setback should be maintained. The CRAC also supports the amendments to the proposed CAMA Land Use Plan rules. These changes will be more economical for local communities and counties updating their plans.

Renee Cahoon made a motion to appoint Frank Rush to the Coastal Resources Advisory Council. Harry Simmons seconded the motion. The motion passed unanimously (Andrew, Baldwin, Cahoon, Dorsey, Gorham, Hairston, Rose, H. Simmons, Snipes, White).

VARIANCE REQUESTS

Hysong (CRC VR 14-14)

Heather Coats, Brenda Menard

Heather Coats, DCM field representative gave an overview of the site for the proposed development.

Brenda Menard of the Attorney General's Office represented staff. The Petitioners, James and Page Hysong are present and Mr. Hysong spoke on behalf of Petitioners on the variance request. Petitioners have owned an oceanfront lot on Oak Island in Brunswick County since 1997. In March 2002, the US Army Corps of Engineers completed a large-scale beach nourishment project, resulting in the implementation of a static line, based on the Commission's rules. In August 2014, Petitioners applied for a CAMA minor permit proposing to build a residential structure of 2,500 square feet that would not meet the 60-foot setback from the static line. Petitioner's permit application was denied in September 2014 based on its inconsistency with the applicable setback. Petitioners seek relief from the oceanfront erosion setback as measured from the static line. Ms. Menard reviewed the stipulated facts of this variance request and stated that staff and Petitioners disagree on all four variance criteria which must be met in order to grant the variance request. First, Staff does not agree that there is an unnecessary hardship because without a variance there remains a building envelope of 855.5 square feet resulting in a total floor area of 1,711 square feet which allows for reasonable use of the property. Second, Staff does not agree that any hardship results from conditions peculiar to the site. . Oak Island has not experienced major impacts from hurricanes since 2002 and while there is a significant distance between the actual vegetation line and the static line at this property; it is likely a temporary condition. Third, State asserts that any hardship is caused by Petitioner's preferred design and use. Finally, the spirit, purpose and intent of the setback rules is to protect life and property. The static line rule ensures that property owners don't get lulled into a false sense of security by a temporary condition. In order to receive an exception to the static line rules a town needs to come forward with a plan for long term beach nourishment that includes funding for the project. . Oak Island has not requested a static line exception.

Mr. Jim Hysong stated we purchased this property in 1997 and this has proven to be a stable and established section of the oceanfront of Oak Island. In 1999 Hurricane Floyd came along and took a portion of the dunes, but none of these properties were affected. The elevation of the lot is 18 or 19 feet which is one of the highest oceanfront property levels on the entire island. The current established line of vegetation would allow considerably more than what we are requesting. We have asked to be in line with the house next door. There was also a comment that the erosion has not occurred at this location because there hasn't been as much storm action. In your packet you will see a list of tropical storms and hurricanes that have been active in the Southport/Oak Island area since 2002. Perhaps we could build a structure with the footprint that has been approved, but in our eyes it would be inadequate, unsightly and a safety hazard from a parking standpoint. It would be a waste of our spectacular lot. In the absence of a variance no reasonable, practical or satisfactory use can be made of the property.

Harry Simmons made a motion that strict application of the applicable development rules, standards, or orders issued by the Commission cause the petitioner an unnecessary

hardship. Larry Baldwin seconded the motion. The motion failed with four votes in favor (Baldwin, H. Simmons, Gorham, Rose) and six opposed (Hairston, Andrew, Cahoon, Dorsey, White, Snipes).

Harry Simmons made a motion that hardships result from conditions peculiar to the petitioner's property. Larry Baldwin seconded the motion. The motion failed with three votes in favor (Baldwin, H. Simmons, Gorham) and seven opposed (Hairston, Andrew, Cahoon, Dorsey, White, Rose, Snipes).

Harry Simmons made a motion that hardships do not result from actions taken by the Petitioner. Larry Baldwin seconded the motion. The motion failed with three votes in favor (Baldwin, H. Simmons, Gorham) and seven votes opposed (Hairston, Andrew, Cahoon, Dorsey, White, Rose, Snipes).

Harry Simmons made a motion 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. Larry Baldwin seconded the motion. The motion failed with three votes in favor (Baldwin, H. Simmons, Gorham) and seven opposed (Hairston, Andrew, Cahoon, Dorsey, White, Rose, Snipes).

This variance request was denied.

ACTION ITEMS

Fiscal Analysis 15A NCAC 7H .1500 GP for Excavation of Upland Basins (CRC 14-36)

Tancred Miller

Tancred Miller stated this General Permit is for the maintenance excavation and excavation of boat basins. This rule language was approved by the CRC earlier this year. These changes will allow the excavation of new boat basins plus bank stabilization structures under a single General Permit. This will save the applicant an additional application fee. The second change is to allow new basin excavation adjacent to primary nursery areas subject to consultation with the resource agencies. The third change is to extend the timeframe for this General Permit from 90 days to 120 days to be consistent with other General Permits. Staff has prepared the fiscal analysis and it has been approved by DENR and OSBM. The annual fiscal impact is about \$200 per year savings to permit applicants. The next step is for the CRC to approve the fiscal analysis to allow it to go to public hearing. The proposed effective date of this rule amendment is July 1, 2015.

Neal Andrew made a motion to approve the fiscal analysis for 15A NCAC 7H .1500 for public hearing. Renee Cahoon seconded the motion. The motion passed unanimously (Hairston, Andrew, Baldwin, H. Simmons, Cahoon, Gorham, Dorsey, White, Rose, Snipes).

Static Line Exception Reauthorization – Town of Ocean Isle (CRC 14-37)

Ken Richardson, Christine Goebel

Ken Richardson stated there is a five year waiting period following a large scale project. There is a minimum setback of 60 feet or 30 times the setback factor based on the erosion rate and measured from the first line of stable natural vegetation. There is a limit on the total floor area of

less than 2,500 square feet and in line with adjacent structures. There are no swimming pools allowed oceanward of the static vegetation line. For structures greater than 2,500 square feet the setback is measured from the most landward line or a measurement line, whichever is more restrictive. A reauthorization of a Town's static line exception is needed every five years. The Town of Ocean Isle Beach has requested a reauthorization of their static line exception. The static line in Ocean Isle Beach extends for approximately 3.2 miles. The erosion rate setback factor is two feet per year for 91% of the area. As you approach Shallotte Inlet, the rates go up to 4 and 6.5 feet per year. There are currently nine vacant residential lots that would benefit from having the exception. Since January 25, 2010, three new home permits have been issued and one permit to extend an open deck was issued under the static line exception. One beach nourishment project has taken place since the Commission granted the Town's first exception in January 2010. A project was constructed between December 2013 and April 2014 during which 800,000 cubic yards of sand was placed on the beach. Overall Ocean Isle's erosion control and hurricane wave protection project has performed very well. The first inlet and shoreline monitoring report prepared in December 2002 showed that approximately just under 300,000 cubic yards of beach fill was lost in the first year over the entire project area. This represents about 15% of the initial placement of the volume. In May 2004, a survey indicated that the east end of the beach fill lost approximately 300,000 cubic yards while the western part gained approximately 200,000 cubic yards. The represented a net loss of about 99,000 cubic yards over the original fill area. It is estimated that Ocean Isle had just under two million cubic yards in the active beach system that it did not have prior to the project. Since the initial project was constructed, no additional beach fill has been considered necessary to the west. Beach compatible sediment came from the Shallotte Inlet borrow area, channel dredging and the area within the active nearshore system. Ocean Isle Beach has established a beach nourishment fund that is used to fund its projects. This fund is currently funded each year through contributions from the Town's General Fund and Accommodations Tax Fund. The General Fund contributes \$400,000 annually and there is an annual 2% occupancy tax and currently there is \$1,807,000 generated. The total beach nourishment reserve that the Town has is \$5,300,178. Based on the information submitted to the Division, Staff recommends to the Commission that the Town's static line exception should be renewed.

Harry Simmons made a motion to reauthorize the Static Line Exception issued to Ocean Isle Beach. Renee Cahoon seconded the motion. The motion passed unanimously (Hairston, Andrew, Baldwin, H. Simmons, Cahoon, Gorham, Dorsey, White, Rose, Snipes).

Local Government Comments on Proposed Amendments to 7B CAMA Land Use Plan Guidelines (CRC 14-38)

Mike Lopazanski

Mike Lopazanski stated at the last meeting proposed revisions were presented to the Commission. These revisions came about as a result of numerous meetings with the Commission and workshops held with local governments. The intention is to reduce the overall burden on local governments connected with CAMA land use planning. We focused on shifting the emphasis of the program to the development of local government policies that best serve their interests. We looked at procedural matters related to approving land use plans and amendments. We also looked at streamlining the overall process allowing local governments to change plans

more quickly by changing the delegation of certification authority from the Commission to the Division. The draft changes were sent out to all elected officials, the planners, and workshop participants in the coastal area to solicit their comments on the proposed changes. We received 15 comments from local governments and 3 interested parties. All of the comments are included in the CRC materials. We received positive feedback in the comments. Traditionally the Division has used the policies within the local plan to make decisions on Major Permits. We are now proposing to give the option to the local government to maintain this traditional Division review, make the determination themselves, or identify specific policies that they want DCM to apply when making permit decisions. Some technical changes have been made since the last meeting. Staff recommends these proposed changes be sent for public hearing. A fiscal analysis will be prepared and present to the Commission for approval at an upcoming meeting.

Harry Simmons made a motion to approve the amendments to 7B and 7L for public hearing. Larry Baldwin seconded the motion. The motion passed unanimously (Hairston, Andrew, Baldwin, H. Simmons, Cahoon, Gorham, Dorsey, White, Rose, Snipes).

LAND USE PLAN AMENDMENTS AND CERTIFICATIONS

City of Southport Land Use Plan Certification (CRC 14-39)

Mike Christenbury

Mike Christenbury stated the City of Southport is requesting certification of the Southport CAMA Land Use Plan update. This 2014 LUP update is an update to their current certified 2007 Land Use Plan. The Town is voluntarily updating its plan to capture the latest census data as well as changes within the community since 2007. The Town used the Cape Fear Council of Governments as a consultant. The City held a duly advertised public hearing and voted by Resolution to adopt the LUP update. Staff has reviewed the plan, determined that it meets the 7B LUP guidelines and that there are no conflicts with either state or federal law or CAMA, and recommends certification.

Renee Cahoon made a motion to certify the City of Southport Land Use Plan. Harry Simmons seconded the motion. The motion passed unanimously (Hairston, Andrew, Baldwin, H. Simmons, Cahoon, Gorham, Dorsey, White, Rose, Snipes).

Carolina Beach Land Use Plan Amendment (CRC 14-40)

Mike Christenbury

Mike Christenbury stated the Town of Carolina Beach is requesting certification of an amendment to their 2007 LUP to allow for dry stack facilities within the Town. This is consistent with the Town's harbor management plan. Staff has not received any comments from the public. Staff has reviewed the amendment and has determined that it meets the LUP guidelines, is consistent with state and federal law and the State's Coastal Management Program. Staff recommends certification.

Renee Cahoon made a motion to certify the Town of Carolina Beach Land Use Plan Amendment. Harry Simmons seconded the motion. The motion passed unanimously (Hairston, Andrew, Baldwin, H. Simmons, Cahoon, Gorham, Dorsey, White, Rose, Snipes).

15A NCAC 7H .0205 Coastal Wetlands – Occasional Flooding Criteria

Larry Baldwin

Larry Baldwin stated that he was assigned at the last CRC meeting to be chair of a Committee to look at the definition of coastal wetlands in the CAMA program. The Committee is focused on putting in place consistent procedures for delineating coastal wetlands. The committee was formed and we held two full day meetings. After the CRC reviews any proposed changes I have a panel of experts that I would like to review the changes as well. The original Dredge and Fill Law is referenced in the CRC rules. The original Dredge and Fill Law says that it shall be those areas upon which grow some, but not necessarily all, of the 10 species. The species are what determines coastal marsh. They work very well. It is amazing how consistent these lines are and how you can determine where coastal wetlands are located. CAMA lines have been fairly well done. A difficulty in the original definitions is when coastal wetlands are defined as marshland. Coastal wetlands are defined as salt marsh or other marsh subject to regular or occasional flooding by tides not including hurricane or tropical storm tides. This is one of the things we want to try to quantify. We could have a tropical storm that is much less than a nor'easter. Is the nor'easter included in these rules? We came up with a form that is similar to what the Corps uses for 404 wetlands. This initial routine evaluation form indicates whether coastal wetlands are found on the property and an official delineation had been performed. This form would also give the landowner the opportunity to appeal the delineation call to someone more senior within DCM. We also want to come up with a more quantitative form to be used when a property owner disagrees with the coastal wetlands determination. This comprehensive evaluation would use additional quantitative methods and data to determine coastal wetlands and especially questionable areas subject to occasional flooding by high tides or wind tides that do not include hurricane or tropical storm tides. We are still editing this document. We plan to finalize edits to the routine evaluation form, finalize input on the comprehensive evaluation data, have the CRC review the documents, and send it out to a panel of technical, legal experts for their review and input. Question, Does the CRC want to consider a variance or an appeals process if someone disagrees with a wetland delineation?

PUBLIC HEARING

15A NCAC 7K .0208 Single Family Residences Exempted

Mike Lopazanski stated this public hearing is for an exemption along estuarine shorelines. This amendment will remove the requirement to obtain a signed statement of no objection from adjacent property owners. Currently it is required. If the property owner is not able to obtain a signed statement of no objection, then a Minor Permit is required which does not require a signed statement. There is no fee associated with an exemption; however there is a \$100 fee for a Minor Permit. This amendment will also increase the exemption time frame to three years in order to be consistent with Major and Minor Permit expiration dates. It will also allow additional flexibility for property owners to construct a perpendicular house to water access and not limit it to an elevated, slatted wooden walkway.

No comments were received.

PUBLIC INPUT AND COMMENT

Bill Price addressed the Commission about the Science Panel and the ongoing Sea Level Rise Report.

OLD/NEW BUSINESS

Chairman Gorham proposed the Commission give the Eure Gardner Award to former CRC Chairman, Bob Emory.

Harry Simmons made a motion to give the Eure Gardner award to Bob Emory. Renee Cahoon seconded the motion. The motion passed unanimously (Hairston, Andrew, Baldwin, H. Simmons, Cahoon, Gorham, Dorsey, White, Rose, Snipes).

David Moyer stated I would like to publically thank everyone that I have worked with over the years, the Commission and Staff. It has been a great pleasure to work with DCM. The advice I would give the CRC is to listen to the Staff. They have a lot of knowledge and there are folks that have seen the changes over the years and can give you a lot of help. To the Staff I would say thank you for making my job so much fun and make this a career, not a job. We want to protect the resources on the coast of North Carolina.

CRC Science Panel Sea Level Rise report – Update Dr. Margery Overton

Dr. Margery Overton reported this is an update on the pre-release draft report. The Science Panel met this week and the Panel looked at the entire written document and made comments. The basic content was unchanged following this meeting. A Sea Level Rise Assessment Report was completed in 2010. At the Commission's request, the Science Panel added an addendum in 2012. At the time of the original report, it was strongly suggested that literature be reviewed and the entire document updated every five years. In 2012, the State Law required this same update. For this pre-draft report the data is easily found in the literature and the analysis is straight forward and easy to duplicate. There is a lot of emphasis on the spatial variation of the relative sea level rise that we get from the NOAA tide gauges in North Carolina. The Charge from the CRC asked the Science Panel to focus on a 30-year timeframe. We added discussion that points to reasons that spatial variations occur in North Carolina. There are two big things, the geology and the oceanographic effect that impact the coast differentially in space. When we look forward in 30 years we use two scenarios from the most recent IPCC Report. We have provided these to the CRC with the ranges and spatial variation. The tide gauges that are still operational and supported by NOAA are Duck, Oregon Inlet Marina, Beaufort, Cape Fear in Wilmington, and Southport (but Southport is no longer operational). For NOAA to report sea level rise they have to have 30 years of data. The length of record can impact the rate. We said in our report that at this juncture we are going to work with these numbers. Moving forward, if there is a need to do a more refined analysis on this data to put it into a common timeframe then that would be done at the request of the Commission. We used the standard of analysis and data that was readily available and vetted. Another thing that impacts what we have is the gaps in the data. The gaps in the data increase uncertainty. All of this plays into the quality of data that you have to use in regional or local assessments in North Carolina. The first approach we can take in thinking about

what could happen in 30 years is to accept that this analysis of rate is reasonably represented in a linear fashion and multiply by 30 to get the elevation difference that will be seen in 30 years. One of the things we spent a lot of time with was trying to understand the spatial variation. We know how to understand relative sea level rise from a point gauge at any one location as compared to what is being said about the global. In North Carolina we have evidence from the geology of vertical land motion. If you put a gauge in and the water level stays the same, but the ground is subsiding, then it will look like rise of water. There is some evidence that is newly reported in the literature that we have a little bit of uplift to the south in the Wilmington/Southport area. In general we have subsidence that is being reported in the north which matches well with the conversations being had in the Norfolk area. In addition recent literature has come out about the oceanographic effects that are being caused by the cyclical oscillation in the ocean basin and the position and speed of the Gulf Stream. The next step was to decide a value to use for global sea level rise to try to differentiate global and local at each gauge. The Science Panel wanted to make some statements about the use of these projections. We want to remind you that we have presented this spatially, there is a high and a low, and if you are looking at the effects in 40 or 50 years then you have to use that as a factor with this as we used 30 years in the report. The Panel knows that we are all concerned about coastal sustainability. We know that what we do impacts the economic, social and environmental impacts of what we have and the work that we are doing on this is very important and will impact the State. There has been a lot of discussion about the decisions that get made relative to risk. When we were doing our work we recognized that the Corps has published standards for dealing with sea level rise for projects, but these would be constructed projects that may have design lives of a certain length of time. We did not use that because it is a standard for building something versus planning and management of development. To think about what you are putting in place relative to the risk that will be there once the standard is in place. State Law 2012-202 says that the CRC needs to consider looking at this in multiple regions. We have in our report a lifting of the graph from the BIMP. The Panel knows that part of the information from this graph came from the geologic framework and know that the geology that we have informed it. The Panel felt that there were far too many regions to really try to section it out. Going forward we hope to have support from, the CRC to influence anyone to continue to put out gauges and keep them active and take measurements where we need measurements. Enough issues have been raised about tide gauge data and the interval of time that it might be worth taking a look at it every five years.

Science Panel Inlet Hazard Area Study – Draft Final Report (CRC 14-41)

Ken Richardson

Ken Richardson stated SL 2012-202 was passed with the provision requiring the CRC to study the feasibility of eliminating the inlet hazard area AEC. As part of this process, the CRC asked the Science Panel to address specific questions related to the study. The Science Panel first looked at how hazards are different in inlet areas compared to other beach areas. These areas are not only influenced by erosion and accretion, but they are also influenced by tidal flows, inlet migration and engineering. Large storms can also displace a considerable volume of sediment from dry land areas adjacent to inlets and deposit that material in the ebb and flood tidal deltas. Channel location, movement or orientation can have an immediate impact on shorelines. Also, inlet erosion rates can vary 10-100 times faster than non-inlet shorelines. Inlets can persistently migrate in one direction. The Science Panel also looked at the best method to delineate the

greatest risk in an inlet area. The Panel generally agreed that this question was addressed as part of their 2010 Inlet Hazard Area Update Study. Those results were presented to the CRC. That study focused on defining areas of historic related processes that had dominated the geomorphic changes to the areas around the barrier islands that were adjacent to inlets. Boundary delineation was based on statistical shoreline, vegetation line and beach width changes. The Panel also looked at topography, shoreline geology, the bathymetry, and used the expertise of the Panel members. The Division made subtle adjustments to those boundaries to follow lot lines and public infrastructure. The 2010 proposed boundaries reflected areas that have been or could be influenced by inlet related processes. Not all areas inside the boundaries were the same as far as the risk was concerned. The Panel acknowledges that the risk is not spatially equal. If you are on the oceanfront your risk is not the same as if you are on the back of the boundary. At the end of the study in 2010, the Panel was looking at a concept of a 30-year risk line. The idea was to better define the risk inside the proposed box. The Panel recommends that the Commission conduct a comprehensive inlet study on a periodic basis to account for dredging, beach fill, and existing or future erosion control structures. The Panel recommends that the CRC use the best methods and data to calculate erosion rates on a periodic basis and to re-evaluate methods and future available data at a five year interval. The Ocean Hazard Area of Environmental Concern is comprised of oceanfront and inlet lands that connect the ocean to the sound. There are three subcategories within the Ocean Hazard AEC. The nature of the hazard is managed using varying siting and development standards designed to address the hazard in protecting property from the hazard. The Science Panel recognizes that the same strategy is needed for inlet hazard areas or areas of inlet influence. The physical processes affecting inlet areas are not the same as those on the oceanfront or the estuarine side of the barrier islands. Management of development in these areas should reflect the relative degree of risk. Since it would be difficult for the CRC to discuss the development of management plans for unique geographic regions without an area the Panel feels it would be good to have a defined boundary for management purposes. Adopting areas of inlet influence or using the 2010 IHA Update Report would allow the CRC to zone these areas based on based on specific hazards. The Panel recommends the CRC consider developing management strategies to address the hazard protection.

John Snipes made a motion to approve the Science Panel's Inlet Hazard Area Study. Renee Cahoon seconded the motion. The motion passed unanimously (Hairston, Andrew, Baldwin, H. Simmons, Cahoon, Gorham, Dorsey, White, Rose, Snipes).

State Vegetation Line Alternatives – Subcommittee Report (CRC 14-42) Rudi Rudolph

Rudi Rudolph stated in the early stages of the setback rules there were rules that applied to less than or greater than 5,000 square feet. The CRC changed the rules to a graduated setback. The static line applies with nourishment and goes into place if there is a large-scale nourishment project. The vegetation line just before nourishment becomes the static line in perpetuity. After the static line was in place and the beaches became wider due to nourishment and homes were found to be non-conforming the CRC came back and provided a static line exception which allowed use of the existing line of vegetation with a couple of qualifiers. The CRC authorized the static line exception and there is a five year review process. A subcommittee was formed and we looked at the static line alternative proposal. The proposal was to eliminate the static line and the

trigger for the static line. Towns, if they wanted to, could develop a development line and no development would be permitted seaward of the development line. The local government would be able to determine the development line and DCM would review it. The vegetation line would be used for setbacks in the absence of a development line and graduated setbacks would be maintained. The vegetation line and setback policy was a pioneering idea when most of the coast was undeveloped. Now that the coast is built out and the thoughts are very different. Preventing the seaward advance of a structure is something we all agree on. The static line is cumbersome to most and confusing to some. One of the issues with the static line is that certain communities were designing projects of less than 300,000 cubic yards to avoid the static line. The larger structures were still non-conforming and there was a negative connotation for real estate purposes. The big issue was that you could only rebuild up to 2,500 square feet. So how do we remove the static line but still achieve the goals of preventing the seaward advance of development and develop proper conforming/non-conforming thresholds? The subcommittee believes the local community towns can establish a detailed development line on the oceanfront. This development line would only be used to prevent the seaward encroachment of development. The development line should be incorporated into the governing documents of the town, such as an ordinance or land use plan). Staff has cautioned that this might not work if towns are not required to do a land use plan. The development line should follow existing development and allow all homes to be rebuilt up to the line. DCM or the CRC could approve the development line, but a standard for approval must be established. Once the development line is approved the static line would be removed and the CRC would resolve any conflicts. The actual stable, natural vegetation line would be used with 30-times the erosion rate setback factor to be considered conforming. In this scenario there will not be a graduated setback. The development line concept does not have a nourishment plan approval process. The issue of grandfathering non-conforming structures should also be reviewed.

Braxton Davis stated the Division has put forward a proposal. The static line concept has been around for a long time. The Chair's proposal and the staff's proposal are almost the same except that the Staff recommends that there continue to be a static line because we are concerned about using an artificial vegetation line after a renourishment project and we would also keep the exception process to ensure a plan for maintaining the beach. This is not included in the Chair's proposal. Depending on where the development line is drawn there could be the potential for additional expansion of development seaward following a renourishment project. You would still have to meet the setback, but there is a possibility that there will be seaward expansion of development. The proposal that was put forward by the subcommittee is more complicated and changes the graduated setbacks. These are significant changes.

Renee Cahoon stated that 300,000 cubic yards is a small project in today's world. This threshold should be increased.

After discussion, Chairman Gorham directed the staff to come back to the CRC with some proposed language on the two proposals.

State Ports Inlet Management AEC Discussion – Beneficial Use

Rudi Rudolph

Rudi Rudolph stated there is a need to have verbiage in the state port inlet AEC that pertains to the Morehead Harbor. The CRC needs to look at whether they want to segregate Morehead from the Cape Fear. This presentation will pertain to the Morehead City issue. The first navigation project was constructed in 1911 and has had a series of construction improvements and deepening since the 1930s. Almost all of the beach quality sand has gone offshore. Every third year Bogue Banks is getting the outer harbor sand. From a navigation standpoint, another challenge is the shoaling. Shackleford Banks over time has been migrating from the east to the west and into the channel. In May 2013 there was a dredging event and by August 2013 the sand was coming back. In March 2014 another dredging event took place and by September it was back. Because it is a federal channel the federal government pays 100% of the costs. They don't have enough money to keep the channel open without putting the sand in the right places. We have been putting some pressure on the State to help with funding for placing the sand. Several Statutes have attempted to have the sand placed on the beach; however the sand continues to go offshore. DCM also attempted to address this issue with the completion of the BIMP. With the State Inlet AEC coming around this is another chance to try and get the language right to get the Corps to do the right thing. The phrase "active nearshore area" has been deleted from the proposed language because there has been a lot of confusion over this term. "To the maximum extent practicable" has a lot of legal meaning when it comes to consistency. It provides the Corps the limited flexibility that they want.

Braxton Davis stated the Division will talk with the Corps and the State Ports about this and bring their feedback to the CRC.

Dredging Window Study Update

Frank Gorham

Frank Gorham stated Ken Wilson's group and Suzanne Dorsey's group has been looking at the various options for expanding the dredge window. A few of us met with the regional director for several states for the US Fish and Wildlife Service. The meeting was very encouraging that there would be consideration for expanding the dredging window. We will have a follow up meeting in January to talk about the conditions that they would require. Our goal is to have the follow up meeting in January and then bring in other federal agencies, including the Corps. We are hoping to identify two or three pilot projects with extra monitoring to see the impacts. We will follow up at the next meeting.

With no further business, the CRC adjourned.

Respectfully Submitted,



Braxton Davis, CRC Executive Secretary



Angela Willis, CRC Recording Secretary