



COASTAL HABITAT PROTECTION PLAN

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COASTAL HABITAT PROTECTION PLAN DRAFT
JANUARY 21, 2021 MEETING MINUTES



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

JOHN G. BATHERSON
Acting Director

January 25, 2021

MEMORANDUM

TO: Marine Fisheries Commission
Environmental Management Commission
Coastal Resources Commission

FROM: Jimmy Johnson, APNEP
Anne Deaton, DMF

SUBJECT: 2021 Coastal Habitat Protection Plan Amendment Update

Issue

Update the Marine Fisheries Commission (MFC), Coastal Resources Commission (CRC), and Environmental Management Commission (EMC) on the status of the ongoing amendment to the 2021 North Carolina Coastal Habitat Protection Plan (CHPP).

Action Needed

For informational purposes only, **no action is needed at this time.**

Overview

At the MFC and CRC 's November 2020 business meeting, and the EMC's December 2020 business meeting, staff provided an update on the 2021 Coastal Habitat Protection Plan Amendment. Staff reviewed the modified timeline for completing the amendment (Table 1).

Since the last commission meetings, a CHPP Steering Committee meeting was held in January 2021. Background on the ecological value of coastal wetlands, their status, and the need for protection and restoration was reviewed. Similarly, the status and ongoing monitoring efforts of the six coastal fish habitats was presented. This background information will be included in the Wetlands Protection and Restoration Issue Paper and the Habitat Status and Monitoring Issue Paper, respectively. A draft of both issue papers and recommended actions will be presented at the next CHPP Steering Committee meeting. At the February MFC, the February CRC and the March EMC commission meetings, staff will present similar background on these two issue papers.

A draft of the issue paper entitled "Reducing Inflow and Infiltration associated with Wastewater Infrastructure to Improve Water Quality" was reviewed along with draft recommended actions. There was discussion regarding who is responsible for some of the recommended actions and the mechanism to get actions done, as well as some rewording suggestions for the proposed actions. The actions for this issue paper will primarily fall under the authority of EMC and the State

Water Infrastructure Authority. The CHPP Steering Committee passed a motion to support the recommended actions with the understanding that there may be some revisions after further consultation with agencies and other appropriate groups.

Dr. Martin Posey, CHPP Steering Committee Chair, informed attendees that the committee sent two letters of support for grant proposals. One project entitled “Multiscale mapping, monitoring, and modeling to assess vulnerability of North Carolina’s coast to sea level rise”, would provide updated information on coastal wetland distribution using emerging technologies in remote sensing, as well as long and short term analyses of coastal change with sea level rise. These outcomes will be highly beneficial for assessing trends, prioritizing needed wetland protection and restoration efforts, and planning for coastal resilience. The other proposal, entitled “Evaluating a tiered approach to inform long-term monitoring, assessment, and decision-support processes for seagrass management and conservation”, will continue coastwide high salinity submerged aquatic vegetation (SAV) mapping efforts and develop standardized protocols for monitoring at sentinel sites. This collaborative monitoring proposal will aid in determining SAV trends needed to guide management actions.

Table 1. Timeline of CHPP milestones relevant to DEQ commission meetings.

Action	Quarter	MFC	CRC	EMC
Provide CHPP background, implementation progress, and process for 2021 amendment	Fall 2019	Nov 15	Nov 20	Nov 14
Provide background on SAV, Compliance, and I&I issue papers	Summer 2020	Aug 20-21	Sep 9	Sep 10
Provide update on timeline	Fall 2020	Nov 19-20	Nov 18-19	Nov 18-19
Present background on Wetlands and Habitat Monitoring issue papers	Winter 2021	Feb 17-19	Feb 17-18	Mar 10-11
Provide update on revision status	Spring 2021	May 19-21	Jun 9-10	May 12-13
Present entire draft amendment; ask to take out for public comment (action item)	Summer 2021	Aug 25-27	Sep 15-16	Sep 8-9
Review public comments received; ask for final plan approval (action item)	Fall 2021	Nov 17-19	Nov 9-10	Nov 17-18
Present public friendly short plan for outreach purposes	Spring 2022	TBD	TBD	TBD



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MEMORANDUM

TO: Coastal Resources Commission
Environmental Management Commission
Marine Fisheries Commission
Coastal Habitat Protection Plan Steering Committee

FROM: Jimmy Johnson
Albemarle-Pamlico National Estuary Partnership
Anne Deaton
Division of Marine Fisheries

DATE: January 25, 2021

SUBJECT: Coastal Habitat Protection Plan Steering Committee Meeting

The Coastal Habitat Protection Plan Steering Committee met via webinar at 9:00 a.m. Thursday, January 21, 2021. The following attended:

Commissioners: Martin Posey, Pete Kornegay, Bob Emory, Larry Baldwin, David Anderson, Yvonne Bailey

DMF Staff: Anne Deaton, Casey Knight, Alan Bianchi, Kacee Zinn, Jacob Boyd, Kim Harding, Nolen Vinay

APNEP Staff: Bill Crowell, Jimmy Johnson, Trish Murphey

DCM Staff: Mike Lopazanski, Daniel Govoni, Curt Weychert

DWR Staff: Danny Smith, Jim Hawhee, Karen Higgins, Amanda Mueller, Chris Pullinger

DEMLR Staff: Brian Wrenn, Samir Dumpor

Public: Paul Cough (APNEP Leadership Council), Kelly Garvy (The Pew Charitable Trust), Leda Cunningham (The Pew Charitable Trust), Todd Miller (NCCF), Michael Flynn (NCCF), Liz Rasheed (SELC), Melissa Whaling (SELC), Geoff Gisler (SELC), Melissa Whaling (SELC), Brooks Rainey Person (SELC), Anne Coan (NC Farm Bureau Federation), Chris Baillie (ECU), Emory Wellman (ECU), Stacy Trackenberg (ECU), Katie Warnell (Duke), Krista Early (Environment NC), Ryan Bethea (Oysters Carolina), Cat Bowler (Audubon NC), Corry Plott (Coldwater Consulting)



WELCOME, INTRODUCTIONS AND APPROVE AGENDA

Chairman Martin Posey (MFC) welcomed everyone on the webinar and asked them to sign in through the chat including their affiliation and what everyone is looking forward to in 2021, in order to get a list of attendees.

APPROVE AGENDA FROM JULY 30, 2020 MEETING

Motion by Yvonne Bailey to approve the minutes. Seconded by David Anderson. Motion carries unanimously.

APPROVE MINUTES FROM OCTOBER 16, 2020 MEETING

Motion by David Anderson to approve the minutes. Seconded by Yvonne Bailey. Motion carries unanimously.

REVIEW TIMELINE

Jimmy Johnson (APNEP) reviewed the timeline of the 2021 Coastal Habitat Protection Plan (CHPP) amendment. Work continues to complete the remaining issue papers. The issue paper, Reducing Inflow and Infiltration (I & I) from Wastewater Infrastructure to Improve Water Quality, is mostly complete. There are two more issue papers being developed. The background for those issue papers will be presented today and drafts will be provided to the committee in the spring. The public will be able to comment on the draft this summer and will go through final approval of the amendment in November by the three commissions. Johnson noted that following completion of the amendment, a document similar to the 2016 CHPP that is aimed toward the general public will be developed in 2022.

REPORT BACK FROM COMMISSION MEETINGS

Chairman Posey provided an update on the November Marine Fisheries Commission and that staff provided background on issue papers of which the commission was very supportive.

Yvonne Bailey (EMC) provided an update from the Environmental Management Commission (EMC). They met in December with CHPP staff presenting the revised timeline, meeting minutes from October and a memo. She highlighted items from the memo to other members of the EMC with no questions from members.

Bob Emory (CRC) provided an update to the Coastal Resources Commission (CRC) in November. There was interest from other CRC commissioners about the SAV issue paper and the nutrient standards recommendations. Larry Baldwin (CRC) discussed the goals of the SAV/water quality issue paper and answered questions about the ability to put recommended actions into place and if some of these goals were attainable.

REVIEW OF ISSUE PAPERS IN PROGRESS

Wetland Protection and Restoration with Focus on Nature-Based Methods

Chris Baillie (ECU) presented information that will be in the draft issue paper. He highlighted the value of wetlands along with the different threats and the different ecosystem services they provide. He reviewed the various kinds of wetlands and wetland classification systems with a focus on palustrine and estuarine wetlands. Ninety-five percent of wetlands are located in the



coastal plains within the four CHPP regions. He also discussed the role of wetlands, their biodiversity and their contribution to recreation and fisheries production. Approximately 70% of endangered, threatened, or of special concern in NC are wetland dependent. There are numerous fish species that are dependent on wetlands and the value to both recreational and commercial fishing. He also discussed the value of wetlands to water quality by providing filtration, sedimentation control, and reduction of nitrogen and phosphorus, as well as their shoreline stabilization, carbon sequestration, recreational and tourism values. He discussed the history of wetland loss from pre-colonial times to present day. Loss of wetlands appears to be accelerating over the past 50 years. He discussed conversion of wetlands over the past 20 years as captured through the NOAA Coastal Change Analysis (C-CAP) program. He provided information on the Hardison Amendment, shoreline hardening and climate change.

Bob Emory (CRC) asked if timber harvest was accounted for with conversion of palustrine forested wetlands to palustrine scrub/shrub and whether, if left undisturbed, succession could return these areas to forested wetlands. Baillie answered that timber harvest does account for conversion of forested wetlands to scrub shrub wetlands and, if the hydrology had not been altered through ditching, reforestation could occur.

Chairman Posey asked about the extent of salt water intrusion impacts we are seeing in the Cape Fear River and how much of a problem this will be in the future. Baillie stated that in the C-CAP data, you do not see documentation of palustrine wetlands converting to emergent wetlands; however, this is because the relatively coarse 30x30m pixel land class mapping generated by National Wetlands Inventory (NWI) and used by NOAA C-CAP has limited ability to detect small scale changes between less disparate land classes. This speaks to the need for higher resolution mapping capabilities. Baillie also commented on the need for estuarine marshes to be able to transgress through migration corridors which will also result in loss of palustrine wetlands.

Baldwin commented on Baillie's presentation and asked if he had considered work by Dr. Matt Ricker with NCSU who is doing soil studies. He has documented two to three-foot loss of coastal shoreline along the Alligator River where there is no development of any kind. Baillie stated there are a number of studies that document erosion impacts and are seeing similar rates of loss. He also stated that work by Dr. Carolyn Currin (NOAA-NCCOS) has shown that most marshes in NC are not keeping up with sea level rise, stating that these marsh edge losses and erosion are typically the result of global-scale anthropogenic impacts, in the form of climate-change induced sea level rise and increasingly frequent and intense storms.

Bailey asked about the coordination with DWR since a lot of these issues relate to them and are also addressed in DWR basin plans. Anne Deaton (DMF) stated that DWR is a key division on the CHPP Team and staff are participating on the call today. There is also a lot of coordination with the CHPP Team to provide background for the basin plans that will help improve water quality.

Reducing Inflow and Infiltration (I & I) to Improve Water Quality

Deaton presented the latest draft of the I & I issue paper. She explained how both inflow and infiltration impact water quality. She discussed several studies on water quality impacts and the prevalence of I & I issues. Infiltration tends to drive most flows and coastal conditions make



them worse. Most areas are located in three foot or less elevation and are very vulnerable to I & I, and climate change will make this issue worse. She provided information on the number of sanitary sewer overflow (SSO) incidences. These overflows are most likely an underestimate because some may not be observed or detected. She discussed the economic impacts on communities. She also discussed the State Water Infrastructure Authority (SWIA) and its role in funding. She discussed the amount of funds that has been issued and what is still needed. Deaton also pointed out how low-income rural areas are most impacted.

Deaton then reviewed the recommended actions and the source of each recommended action and whether they would require a rule change. She discussed the need to make them SMART (Specific, measurable, achievable, relevant, time bound).

Chairman Posey asked about recommendation number seven and eight, and who would be responsible (what group) for the implementation. Deaton noted that the NC Resilient Coastal Communities Program, staffed by DCM, could be a mechanism to get local governments to develop climate adaptation strategies involving wastewater infrastructure. Posey stated that it would be good to have the responsible group or groups identified within these recommendations. He also asked about funding sources.

Baldwin stated funding is paramount in I & I and without funding, nothing will be able to happen. He suggested a way to keep costs down is to put liners inside leaky collection lines, rather than replace sections of pipes. This would be much more economical than building a new system. There is a need for huge incentives for towns to take care of I & I. Adding pipe liners could increase capacity by almost 20% and is economical. Deaton said that she would include the liner idea in the paper.

Chairman Posey asked for a motion for the steering committee to consider supporting these actions. Bob Emory (CRC) asked about jurisdiction of the different recommendations and if the different agencies supported these recommendations. Deaton explained that there were several discussions on these recommendations with David May (DWR) and Danny Smith (DWR) and they supported them as a way to reduce SSOs. They are also on board with prioritizing the coastal areas. Baily asked about the process of rulemaking and if it would go through staff, EMC, and the public. Deaton explained that once the plan was final, the CHPP Team would work with staff and EMC to move any rulemaking actions forward. Baldwin stated that he would like to take these recommendations to the commissions first because he did not want to speak for the CRC. Bailey agreed with Baldwin. Bailey also recommended that the EMC's Water Quality Committee review the recommendations.

Johnson stated to the committee that they are free to do what they want but the commissions are relying on the steering committee to provide guidance, since the steering committee receives more detailed information and has the time to discuss it. Because of this, Johnson said it would be better for the steering committee to support these actions in principle with the understanding that they can be adjusted or revised. Baldwin stated there was a lot of water quality involved. He had no problems with funding needs and to look at elevating structures but the recommendations need to be more targeted. When these are taken to the commissions, it needs to be clear who is responsible. Deaton said that the three full commissions are getting background presentations on



all the issue papers in pieces, so they will be familiar with the issues, but will not review the recommended actions until the draft plan is completed for their review.

Motion by Yvonne Bailey to support the recommended actions of the I & I issue paper. Seconded by Pete Kornegay. Motion passes 5 to 1. Baldwin opposed.

BREAK

Chairman Posey called a 10-minute break.

Habitat Monitoring to Assess Status and Regulatory Effectiveness

Casey Knight (DMF) provided a presentation on this issue paper. She provided background on the CHPP goals and discussed the need for monitoring for all six coastal habitat types: water column, shell bottom, wetlands, submerged aquatic vegetation (SAV), hard bottom, and soft bottom. There is a need for a good understanding of trends to be able to manage properly. She discussed the water column as the connector to all the other habitats and the importance of good water quality to support the other habitats. She discussed the trends seen in the four different CHPP regions including trends in Phosphorus, Nitrogen, Chlorophyll *a*, turbidity, dissolved oxygen and Ph. She discussed the Nutrient Sensitive Waters classifications and the lack of standards for nutrients, and monitoring of fish kills and algal blooms. She discussed water quality monitoring by DMF Shellfish Sanitation and Recreational Water Quality monitoring in shellfish growing areas and recreational swimming areas.

Knight next discussed monitoring of shell bottom and provided a history of oysters from the 1880s to the present. In the 1940s the shellfish rehabilitation program began with the development of oyster sanctuaries and the planting of cultch. She discussed the changes in oyster harvest with a shift from commercial public bottom harvest to more oysters coming from private bottom harvest. She provided information on the oyster sanctuary program where there have been 15 oyster sanctuaries constructed and have been strategically placed in Pamlico Sound for larval production. She then described the estuarine bottom mapping program. There are approximately 16,700 acres of subtidal shell bottom, and 5,351 acres of intertidal shell bottom. The majority of subtidal shell bottom occurs in SHA Region 3 (White Oak River Basin), and the majority of intertidal shell bottom occurs in SHA Region 4 (Cape Fear and Lumber River Basins). Knight reviewed the SAV mapping efforts, and the 191,155 acres of the known historical extent in NC and extent of change previously shown in the SAV issue paper.

Knight discussed the hard bottom habitat and that it is limited to mostly south of Cape Hatteras. It is estimated that there are approximately 500,000 acres. There is little information as far as status of hard bottom but is very important to the snapper group complex. She finished with a description of the soft bottom habitat which is a vast resource with an estimated 2.9 million acres in NC's estuaries and coastal rivers. Global losses of soft bottom have been documented, but little is known about the status of soft bottom in NC. Soft bottom can also be a potential sink and source of chemical and microbial containments.

There were no questions from the committee.

SUPPORT FOR RESEARCH EFFORTS



Chairman Posey reviewed two letters of support for two proposals related to CHPP priority areas and includes support for “Evaluating a tiered approach to inform monitoring, assessment, and decision making elements for seagrass management and conservation” which will focus on high salinity SAV habitat and “Coastal resilience multi-scale mapping and monitoring to assess vulnerability of NC’s coast to sea level rise” which will focus on wetlands.

PUBLIC COMMENT

No public comment.

ISSUES FROM COMMISSIONERS

Chairman Posey brought up the idea of having a working group formed to discuss win-win recommendations that could be accomplished quickly, particularly concerning water quality related issues. The NC Coastal Federation and the Pew Charitable Trust offered to work with CHPP staff to brainstorm items and timeframe. Baldwin stated that he thought it would be a great idea to work with a small group of stakeholders on the issue of water quality and to have more input and suggestions from stakeholders. Johnson asked for clarification as to whether there would be a stakeholder group for each priority issue or only one stakeholder group. Chairman Posey stated it would only be one stakeholder group that would focus on water quality issues and recommendations that have already been presented to the committee. The intent would be to provide supplemental recommendations that could be pursued quickly. Johnson stated that he will contact Todd Miller with NCCF and Leda Cunningham with Pew and work out details.

ADJOURN

Johnson will send out information regarding the date of the next meeting. **Motion by Larry Baldwin to adjourn. Seconded by Pete Kornegay. Motion passed unanimously.**

/plm

