NC COASTAL RESOURCES COMMISSION (CRC)

February 10, 2022 **Beaufort Hotel, Beaufort**

Present CRC Members

Renee Cahoon, Chair Larry Baldwin, Vice-Chair Neal Andrew Craig Bromby **Bob Emory** Robert High Sheila Holman Doug Medlin Phil Norris Lauren Salter

Present CRAC Members

Alexander "Dick" Tunnell

Spencer Rogers, Vice-Chair David Kellam Ike McRee Michael Moore David Moye

Present from the Office of the Attorney General

Mary Lucasse

Angie Wills

Present from the Department of Environmental Quality, Office of the General Counsel

Christine A. Goebel Holly Ingram

CALL TO ORDER/ROLL CALL

Renee Cahoon called the meeting to order at 9:00 a.m. on February 10, 2022, reminding the Commissioners of the need to state any conflicts due to Executive Order Number 34 and the State Government Ethics Act. The State Government Ethics Act mandates that at the beginning of each meeting the Chair remind all members of their duty to avoid conflicts of interest and inquire as to whether any member knows of a conflict of interest or potential conflict with respect to matters to come before the Commission. The Chair requested that if any member knows of a conflict of interest or a potential conflict of interest, they so state when the roll is called. Commissioner Cooper was absent. No conflicts were reported. Commissioner Sheila Holman read her evaluation of statement of economic interest into the record which indicated that the State Ethics Commission did not find any actual conflicts of interest or likelihood for a conflict of interest. Based upon this roll call Chair Cahoon declared a quorum.

CHAIR'S COMMENTS

Chair Cahoon advised the Commission of an agenda change. It will be necessary for the Commission to enter closed session at the end of the meeting to confer with CRC Counsel. Ms. Cahoon welcomed the newest Commissioner, Sheila Holman, and thanked MaryJo Alcoke of the Governor's Office and Assistant Secretary Sushma Masemore for attending the meeting. The Chair congratulated Spencer Rogers, CRAC and Science Panel member, on his retirement from NC Sea Grant.

MINUTES

Neal Andrew made a motion to approve the minutes of the November 10, 2021, Coastal Resources Commission meeting. Bob Emory seconded the motion. The motion passed unanimously (Cahoon, Andrew, Baldwin, Emory, High, Medlin, Norris, Salter, Tunnell, Wills)(Bromby, Holman abstained).

EXECUTIVE SECRETARY'S REPORT

DCM Director Braxton Davis gave the following report:

DCM is off to a busy start this year. Our permit numbers are up over last year, and we are moving forward with a lot of rulemaking, resilience planning, training and outreach, and new hires. Some of our highest priorities for 2022 include a transition to electronic permitting, a renewed focus on estuarine shorelines, and expansion of our Resilient Coastal Communities Program. As part of the renewed focus on estuarine policy, today you'll hear from Whitney Jenkins, our Coastal Reserve Training Coordinator, who is now leading DCM's internal work group focusing on estuarine shoreline stabilization. We hope to follow her presentation with discussions of living shorelines, shoreline mapping, thin layer disposal, and other estuarine topics at upcoming commission meetings.

Regulatory

Since Robb Mairs accepted the new Minor Permitting Coordinator position in April of last year, he has been expanding our outreach and training of new Local Permitting Officers. In November 2021, Robb re-launched the "Minor Details" Newsletter for LPOs to provide regular updates on commission rule changes, rule interpretations, and other guidance and training. The last Minor Details newsletter was back in 2009. Also, as part of a Department-wide study of permitting fees, we recently sent a survey to the LPOs on whether they feel the current minor permit application fee of \$100 should be increased, along with any justifications for their recommendation. We will bring the results of that survey to you at your next meeting. On oceanfront matters, Ocean Isle Beach is continuing construction of their terminal groin and has a Federal Coastal Storm Risk Management project being constructed by the US Army Corps of Engineers. Holden Beach is currently conducting a beach nourishment project, as is the Town of Oak Island. The Town of North Topsail Beach is also planning to begin a 2-year truck haul beach nourishment project in the southern part of the town. The Town is also proposing a modification for additional fill at the north end of the beach adjacent to Topsail Reef, which is currently under agency review. The Carolina Beach & Kure Beach federal CSRM project has also been contracted, with work scheduled to start this month. Finally, there are also a few federal beneficial use projects occurring this winter - where the Corps is nourishing adjacent beaches with beach-compatible material from channel maintenance. Dredging of Snows Cut, with material going to Masonboro Island, is wrapping up and dredging of the Lockwoods Folly Inlet AIWW crossing will place material on Holden Beach. The USACE has also placed material on Onslow Beach from maintenance dredging of Brown's Inlet. In January, staff received a request from Kinder Morgan

for emergency agitation dredge authorization at the Wilmington Port in preparation for a large vessel seeking berthing that evening. Staff were able to rapidly coordinate with commenting agencies to ensure the proper precautions were taken prior to providing the authorization and we are looking forward to working with Kinder Morgan soon on a more comprehensive dredge plan. Also, Carteret County proposed a modification of an existing major permit to dredge Taylors Creek and place the beach compatible sediment in an upland disposal site, and later onto the beach at Radio Island to protect an existing roadway. The proposal had several issues that needed to be resolved, including sediment testing and DCM coordinated with the Army Corps of Engineers, Wildlife Resources Commission, Division of Marine Fisheries, and the Division of Water Resources to resolve those issues, and a monitoring plan was developed to allow the project to move forward. This project is important to both the military and Carteret County as the road is being undermined by erosion and is an area heavily used as a public access site. This project has received two grants, from the Division of Water Resources Shallow Draft Fund and from the federal Defense Community Infrastructure Program. Staff should have this permit modification issued by the end of this week.

Federal Consistency

Last year, DCM submitted a Routine Program Change request to NOAA's Office for Coastal Management. The Coastal Zone Management Act requires state Coastal Programs to formally incorporate changes made to the laws, rules and policies that are used in Federal Consistency reviews. Your rules at 15a NCAC 07H .0208 were recently amended to remove outdated provisions and clarify vague and ambiguous language, so the purpose of this action was to incorporate these changes into our enforceable policies for Federal Consistency review. On January 20, 2022, NOAA concurred with this program change thereby incorporating all of 15A NCAC 07H .0208 as enforceable policies. On the offshore energy front, the federal Bureau of Ocean Energy Management (BOEM) has proposed issuing up to three commercial wind energy leases and approving site assessment activities in the Wilmington East Wind Energy Area (WEA), approximately 17 nautical miles offshore North Carolina. Site characterization activities would involve meteorological buoys, vessel and aerial surveys of benthic habitats, avian resources, and marine fauna. The lease, by itself, would not authorize the construction of a wind energy project. On January 12, 2022, DCM received BOEM's Federal Consistency Determination to review whether issuing up to three commercial wind energy leases and site assessment activities are consistent to the maximum extent practicable with the enforceable policies of the North Carolina and South Carolina Coastal Management Programs. On January 23, 2022, DCM published a public notice for comments to be accepted on the consistency determination until February 23, 2022. To date, thirteen comments have been received: One in support, eleven in opposition, and one requesting additional information. DCM staff is also participating on a Central Atlantic Renewable Energy Task Force regarding BOEM's Draft Call for Information and Nomination Areas. The planning area and possible leasing process encompasses the area offshore Delaware south to Cape Hatteras. The task force includes members from NC, VA, MD, and DE. In other areas, the Division is reviewing a plan from the N.C. Department of Transportation to provide the wetland mitigation requirements for the US-17 Hampstead Bypass project through the Beane Property Wetland Mitigation Site in New Hanover County in accordance with their federal (Section 404) permit requirements. The 309-acre project site will provide approximately 79 acres of wetland restoration, 78 acres of wetland

enhancement, and 31 acres of wetland preservation. DCM is circulating the plan to review agencies for comment and anticipates making a federal consistency decision soon.

Land Use Plan Certifications

DCM certified two land use plan updates since your last meeting for the Town of Duck and for Carteret County and certified an amendment to the Currituck County Land Use Plan. Please let us know if you have a question about this process, or the plans themselves.

Access Grants

The Public Beach and Coastal Waterfront Access program, now in its 40th year, is accepting preapplications for the upcoming 2022-2023 fiscal year which are due April 22nd. You will recall that recent actions by the General Assembly have restored the funding source of the Parks and Recreation Trust Fund to a portion of the deed transfer tax rather than annual appropriations. For this round of grants, DCM expects about \$1.2 million for local governments to improve public access to coastal beaches and waters.

Resilient Coastal Communities Program

Work in the Resilient Coastal Communities Program's 26 communities continues to go well. Communities are hosting public meetings to receive feedback on their risk and vulnerability assessments and beginning to identify potential projects. Navassa, Leland, and Sunset Beach have submitted final deliverables for Phases 1 and 2, and staff are currently reviewing those documents. Last month, DCM staff attended four public meetings in Bertie County, Hertford County, Windsor, and the Town of Hertford. Staff plan to travel to Washington, Aurora, Belhaven, and Beaufort County next week for public meetings. Staff anticipate releasing the Request for Applications for Phase 3 of the program later this month. Phase 3 will fund the engineering and design of a prioritized project (identified during Phase 2). The RCCP recently received about \$545,000 from NFWF's National Coastal Resilience Fund, plus another \$1.15 million through the state budget to continue and expand the RCCP. Phases 1 and 2 are scheduled to wrap up later this spring, and Phase 3 work is tentatively scheduled to begin later this summer.

DCM has also drafted and is circulating a new guidance document for coastal resilience projects in North Carolina. The document is intended to promote a consistent approach across all organizations providing funding or technical assistance for resilience projects, and we hope that the various programs will incorporate the principles and project guidelines into their Requests for Proposals and scoring criteria used in project selection. We received great feedback from partner organizations on early drafts, and we've received requests for copies from other coastal states who are also seeking to publish guidance. Please let me or Tancred Miller know if you'd like a copy, which will also be available on our website.

Coastal Reserve

Coastal Reserve rule amendments re-adopted by the Department in October and approved by the Rules Review Commission in November became effective last week, on February 1. These amendments satisfy the Legislative Periodic Review and Expiration of Existing Rules process requirements, and address priority updates to enhance clarity of existing rules and address issues and gaps to ensure effective management of the Coastal Reserve. Reserve Staff will host a

webinar for commercial users of Reserve sites on February 22 regarding the special activity authorization, a new process authorized in the rules. On March 2, The Coastal Training Program and Division staff are once again offering a virtual workshop on "Living on a Barrier Island" for real estate professionals. Participants will learn about the ecology and geology of barrier islands, rules that govern development, NFIP updates, and native plantings for the coastal landscape. Real estate professionals will receive four elective continuing education credits from the N.C. Real Estate Commission.

Staff News

As I mentioned at the November meeting, DCM is receiving funding from the Legislature to establish several new positions. The Coastal Resiliency Program will be getting one permanent full-time position and two time-limited positions to staff the program and increase the Division's capacity to work with local governments on resiliency projects. These positions will be supervised by Tancred Miller in in the Division's Policy and Planning Section. We are also establishing a new Major Permits position that will focus on infrastructure projects associated with the American Rescue Plan Act, or ARPA and assist with the increased permitting workloads facing the division again this year. Last, but certainly not least, unfortunately, Mr. Roy Brownlow has announced his imminent retirement and transition to the private sector. Roy has been District Manager in the Morehead City office since 2002. Before that, Roy had served as an Assistant Town Manager for Carteret County and as the building inspector for Pine Knoll Shores, bringing excellent experience to the Division and has been our go-to for questions about construction methodology over the years. He also took on an extra role as the Division's compliance and enforcement coordinator. In that role, he worked with staff and other district managers on our more complex enforcement cases and kept a database of all enforcement actions for the division. But most importantly, he has been a supportive supervisor, steadfast leader, a positive force in the office, and friend to everyone in our program. His presence in the office will be sorely missed, but he'll still be around town, and we all plan to continue hanging out with Roy for the long-term. Congratulations to Roy, we wish him the very best in his new endeavors.

CRAC REPORT

Spencer Rogers, CRAC Vice-chair, reported that the Advisory Council had a virtual presentation from FEMA on flood insurance rates and "Risk Rating 2.0". The new rating system is coming online for new construction and the impacts are less than clear. The software used is only available to insurance agents, so you should speak with your agent regarding the impacts to your specific policies, properties, and rates.

VARIANCES

Arnold/McGraw (CRC-VR-21-06), Atlantic Beach, Oceanfront Setback Heather Styron and Holly Ingram, Esq./pro se

Heather Styron, DCM Field Representative gave an overview of the site location. Holly Ingram stated Petitioner Carolyn Arnold is present and will represent herself. Ms. Ingram stated Petitioners own a single-family residence located at 312 East Boardwalk Boulevard in Atlantic Beach. The residence is attached to a septic system that Petitioners are seeking to replace oceanward of the house, which is waterward of the oceanfront setback requirement as measured from the Static Vegetation Line. On November 2, 2021, The Town of Atlantic Beach's Local Permit Officer denied Petitioners minor development permit application due to its inconsistency

with the Commission's rules codified in 15A NCAC 07H .0306. Petitioners seek a variance in order to replace the septic system oceanward of the house. Ms. Ingram reviewed the stipulated facts of this variance request and stated that staff and Petitioner agree on all four statutory criteria which must be met to grant the variance.

Petitioner Carolyn Arnold reviewed the stipulated facts which Petitioners contend support the granting of this request.

Neal Andrew made a motion that Petitioner has shown that strict application of the applicable development rules, standards, or orders issued by the Commission will cause the Petitioner an unnecessary hardship. Phil Norris seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Bromby, Wills, Tunnell).

Neal Andrew made a motion that Petitioner has shown that hardships result from conditions peculiar to the Petitioner's property. Larry Baldwin seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Bromby, Wills, Tunnell).

Neal Andrew made a motion that hardships do not result from actions taken by the Petitioner. Doug Medlin seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Bromby, Wills, Tunnell).

Neal Andrew made a motion that the variance 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. Angie Wills seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Bromby, Wills, Tunnell).

This variance request was granted.

NCDOT – (CRC-VR-21-07), Mirlo Beach, Sandbags Jonathan Howell and Christine Goebel, Esq./Colin Justice, Esq.

Jonathan Howell, DCM Major Permit Coordinator, gave an overview of the site location. Ms. Goebel stated NCDOT owns the NC-12 right-of-way in the Rodanthe area in the Outer Banks of Dare County. Following the completion of the Jug Handle Bridge, NCDOT plans to remove the NC-12 roadway in the portion of the area bypassed by the new bridge and develop a turnaround area for traffic to continue to access north Rodanthe up to this dead-end. NCDOT also proposed a new sandbag structure to protect the new turnaround area. On October 25, 2021, DCM denied the Town's application for a minor development permit due to its inconsistency with the Commission's oceanfront setback rules as well as rules regarding the orientation, size, and color of the sandbags. Ms. Goebel reviewed the stipulated facts of this variance request and stated that staff and Petitioner agree on all four statutory criteria which must be met to grant the variance.

Colin Justice represented Petitioner and reviewed the stipulated facts which Petitioner contends supports the granting of the variance.

Larry Baldwin made a motion that Petitioner has shown that strict application of the Commission's rules, standards, or orders will cause Petitioner an unnecessary hardship. Phil Norris seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Bromby, Wills, Tunnell).

Larry Baldwin made a motion that Petitioner has shown that hardships result from conditions peculiar to Petitioner's property. Doug Medlin seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Bromby, Wills, Tunnell).

Larry Baldwin made a motion that hardships do not result from actions taken by the Petitioner. Doug Medlin seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Bromby, Wills, Tunnell).

Larry Baldwin made amotion that the variance request will be consistent with the spirit, purpose and intent of the Commission's rules, standards, or orders; will secure the public's safety and welfare; and preserve substantial justice. Dick Tunnell seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Bromby, Wills, Tunnell).

This variance request was granted.

DEQ ASSISTANT SECRETARY COMMENTS

Sushma Masemore thanked the Commission for its work protecting the resources of the State. Ms. Masemore stated that the Department regularly communicates with the DCM Director on many issues regarding the amount of development, solutions for today's environmental challenges, and regulatory actions. She also noted that the Department is focused on climate and resiliency and is available to assist the Commission at any time.

SHELLFISH LEASING

Floating Structures Associated with Shellfish Leases Update (CRC 22-07) Braxton Davis, DCM Director

Braxton Davis stated that comments received by the Division on this topic have been provided to each Commissioner. He acknowledged that the NC Statutes authorize the Division of Marine Fisheries to issue shellfish leases, whereas DCM authorizes development within any Area of Environmental Concern. Davis stated that DCM's regulations require specific site plans and allow for minor modifications or amendments to these plans. However, shellfish growers often need to experiment with different alignments and structures within their approved leases, which would present complexities for the CAMA permitting and enforcement process.

Over the past several years, there has been a concerted effort to avoid duplications in permitting, reviews and approvals of shellfish leases between DMF and DCM. At this point, both agencies can be involved in different ways. For example, DMF holds public hearings to attempt to resolve conflicts prior to issuing a new lease. DCM may be involved in the permitting of certain structures such as pilings. At the November 2021 CRC meeting, DCM requested a pause in

rulemaking efforts by the CRC to allow time for DCM, DMF, and DEQ leadership to discuss the recommended roles of each division going forward. In January 2022, a meeting was held with DMF staff, DEQ leadership, and representatives of the DEQ Office of General Counsel where agreement was reached on an approach in which any cages, poles, anchoring systems, and any above-water frames or structural supports used to suspend or hold aquaculture equipment in place should be considered gear and regulated through the DMF shellfish lease. It was also agreed that platforms and floating structures will require a CAMA Major Permit and will not be authorized through a DMF shellfish lease. If the CAMA permit is denied, a request to the CRC for a variance would be available and this approach would allow the CRC to review each proposal on a case-by-case basis and review any unique concerns or comments from federal and state resource agencies, local governments, and commentors on the lease and permit applications. The variance process would also require the petitioner to notify adjacent riparian property owners. However, since that time, the NC Shellfish Growers Association submitted written comments questioning the authority of CAMA contending that an agricultural exemption would apply to anything within a shellfish lease.

Chair Cahoon asked the Commission whether it would be appropriate to ask the Attorney General's Office for an official opinion on whether this development would fall under a CAMA agricultural exemption. Following discussion, the Commission agreed and also requested that the AG's opinion include an assessment regarding whether floating structures would be an infringement of riparian rights, as well as whether local governments have the right to regulate the placement of these structures. The Attorney General's Advisory Opinion can be reviewed at an upcoming CRC meeting for further discussion. Mary Lucasse, CRC Counsel, stated she will draft three questions to be addressed for review by staff and the Executive Committee. By consensus, the Commission approved this approach.

PUBLIC INPUT AND COMMENT

Roger Montague commented on the issuance of a permit in Carteret County.

James Frey, Crystal Coast Oysters, requested that floating structures be allowed for shellfish growers and believes these structures are exempt from CAMA under agricultural exemption. Chris Matteo, NC Shellfish Growers Association, submitted a signed petition for allowing the use of floating structures on shellfish leases and believes the structures are exempt from CAMA permitting under the agricultural exemption.

Conor MacNair, NC Sea Oyster Company, spoke in favor of allowing floating structures on shellfish leases.

Greg Huhn, Swan Quarter Oyster Company, spoke in favor of allowing floating structures on shellfish leases.

Ronald Sheffield, Topsail Sound Shellfish LLC, spoke in favor of allowing floating structures on shellfish leases.

Kevin Linebarger, Millstone Marine, requested the Commission consider extension of expiration time on General Permits from 120 to 180 days.

Chris Elkins, Coastal Conservation NC, spoke in opposition to floating structures on shellfish leases.

Bobby Schultz spoke in opposition to floating structures on shellfish leases.

Wes Cooper spoke in favor of allowing floating structures on shellfish leases.

PUBLIC HEARING

Amendments to 15A NCAC 7H .0104; .0304 - .0306; .0308 - .0310; 7J .1201-.1206; .1301 - .1303 Beach Management Plans

Mike Lopazanski stated these amendments were published on January 18 and create procedures for requesting and approving beach management plans for oceanfront communities constructing large-scale beach fill projects to provide regulatory relief from oceanfront development setback provisions. Comments will be accepted until March 21, 2022.

David Kellam, Figure 8 Island, spoke against the amendments. (written comments provided).

Amendments to 15A NCAC 07M .0300 Shoreline Access Policies

Rachel Love-Adrick stated these amendments were published on January 3 and address implementation aspects of the CAMA Public Beach and Coastal Waterfront Access Program as well as reorganization some of the rules based on grant administration, local government requirements, and project selection. Comments will be accepted until March 4, 2022.

No comments were received.

Amendments to 15A NCAC 07H .0208 & .1205 Structural Boat Covers

Mike Lopazanski stated these amendments were published on January 3 and allow for the permitting of structural boat covers. Comments will be accepted until March 4, 2022.

No comments were received.

Amendments to 15A NCAC 07H .0308 and 7H .1800 General Permit for Beach Bulldozing Ken Richardson stated these amendments were published on January 3 and extend the use of a beach bulldozing General Permit or Emergency Permit to oceanfront areas inside an inlet hazard area. Comments will be accepted until March 4, 2022.

No comments were received.

Amendments to 15A NCAC 07H .0403 - .0404 Development Period/Commencement/ Continuation and Extension

Mike Lopazanski stated these amendments were published on January 3 and will lengthen the initial expiration date of most Major Permits. Comments will be accepted until March 4, 2022.

No comments were received.

Amendments to 15A NCAC 07H .0306 and 7K .0208 Elevating Structures

Mike Lopazanski stated these amendments were published on January 3 and clarify when a permit is needed for the elevation of oceanfront structures. Comments will be accepted until March 4, 2022.

No comments were received.

PETITION FOR RULEMAKING

Petition for Rulemaking Procedures (CRC 22-01)

Mary Lucasse

Mary Lucasse reviewed the petition for rulemaking procedures as outlined in CRC 22-01.

Request for Repeal 15A NCAC 7H .0205 – Alteration of Coastal Wetlands Nelson G. Paul

Nelson Paul stated that as a former DCM employee, he is qualified to address the lack of authority issued to the Commission to regulate marsh mowing or cutting. No authority is granted to the CRC under the Coastal Area Management Act to regulate marsh mowing or cutting as neither activity is listed as development in the enabling legislation. Because mowing and cutting are not development under the CAMA, the activities described in 15A NCAC 7H .0205 are clearly outside the legislative authority and jurisdiction of the CRC. The definition of development is clearly outlined in NCGS 113A-103. Development is any activity in any Area of Environmental Concern involving construction or enlargement of a structure, excavation, filling, dumping, or alteration of land. Being that this rule was adopted in error, it compromises the integrity and diminishes the authority of other rules lawfully adopted and administered by the CRC. Repeal of this rule will result in the reallocation of resources into other activities pursuant to the proper implementation of the legislative intent of the Coastal Area Management Act. If DCM wishes to add mowing and cutting to the definition of development, then a request should be sent to the Legislature.

Staff Response to Petition for Rulemaking (CRC 22-02) Christine Goebel, Asst. General Counsel

Christy Goebel stated that Mr. Paul is questioning the Commission's and DCM's authority to regulate the alteration or mowing of coastal wetlands and noted that the Director's response to this Petition lays out the history of this issue. The statutory authority has been reviewed by two separate Commission Counsel. In 1998 an Attorney General's opinion was requested by DCM along with a letter on the issue from Professor Stephen Broome of the NCSU Soils Sciences Department which outlined how regular mowing of wetland species eliminates the life support and erosion control values generally attributed to high marshes and will eventually cause a change in the dominant plant species composition. Robin Smith, of the NC Attorney General's Office, provided a legal opinion at the request of then DCM Director Donna Moffitt on whether the CRC has the authority to regulate the alteration of shoreline vegetation or coastal wetlands. Ms. Smith's response specific to coastal wetlands noted that the CAMA identified coastal wetlands as a discreet Area of Environmental Concern for designation by the Commission. Additionally, the CAMA requires permit denial where dredging, filling, or otherwise altering coastal wetlands is prohibited. The alteration of coastal wetlands by cutting, burning, etc., may fall within the definition of development because it includes alterations of the shore, bank, or bottom of the Atlantic Ocean or any sound, bay, river, bank, stream, lake, or canal. In 2006, the Commission was advised by DCM staff of intense efforts to develop marginal land through repeated mowing which would change plant species composition resulting in a more favorable coastal wetlands delineation for development. The Commission, through DCM staff, asked then CRC Counsel, Jill Hickey, for an advisory opinion on the question of the CRC's authority under CAMA to regulate clearing, cutting, mowing, or burning of coastal wetlands. In 2007, Ms. Hickey responded and concluded that the CRC has the authority to regulate the burning and

mowing of coastal wetlands by means of rulemaking and in certain cases permitting. DCM's Director and staff strongly assert that the unrestricted mowing of marsh vegetation can lead to the alteration of the substrate and can therefore constitute development under CAMA. This issue has been thoroughly vetted by the Division, Commission, and Attorney General's Office and note that the Rules Review Commission did not raise any concerns about the statutory authority of the CRC to enact marsh alteration rules when it was before that body in 2009, when other portions of this rule changed in 2016, or when these rules went before them for readoption in July 2020. In response to Petitioner's concern that repeal of this rule will result in the reallocation of resources into other activities pursuant to the proper implantation of the legislative intent of the CAMA, DCM submits that any resources allocated to the prevention of significant salt marsh alterations by mowing, cutting, or other means are well justified given the importance of these resources. As laid out in the documents from the Attorney General's Office regarding advising the Commission about its authority, the Commission has the legislative authority to regulate the alterations of coastal wetlands.

Commissioner Emory stated he was on the Commission at the time of these rule changes and it was apparent from reports from staff that there was a need to regulate this activity. Chair Cahoon stated these rules allow for specific cutting and mowing to provide water access on lots that cannot have a dock or pier. Commissioner Bromby stated this petition may be worth looking at from an authority standpoint. Director Davis stated altering coastal wetlands is altering the substrate which is development under CAMA. It would be the same as if you destroyed submerged aquatic vegetation which is altering the substrate. The AG's Office has provided two advisory opinions which address the authority issue. If the petitioner wants more clarity on legislative authority for the rule, let's not repeal a rule which is protecting the resource, rather, Petitioner could take his concerns to the General Assembly. Mr. Emory stated this question has been raised twice to the Attorney General's Office with the same outcome and has been before the Rules Review Commission multiple times. Commissioner Andrew stated the question of authority has been asked and answered twice and there is no need to ask a third time.

Bob Emory made a motion to deny the Petition for Rulemaking to repeal 15A NCAC 07H .0205. Sheila Holman seconded the motion. The motion passed with eleven votes in favor (Medlin, Norris, High, Salter, Holman, Cahoon, Baldwin, Andrew, Emory, Wills, Tunnell) and one opposed (Bromby).

ESTUARINE SHORELINE MANAGEMENT

DCM Estuarine Shoreline Strategy Update (CRC 22-03) Whitney Jenkins, Coastal Training Program Coordinator

Whitney Jenkins stated DCM's internal Estuarine Shoreline Workgroup has finalized an update to its estuarine shoreline strategy for the next five years. Through implementation of this strategy, the Division will continue to better understand and manage estuarine shorelines through an integrated approach of planning, permitting, education, and research. This includes promoting the use of living shorelines for shoreline stabilization, understanding shoreline change through mapping and exploring implementation of resilience strategies including thin layer deposition and protection of marsh migration pathways. The strategy update takes into account the significant progress already made in estuarine shoreline permitting, research, and outreach. The purpose of this presentation is to review the Division's accomplishments related to estuarine

shoreline management, review the objectives of the updated estuarine shoreline strategy, and set the stage for future conversations regarding estuarine shoreline management.

Between 2009 and 2021, the Division has permitted 45 marsh sills, 605 riprap revetments, and 3,504 bulkheads. As of 2018, twelve of the 20 CAMA counties have at least one marsh sill. Approximately 67 percent of marsh sills are in Carteret, Dare and Hyde counties. Approximately 86 percent of marsh sills are made of either granite rock, oyster shell, or oyster shell bags. We have yet to quantify the impact of the changes to the marsh sill General Permit which took effect in April 2019 but improving living shoreline permit tracking is an objective in the updated estuarine shoreline strategy. Over the past five years, this research has guided our policy decisions and been incorporated into outreach messaging for decision makers and property owners. The Coastal Reserve's research coordinator, Dr. Brandon Puckett, has been involved in several research areas including a multi-decadal assessment of the impact of bulkhead on salt marsh loss. In partnership with Duke University and NOAA, research staff investigated the long-term effect of bulkheads on adjacent salt marsh. Research has also been conducted to evaluate the resilience of marsh sill living shorelines to storm events. When making decisions about shoreline stabilization, property owners rank effectiveness and durability, particularly during large storms and high wind, when weighing various shoreline stabilization options.

The efficacy and durability of living shorelines, such as marsh sills, compared to traditional hardened shorelines is largely untested. In response to this, research staff partnered with UNC Chapel Hill to evaluate the effectiveness of rock sill living shorelines before and after Hurricane Matthew. The results show that marsh sill living shorelines exhibited better resistance to landward erosion than bulkheads and natural, non-stabilized marshes. Additionally, living shorelines were more resilient than hardened shorelines as they maintained their elevation and didn't require any repair. The results suggest that living shorelines have the potential to improve coastal resilience while supporting important coastal ecosystems.

Reserve research staff and DCM regulatory staff have been conducting annual monitoring of eight rock and oyster marsh sills to assess the performance and resilience of marsh sills. The monitoring addresses structural integrity, erosion reduction, and sediment accumulation as well as repair and maintenance. Continuing this monitoring is an objective of our updated strategy. Reserve staff have also partnered with East Carolina University to evaluate marsh sills constructed with the novel and biodegradable oyster catcher material and oyster shell bags. Sediment accretion was greater in marshes behind shell bag reefs, particularly in low energy settings, than with oyster catcher reefs. However, oyster catcher reefs provided the greatest reduction in shoreline erosion in high energy environments and generally supported a greater density of large oysters than did shell bag reefs. These results indicate that deliberate decisions regarding substrate, siting, and configuration can produce resilient reefs that reduce erosion, promote sediment accretion, and provide valuable oyster habitat.

Jenkins reviewed the use of thin layer sediment placement as a promising management tool for enhancing resilience of tidal marshes to stressors such as sea level rise. Reserve research staff conducted a three-year experiment to evaluate effects of sediment thickness on vegetation response in low and high marsh. Colonization by marsh plants was generally rapid following sediment addition, such that thin layer placement plots soon resembled control plots and found

that thin layer placement was effective at restoring both high and low marsh and can serve as a climate adaptation strategy across the marsh landscape.

The Coastal Reserve Training Program has worked with partners including North Carolina Coastal Federation and North Carolina Sea Grant to offer living shoreline training for coastal decision makers including real estate agents, marine contractors, engineers, environmental consultants, and agency staff. Since 2016, 13 living shoreline workshops have been offered for these audiences reaching 492 professionals. Four of these workshops were held virtually for real estate agents and they earn four elective continuing education credits for participation. To help improve living shoreline training for marine construction professionals, Florida's marine contractor training was adapted for North Carolina. The pilot training was held in the spring of 2021 reaching 32 professionals. Our goal is to offer this yearly in different locations along the coast. Additionally, Dr. Puckett gave a presentation on the value and merits of living shorelines at a Nature as Infrastructure Briefing to the Congressional Estuary Caucus.

As part of the estuarine shoreline strategy, we will continue to host real estate and marine construction professional trainings, keep regulatory field staff aware of the latest research and monitoring findings related to living shorelines to help promote to property owners, and continue living shoreline communication efforts. The strategy for research and monitoring includes continuing to monitor living shoreline sites for structural integrity, erosion, and protection of marsh vegetation; continue to refine research questions for distribution to partners and funding opportunities; and use existing methodology to complete the third iteration of estuarine shoreline mapping and coordinate with other state agencies and organizations to determine additional mapping opportunities. The regulatory strategy includes promoting living shorelines and costshare opportunities and incentives related to their construction; finalizing a system for tracking living shoreline permits; and comparing and exploring policy approaches with Virginia and South Carolina's regulatory programs. In concert with state and federal partners, the strategy includes developing guidelines for permitting thin layer placement projects; using living shorelines on Coastal Reserve sites to improve resilience and create demonstrations sites; encourage public landowners to use living shorelines where appropriate; and support collaborations related to estuarine shoreline management.

Braxton Davis stated estuarine shoreline management approaches are being compared with Virginia and South Carolina. Virginia and Maryland have preferential laws which require an applicant to show why they could not use a living shoreline using the best available science. Virginia would be willing to come and talk about this strategy at a future Commission meeting.

OCEANFRONT MANAGEMENT

Use of Hay Bales as Sand Fencing (CRC 22-04)

Curt Weychert

Curt Weychert, DCM Assistant Major Permit Coordinator, stated today's presentation provides information on the use of hay bales as an alternative material for sand fencing within the Ocean and Inlet Hazard AEC. At the last Advisory Council meeting, there was interest in investigating the use of hay bales as an alternative material for sand retention along the coastal counties of North Carolina. Several beach communities have voiced concerns regarding marine debris associated with structural accessways, gazebos, and sand fencing following storm events. Hay

bales are being considered as a way to use natural materials that wouldn't have the same concerns of breaking down, while still performing the purpose of trapping and storing sand movement from aeolian transport. This retention of sand may aid to stabilize dunes, while allowing for the planting or stabilization of vegetation. Even though I will refer to this alternative material as a hay bale, it is important to make the distinction between hay and straw. Hay is the harvested product of high nutrient plants primarily used as feed for horses, cattle, and livestock. These bales are typically heavier, more expensive and would likely be less resilient to withstanding high moisture environments. Straw is comprised of the dried stalks of plants which have already been harvested for their seeds. This material is much lighter in weight because it contains more voids within the bales and costs less than hay. The most likely material to be used as sand fencing would be straw. The precedent of using alternative materials to serve as stabilization for dune structures is not uncommon. For example, every year, the Division releases guidance for recycling natural Christmas trees to be used as sand fencing. The recommended use of Christmas trees follows the same rule language as traditional sand fencing regarding the placement, orientation, and configuration. North Topsail Beach used unauthorized bales of pine straw at the oceanward toe of a frontal and primary dune. In August 2015, a CAMA Minor Permit was issued to two individuals in Figure 8 Island to serve as a pilot study looking into the feasibility of using hay bales as an experimental alternative material. The permit authorized the use of hay bales to be placed in the same orientation, length, and distances as the exemption language in 15A NCAC 07K .0212. Through interagency consultation of the 2015 Minor Permit, DCM was able to solicit input from various regulatory and resource agencies regarding the use of this experimental material. Some of the comments and conditions were as follows: all bales must be free of any binding to reduce interactions with nesting shorebirds or turtles; the orientation, size, and location of bales should be in compliance with 15A NCAC 07K .0212; and the applicant was to provide photographs and a brief narrative on the status of the material. Based on the initial analysis of the bales that were placed on Figure 8 Island, which were in place for just over one month before being washed away, the bales appeared to be functional in trapping sand. Additional research seems necessary to monitor these bales for decomposition rates and other factors to address comments from resource agencies such as the NC Wildlife Resources Commission and the US Fish and Wildlife Service. To date, no CAMA permit applications for the use of hay bales as sand fencing have been denied. DCM staff recommend maintaining the current minor permitting process for hay bales until more information can be gathered from multiple sites and be further analyzed by resource agencies.

LEGAL UPDATES

Update on Litigation of Interest to the Commission (CRC 21-32)

Mary Lucasse, CRC Counsel, reviewed all active and pending litigation of interest to the CRC.

OLD/NEW BUSINESS

Larry Baldwin requested the Commission look at the time limits associated with General Permits. Due to the Pandemic and supply chain issues, 120 days is not enough to complete a project. Commissioner Baldwin asked staff to come back at the April meeting with the pros and cons of extending the GP to 180 days. Commissioner High echoed the concerns and asked to consider 365 days. Commissioner Andrew also agreed that the time should be extended.

Tancred Miller reviewed the minor edits to the Charge to the Science Panel since the Panel's last meeting. By consensus, the Commission approved the Charge and asked that it be sent to the Science Panel.

Neal Andrew made a motion that the Commission go into closed section pursuant to North Carolina General Statute section 143-318.11(a)(3) to consult with its attorney regarding the petition for judicial review filed in the North Carolina Superior Court for New Hanover County titled Henry Fonvielle v. Coastal Resources Commission, File No. 21-CVS-3584. Phil Norris seconded the motion. The motion passed unanimously (Medlin, Norris, High, Salter, Holman, Cahoon, Andrew, Emory, Bromby, Wills, Tunnell) (Baldwin absent for vote).

After returning to open session and there being no further business, the CRC adjourned.

Respectfully submitted,

Braxton Davis, Executive Secretary