

*COMMITTEE  
REPORTS*



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: October 21, 2019

SUBJECT: Coastal Habitat Protection Plan Steering Committee Meeting

The Coastal Habitat Protection Plan Steering Committee met 10:00 a.m. Wednesday, October 15, at the NCSU Center of Marine Science and Technology, 303 College Circle, Morehead City. The following attended:

Advisers: Martin Posey, Bob Emory, Larry Baldwin, David Anderson, Yvonne Bailey

Absent: Pete Kornegay

Commissioners: Mike Blanton, MFC

DEQ Staff: John Nicholson

DMF Staff: Katy West, Dana Gillikin, Anne Deaton, Katy Rawls, Casey Knight, Jacob Boyd,  
Jason Peters, Curt Weychert

APNEP Staff: Bill Crowell, Jimmy Johnson, Trish Murphey

DCM staff: Mike Lopazanski, Rebecca Ellin, Daniel Govoni

DWR Staff: Anthony Scarborough, Brian Wrenn

DEMLR Staff: Samir Dumpor

WRC staff: Chad Thomas

Public: Perry Wood Beasley, Larry Baldwin, Chris Elkins



## **WELCOME AND INTRODUCTIONS**

Jimmy Johnson, serving as chair, called the meeting to order. He welcomed everyone and asked for members of the committee to introduce themselves. He also asked that those attending to also introduce themselves. Johnson then gave a history and a brief update on recent meetings with Department of Environmental Quality (DEQ) division directors on Coastal Habitat Protection Plan (CHPP), the upcoming review, review process and priority issues. He noted that at a previous meeting of DEQ directors, Inflow and Infiltration (I&I) issues and coastal septic tanks were mentioned as additional priorities.

## **DEPARTMENT INPUT ON CHPP IMPLEMENTATION**

John Nicholson, DEQ Chief Deputy Secretary, provided additional comments on the recent DEQ director meetings, and that the Department strongly supports implementing habitat protection and restoration recommendations of the CHPP. He noted that the CHPP is a natural fit with Governor's Executive Order 80 (EO80) and follows the DEQ Secretary's vision for the direction, implementation and desired results the department would like regarding EO80. Nicholson discussed recent engagement with the Department of Agriculture and Forestry and that we need to foster that relationship.

## **CHPP IMPLEMENTATION UPDATE AND 2021 REVISION**

### ***Implementation Progress***

Anne Deaton presented a brief overview of the CHPP and progress on the implementation of the 2016 CHPP. She discussed the four 2016 CHPP priorities; Oyster Restoration, Metric Development, Living Shorelines, and Sedimentation.

Oyster restoration. Development of oyster sanctuaries has been very successful in the past three years. Legislative support and funding for the sanctuary program as well as matching funding from the NC Coastal Federation has resulted in 40 acres of new oyster reef habitat at Swan Island Sanctuary. Other progress that has been made regarding oyster restoration includes cultch planting, monitoring, siting tools and material acquisition. The group discussed how this work has effected overall oyster populations. Division staff commented that there are most likely some positive impacts on a local level, although it is hard to say how it is impacting the overall population.

Development of habitat metrics. Monitoring standards, drone technology and the use of side scan sonar has been incorporated into monitoring oysters. The Albemarle-Pamlico National Estuary Partnership (APNEP) Submerged Aquatic Vegetation (SAV) Partnership has developed monitoring protocols for low and high salinity SAV and have acquired coast wide imagery of the high salinity SAV this summer. Continuous funding is needed for the long-term monitoring of these habitats. The group also discussed wetland monitoring by Division of Water Resources.

Living Shorelines. This has also been a successful implementation priority of the CHPP. There are now general permits for marsh sills through the Division of Coastal Management, thus shortening the permit process for living shoreline development. Research has been completed that shows that living shorelines outperform bulkheads during large storm events, and provide multiple ecological services, including fish habitat, carbon sequestration, and coastal resilience. There has been engagement of realtors, contractors and homeowners through the coastal training



program on living shorelines and there is now a NC Living Shoreline Steering Committee to further advance this method of shoreline stabilization.

Sedimentation. There is a study on sedimentation that should be concluded next year that will provide important information regarding the source and impact of sedimentation in tidal creeks. Sedimentation continues to be a concern of small tributaries filling up with sediment, especially with the fine sediments, that smother oysters and accumulate toxins from runoff. More efforts are needed to address this issue.

### ***2021 Process and Timeline***

Deaton then presented the revised process and a rough timeline for the 2021 CHPP update. This new process will focus on priority issues and actions that will have co-benefits for coastal resiliency. SMART (specific, measurable, attainable relevant, and timely) recommended actions will be incorporated into the priority issues. Issue papers on each priority topic will be developed by holding technical workshops to compile key information, issue papers being drafted by CHPP Team members, and review by DEQ and the CHPP Steering Committee. The implementation plan will be eliminated because specific recommended actions will be in the plan itself.

### ***Priority Habitat Issues***

Deaton then presented three proposed priority issues for the upcoming 2021 CHPP. They are:

1. SAV protection and restoration with focus on water quality improvements.
2. Wetland shoreline protection and enhancement using nature based methods.
3. Habitat condition monitoring and environmental rule compliance.

The committee discussed the wetland shoreline protection issue. There was concern of only focusing on the shoreline while broader protection of wetlands is also important. Wetlands are under pressure from sea level rise, wave energy and the changing dynamics of wetland species because of these stressors. The group would like to see the priority expand to wetland protection beyond the shoreline. It was suggested that the word “shoreline” could be removed but that shoreline protection could be incorporated through proposed actions under this priority. Other discussion included that there are already rules and regulations in place now to protect wetlands. However, there are changes occurring to the quality of wetlands that need to be considered. The group also discussed the recommendation of looking into I&I and coastal septic tank issues proposed by DEQ directors. Inflow and infiltration due to leaks and breaks in wastewater pipes and infrastructure has been an ongoing problem, especially in smaller communities, and has led to large quantities of raw sewage entering coastal waters. Upgrading and maintenance of sewer systems are expensive and logistically challenging. Contamination from septic tank systems ties into nutrient and bacteria issues.

## **PUBLIC COMMENT**

**Perry Wood Beasley**, president of NC Watermen United, discussed issues of farming, water treatment plants, and how impacts from these drain to the coast. Fish will move from fresh water. Chemical treatment of crops like cotton by farmers end up in storm water runoff and can kill blue crabs. He commented on his concerns of outdated wastewater treatment plants, and herbicide spraying of invasive species of aquatic vegetation by the state. He discussed how



oyster dredgers in the Chesapeake Bay are using their dredges without the bags to drag to address sedimentation and as a way to clean up the bottom.

**Mike Blanton**, MFC member, discussed the need to talk to older fishermen who can provide a timeline of the environmental changes that have occurred in Albemarle Sound. He discussed the amount of acreage (two million) that has been drained for farmland and the 20 square miles of ditches that drain it. The coast is overwhelmed by people. He commented about the current lack of grass in the Albemarle Sound. When he was young, it was thick from one end of the river to the other. It is now a desert. We need to give the “neighborhood” back to the fish and animals. They can be resilient then. We need to reverse the cycle. We need to get the message to the legislators who need to be convinced that we need change. He offered to take members of the committee out to see the sound. Development and non-compliance has had impacts. Mr. Blanton suggested that first we need to restore the habitat then protect and enhance. Spending time on regulating fishermen has wasted time that could have been used looking at regulations for the habitat.

**Chris Elkins**, NC Coastal Conservation Association, discussed his first introduction to the CHPP plan and has seen over the years that a lot of work has been done on the CHPP but there has been no action. There has not been much done at all to improve habitat. The more habitat, the more fish for everybody. He provided a handout to the committee on oysters. The CCA recommends a phase out of oyster dredging. After Florence, there was no oyster dredging, but he had no problems getting oysters either locally or out of state. 95% of the worlds oysters come from aquaculture and NC is moving in that direction. Oysters role as habitat and water filtration is more important than food. Mr. Elkins also discussed aquaculture and oyster relay and stated the oyster relay is wild harvest, not aquaculture. With the expansion of shellfish leases, including large leases in Pamlico Sound, he is concerned there will be increased demand for relaying; CCA therefore proposes that relay no longer be allowed.

### **EO80 AND THE CHPP**

Jacob Boyd, DMF Habitat Enhancement Section Chief, gave a brief update on EO80, specifically Section 9 in reference to the the climate science assessment and the risk and resiliency plans. Through the Natural Working Lands Steering Committee, six subcommittees were formed to make recommendations on carbon sequestration and resiliency. Coastal Habitats was one of the subcommittees formed. The CHPP recommendations fit well into the set of recommendations from this subcommittee. Many of the Coastal Habitat recommendations originated from CHPP and APNEP plans.

Casey Knight, Habitat Enhancement Biologist added that the NC Climate Science Report will be released in December and inter-agency committees are currently working to identify climate related hazards and assess vulnerability and risk to be included in the NC Climate Risk Assessment. The NC Climate Science Report and the NC Climate Risk Assessment will then incorporate the actions of the subcommittees like Natural Working Land and the agency and regional workshops to create the NC Climate Resiliency Plan. This plan will then be disseminated among local government to facilitate community assistance towards resilience.



## **ALBEMARLE SOUND ALGAL BLOOM UPDATE**

Brian Wrenn, Ecosystems, Branch Supervisor, DWR, and coordinator for the Nutrient Criteria Development Committee, presented information on nutrient criteria development in the Chowan River/Albemarle Sound. He provided a brief history on nutrient criteria development in NC and covered algal blooms in the area including existing conditions and the status of the sound. He explained that nutrient criteria are linked to the protection of designated uses of waters. The Scientific Advisory Council (SAC) was created to advise on development of scientifically defensible nutrient criteria and is composed of experts in water quality and nutrient management. The Criteria Implementation Committee (CIC) was created to comment on social and fiscal impacts of draft nutrient criteria and is composed of economists, stakeholders, and academia. DWR plans to have criteria finalized in two years, with a 2024 deadline to have associated rules in place.

There are several sampling stations in the Chowan River system. Organic nitrogen (TKN) has increased over time. In Potecasi Creek, nutrient patterns shifted around 2002, with nitrate concentrations declining and TKN and total Nitrogen increasing. Phosphorus has remained fairly stable. The cause for that is unknown. He presented data of other waterbodies (Blackwater and Nottaway rivers). In Nottaway River, TKN and total Nitrogen have increased similar to the Potacasi, but to a lesser extent. In Blackwater River, they have seen a decline in Nitrogen and Phosphorus over time, in contrast to what is occurring in Chowan. There were initial thoughts that the increases were from Virginia but this data suggests this is a North Carolina problem, not a Virginia problem.

Wrenn discussed the 2019 algal blooms in Chowan, Perquimans, and Pasquotank rivers as well as the different toxins that are encountered, with microcystin being very serious. Concentrations were highly elevated in some blooms (Arrowhead Beach, Indian Creek, Leary Landing), requiring health advisories. In the last two days they have had six reports of blooms near Elizabeth City. He also commented that they are seeing blooms starting earlier and lasting longer.

The group discussed indicators such as chlorophyll a, but Wrenn stated that there are no waters impaired based on chlorophyll a. This is partly due to how the water is collected throughout the water column, so the blue-green algae on the surface is diluted. The SAC will work on determining these criteria.

## **PROPOSED JURISDICTIONAL BOUNDARY CHANGES**

Deaton gave a presentation about the reclassification of jurisdictional waters. This is an ongoing issue with the NC Wildlife Resource Commission (WRC) due to the periodic rule review process. She provided the definitions of the different fishing waters and background on how this issue originated due to periodic rule review, joint rules, and different determinations regarding rule review. WRC determined the joint rules regarding jurisdiction had substantive public interest, while MFC determined they did not and had already submitted those rules to Raleigh. A committee of MFC and WRC commissioners was formed to discuss how to handle the conflict regarding periodic rule review differences. The committee asked DMF and WRC staff to determine a science based method to evaluate joint fishing water boundaries. Deaton summarized the different ways to define the upper limit of an estuary and delineate boundaries, such as head of tide, salinity zones, biologically based salinity zones, and the physiographic line.



She also described the way the group analyzed the data based on these different methods and from a regional and flow year perspective. Based on Bulger at al. 1993 the WRC suggested modifying boundaries based on 4 ppt salinity contour and then ultimately proposed modifications based on a 2.6 ppt salinity contour (Keup and Bayless 1964), DMF suggested if a change was necessary, boundaries approximating a 0.5 ppt salinity contour would be more consistent with scientific literature, EMC saltwater classifications, and the methodologies previously described, and supported by the NC fish data. After several meetings of the committee, the MFC and WRC commissioners were unable to come to consensus on how to revise boundaries and a recess was called. At the August 29<sup>th</sup>, 2019 WRC business meeting, without input from the MFC, WRC approved preliminary boundary maps and moving forward with revising jurisdictional boundaries based on 2.6 ppt salinity. Deaton then provided information on the impacts of the proposed 2.6 ppt boundaries, including a loss of 144,784 acres of coastal fishing waters to inland waters, and impacts to commercial fishing, MFC designated Primary Nursery Areas, Anadromous Fish Spawning Areas, as well as Coastal Resources Commission's estuarine Areas of Environmental Concern (AEC) designations. Where jurisdiction of coastal waters change to inland, this estuarine AEC classification would change to Public Trust AEC, decreasing storm water runoff restrictions. It would also impact Division of Coastal Management (CAMA) Coastal Counties and their Land Use Plans. It would also require statutory changes in the Coastal Area Management Act and Dredge and Fill Act. The group also discussed possible impacts to EMC water use classifications.

The committee debated the issues of the boundary changes including questioning if there is a problem with the current boundaries. Chad Thomas, WRC biologist explained that these rules had not been revised since 1965 and that they were interested in using science based criteria to base these boundaries. He stated that they will investigate impacts on fishing and other agency rules that provide habitat and environmental protection. He said that commercial fishing could possibly be allowed, but currently gill netting is not. It was also noted that this would impact the ability to catch blue catfish, an invasive introduced species that is devastating other native species through predation, including river herring. Thomas also stated that WRC has not moved forward with any rule making yet. Committee members continued to question why this was going forward if there are no apparent problems with the with the current boundaries. DMF staff stated that their agency proposed no changes in the boundary lines. Committee members continued to discuss their concerns over the process, concerns of impacts to CRC rules and EMC rules, the loss of 1,600 miles of coastal shorelines and the loss of Gates and Herford counties as coastal counties.

### **OTHER BUSINESS**

The next meeting will be sometime in January. Mr. Johnson will send out a poll to determine the best date. Please send him any agenda items for the January meeting.

/plm

Enclosures

Meeting adjourned.

cc: Tim Baumgartner    Braxton Davis    Casey Knight    Steve Murphey    Danny Smith  
Bill Crowell    Samir Dumpor    Mike Lopazanski    Trish Murphey  
Linda Culpepper    Daniel Govoni    Ian McMillan    John Nicholson



**From:** James Hargrove [REDACTED]  
**Sent:** Monday, October 14, 2019 10:42 AM  
**To:** Deaton, Anne <[anne.deaton@ncdenr.gov](mailto:anne.deaton@ncdenr.gov)>  
**Cc:** Johnson, Jimmy <[jimmy.johnson@ncdenr.gov](mailto:jimmy.johnson@ncdenr.gov)>; [REDACTED]  
**Subject:** [External] RE: CHPP Steering Comm Mtg.

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Anne,

That is unfortunate considering modern technology. If you guys want more feedback from the general public you should really consider getting a call-in line for every meeting. Seems to me like you do not want user feedback otherwise you would find a way to engage the public better. This is a typical agency status quo rather than inability. Please consider making it a priority to get call in numbers for all public meetings.

Since I won't be able to make it in person I would like for my message to be heard again.

The states Relay Program is killing our estuaries. Just a few weeks ago the permanent closure boundaries were pushed farther out of these tidal creeks to the tune of over 150 acres, and this is in a drought year. If nothing is done to curb this degradation, your inaction will kill the majority of oyster farming locations in the southern portion of the state. Instead of spending millions on re-deploying oyster shells, why not keep it in place where it has the best chance to remove pollution?

We are only as good as the quality of our water, without it we have nothing. As an environmental steward, scientist, and oyster farmer, one practice that stands out as detrimental and archaic to NC's water quality initiative and shellfish mariculture industry. This is the practice of **NCDMF's relay-depuration program**. This program was developed to allow low-output, extensive shellfish gardeners to harvest wild shellfish from polluted tidal creeks that are closed due to bacteria (fecal coliforms and other pollutants), then transplant them to their bottom lease. The problem with this method is, by removing the biological filtration and habitat from these creeks pollutants and sediment from runoff are allowed to flood the greater estuaries and bays of our state. With modern technology in breeding, cultivation, and oyster seed availability, there is no need for the harvest of the biological filters that prevent estuaries from receiving high levels of polluted runoff. **It is absolutely counterproductive to keeping the waters of the state safe and clean.** Along with the negatives associated with removing these water scrubbers (oysters), when the shellfish are relayed to the gardener's lease, the lease shuts down for a number of weeks to allow the oysters to release the bacteria/pollutants (depuration). These leases can be adjacent to other open leases and there is a possibility of contaminating those leases and creating a human health hazard.

James Hargrove

**From:** Deaton, Anne <[anne.deaton@ncdenr.gov](mailto:anne.deaton@ncdenr.gov)>  
**Sent:** Friday, October 11, 2019 11:49 AM





**To:** James Hargrove <[REDACTED]>  
**Cc:** Johnson, Jimmy <[jimmy.johnson@ncdenr.gov](mailto:jimmy.johnson@ncdenr.gov)>  
**Subject:** CHPP Steering Comm Mtg.

Hi James. I'm happy to see you want to be involved. Unfortunately, we won't be able to have a conference line available for this meeting. I can send you the minutes though or if you can make it to Morehead, that would be great.

Anne

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DRAFT



**From:** Keith Walls [REDACTED]  
**Sent:** Monday, October 14, 2019 11:32 AM  
**To:** James Hargrove [REDACTED]  
**Cc:** Deaton, Anne <[anne.deaton@ncdenr.gov](mailto:anne.deaton@ncdenr.gov)>; Johnson, Jimmy <[jimmy.johnson@ncdenr.gov](mailto:jimmy.johnson@ncdenr.gov)>  
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Good morning,

I agree with James. Having a call in number is an easy fix, and there is no excuse not to have one in 2019.

Furthermore, the relay program makes absolutely no sense to me. The oysters in the tidal creeks are closest to the primary source of pollution and our last line of defense. Removing these filters allows closure lines to steadily progress toward our sounds and our aquaculture businesses. **We should be doing the opposite! We should be putting more oysters in the tidal creeks, not removing them.** We need buffers and filters in place to combat the poor planning and overdevelopment that is occurring at an unprecedented rate in the southern part of our state. Otherwise, **the non-point source pollution will continue to increase and aquaculture in the southern part of the state will be gone.** Nobody can be expected to invest money in a business that depends on water quality without having some support from the state that goes into protecting the growing waters, and that starts with ending archaic nonsense like removing oysters from the tidal creeks where they are needed the most. There is now an ongoing effort to restore Bradley Creek and Hewletts Creek due to the overdevelopment in those areas. **We still have an opportunity to preemptively place more oysters in the tidal creeks north of Ogden to defend against what we know is coming (more development). Otherwise, we will see conditionally open areas become conditionally closed, and eventually prohibited.** As a GIS Analyst and marine scientist, it's clear to me from the closure maps that the closure lines are shifting. Moreover, the state has spent a lot of time and money promoting aquaculture over the last several years, and based on that information, a lot of growers are investing their time and money to get into the industry. **If the state does not wake up and begin putting a plan in place to protect the growing areas, it will all be for nothing!** We have to be forward thinking and meet the challenge of overdevelopment and water quality degradation head on! If we continue with a "business as usual" attitude and do not reevaluate outdated programs like the relay/depuration program, we stay stuck in the past and the shellfishing industry in the southern part of the state will not survive. **There is a lot of talk about making NC the Napa Valley of Oysters, well, if you look at the history of the Napa Valley, the first thing the growers there did was create an Agricultural Preserve (the first of its kind in the U.S.) to protect the growing areas from the urban sprawl of San Francisco. You can read about it at this website <http://napaagpreserve.org/> We need to be thinking the same way! Please consider reevaluating the relay/depuration program and listen to the growers that are asking for your help to protect our fledging Aquaculture industry. We have something special, but we need to protect it!**



Keith Walls

On Mon, Oct 14, 2019 at 10:41 AM James Hargrove <[REDACTED]> wrote:

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STEPHEN W. MURPHEY  
*Director*

Oct. 25, 2019

## MEMORANDUM

**TO:** N.C. Marine Fisheries Commission

**FROM:** Chris Batsavage, Special Assistant for Councils

**SUBJECT:** Mid-Atlantic Fishery Management Council Obligatory Seat Nominations for North Carolina

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### Issue

The N.C. General Statutes require the Marine Fisheries Commission (MFC) to approve nominees for federal fishery management council seats for the governor's consideration, and that the statutes allow the governor to consult with the commission regarding additions to the list of candidates. The governor must nominate no fewer than three individuals for a federal fishery management council seat.

### Action Needed

The commission needs to approve nominees for the N.C. Obligatory Seat on the Mid-Atlantic Fishery Management Council.

### Findings

The MFC's Nominating Committee met on October 23<sup>rd</sup> and voted to forward the following individuals for consideration by the full commission. The nominees for the Mid-Atlantic Fishery Management Council obligatory seat are:

- Dewey Hemilright, a commercial fisherman from Kitty Hawk and the current N.C. obligatory member on the Mid-Atlantic Fishery Management Council
- Brent Fulcher, a dealer and vessel owner from New Bern
- Robert Ruhle, a commercial fisherman from Wanchese

For more information, please refer to:

- Draft minutes from the Nominating Committee Meeting
- Nominees' Biographies



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*Secretary*

STEPHEN W. MURPHEY  
*Director*

## MEMORANDUM

TO: N.C. Marine Fisheries Commission  
MFC Nominating Committee

FROM: Chris Batsavage and Dana Gillikin  
Division of Marine Fisheries, DEQ

DATE: Oct. 24, 2019

SUBJECT: Marine Fisheries Commission Nominating Committee Meeting Minutes

The N.C. Marine Fisheries Commission Nominating Committee met on Wednesday, Oct. 23, 2019 at 10 a.m. at the N.C. Division of Marine Fisheries Headquarters Office, 3441 Arendell Street, Morehead City, N.C.

The following were in attendance:

Committee members: Robert McNeill (Chairman, via phone), Pete Kornegay (via phone), Mike Blanton (via phone)

Cameron Boltes was absent.

Staff: Chris Batsavage, Lara Klibansky, Dana Gillikin

Public: Mike Shutak (Carteret County News-Times)

Chairman McNeill called the meeting to order. The agenda was approved without modification.

**Motion by Pete Kornegay to approve the minutes from the Oct. 29, 2018 Nominating Committee meeting, seconded by Mike Blanton. Motion passed without dissent.**

### **Public comment**

No public comment given at the meeting or received via email.

### **Review of N.C. General Statutes and federal Magnuson-Stevens Act requirements**

Batsavage briefly reviewed the N.C. General Statutes pertaining to the selection of nominees for federal fishery management council seats. He stated that the N.C. Marine Fisheries Commission must approve a slate of candidates for the governor's consideration, and that the statutes allow the governor to consult with the commission regarding additions to the list of candidates. Batsavage also described the federal statutes and regulations pertaining to qualification of candidates and noted that the governor must submit a list of no less than three nominees for an appointment. The commission will review the list of candidates approved by the committee at its business meeting in Beaufort on Nov. 13-15, 2019.

**Review and selection of candidates for Mid-Atlantic Fishery Management Council obligatory appointment**

Batsavage reviewed the biographies of the candidates for the Mid-Atlantic Fishery Management Council obligatory seat, briefly describing the background and qualifications of each: Dewey Hemilright (incumbent), Brent Fulcher, and Robert Ruhle. Batsavage noted that Mr. Hemilright is completing his second three-year term and is eligible for another three-year term.

After a brief discussion of the candidates, the committee made the following motion:

**Motion by Mike Blanton to forward the names of Brent Fulcher, Dewey Hemilright and Robert L. Ruhle to the Marine Fisheries Commission for consideration for the Mid-Atlantic Fishery Management Council obligatory seat. Seconded by Pete Kornegay. Motion passed without dissent.**

Meeting adjourned.

DRAFT

## **Dewey Hemilright**

Kitty Hawk, NC

Mr. Hemilright is the owner/operator of the 42-ft. F/V TARBABY with his homeport in Wanchese, NC. He has been commercial fishing for 30 years off the east coast, ranging from New York to Florida and has a wide range of fisheries experience. He has served on advisory panels for Highly Migratory Species (HMS), Dolphin-Wahoo (South Atlantic Fishery Management Council) and as chairman of the N.C. Spiny Dogfish Compliance Advisory Panel. Mr. Hemilright holds permits and fishes for tuna, swordfish, dolphin-wahoo, bluefish, spiny dogfish, smooth dogfish, croakers, blueline tilefish, golden tilefish and large coastal sharks, species which are mainly managed by the Mid-Atlantic Fishery Management Council, the South Atlantic Fishery Management Council, the Atlantic States Marine Fisheries Commission or the HMS Division of the National Marine Fisheries Service. He is a member of the North Carolina Fisheries Association, The Bluewater Fishermen's Association, and also serves on the Board of Responsible Offshore Develop [RODA] Alliance.

Mr. Hemilright was initially appointed in 2012 to complete the term of Mr. Jule Wheatley, who passed away after being reappointed to the Mid-Atlantic Fishery Management Council in 2011. Mr. Hemilright is currently completing his second full term on the Mid-Atlantic Fishery Management Council and has been involved in the following council committees: Protected Resources, Law Enforcement, Highly Migratory Species, Spiny Dogfish, Demersal and Tilefish. He has also participated in collaborative research and monitoring on a number of species, including both spiny and smooth dogfish, and most recently dusky sharks and blueline tilefish. He also serves as Liaison to both SAFMC and NMFS/HMS division.

When not out at sea, Mr. Hemilright is spreading awareness about the importance of the fishing industry in North Carolina. He has been active in an outreach program for K-12 students across the country for the past seven years through Provider Pals. He has compiled a presentation showcasing an array of photos from his years of fishing, including the unique sights of nature he has been privileged enough to capture. His presentation summarizes a day in the life of a commercial fisherman, and challenges students to think about all the logistics that are involved with operating a fishing vessel for a living. Mr. Hemilright expanded his outreach program by teaming up with the N.C. Coastal Federation, sharing his lesson with over 400 middle school students living on the coast of North Carolina.



**Brent Fulcher**

New Bern, NC

Mr. Fulcher is a third generation family member with over 30 years in the seafood industry. He is vertically integrated in the seafood industry with harvesting, purchasing, packing, processing and marketing, through his ownership in two seafood processing facilities, B&J Seafood in New Bern and Beaufort Inlet Seafood in Beaufort. Mr. Fulcher's business's support and purchase from over 200 independent fishermen from up and down the East Coast in addition to the ten vessels that he presently owns. Mr. Fulcher's vessels hold state and federal fishing permits for Shrimp, Summer Flounder, Atlantic Sea Scallops, Monkfish, Scup, Black Sea Bass, etc. B&J Seafood and Beaufort Inlet Seafood also pack, process, and market seafood from state and federally permitted vessels and fishermen from all over the United States. Mr. Fulcher is currently Chairman of the North Carolina Fisheries Association, a Board Member on the Southern Shrimp Alliance for the state of North Carolina and presently a NC Marine Fisheries Commission's Finfish Advisory Committee member and has previously been a member of the Protected Species Advisory Committee for the NC Division of Marine Fisheries. Mr. Fulcher also serves on the Atlantic States Marine Fisheries Commission's (ASMFC) Summer Flounder, Scup, and Black Sea Bass Advisory Panel as a North Carolina commercial industry representative.

## **Robert L. Ruhle**

Wanchese, NC

Robert Ruhle owns and operates the F/V DARANA R along with his father James Ruhle, who served 3 consecutive terms as a Mid-Atlantic Fishery Management Council member for NC. His uncle, Phillip Ruhle, also served on the New England Fishery Management Council. His proximity to the council was highly educational to both the process and function of the councils, as well as provided insight to the innerworkings of Fisheries Management.

Robert is a member of Commercial Fisherman of America and the North Carolina Fisheries Association (NCFA).

He has been fishing commercially since 1994 and a Captain since 2001 although his fishing career began in 1983 when he first went to sea with his father aboard the family's 90' trawler. He has held an NC commercial fishing license since 1988.

Over the course of his career he has been active in numerous Mid Atlantic and New England fisheries and has fished from Hatteras to Canada, primarily focusing on *Illex* squid, Longfin squid, Atlantic Mackerel, Sea herring, Atlantic Croaker and Butterfish.

He also participates in the Fluke, Black Sea Bass, and Scup fisheries, landing in both North Carolina and Virginia.

Mr. Ruhle has served multiple terms and currently is an Advisor for the Mid Atlantic Council serving on the Atlantic Mackerel/Squid/Butterfish, Summer Flounder/Scup/Black Sea Bass, River Herring/Shad, Ecosystem, and Sturgeon Advisory Panels. Mr. Ruhle has been very active in his capacity as an advisor and always made himself available to attend meetings as well as work with the council staff on many different issues. Robert is also an Atlantic States Marine Fisheries Commission (ASMFC) advisor for the Northeast Trawl Advisory Panel (NTAP) and a member of the NTAP working group.

Robert has participated all 3 Marine Resources Education Program (MREP) modules, (Management, Science 1 and Science 2) and has had over 20 years of experience in co-operative research. He has worked on projects ranging from Gear selectivity to bycatch reduction with academic partners from, the University of Rhode Island (URI), Cornell University, Scimfish, Rutgers University, NOAA Fisheries and the Virginia Institute of Marine Science (VIMS). He has been a participant in the NOAA Fisheries Study Fleet program since 2008.

Mr. Ruhle has been very active and a primary component in the NEAMAP trawl survey since 2006. Alongside VIMS, the Northeast Area Monitoring and Assessment Program (NEAMAP) is conducted onboard the F/V DARANA R biannually during the spring and fall of each year. During his association with the survey, Mr. Ruhle has gained in depth knowledge of Fisheries/Scientific data collection methods as well as its use in fisheries management practices. Over the course of NEAMAP, Mr. Ruhle has been a party to a multitude of outreach programs associated with the trawl survey.



ROY COOPER  
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STEPHEN W. MURPHEY  
*Director*

Oct. 25, 2019

## MEMORANDUM

**TO:** N.C. Marine Fisheries Commission

**FROM:** Jamie Botinovch, CRFL Project Coordinator, Administrative Services Section

**SUBJECT:** MFC CRFL Advisory Committee Meeting

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### Issue

The N.C. Marine Fisheries Commission Advisory Committee (MFC AC) met at 9 a.m. on Tuesday, October 1, 2019 to review and provide advice on the applications received in response to the 2019 Coastal Recreational Fishing License (CRFL) Request for Proposals (RFP).

### Findings

The MFC AC reviewed and provided advice on 17 RFP applications received that are were under consideration for funding. Of the 17 applications, nine were focused on fisheries, six were focused on habitat, and two were focused on outreach.

The total funds requested for all 17 proposals was \$4,023,017

### Action Needed

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

### Recommendations

The MFC AC provided the following advice to the DMF Director's office;

- Advised for Funding
  - Four fisheries applications - \$850,134
  - Three habitat applications - \$708,022
  - One outreach application - \$75,000
- Not Advised for Funding
  - Three fisheries applications - \$530,524
  - Three habitat applications - \$1,020,333
  - One outreach application - \$116,121
- Tabled Decision
  - Two fisheries applications - \$722,883

For more information please refer to the **Draft MFC CRFL AC Meeting Minutes.**



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*Director*

## MEMORANDUM

TO: MFC CRFL AC

FROM: Jamie Botinovch, CRFL Project Coordinator  
Division of Marine Fisheries, NCDEQ

DATE: October 1, 2019

SUBJECT: Marine Fisheries Commission Coastal Recreational Fishing License Advisory Committee (MFC AC) Meeting

The Marine Fisheries Commission Coastal Recreational Fishing License Advisory Committee (MFC AC) met at 9 a.m. on Tuesday, October 1, 2019 at the N.C. Department of Environmental Quality's Division of Marine Fisheries Morehead City Office. The following attended:

MFC AC: Pete Kornegay and Rob Bizzell

Teleconference: Robert McNeill

Absent: Cameron Boltes

DMF Staff: William Brantley, Beth Govoni, Dee Lupton, Jamie Botinovch, Lara Klibansky, and Dana Gillikin

### APPROVAL OF AGENDA

Chairman Pete Kornegay called the meeting to order at 8:59am, gave a reminder of the duty to avoid conflicts of interest, and inquired of any known conflicts of interest (N.C.G.S. 138A-15e).

Dana Gillikin called role.

**Rob Bizzell made a motion to approve the meeting agenda. Robert McNeill seconded the motion. The motion carried unanimously.**

### PUBLIC COMMENT

No public present.

### COMMITTEE BRIEF ON THE MFC CRFL AC ROLES

William Brantley briefed the team on the MFC AC's role in the Request for Proposal process including the reason for the committee's implementation, their role in providing advice, and other applicable details. Brantley discussed the role of the MFC AC's past advice and how it impacted the current RFP.

## **RANKING OF GRANTS**

### **a. Fishery Management Grants**

**i. 2019-F-056, "Evaluating the current productivity and suitability of NC's designated estuarine nursery areas"** – Discussion was had regarding how the results of this project could potentially impact within the DMF structure. DMF staff offered they could not speculate until the findings were completed. Discussion was had in general by the MFC AC regarding how to handle voting (umbrella vs individually). The MFC AC decided to vote on issues individually and review each proposal one-by-one. Rob Bizzell made a motion to advise this proposal to be recommended for funding. Robert McNeill seconded. The MFC AC unanimously supported and the motion carried.

**ii. 2019-F-057, "Using a novel satellite tagging approach to estimate spawning locations and post-spawning movements of adult southern flounder"** – Discussion was had regarding timeliness and necessity for a project of this scope. Rob Bizzell asked about the budget and William Brantley offered that a large portion of the funds would be used for tags. Beth Govoni commented that continued funding years are contingent based on milestones met and data received per outlined contract. Discussion was had regarding where the money in the CRFL Marine Resource Fund was coming from. Rob Bizzell made a motion to advise this proposal to be recommended for funding. Robert McNeill seconded. The MFC AC unanimously supported and the motion carried.

**iii. 2019-F-058, "NCDMF / UNCW Fellowship Program Phase 2"** – DMF staff noted that it was not reflected on the proposal in the documents received by the MFC AC, but Martin Posey had formally requested to be removed from the proposal. Discussion was had initiated by the MFC AC regarding how many fellowship programs were funded by the CRFL RFP process. DMF staff responded that there were two currently. The MFC AC members offered that they were hesitant to approve or felt neutral on this proposal. Rob Bizzell made the motion to table their advice. Robert McNeill seconded. The MFC AC unanimously supported and the motion carried.

**iv. 2019-F-059, "Identifying spawning areas and offshore migration patterns of sheepshead in NC"** – Discussion was had regarding if the proposal end date would need to be adjusted due to the proposal listing a start date that had already elapsed. DMF staff offered that any proposal with a start date already elapsed would be adjusted as appropriate and that many projects often operate under a no cost extension. The NCE option would help to provide buffer if needed for projects that depend on seasonal dependent surveys/findings/collection or similar. Discussion was had regarding the potential future importance of data collected on this species. Rob Bizzell made a motion to advise this proposal to be recommended for funding. Robert McNeill seconded. The MFC AC unanimously supported and the motion carried.

**v. 2019-F-060, “Mapping offshore spawning locations of soniferous NC fishes”**– Discussion was had regarding the proposed method of mapping offshore locations. Rob Bizzell made a motion to advise this proposal not to be recommended for funding. Robert McNeill seconded. The MFC AC unanimously supported and the motion carried.

**vi. 2019-F-061, “Validation of wild spawned striped bass year classes in the CSMA using natural tracers”**- Discussion was had by the MFC AC regarding the relevance of this proposal regarding backing up existing genetic information. Rob Bizzell made a motion to advise this proposal to be recommended for funding. Robert McNeill seconded. The MFC AC unanimously supported and the motion carried.

**vii. 2019-F-062, “Quantifying recreational harvest and improving stock assessment for NC blue crab with a tagging study”** – The MFC AC questioned what portion of recreational harvest reported was blue crab. DMF staff offered that it made up a very small portion of the total catch. Robert McNeill asked for clarification on how DMF quantified its recreational blue crab survey. Rob Bizzell made a motion to advise this proposal not to be recommended for funding. Robert McNeill seconded. The MFC AC unanimously supported and the motion carried.

**viii. 2019-F-063, “Quantifying nursery area habitat and evaluating performance of a statewide estuarine trawl survey in NC for recreationally significant species using spatiotemporal models”** – Discussion was had regarding issues with the fixed station sampling. Rob Bizzell made a motion to advise this proposal not to be recommended for funding. Robert McNeill seconded. The MFC AC unanimously supported and the motion carried.

**ix. 2019-F-064, “Identification of the spawning grounds of offshore migration corridor used by the NC stock of southern flounder”** – Discussion was had regarding the MFC AC’s desire to cite what overlap there was in this proposal and proposal 2019-F-057. DMF staff noted that PI’s from both proposals were acquainted and aware of each other’s work. Rob Bizzell made a motion to advise this proposal to be tabled, pending potential modifications recommended by the CJRT. Robert McNeill seconded. The MFC AC unanimously supported and the motion carried.

#### b. Habitat and Enhancement Grants

**i. 2019-H-073, “Identifying sources of potential conflict to enhance siting of shellfish cultivation operations to reduce regulatory burden”** – Discussion was had regarding the recreational impacts of oyster cultch sites on landowners. General discussion had on the relevance of oyster cultch sites as important or not to recreational fishing. The MFC AC offered that they thought this study should be funded outside of the CRFL funds. Rob Bizzell made a motion to advise this proposal not to be recommended for funding. Robert McNeill seconded. The MFC AC unanimously supported and the motion carried.

**ii. 2019-H-074, “Drone based rapid mapping methodology for SAV sentinel sites”** – Discussion was had regarding the importance of SAV’s. Rob Bizzell made a motion to advise this proposal to be recommended for funding. Robert McNeill seconded. The MFC AC unanimously supported and the motion carried.

**iii. 2019-H-075, “Maximizing ecological benefits of artificial reef enhancements by harnessing advanced technologies to quantify fish community patterns and develop a decision support tool”** – Discussion was had regarding the cost and potential outcome for this proposal. DMF staff offered that the PI had been in contact with DMF Artificial Reef Coordinator. Rob Bizzell made a motion to advise this proposal not to be recommended for funding. Robert McNeill seconded. The MFC AC unanimously supported and the motion carried.

**iv. 2019-H-076, “Public use of offshore artificial reefs: a pilot study using hydrophones, on water observations, and vessel tracking data”** – Discussion was had regarding review of this proposal. Robert McNeill made a motion to advise this proposal not to be recommended for funding. Rob Bizzell seconded. The MFC AC unanimously supported and the motion carried.

**v. 2019-H-077, “Evaluating the persistence of oyster cultch reefs: recommendations for restoration and management”** – Discussion was had regarding the finfish sampling portion of this proposal. Mention was made that the PI would need to work very closely with the DMF staff for this proposal. Rob Bizzell made a motion to advise this proposal to be recommended for funding. Robert McNeill seconded. The MFC AC unanimously supported and the motion carried.

**vi. 2019-H-078, “Evaluating and optimizing restoration targets and multi-substrate monitoring methods for North Carolina's Oyster Sanctuary Program”** – Discussion was had regarding the connection to oyster sanctuaries and recreational fishing. Rob Bizzell made a motion to advise this proposal to be recommended for funding. Robert McNeill seconded. The MFC AC unanimously supported and the motion carried.

c. People Grants

**i. 2019-P-066, “A monthly radio news feature focusing on local science & management efforts to protect coastal and marine resources”** – Discussion was had about the frequency of broadcast and the limited audience due to the station being a regional broadcast and not statewide. Robert McNeill made a motion to advise this proposal not to be recommended for funding. Rob Bizzell seconded. The MFC AC unanimously supported and the motion carried.

**ii. 2019-P-067, “Take A Kid Fishing Event”** – General discussion had regarding the previous funding of Take a Kid Fishing proposals. Rob Bizzell made a motion to advise this proposal to be recommended for funding. Robert McNeill seconded. The MFC AC unanimously supported and the motion carried.

**ADDITIONAL BUSSINES**

None.

**Robert McNeill made a motion to adjourn the meeting at 10:11am, Rob Bizzell seconded. The MFC AC unanimously supported and the motion to adjourn carried.**

JLB



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STEPHEN W. MURPHEY  
*Director*

October 17, 2019

## MEMORANDUM

**TO:** N.C. Marine Fisheries Commission  
Northern Regional Advisory Committee

**FROM:** Katy West, Northern District Manager  
Michael S. Loeffler, Conservation Biologist II  
Division of Marine Fisheries, NCDEQ

**SUBJECT:** Northern Regional Advisory Committee Meeting and Recommendations for  
Blue Crab Fishery Management Plan Amendment 3

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**SUBJECT:** Northern Regional Advisory Committee Meeting and Recommendations for Blue  
Crab Fishery Management Plan Amendment 3

The Northern Regional Advisory Committee met on Thursday, September 12, 2019 at 6 p.m. at the NCDEQ Washington Regional Office located at 943 Washington Square Mall in Washington, NC. The following attended:

**Advisors:** Keith Bruno, Raymond Pugh, Roger Rulifson, Sara Winslow

**Absent:** Everett Blake, Joseph Kavanagh, Floyd Layden, Sam Liverman, James Neely, Jim Rice, Kenneth Shivar

**Staff:** Michael Loeffler, Jason Rock, Corrin Flora, Dana Gillikin, Charlton Godwin, Donnie Twyne, Brian Long, Kathy Rawls, Kimberly Harding

**MFC:** Michael Blanton

**Public:** Victor White, Perry Beasley, Charles Beasley, Tommy Beasley

Sara Winslow, serving as chair, called the meeting to order. Sara Winslow informed the committee that since there is not a quorum they will not be able to vote on agenda items, only approve by consensus.



## **APPROVAL OF THE AGENDA**

**Roger Rulifson recommended approval of the agenda by consensus. All in agreement. Approval of agenda by consensus.**

## **APPROVAL OF MINUTES**

**Keith Bruno recommended approval of the minutes from July 12, 2018 and June 3, 2019 by consensus. All in agreement. Approval of minutes by consensus.**

## **DRAFT BLUE CRAB FISHERY MANAGEMENT PLAN – AMENDMENT 3**

Jason Rock provided a presentation on draft Amendment 3 to the Blue Crab Fishery Management Plan. The presentation covered six issues covering a wide range of topics related to the blue crab fishery. Several issue papers are included in Amendment 3 such as achieving sustainable harvest in the North Carolina blue crab fishery, management measures beyond quantifiable harvest reductions, addressed water quality concerns impacting the North Carolina blue crab stock, expand crab spawning sanctuaries to improve spawning stock biomass, establish a framework to implement the use of terrapin excluder devices in crab pots and bottom disturbing gear in the blue crab fishery.

The committee began discussion on water quality. Water quality has been an issue for many years and has come up with other species management as well. There is nothing being done about water quality, so the fishermen keep getting more regulations put on them. Discussion shifted to how many cull rings we currently have now and biodegradable panels. Concerns were expressed if turtle excluders would be statewide or just in hot spots. Discussion also occurred the crab sanctuaries. If the crab sanctuaries are not working, do not feel the need to add more. There are just as many mature females outside of the sanctuary as inside. Questions were raised about if female sponge crabs pot, do they lose their clutch.

Additional discussion focused on effects of recruitment from the Chesapeake Bay stock and how hurricanes and other storms can influence recruitment in NC, both positively and negatively. Cull ring size was discussed and how the stock has been affected by this regulation. Concern was expressed that because of the size of crabs that cull rings exclude, are we allowing the smaller crabs to survive and pass along their genetics selecting for smaller crabs in the population. Lastly, discussion focused on cull tolerance. Industry felt 5% cull tolerance is already hard but going to 0% cull tolerance is crazy. Another concern raised was that once marine patrol inspects a box of crabs for undersized crabs the crabs die and cannot be sold.

## **PUBLIC COMMENT**

**Charlie Beasley**, owner of Outer Banks Seafood in Dare County, does not want unnecessary regulations. The crabbers will regulate themselves. The market cannot sustain too many crabs, so the market will regulate. He stated they need pots in early March. In April and May you do not see many crabs because of going into shedding season. He stated they do not catch females in July. He also stated they caught so many crabs in August, they had to have lay days.

**Tommy Beasley**, Billy's Seafood in Dare County, expressed that people do not buy dredge crabs and he has only caught 6 bus crabs in 40 years in the proposed spawning sanctuaries. He stated we have more small crabs now more than ever.

**Perry Wood Beasley**, commercial fisherman from Dare County, expressed concerns about water quality. He stated that Chesapeake Bay does not have cull rings in their pots, they know that water quality is the issue. He also expressed concerns about the fishermen reducing, there are not as many as there use to be. He stated we need to recruit fishermen not crabs.

### **CONSENSUS STATEMENTS TO THE MARINE FISHERIES COMMISSION ON DRAFT BLUE CRAB FMP AMENDMENT 3**

The committee was again informed that since there is not a quorum, they will not be able to vote, only approve by consensus.

#### **Sustainable Harvest**

- Consensus to support the Blue Crab FMP AC's recommendation option 18.3 18.3 will replace the current pot cleanup period and maintain the 5% tolerance as stated in the 2016 Revision. Included in the consensus was support for the proposed adaptive management framework.

#### **Qualitative Management**

- Consensus to support the Blue Crab FMP AC's recommendation.

#### **Water Quality**

- Consensus to support the Blue Crab FMP AC's recommendation.

#### **Spawning Sanctuaries**

- Split consensus on whether to expand or keep existing sanctuaries.
- Consensus to support the NCDMF's move of Drum Inlet boundaries.
- Consensus to support Blue Crab FMP AC's recommendation for the southern sanctuaries.
- Consensus to support the NCDMF's recommendation of the Cape Fear River boundaries.
- Consensus to support the Blue Crab FMP AC's recommendation for March 1 through October 31 closure for Beaufort through Tubbs inlet sanctuaries.
- Consensus against the migration corridor of Croatan Sound.
- The committee also recommends using same language of Highway 58 bridge.
- Recommend March 1 through October 31 closure for all inlets south of the Highway 58 Bridge, Bogue Inlet and Tubbs Inlet sanctuaries.

#### **Diamondback Terrapin Protections**

- Consensus to support the NCDMF recommendation.

#### **Bottom Disturbing Gear**

- Consensus to support NCDMF recommendation 1a: prohibit taking of crabs with crab dredges.

- Consensus against the bycatch limit 1d, as NCDMF recommends, until we can look at trip ticket data to determine the amount of landings and extent of landings from oyster dredges for blue crabs.
- Spilt consensus on the NC DMF's recommendation 2a, prohibiting the use of crab trawls in areas where shrimp trawls are already prohibited in the Pamlico, Pungo, and Neuse rivers.

### **MARINE FISHERIES COMMISSION UPDATE**

Mike Loeffler provided updates from the August 2019 MFC meeting. The MFC adopted the Fishery Management Plan for Southern Flounder Amendment 2 and gave the director flexibility with the seasons. The Southern Flounder AC is continuing to meet to begin discussions on Amendment 3. They will be looking at several management tools to augment the sustainable harvest of southern flounder. Loeffler updated the committee on the FMP schedules for striped bass and spotted seatrout. NC DMF is working on revising the FMP process. The Division is changing the development process to gain a more efficient and overall better process with focus on ways to obtain information and input from stakeholders. The Marine Fisheries Commission denied the shrimp petition received from the Wildlife Federation. He updated the group on the cobia amendment through the Atlantic States Marine Fisheries Commission. The Amendment was approved, it establishes management measures for cobia from New York to Florida. The Marine Fisheries Commission also set a cap of 500 Standard Commercial Fishing Licenses for the eligibility pool.

The meeting adjourned at 9:21 p.m.



ROY COOPER  
*Governor*

MICHAEL S. REGAN  
*Secretary*

STEPHEN W. MURPHEY  
*Director*

Oct. 15, 2019

## MEMORANDUM

**TO:** N.C. Marine Fisheries Commission

**FROM:** Tina Moore, Southern District Manager  
Chris Stewart, Biologist Supervisor  
Fisheries Management Section

**SUBJECT:** Southern Regional Advisory Committee Meeting and Recommendations for Blue Crab Fishery Management Plan Amendment 3

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The Southern Regional Advisory Committee met at 6 p.m. on Tues. September 24, 2019 at the Central District Office, 5285 Highway 70 West, Morehead City. The following attended:

Advisors: Dr. Fred Scharf, Jerry James, Jason Fowler, Pam Morris, Adam Tyler

Absent: Charles Griffin, Chris Hunt, Ruth King, Scott Bebb, Ron McCoy, Tom Smith

Staff: Chris Stewart, Tina Moore, Jason Rock, Corrin Flora, Debbie Manley, Dana Gillikin, Garland Yopp, Ashley Bishop

Public: David Brown, Ken Seigler, Scott Baker, Jonathan Robinson, Gary Cannon, Brandon

Dr. Fred Scharf called the meeting to order and noted that there were not enough members present to have a quorum; thus the committee would try to reach a consensus for the issues discussed. He then asked the new and old committee member to introduce themselves.

### APPROVAL OF THE AGENDA

**Adam Tyler moved to approve the agenda;** Pam Morris seconded the motion. The motion passed unanimously.

### APPROVAL OF MINUTES

**Pam Morris moved to approve the July 11, 2018 minutes to provide recommendations to the Marine Fisheries Commission on the adaptive management framework of the Striped Mullet Fishery;** Adam Tyler seconded the motion. The motion passed unanimously.

**Jerry James moved to approve the June 3, 2019 minutes to provide recommendations to the Marine Fisheries Commission on the percent reduction in harvest needed for Southern Flounder Fishery Management Plan at a joint advisory meeting held in Beaufort;** Jason Fowler seconded the motion. The motion passed unanimously.

### **DRAFT AMENDMENT 3 BLUE CRAB FISHERY MANAGEMENT PLAN**

Division staff (Jason Rock) provided a presentation of the draft Amendment 3 Blue Crab Fishery Management Plan. He provided the timeline of how we came to development of the stock assessment and issue papers. A wide range of topics were addressed in the issue papers including: achieve sustainable harvest, management options beyond quantifiable harvest reductions, water quality concerns, expanding crab spawning sanctuaries, establishing a framework to implement the use of terrapin excluder devices in crab pots, and measures to address bottom disturbing gear in the blue crab fishery. He next reviewed the results of the stock assessment. Rock provided a detailed overview of the proposed adaptive management measures needed to achieve sustainable harvest and the Blue Crab Advisory Committee (AC) and North Carolina Division of Marine Fisheries (NCDMF) recommendations for achieving sustainable harvest.

A committee member asked if the immature female harvest management measure was for only the hard crab fishery. Staff indicated it only applied to the hard crab fishery and not the peeler fishery. The committee member also asked why the division was considering a change to the cull tolerance since it appeared to be a Marine Patrol issue. Staff noted that small crabs were being culled into containers at fish houses with more than the 5% undersize allowance. Staff further noted the intent of the culling tolerance was to give fishermen some leeway while culling their catch on the water, not at the fish house and holding culled crabs from multiple trips.

Rock next provided an overview of the management measures beyond quantifiable harvest to improve the NC blue crab stock. Noting that these measures do not have a quantifiable harvest reduction and do not count toward sustainable harvest calculations. However, these measures are thought to have a positive impact on recruitment and other populations metrics and to aid in long term sustainability of the fishery. Impacts from these measures will be seen as part of the population response through the updated stock assessment. Rock further noted that many of the beyond quantifiable management measures that were put in place in the last revision will need to be voted on if they are to be continued through Amendment 3 or they will expire when the amendment is adopted. These measures that will expire include: a 5% cull tolerance, the use of three cull rings with, one cull ring in the modified position, prohibit harvest of crabs with a crab dredge, eliminate the harvest of v-apron immature female hard crabs (excluding peeler crabs), and the prohibition of dark sponge crab harvest from April 1-April 30. Rock reviewed the Blue Crab AC and NCDMF recommendations for management options beyond quantifiable harvest.

Staff provided an overview of measures to improve water quality by addressing pollution sources, especially those associated with agricultural runoff. Rock noted that while the NCMFC does not have regulatory authority over land use and other practices, the NCMFC could contact and bring other state and federal agencies to the table. Rock next reviewed the Blue Crab AC and NCDMF recommendations for addressing water quality concerns. Staff then reviewed the issue paper that looked at expanding existing Crab Spawning Sanctuaries and designation of new

sanctuaries to protect mature females prior to spawning as well as the Blue Crab AC and NCDMF recommendations. Rock noted that there were slight differences in the recommended lines suggested by the division and the Blue Crab AC for the boundaries in the lower Cape Fear River

Rock went over the proposed criteria to designate diamondback terrapin management areas where terrapin excluder devices would be required in crab pots as well as the Blue Crab AC and NCDMF recommendations. Existing proclamation authority requires establishment of criteria prior to designation of diamondback terrapin management areas. A committee member asked to see the maps where the devices would be required. Rock indicated the maps could be found in Appendix 3, further noting that most of the areas were in the southern part of the state, particularly around Masonboro Island. Rock indicated that these areas met the criteria established in the issue paper, further noting there has been research to support use of excluders to diamondback terrapins in these areas. Rock went over the criteria used to select these areas as well as the different designs of the excluders. If approved, these devices would be required March 1 – October 31 in areas that meet the criteria. Rock noted that a targeted approach improves localized protection of diamondback terrapins and minimizes impacts to the crab fishery, uses best available scientific data and allows for new data to be incorporated in the future, minimizes inclusion of areas too deep or far from shore, and may improve fishery rating from outside certification groups.

Staff next presented the issue paper that examined bottom disturbing gear in the blue crab fishery. Rock noted that targeted crab dredging is only allowed in a designated area in northern Pamlico Sound during from January 1 - March 1; however, this fishery was closed as part of the 2016 Revision. Crab harvest is allowed in the oyster dredge fishery but it is limited to 50% of the combined weight of the oyster and crab catch or 500 pounds, whichever is less. Overall, the dredge fishery accounts for less than 0.1% of commercial landings on average. Rock then reviewed the maps of areas where crab trawls are allowed in the Pamlico, Pungo, and Neuse rivers. Overall, landings of blue crabs from crab trawls in the Pamlico, Pungo, and Neuse rivers has declined since 1995 and have been minimal since 2007, accounting for about 0.1% of total crab harvest on average in the past five years. Rock again noted that management measures put in place in the last revision that prohibit the harvest of crabs with a crab dredge and eliminate the harvest of v-apron immature female hard crabs (excluding peeler crabs) will expire when the Amendment 3 is adopted unless voted on tonight.

Rock concluded the presentation with next steps in the process, indicating that after getting public and standing and regional AC input on the draft amendment the NCMFC will select its preferred management options at their November 2019 business meeting. After the November meeting, the draft plan will undergo departmental and legislative review. Then in February 2020, the draft plan will come back to the commission for final approval.

Dr. Scharf opened the floor to the committee member for question for division staff. A committee member asked for further clarification on the wording used in management measure eight, where it states “Peeler/Soft Crab Minimum Size Limit”. Based on his experience you can’t have both a 3-inch soft and peeler crab. The committee member further noted, that the crab will never be the same size after it initially sheds, indicating that a 3 inch crab will be 2 ¼ inches after it sheds. Rock indicated that the minimum size limit would be at the point of harvest

only. The committee member suggested that it should be clarified not to confuse the public. Staff indicated that they would make the changes to the wording.

Another committee member indicated that they had some concerns with the stock assessment, and wanted to be clear that landings are not overly influencing the model. Landings dropped off in 2004 due to fuel prices and Hurricane Isabel; noting that many fishermen got out of the fishery, likely resulting in the drop. Rock indicated that the landings do not influence the model, noting that the division survey data is used to determine the health of the population. The landings are used to inform the model of the removals. The committee member noted that there are less and less fishermen and still doesn't understand how population is at its current state. The committee member also noted that they wanted to see more information as it pertains to impacts from storms. Staff indicated that there were several parts of the FMP that addressed these concerns. The committee member further noted that over 50 new inlets opened up following Hurricane Florence; thus, minimizing the need for expanding crab spawning areas. The committee member however applauded the division for taking on issues related to water quality, specifically on the use of pesticides.

A committee member also commented on the March closure, noting that it will destroy the soft and hard crab fishery in Carteret County. They suggested that the division split it much like what is done in the gillnet fishery. The committee member indicated that in March they get \$125 a bushel for jimmy crabs and they stock pile jimmies at the end of the month for their peeler pots. The committee member indicated that they preferred the Blue Crab AC's recommendation of splitting the season north and south of the Highway 58 Bridge. Another committee member next asked if anyone has looked into the effects of Gen X in the Cape Fear River as it pertains to blue crabs. Dr. Scharf indicated that some research is currently been done at the university, but the results are not in yet. He further noted that it appears to be more of an accumulation problem versus acute.

Dr. Scharf asked division staff for more clarification on why the difference in minimum sizes. Rock indicated that the Blue Crab AC had a lot of discussion about size limits. Originally the division only had a maximum size limit, however the AC asked staff about a minimum size limit. They indicated that there would be different impacts for different parts of the state, noting that fishermen in the northern part of the state were willing to give up 6  $\frac{3}{4}$  -inch crab to help get to the sustainable harvest number. Right now there is no size limit for mature females. Staff also noted that the division wanted to align our size limits with other states, to help with interstate sales. Discussion then focused on the number of cull rings. A member of the audience suggested that it would be better to put two in the corners (correct location) of new pots versus requiring three in new pots. It was also noted that there was not a need for cull rings in the Newport River due to the crab pot limit, thus it was exempted in the past. Next the committee discussed the prohibition of sponge crabs. Two committee member raised concern that the prohibition of sponge crabs would cut out fishermen on the east side of Core Sound as well as parts of the Outer Banks, further noting that there needs to be different management measures for different regions of the state.

## **PUBLIC COMMENT**

Ken Seigler – strictly opposed to the splitting of the seasons south of the Highway 58 Bridge. Only two or three people will benefit from this. This is going to be a big enforcement issue. It makes more sense to decrease the number of cull rings to two per pot not three, it's really the placement is that's important. Mr. Seigler indicated that he also had a problem with the terrapin excluders, the excluders tested show a 60% reduction in crabs, all the jimmy's, all the stone crabs, whelk etc. He is really concerned with the flounder closure and how that going to push new people to the blue crab fishery; noting that there are going to be even more pots in the water. Further noting that all the effort put in place to get the needed reductions will be whipped away with all these new pots. He would like to see a 100 pot limit from Highway 58 to the Swansboro Bridge (including Queens Creek, Bear Creek, etc.). In regards to the 5% culling tolerance, he agreed that the "hickory sooks" are more valuable in the water than in the fish house.

Gary Cannon – Lets make it law that you have to cull your crabs on the water. Five percent is basically nothing, sometimes it could be as low as three crabs. I have an issue with the mandated use of terrapin excluders, particularly the time of year they were tested. Noting that he has never caught a terrapin and that no one has contacted him about the current testing. He noted that 20 years ago someone asked to work on a study to test excluders but he said no; we knew this was coming. We keep putting holes in the pots as it is and it's going to cost us more per pot if we have to put excluders in. The guys up north are setting 2,000 plus pots, they are the problem not us. The simple solution to save the females is to close Core Sound from July to November; no one is going to complain. Why do you want to save the 6 <sup>3</sup>/<sub>4</sub> -inch crabs, don't they die within a short period of time? Rock noted that measure was meant to help the spawning capacity. Overall, I think more research needs to be done on turtle excluders before we are made to use them. Rock iterated that their use would be limited to certain areas that met the criteria established in the working paper and it would only be done in certain areas with documented issues with terrapin bycatch, this is not for the whole state.

### **Additional Discussion from the Southern Advisory Committee**

A committee member asked why the division did not look into regional pot limits, noting that we need to reduce the amount of gear in the water. Less gear equals less catch. Things are only going to get worse as Mr. Seigler mentioned. Rock noted that the division did discuss this and other plans looked into this as well. However, it was not adopted the first time and it had no traction with the Blue Crab AC. One committee member noted that when it was first attempted it was right after a big jump in license fees. The committee member further noted that real crabbers would set 400 pots in multiple areas and rotate pots, thus they didn't want the limits. The committee member went on to say that they didn't think there is going to be that big of an expansion now, and a pot limit was not needed.

Dr. Scharf next recommended that the AC make a recommendation for each issue, using consensus statements since not enough committee members were present to have a quorum.



## **CONSENSUS STATEMENTS TO THE MARINE FISHERIES COMMISSION ON DRAFT BLUE CRAB FMP AMENDMENT 3**

The Southern Regional AC provided these statements with consensus among members for each issue.

### **Achieving Sustainable Harvest**

- Prefer a December to January closure North of the Highway 58 Bridge and a January closure south of the Highway 58 Bridge.
- Maintain a 5-inch mature female minimum size limit.
- Maintain the 5% cull tolerance that is in place.
- Prohibit the harvest of immature hard crab females.
- Prefer the MFC make the final decision on the adaptive management framework.

### **Qualitative management**

- Allow 2 cull rings or 3 cull rings in a pot, with one cull ring the proper corner placement.
- Remove the cull ring exemptions for Newport River and eastern Pamlico Sound and prohibit designation of exempt areas in future.
- Maintain the prohibition dark sponge crab harvest from April 1 - April 30.

### **Water quality**

- Support all management options within the issue paper, with a high priority given to task the Coastal Habitat Protection Plan steering committee to prioritize blue crab water quality impacts, such as: hypoxia and toxins, while researching specific sources of water quality degradation and their effects on blue crabs.
- Request NCDMF habitat staff report back to the Shellfish/Crustacean AC with progress.

### **Expanding Crab Spawning Sanctuaries**

The Southern AC recommends to support the Blue Crab AC recommendation, which include:

- Keep Oregon, Hatteras, and Ocracoke inlets the same and change Drum and Barden inlets to proposed boundaries.
- Add spawning sanctuaries from Beaufort through Tubbs inlets using the Blue Crab AC recommended boundaries with a closure period of March 1 through Oct. 31 with same restrictions as existing sanctuaries.

### **Establishing a Framework to Implement the Use of Diamondback Terrapin Excluder Devices**

- The Southern AC supports both the Blue Crab AC and NCDMF recommendations, which include:
- Use the criteria as outlined for the establishment of Diamondback Terrapin Management Areas.
- Use science on locally specific pot funnel design to reduce terrapins and identify individual creeks with terrapin population hot spots that would be closed to potting

### **Bottom Disturbing Gear**

- Allow crab dredging to continue and leave the crab trawl lines as is.

## MARINE FISHERIES COMMISSION UPDATE

Division staff (Tina Moore) provided updates from the August 2019 MFC meeting in Raleigh. The MFC adopted the Southern Flounder FMP Amendment 2 as proposed by NCDMF at this meeting. Moore noted that the recreational and commercial flounder seasons closed September 4<sup>th</sup> and opened on the September 15<sup>th</sup> in the waters north of Pamlico Sound to commercial harvest. The Pamlico Sound and all other internal coastal waters will open on October 1. She noted the southern flounder AC has continued to meet and their next meeting is October 9<sup>th</sup>. Management tools that will be explored include: quota, changes in size limits, gear changes related to size limit changes, species-specific management, and possible for-hire industry allocations.

Next Moore reviewed the status of several other on-going FMPs. Noting that the Estuarine Striped Bass held a workshop on September 10<sup>th</sup> and the PDT will meet again in early October drafting the stock assessment for the ASMA and CSMA populations. A peer review workshop will occur in December. The Spotted Seatrout FMP is also currently under review and the data workshop is scheduled on September 26<sup>th</sup>. She further noted that the MFC during their August meeting requested more information on a proactive approach for management strategies to address potential increased pressure on spotted seatrout due to southern flounder reductions and other issues.

Next Moore gave a brief summary on some upcoming changes to the development of FMPs, to gain a more efficient and overall better process with focus on ways to obtain informed input from stakeholders. The division is looking to public scoping meeting at the beginning of the process to: give notice to the public that the review of the FMP is underway, inform the public of the stock status (if applicable), solicit input on issues from the public; and recruit potential adviser to serve on the AC among other things. The PDT will complete the draft FMP prior to giving it to the AC versus developing it issue by issue. This should shorten the period of time the PDT and AC work together. Moore noted that the role of the regional AC will not change. The FMP AC will meet with the full PDT in a workshop format and will meet more frequently and for longer sessions. The workshops will also be more informal and will not use motions, votes, or other components of meeting used in the past. The goal is to get a uniform position on the various issues of the FMP to present to the MFC. There will no longer be separate NCDMF and FMP AC recommendation.

Moore next updated the AC on the recent cobia fishery closing on September 4, 2019. Spanish mackerel closed on August 24 due the Northern region commercial annual catch limit being met. She further noted that the fishery will re-open on the 27<sup>th</sup> with a 500-pound trip limit and will close if the total coastwide annual catch limit is met or on November 15, whichever occurs first.

Moore provided an update on the N.C Wildlife Federation petition for rulemaking. The commission voted to deny the petition, noting that if implemented would impact the state's shrimp trawl fishery. The MFC did however direct the division to consider elements of the petition in the upcoming N.C. Shrimp FMP. Moore noted that this FMP will be one of the first plans to follow the new format. The first Shrimp PDT meeting is scheduled for October 4<sup>th</sup>. Moore reminded the AC of the new management measures that went into place on July 1, 2019

that require the use of gear configurations that were tested by the industry workgroup that were shown to reduce bycatch by 40% or greater.

The MFC Eligibility Pool cap of 500 Standard Commercial Fishing Licenses (SCFL) for the 2019-2020 license year were also set at the August MFC meeting. Applications were reviewed for the 2019-2020 year on September 24<sup>th</sup>. Pam Morris gave the AC some additional information on the application process, noting that they received 32 applications; all but six were approved. Next Moore gave the AC an update on the notice of text for rulemaking and fiscal analysis to readopting existing rules under a state-mandated periodic review. One of these rules under review was 15A NCAC 03O .0108 that deals with transfer of commercial fishing licenses. Morris also gave the AC a brief history on the sale and transfer of SCFLs. Another rule under review, 15A NCAC 03M .0509 makes tarpon a no spear, no gaff and no possession fish. Moore noted that the public comment period is scheduled tentatively for October 15 through December 2<sup>nd</sup>, 2019. A new release will be issued providing more details on the open public comment period and one meeting open to the public to provide their input in-person.

### **PLAN AGENDA ITEMS FOR NEXT MEETING**

The next meeting will be upon request of the Marine Fisheries Commission, and is tentatively scheduled some time in early 2020 at the Wilmington Regional Office.

**Pam Morris moved to adjourn; Jerry James seconded the motion. The motion passed unanimously.**

The meeting adjourned at 9:35 p.m.



ROY COOPER  
*Governor*

MICHAEL S. REGAN  
*Secretary*

STEPHEN W. MURPHEY  
*Director*

Oct. 15, 2019

## MEMORANDUM

**TO:** N.C. Marine Fisheries Commission

**FROM:** Anne Deaton, Habitat Program Manager  
Tina Moore, Southern District Manager  
Habitat and Enhancement Section, Fisheries Management Section

**SUBJECT:** Shellfish/Crustacean Advisory Committee Meeting and Recommendations for Blue Crab Fishery Management Plan Amendment 3

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The Shellfish/Crustacean Advisory Committee Meeting met at 6 p.m. Tuesday, October 1, 2019 at the Department of Environmental Quality Regional Office, 127 Cardinal Drive Extension, Wilmington, N.C. The following attended:

Advisors: Sam Romano, Ted Wilgis, Martin Posey, Tony Tripp, Bruce Morris, Adam Tyler, Jim Hardin, Tim Willis, Brian Shepard

Absent: Mike Marshall, James Kornegay

Staff: Anne Deaton, Kathy Rawls, Tina Moore, Jason Rock, Corrin Flora, Joe Facendola, Jason Parker (MP officer), Dana Gillikin

Public: Glenn Skinner, Kenny Rustick, Kenneth Seigler, Joe Romano, Jonathan Oracion, William Walter, Nolan Vinay, Taylor Barefoot, Ms. Willis

Sam Romano, serving as chair, called the meeting to order at 6:00 p.m. and reminded the advisors that it is their duty to avoid conflicts of interest under Chapter 138 and requested if there were any conflict of interest to any matters coming forward at this meeting. No one came forward with any conflict of interest.

### **MODIFICATIONS TO THE AGENDA**

**Martin Posey made a motion to accept the agenda. Bruce Morris seconded the motion. The motion passed unanimously.**

## **APPROVAL OF MINUTES**

**Ted Wilgis made a motion to approve the minutes. Adam Tyler seconded the motion. The motion passed without dissent.**

## **REVIEW OF BLUE CRAB FISHERY MANAGEMENT PLAN – AMENDMENT 3**

Jason Rock provided a presentation of the draft Amendment 3 Blue Crab Fishery Management Plan. He provided the timeline of the stock assessment and issue paper development. Issues paper topics included: achieve sustainable harvest, management options beyond quantifiable harvest reductions, water quality concerns, expanding crab spawning sanctuaries, establishing a framework to implement the use of terrapin excluder devices in crab pots, and measures to address bottom disturbing gear in the blue crab fishery.

Rock then provided an overview of the quantitative management measures to improve the NC blue crab stock. Noting that these measures do not have a quantifiable harvest reduction and do not count toward sustainable harvest calculations. However, these reductions are thought to have a positive impact on recruitment and other populations metrics and are thought to aid in long term sustainability of the fishery. Impacts from these measures will be seen as part of the population response through the updated stock assessment. Rock further noted that many of the non-quantifiable management measures that were put in place in the revision to Amendment 2 will need to be voted on if they are to be re-established in Amendment 3 or they will expire when the amendment is adopted. These measures include: a 5% cull tolerance, the use of three cull rings with one cull ring in the modified position, prohibit harvest of crabs with a crab dredge, eliminate the harvest of v-apron immature female hard crabs (excluding peeler crabs and the prohibition of dark sponge crab harvest from April 1-April 30. Rock next reviewed the Blue Crab AC and NCDMF recommendations for management options beyond quantifiable harvest.

Staff provide an overview of measures to improve water quality by addressing pollution sources, especially those associated agricultural runoff. Rock noted that while the NCMFC does not have regulatory authority over land use and other practices, the NCMFC could contact and bring other state and federal agencies to the table. Rock next review the Blue Crab AC and NCDMF recommendations for addressing water quality concerns. Staff then reviewed the issue paper that looked at expanding existing Crab Spawning Sanctuaries and designation of new sanctuaries to protect mature females prior to spawning as well as the Blue Crab AC and NCDMF recommendations. Rock noted that the were slight differences in the recommended lines suggested by the division and the Blue Crab AC for the boundaries in the lower Cape Fear River

Rock next reviewed the use of terrapin excluder devices in crab pots as well as the Blue Crab AC and NCDMF recommendations. Existing proclamation authority could be used to require the use of excluders in these areas. Once the NCMFC approves the criteria, the overall result would be to establish diamond back terrapin management areas. A committee member asked to see the maps where the devices would be required. Rock indicated the maps could be found in Appendix 3, further noting that most of the areas were in the southern part of the state, particularly around Masonboro Island. Rock indicated that these areas met the criteria established in the issue paper, further noting there has been research in these areas. Rock then went on to review the criteria

used to select these areas as well as the different designs of the excluders. If approved, these devices would be required March 1 – October 31 in areas that meet the criteria. Rock noted that a targeted approach improves localized protection of diamondback terrapins and minimizes impacts to the crab fishery, uses best available scientific data and allows for new data to be incorporated in the future, minimizes inclusion of areas too deep or far from shore, and may improve fishery rating from outside groups. Rock next reviewed the Blue Crab AC and NCDMF recommendations for criteria used to determine the use of terrapin excluders.

Staff next reviewed the issue paper that examined bottom disturbing gear in the blue crab fishery. Rock noted that targeted crab dredging is only allowed in a designated area in northern Pamlico Sound during from January 1 through March 1; however, this fishery was closed as part of the 2016 Revision. Crab harvest is allowed in the oyster dredge fishery outside of the but it is limited to 50% of the combined weight of the oyster and crab catch or 500 pounds, whichever is less. Overall, the dredge fishery accounts for less than 0.1% of commercial landings on average. Rock then reviewed the maps of areas where crab trawls are allowed in the Pamlico, Pungo, and Neuse rivers. Overall, landings of blue crabs from crab trawls in the Pamlico, Pungo, and Neuse rivers has declined since 1995 and have been minimal since 2007 and that only about 0.1% of total crab harvest on average in the past five years. Rock next reviewed the Blue Crab AC and NCDMF recommendations for bottom disturbing gear.

Rock concluded the presentation with next steps in the process, indicating that after getting public and standing and regional AC input on the draft amendment the NCMFC will select its preferred management options at their November business meeting. After the November meeting the draft plan will undergo departmental and legislative review. Then in February 2020, the draft plan will go back to the commission for final approval.

Ted Wilgis asked how long would the measures need to be in place, would it be for an entire 10-year period. Rock responded NCDMF would completed a stock assessment within the time period and see if the results improved, it shows in the Adaptive Management slide how implementation would occur. Tim Willis asked why not complete a stock assessment more often, Rock explained both the need for added data including NCDMF independent sampling and landings requires time to respond to management changes.

Further discussion occurred on the specific details on the addition of new sanctuaries and the expansion of existing sanctuaries. Questions also came up on the diamondback terrapin excluders and the criteria needed to implement these devices in certain areas.

Adam Tyler added that dark sponge females cannot be taken in April since 2016, and he is now seeing a bunch of very small crabs in his oyster lease gear. Rock added that NCDMF sampling did show and increase in juvenile abundance in 2018. But these upticks in data are not shown in the stock assessment because the model only had inputs through 2016. Brian Shepard had questions about abundance levels of crabs through time and the timing of management measures being implemented in Amendment 2 and where we are at now. He expressed concern this stock assessment not including the last three year of data, after implementing management measures in 2016. Rock explained the timing for the assessment was scheduled earlier than planned by the NCMFC. Shepard also expressed concern with now the adaptive management process not allowing relaxing of the regulations if improvements are seen, but the opposite, more

management measures added if the stock continues to decline. Wilgis asked about the non-quantifiable measures and whether those could show benefit to the stock. Rock explained that yes we would think they add benefit to the stock but it is just not measurable directly to the inputs in the stock assessment. Wilgis asked how do you know which measure then has the desired effect? Rock said our models do not allow us to tease that out. Willis stated that Virginia and Maryland has shown increases in biomass because of the implementation of their spawning corridor. Martin Posey explained that corridors are a means for habitat protection with direct results to the species that use the corridor during their lifetime. Posey also added that juvenile habitat and survival are important aspects to consider. The AC had further discussions on how to measure economic effects on increased costs for excluder devices for terrapins and added cull rings. Wilgis asked if the economic effects of the different measures can be quantified. Sam Romano stated that the Blue Crab AC had gone into great detail discussing the burdens each one of these measures would place on crabbers.

Willis asked why was March chosen for the closed period. Rock explained the Plan Development Team originally chose December as the closure windows, which also would replace the pot clean up period but remain closed for the entire window. After further discussion the AC determined they would prefer the closure earlier in the year. Tyler explained that a March closure would not be good for the Core Sound area, Shepard also said it would be detrimental to people in the Snead Ferry area as well. Tyler suggested a closed period from July 15 to August 31 would be better for Core Sound because people cannot set pots then because turtles crush the gear. Posey added that the timing of the closure will have different impacts across different areas of the state.

## **PUBLIC COMMENT**

**Glenn Skinner**, North Carolina Fisheries Association (NCFA), commented that the AC needs to keep in mind adaptive measures were added in 2016 and no benefits from these measures are shown in the stock assessment. There are more crabs this year than seen in the last 25 years and people are setting half the gear because the markets are poor, getting only \$6 to \$10 per bushel. This is the most valuable fishery in the state. The NCFA Board met and will be sending a letter to NCDMF recommending that the data be updated in the stock assessment to include information from 2017 through 2019. The NCMFC requested the assessment to be started in 2016, and the timeline for this amendment is not set in stone. NCDMF should be able to output the information in 6 months and come back to the advisory committees for their input. If this update of data does not occur, it will ruin NCDMF credibility and decreases fisherman confidence in NCDMF staff. This stock can likely rebuild in two years and the NCFA Board would appreciate this AC take no action at this time. Tony Tripp added that he has seen 142,000 pounds more crabs coming through his fish house this year than last year this time. We can't let the crabber go fish because we can't sell all that they catch, the picking houses have declined so there is less market now.

**Kenny Rustick**, commercial fisherman from Gloucester, NC. I crab in Core Sound in February through June. A March closure would hurt and it also is when the price is high for crabs. I fish from North River to Cedar Island and it is a straight basket market. By mid-July I pull my pots because of damage by sea turtles. Now with the closure of flounder, people are going to need to

get into other fisheries. Economic impacts of increased measures on blue crabs will be devastating. NCDMF hasn't assessed the effects of the 2016 measures.

**Joe Romano**, commercial fisherman and Chair of the Blue Crab Advisory Committee, said the ACs are not getting the full scope of the time that NCDMF staff and the Blue Crab AC met and discussed the issues. The Blue Crab AC spent hours discussing the difference between the northern and southern fisheries in the state. The 5-inch minimum size limit came from crabber input. NCDMF is guided by law. The data from the trip ticket landings is based on markets, and we are seeing some better landings. I am more distrustful of the system now because of yoyo laws, and people are not coming together to work on the issues. There is room to wait a year to get more data and there are some elements of the plan that do not take into account what the crabbers are saying.

**Ken Seigler**, commercial fisherman and advisor on the Blue Crab Advisory Committee, stated that has concerns over a 5-inch minimum size limit. Crabber don't want the small ones, they aren't worth much, the terrapin excluder device test pots will lose 60% of the crab value, you'll lose the Jimmy's, conchs, and stone crabs. The cull rings are all about the location in the pot and not about how many. If we keep adding cull rings it reduces the life of the pot. I agree with Glenn comments and also I think predation impacts should be added to the stock assessment, if that was added it would likely show we are not overfishing. From Mar 1 to April 15<sup>th</sup> I am starting to crab for the year and seeing good prices, I think January 1 through 31 is the best time for a closure.

### **VOTE ON RECOMMENDATIONS TO THE MARINE FISHERIES COMMISSION FOR AMENDMENT 3 OF THE BLUE CRAB FISHERY MANAGEMENT PLAN**

Shepard noted that regulatory changes in 2006 made a difference and now here we are with more management changes in 2016 that are not reflected in the assessment. Rock stated this is an issue with all stock assessments, chasing our tail to always have the most recent information. Tina Moore stated that an assessment with the added three years of data cannot be completed in 3-4 months after the new year as data verification is needed for the landings and NCDMF sampling. Skinner said southern flounder external reviewers required more data and asked for more years to be added, it was expedited. NCFA will be sending a formal request to expedite the blue crab data as well, since they are not at a point of collapse.

Posey asked how important is the crab dredge fishery, Sam Romano replied that there was only one guy still working in it. Joe Romano said we received input from the crab dredger during Blue Crab AC discussions. They discussed whether there was a need to regulate because it was only a few active participants and it has been closed with the 2016 measures in place. It was more of a habitat consideration.

Posey also had further questions on the crab spawning sanctuaries. Rock explained the differences between the AC and NCDMF positions on sanctuaries mostly occurred in the northern inlets. Joe Romano added the AC did not want to increase their size, and the corridor in Oregon Inlet would be an economic burden to the crabbers in that area. Shepard asked if adaptive management is approved can the NCDMF provide relief if there is improvement in the population? Rock responded no - only if it gets worse can NCDMF institute further measures. If



improvement is seen in the population, we cannot confirm the improvement in the population until another assessment and plan is updated. Corrin Flora added if adaptive management is not approved then management would go back to the Traffic Light method.

Willis asked why the AC and NCDMF did not go for the larger maximum female size because Jess Hawkins told him that larger females spawn more. Rock said the research has found that smaller females do not produce only small crabs. Environmental factors as well as genetics play a role in the ultimate size at maturity of a crab. Sam Romano explained in the AC discussion the maximum female size limit impacted one region more than another and they couldn't come to a compromise. Also, there would be issues with enforcement if there were both minimum and maximum size limits at once. Further discussions occurred on reducing the cull tolerance to zero and a peeler size limit. Rock explained that reducing the cull tolerance was not supported by the advisory committee. Joe Romano stated that some crabbers felt it would be too labor intensive and would only destroy peelers as you try to pull them apart to cull and measure for a size limit. Willis asked if the advisory committee would consider some of the aspects of the plan now because there are some good things in there. The AC liked the water quality and spawning sanctuaries recommendations. Sam Romano said the current measures of the three cull rings with specific placement of one, and dark sponge no-take in April are already in place. It would be good to wait before taking any other actions to see if they had an effect on the population.

**Adam Tyler made a motion to recommend to table this FMP process and request NCDMF to add data through 2019 to determine the effects of the 2016 management measures. Bruce Morris seconded the motion.**

Willis asked what does the latest information show. Rock responded that the annual FMP update through 2018 indicated a slight increase in the juvenile abundance index. Rock added that one year of data is not a trend. Skinner agreed that one year is not a trend but we need time to see how previous measures have helped, and changing management every few years is ridiculous. Tyler confirmed that he was seeing a lot of little crabs on his oyster lease as well. Sam Romano stated that this is the most important fishery in North Carolina and we need to be careful. Wilgis asked if the Blue Crab AC had the same issue with the stock assessment only considering data up to 2016. Sam Romano replied that it was not considered because they reviewed the assessment early in the process.

**The motion passed 6 to 2, with 1 abstention.**

Discussion occurred on other topics in the amendment not connected to the achieving sustainable harvest paper. Posey stated habitat could be an important component of blue crab survival, particularly oyster, submerged aquatic vegetation, and marsh restoration.

**A motion was made by Martin Posey, that the AC support the consideration of habitat as a part of the overall strategy for management of the blue crab fishery. The motion was seconded by Adam Tyler. The motion passed without dissent.**

The rest of the meeting was spent for discussion purposes only to pass along to the Commission.

Shepard restated that he did not like how Adaptive Management is set up that if there is improvement that we cannot ease off on measures, but instead will update the stock assessment if showing decline. Sam Romano said other fisheries ease off of management when improvements are shown. Rock said that is usually the case for fisheries with annual updates, like summer flounder, that then adjust the annual catch limits for a fishery based on the latest information. Posey noted the Blue Crab AC has spent a lot of time in discussions on the various measures. Sam Romano said that these comments are not lost, just on pause for now to see how things play out.

Shepard said he couldn't agree to a March closure for the potters in his area, as it would kill them. There was a general agreement among the advisory committee that a March closure would have a big impact on some areas of the state and differing regional closure periods should occur.

Most members generally supported the crab spawning sanctuaries. Willis stated that the sanctuaries are critical. That's what they did in Chesapeake Bay and it was very successful. He acknowledged that there may be some people who don't like them, but they would ultimately help the ecosystem and help the crabbers.

Discussions on crab dredging led by Posey revolved around the fact that it is a positive habitat measure to remove, but it is only a few people involved in the fishery. Tyler asked how much impact do the few people who want to crab dredge have. Posey suggested since dredging is a lightning rod issue, possibly considering allowing no new members in this fishery and letting the few left age out could be a solution. Rock noted that that wouldn't work as it is a means of limited entry.

Glenn Skinner interjected that the NCFA Board had no problem with the Crab Spawning Sanctuaries and some of the other items the Blue Crab AC had discussed. He stated that the NCFA Board also raised concerns with implications of the seafood watch ratings from the diamondback terrapin issue. He stated that the NCFA just didn't want to pick and choose their positions on the other issues without first updated data being considered in the stock assessment.

Sam Romano said for the adaptive management framework to be considered more details will need to be determined and more discussions among the members of the Blue Crab AC. Posey asked what are further thoughts from the committee? Sam Romano asked Joe Romano how the Blue Crab AC came up with the minimum and maximum size limits and the March closed season. Joe Romano stated the Blue Crab AC looked at the percent reductions provided by the NCDMF and then picked which ones they could agree on to meet the required reductions. The group agreed they preferred to keep the cull tolerance at 5%, and they liked the idea of the 3 cull rings or at a minimum of 2 cull rings, so long as one ring was in the correct placement in the pot. Skinner added if the updated stock assessment says the stock has improved, he would hope to keep in all of the 2016 measures that worked.

Discussion continued onto the diamondback terrapin issue paper. Sam Romano described his work with researchers and the modifications to the throat of the pot to exclude terrapins. So far the modifications seem to be working. He started working with the researchers in July 2019. Modifications to pots to exclude terrapins would only occur in specific areas and times based on the criteria outlines in the paper. Willis asked if this is an issue or not. Joe Facendola, NCDMF

biologist, said it depends on who you ask. Conservationists will say the diamondback terrapins have declined by a lot. They are listed as a species of concern in some counties of NC and the IUCN red list have downgraded their status as well. Wildlife Resource Commission and other groups have determined that pots are the primary threat to diamondback terrapins. The NCDMF has indicated these concerns since the 1998 FMP. The framework provided in the paper provides some flexibility for the excluder design and also identify how much area within a waterbody or creek where the terrapins are known to occur. Seigler added there is long term research in South Carolina which shows that large females can't get into the pot but smaller ones can. Corrin Flora said the device is meant to prevent the terrapins from getting into the pot, and the South Carolina design is based on thousands of measurements taken on terrapins. Small terrapins do get in but if real small they also can get out through the cull rings. Wilgis added that terrapins like sandy beaches which are being lost to bulkheads and other hard structures. We could recommend promoting natural shorelines for the benefit of the terrapins.

## **MARINE FISHERIES COMMISSION UPDATE**

Tina Moore identified the new NCMFC Executive Assistant for the Commissions and Councils, Lara Klibansky, was hired and will replace Nancy Fish in this position.

Moore provided updates from the August 2019 NCMFC meeting in Raleigh. The NCMFC adopted the Southern Flounder FMP Amendment 2 as proposed by NCDMF at this meeting. Moore noted that the recreational and commercial flounder seasons September 4<sup>th</sup> and opened on the 15<sup>th</sup> in the waters north of Pamlico Sound. The Pamlico Sound and all other internal coastal waters will open on October 1. She noted the southern flounder AC has continued to meet and their next meeting is October 9<sup>th</sup>. Management tools that will be explored include, quota, slot limits, changes in size limits, gear changes related to size limit changes, species-specific management, and possible for-hire industry allocations.

Next Moore reviewed the status of several other on-going FMPs. Noting that the Estuarine Striped Bass held a workshop on September 10<sup>th</sup> and the Plan Development Team (PDT) will meet again in early October. A peer review workshop will occur in December. The Spotted Seatrout FMP is also currently under review and the data work is scheduled on September 26<sup>th</sup>. She further noted that the NCMFC during their August meeting requested more information on a proactive approach for management strategies to address potential increased pressure on spotted seatrout due to southern flounder reductions and other issues.

Next Moore gave a brief summary on some upcoming changes to the development of FMPs, to gain a more efficient and overall better process with focus on ways to obtain informed input from stakeholders. The division is looking to public scoping meeting at the beginning of the process to: give notice to the public that the review of the FMP is underway, inform the public of the stock status (if applicable), solicit input on issues from the public; and recruit potential adviser to sever on the FMP among other things. The PDT will complete the draft FMP prior to giving it to the AC vs developing it issue by issue. This should shorten the period of time the PDT and AC work together. Moore noted that the role of the regional AC will not change. The FMP AC will meet with the full PDT in a workshop format and will meet more frequently and for longer sessions to also help shorten the process. The meetings will also be more informal and will not use motions, votes, or other components of meeting used in the past. The goal is to get a uniform

position on the various issues of the FMP to present to the NCMFC. There will no longer be a NCDMF and AC recommendation.

Moore next updated the AC on the recent Cobia closing on September 4, 2019. Spanish mackerel closed on August 24 due the commercial annual catch limit being meet. She further noted that the fishery will re-open on the 27<sup>th</sup> with a 500-pound trip limit and will close if the total coast wide annual catch limit is meet or on November 15, whichever occurs first.

Moore then gave an update on the N.C Wildlife Federation petition for rulemaking. The commission voted to deny the petition, noting that if implemented would impact the state's shrimp trawl fishery. The NCMFC did however direct the division to consider elements of the petition in the upcoming NC Shrimp FMP. Moore noted that this FMP will be one of the first plans to follow the new format. The first Shrimp PDT meeting is scheduled for October 4<sup>th</sup>. Moore all reminded the AC of the new management measures that went into place on July 1, 2019 that require the use of gear configurations that were tested by the industry workgroup that were shown to reduce bycatch by 40% or greater.

The NCMFC Eligibility Pool cap of 500 Standard Commercial Fishing Licenses (SCFL) for the 2019-2020 license year were also set at the August meeting. Applications were reviewed for the 2019-2020 year on September 24<sup>th</sup>. Pam Morris gave the AC some additional information on the application process, noting that they received 32 applications; all but six were approved. Next Moore gave the AC an update on the notice of text for rulemaking and fiscal analysis to readopting existing rules under a state-mandated periodic review. One of these rules under review was 15A NCAC 03O .0108 that deals with transfer of commercial fishing licenses. Mrs. Morris also gave the AC a brief history on the sale and transfer of SCFLs. Another rule under review, 15A NCAC 03M .0509 makes tarpon a no spear, no gaff and no possession fish. Moore noted that the public comment period is scheduled tentatively for October 15 through December 2<sup>nd</sup>, 2019. A new release will be issued.

### **PLAN AGENDA ITEMS FOR THE NEXT MEETING**

The committee discussed bringing forward the stock assessment for blue crabs with the addition of the next three years and consider items on habitat and water quality. No dates were set for the next meeting.

Sam Romano adjourned the meeting at 8:46 p.m.



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STEPHEN W. MURPHEY  
*Director*

Oct. 15, 2019

## MEMORANDUM

**TO:** N.C. Marine Fisheries Commission

**FROM:** Anne Deaton, Habitat Program Manager  
Katy West, Northern District Manager

**SUBJECT:** Habitat and Water Quality Advisory Committee Meeting October 3, 2019 and Recommendations for Blue Crab Fishery Management Plan Amendment 3

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The Habitat and Water Quality Advisory Committee Meeting met at 1 p.m. Tuesday, October 3, 2019 at the Department of Environmental Quality Regional Office, 948 Washington Square Mall, Washington, NC. The following attended:

**Advisors:** Pete Kornegay, Brian Boutin, Bob Christian, Joel Fodrie, David Glenn, Nathan Hall, Chris Moore

**Absent:** Martin Posey, Mike Street, Samuel Boyce

**Staff:** Anne Deaton, Katy West, Casey Knight, Kathy Rawls, Laura Klibanski, Jason Rock, Corrin Flora, Dana Gillikin, Dan Zapf, Kim Harding

**Public:** Mike Blanton, Glenn Skinner, Perry Beasley, Trish Murphey

Chairman Pete Kornegay called the meeting to order at 1:00 p.m.

### **MODIFICATIONS TO THE AGENDA**

Pete Kornegay noted that an item had been added to the agenda. Nathan Hall is going to give a presentation on the algal blooms in the Albemarle System. **The agenda was then passed by consensus.**

### **APPROVAL OF MINUTES**

**Bob Christian made a motion to approve the minutes from April 12, 2018. Joel Fodrie seconded the motion. The motion passed without dissent.**

### **REVIEW OF BLUE CRAB FISHERY MANAGEMENT PLAN – AMENDMENT 3**

Jason Rock provided a presentation of the draft Amendment 3 Blue Crab Fishery Management Plan. He provided the timeline of the stock assessment and issue paper development. Issue paper topics included: achieve sustainable harvest, management options beyond quantifiable harvest reductions, water quality concerns, expanding crab spawning sanctuaries, establishing a framework to implement the use of terrapin excluder devices in crab pots, and measures to address bottom disturbing gear in the blue crab fishery.

Rock provided a detailed overview of the proposed management measures needed to achieve sustainable harvest and the Blue Crab Advisory Committee (AC) and North Carolina Division of Marine Fisheries (NCDMF) recommendations for achieving sustainable harvest. Joel Fodrie asked if fishing mortality had been 49%, would management changes still be required. Rock said yes, because while that might change overfishing status, the spawning stock biomass still indicates that the species is definitely overfished.

Rock then provided an overview of the management measures beyond quantifiable harvest reductions. He noted that although these measures do not have a quantifiable harvest reduction and do not count toward sustainable harvest calculations, they are expected to have a positive impact on recruitment and other populations metrics, and aid in long term sustainability of the fishery. Impacts from these measures should be seen as part of the population response through the updated stock assessment. Rock further noted that many of the non-quantifiable management measures that were put in place in the revision to Amendment 2 will need to be voted on if they are to be re-established in Amendment 3 or they will expire when the amendment is adopted. These revision measures include: a 5% cull tolerance, the use of three cull rings with one cull ring in the modified position, prohibited harvest of crabs with a crab dredge, eliminated harvest of v-apron immature female hard crabs (excluding peeler crabs) and the prohibition of dark sponge crab harvest from April 1-April 30. Rock reviewed the other beyond quantifiable harvest reduction management options.

Staff provide an overview of measures to improve water quality by addressing pollution sources, especially those associated with agricultural runoff. Rock noted that while the NCMFC does not have regulatory authority over land use and other practices, the NCMFC could contact and bring other state and federal agencies to the table. Rock next reviewed the Blue Crab AC and NCDMF recommendations for addressing water quality concerns. Bob Christian asked if there was evidence that water quality was affecting blue crab. Staff replied that there is based on die-offs related to hypoxia and toxin contamination, as well as habitat loss over time. Corrin Flora noted that when Chesapeake Bay reduced nutrient loading, SAV and crabs increased.

Staff then reviewed the issue paper on expanding existing Crab Spawning Sanctuaries and designation of new sanctuaries to protect mature females prior to spawning, as well as the Blue Crab AC and NCDMF recommendations.

Rock reviewed the proposed criteria to determine when to require the use of terrapin excluder devices in crab pots, as well as the Blue Crab AC and NCDMF recommendations. Existing proclamation authority could be used to require the use of excluder under the proposed criteria. Once the NCMFC approves the criteria, the overall result would be to establish diamond back terrapin management areas (DTMAs). Rock noted the DTMA maps in Appendix 3, and that most

of the areas were in the southern part of the state, particularly around Masonboro Island. Rock indicated that these areas met the criteria established in the issue paper, and that terrapin research has been done in these areas. Rock then went on to review the criteria used to select these areas as well as the different designs of the excluders. If approved, these devices would be required March 1 – October 31 in areas that meet the criteria. Rock noted that a targeted approach improves localized protection of diamondback terrapins and minimizes impacts to the crab fishery, uses best available scientific data and allows for new data to be incorporated in the future, minimizes inclusion of areas too deep or far from shore, and may improve fishery rating from outside groups.

Staff reviewed the issue paper that examined bottom disturbing gear in the blue crab fishery. Rock noted that targeted crab dredging is only allowed in a designated area in northern Pamlico Sound during from January 1 through March 1; however, this fishery was closed as part of the 2016 Revision. Crab harvest is allowed in the oyster dredge fishery outside of the but it is limited to 50% of the combined weight of the oyster and crab catch or 500 pounds, whichever is less. Overall, the dredge fishery accounts for less than 0.1% of commercial landings on average. Rock then reviewed the maps of areas where crab trawls are allowed in the Pamlico, Pungo, and Neuse rivers. Overall, landings of blue crabs from crab trawls in the Pamlico, Pungo, and Neuse rivers has declined since 1995 and have been minimal since 2007 and that only about 0.1% of total crab harvest on average in the past five years. Rock next reviewed the Blue Crab AC and NCDMF recommendations for bottom disturbing gear.

Rock concluded the presentation with next steps in the process, indicating that after getting all public and various AC committees input on the draft amendment, the NCMFC will select its preferred management options at their November meeting, followed by departmental and legislative review. In February 2020, the draft plan will go back to the commission for final approval and implementation by division proclamation(s).

## **PUBLIC COMMENT**

**Perry Beasley**, a crabber for 40 years, said that the problem is water quality, due to runoff from parking lots, car oil, toxins, discharged industrial chemicals, chemicals on cropland, and broken sewage pipes. But there are plenty of small and large crabs this year. Hurricanes impacted the system, covering up oysters, killing fish, and flooding the coast, and it takes time to recover. He noted how he sees more algae on the pots that are placed near the Tyrell County prison treated wastewater discharge. He also said that there is only one crab dredger left that works the crab dredge area when open and there are fewer fishermen, so too much crab harvest is not the issue.

**Glenn Skinner**, North Carolina Fisheries Association (NCFA), commented their board discussed the plan amendment and are concerned that it doesn't include post-2016 data, when additional measures from the 2016 revision were put in place, He asked the AC to hold off until the stock assessment can be updated with 2017-2019 data to determine if the 2016 measures were effective. There are more crabs this year than seen in a long time. Nathan Hall asked staff if 2017-2018 data was available (yes). Bob Christian said it seems reasonable if this is an adaptive process, particularly since we've had two hurricanes. Brian Boutin noted that crabbers he knows in the northern region are pulling up pots. Some are having good year, others not. Glenn said planting SAV would be a great recommendation to help blue crabs.

**Mike Blanton**, crabber and NCMFC commissioner, described how the Albemarle System used to have so much SAV, you had to wade your boat across it to get out of the boat ramp area. There is none now. There have been blue green algae blooms all year and more crabs swimming on surface due to lack of oxygen. He's watched development and bulkheads increase, leading to less filtering. A ditch near his house drains a large area of highway and development, with no filtration. Hurricane Matthew pushed all the water from the Dismal Swamp into Pasquotank River, and killed blue crabs.

### **VOTE ON RECOMMENDATIONS TO THE MARINE FISHERIES COMMISSION FOR AMENDMENT 3 OF THE BLUE CRAB FISHERY MANAGEMENT PLAN**

Fodrie asked what the other ACs had done and Rock summarized the other committee recommendations. The AC discussed whether they were comfortable making recommendations on fishery issues, because their expertise is on habitat and water quality, not fisheries.

**Fodrie made a motion to not vote on Issues # 1,2, and 5. Christian seconded the motion. Motion passed unanimously.**

#### Issue 3- Addressing Water Quality Concerns

**Hall made a motion to accept all the water quality recommendations, with the addition of adding that the habitat staff report back to the HWQ AC as well as the Shellfish/Crustacean AC. David Glen seconded the motion. Motion passed unanimously.**

#### Issue 4 – Expand Crab Spawning Sanctuaries (CSS)

The AC discussed CSS expansion. Boutin noted there were 13 crab boats today in Croatan Sound, proposed as a migration corridor sanctuary. He said that's a fishing hot spot and did not support a CSS in that area. The AC members weighed in on the different proposed expansions. Glenn Skinner and Perry Beasley reiterated that they and the NCFA didn't support a migration corridor in Croatan Sound, or increasing the Oregon Inlet CSS. There was discussion on the dark sponge restriction. Although fishermen throw them back, Corrin Flora explained that studies show the eggs are damaged and having a CSS prevents some of that damage. Rock added that the NCMFC shifted from sponge prohibition to CSS because they were only catching sponges in those areas.

**Boutin made a motion to recommend 1) keeping the Oregon, Hatteras, and Ocracoke CSS the same and change Drum and Barden to the division proposed boundaries; 2) Support Blue Crab AC recommendation for southern spawning sanctuary boundaries (excluding Cape Fear River); 3) Support NCDMF recommended boundary for Cape Fear River spawning sanctuary; 4) Recommend March 1 - Oct. 31 closure for spawning sanctuaries south of the Hwy 58 Bridge (Bogue through Tubbs inlets). Beaufort Inlet would have same closure period as existing spawning sanctuaries (March 1 - Aug. 31); 5) Do not support a spawning sanctuary (migration corridor) in Croatan Sound. Fodrie seconded the motion. Motion passed unanimously.**

#### Issue 6- Bottom Disturbing Fishing Gear



The AC discussed the crab dredge area and whether low effort means low habitat impact and therefore allow, or low fishery impact, and therefore keep closed.

**Fodrie made a motion to support the NCDMF recommendation 1a to prohibit the taking of crabs with crab dredges. Glenn seconded the motion. Motion passed: 4 – 0, with 3 abstentions.**

Regarding bycatch from oyster dredges, Christian asked whether this affects how much a fisherman can oyster. Corrin explained yes but indirectly. Fisherman are currently allowed incidental bycatch of blue crabs not to exceed 50% of the total weight of the combined oyster and crab catch or 500 lbs, whichever is less when oyster dredging. By lowering the allowable bycatch from 50% to 10% of the total weight of the oyster and crab catch or 100 pounds, whichever is less, it reduces the incentive to dredge off of the rock to get the maximum allowed blue crab bycatch.

**Fodrie made a motion to support the DMF recommendation 1d to reduce the bycatch allowance of crabs taken with oyster dredges. Christian seconded the motion. Motion passed: 5-1-1.**

The AC then discussed crab trawling in Neuse and Pamlico rivers. There was discussion regarding impacts to bottom habitat. Staff explained the structured habitats are in shallower water than where trawling occurs and that studies have mixed results on the impact of trawling in shallow windy systems.

**Fodrie made a motion to not support the DMF recommendation 2a to remove crab trawling in Neuse and Pamlico rivers. Boutin seconded the motion. Motion passed: 5-1-1.**

### **WASTE DISPOSAL FROM HEAD BOATS**

Deaton gave an update to the AC on a report of illegal dumping of sewage by a headboat in estuarine waters. The complaint was forwarded on to the US Coast Guard to investigate. Coastwide there are 20-37 headboats in NC. It is illegal to discharge raw or insufficiently treated sewage within three miles from shore or within no-discharge zones. To legally dispose of sewage, boaters must have an onboard treatment system or a holding tank to hold the waste and have it pumped out ashore. All estuarine waters in Pender, New Hanover, and Brunswick counties are designated no-discharge zones. This incident raised concern regarding compliance with waste discharge regulations. After a brief discussion, Deaton said she would follow up with staff at the Clean Marina Program.

### **CHPP REVISION UPDATE**

Deaton updated the committee on progress with the 2016 CHPP implementation plan. Focus has been on four priority issues – oyster restoration, living shorelines, developing habitat condition metrics, and reducing sedimentation impacts in tidal creeks. A substantial amount of progress has been made with construction of oyster sanctuaries and cultch planting due to legislative funding and partnering with NC Coastal Federation to leverage funding. Monitoring of oyster sanctuaries and cultch plantings has improved, and siting tools are being used to strategically plan where future reefs should be located for greatest efficacy. Much progress has also occurred

regarding living shorelines. The permit process has been streamlined, research has been done on the durability and performance of living shorelines following major storm events and found them to be very successful, and a Living Shorelines Steering Committee was formed to continue facilitating progress with living shorelines, as a more resilient and fish friendly method of shoreline stabilization. Regarding establishment of habitat metrics, methodology for intertidal oysters and SAV is underway, both nearing completion. SAV mapping and field groundtruthing was completed this summer through funding from APNEP and DEQ. Delineation of SAV is underway.

Deaton then went over the proposed revision process for the 2021 plan. Some initial habitat priority issues to be addressed include: SAV protection and restoration, with focus on water quality improvements, wetland protection and restoration with focus on nature-based solutions, and habitat monitoring and environmental rule compliance. Staff will begin working on the revision soon, with initial focus on issue paper development, and incorporate technical workshops to gather information and viable solutions for each of the issues.

### **ALGAL BLOOMS IN ALBEMARLE SOUND**

Nathan Hall, an AC member and also an ecologist at UNC-IMS, gave a presentation on algal bloom trends in Chowan River and Albemarle Sound. The Albemarle system is susceptible to blooms due to the long residence time and shallow water. Frequent blooms in the 1970s were found to be due to a few point sources, including a fertilizer plant and paper mill. The recent blooms do not appear to be originating from discrete locations. Since 2000, chlorophyll a in eastern central Albemarle Sound has almost doubled. While eutrophication usually is worse in upper tributaries, the center of the sound has higher values. Also, they've found that the source of nutrients does not appear to be coming from Virginia. Western Albemarle and Chowan have had high levels of cyanobacteria. There has been a large increase in total nitrogen load in Potacasi Creek. This region is generally nitrogen limited but nitrogen is increasing everywhere, and mostly is organic N. Remote sensing by NOAA is helping to assess trends in the algal concentrations. Factors influencing the shift toward higher proportions on nitrogen fixing cyanobacteria are not clear. This year was dry but flows from Roanoke River were high. To partially address the algal bloom problem, a Scientific Advisory Committee has been formed to work with Division of Water Resources to develop nutrient criteria for the Albemarle system.

### **MARINE FISHERIES COMMISSION UPDATE**

Katy West identified the new NCMFC Executive Assistant for the Commissions and Councils, Lara Klibansky, was hired and will replace Nancy Fish who retired from this position. Due to the late hour, staff omitted the full commission update and AC members were directed to the NCMFC news release and meeting materials on the division website.

### **PLAN AGENDA ITEMS FOR THE NEXT MEETING**

No future agenda items were discussed, and no dates were set for the next meeting. Christian noted it would be helpful for attendance to get dates on the calendar to hold and cancel if not needed. Kornegay adjourned the meeting at 5:00 p.m.



ROY COOPER  
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MICHAEL S. REGAN  
*Secretary*

STEPHEN W. MURPHEY  
*Director*

October 11, 2019

## MEMORANDUM

**TO:** N.C. Marine Fisheries Commission

**FROM:** Jason Rock and Corrin Flora, Blue Crab Fishery Management Plan Co-Leads  
Fisheries Management Section

**SUBJECT:** Blue Crab Fishery Management Plan Advisory Committee Meeting

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The Blue Crab Fishery Management Plan Advisory Committee met on October 8, 2019 at 6 p.m., at the NCDEQ Washington Regional Office located at 943 Washington Square Mall in Washington, NC. The following attended:

**Advisers:** Joseph Romano, Mike Marshall, Kenneth Seigler, Perry Beasley, Robert Bruggeworth

**MFC:** Mike Blanton, Dr. Martin Posey

**Staff:** Jason Rock, Corrin Flora, Debbie Manley, Katy West, Kathy Rawls, Daniel Ipock, Dana Gillikin

**Public:** Steve Midgett, Dana Beasley, Judy Reynolds, Tommy Beasley, Chris Merritt, Darrell Beasley, Gene Ashton, Kristina Bridges, Charlie Beasley, Brent Fulcher, Adam Spenar, Zeb Mayo, Brittany Spencer, James Spencer Jr.

Chairman Romano called the meeting to order at 6:06 p.m.

### **APPROVAL OF THE AGENDA AND MINUTES/PUBLIC COMMENT**

**Chairman Romano entertained a motion to approve the agenda. Bruggeworth moved to approve the agenda and Seigler seconded the motion. The motion passed unanimously.**

**Chairman Romano entertained a motion to approve the draft minutes from the June 27, 2019 meeting. Marshall moved to approve the minutes, seconded by Beasley. The motion passed unanimously.**

### **PUBLIC COMMENT**

Members of the public provided comment during the formal public comment period. Steve Midgett expressed concerns with a March closure and water quality. Dana Beasley expressed concern over the location of meetings and the burden it is to attend when they are so far away, the limited number of public comment received on the FMP, accounting for economic drivers of the

industry, and the proposed blue crab migration corridor; supported the blue crab AC recommendations and remarked on the abundance of crabs this season and cyclical nature of the fishery. Tommy Beasley expressed concern with a blue crab migration corridor and remarked fishermen are the true biologists to listen to, and noted the, the aging demographics of the fishery and abundance of crabs this season. Chris Merritt voiced concern over more laws. Darrel Beasley expressed concern with the migration corridor. Gene Ashton voiced concern over the progression of laws and fisheries being shut down, as well as there being no need for both a cull ring and a cull tolerance. Kristina Bridges spoke on how the industry and mother nature control the fisheries and concerns of Oregon Inlet bridge construction, division fish house sampling, meeting distance, peeler size limits, and need for consideration of individual fishermen activities. Charlie Beasley expressed his relief in the knowledge of the committee advisors and concern over closing the season and the migration corridor when there are so many adult and juvenile crabs this season. Brent Fulcher shared with the committee the stance of the NCFA on the blue crab fishery management plan to put it on hold until the stock assessment is updated to 2019 and his concern that fishery management plans will not work alone, requiring multispecies concerns as well as improved water quality. Mr. Fulcher would like the division to have the ability to control the FMP process and suggested the diamondback terrapin and sanctuary issues may be handled under a supplement while Amendment 3 is on hold for an updated stock assessment. He does not support a pot limit or see the merit in sanctuaries. James Spencer Jr. commented on water quality and size of breeding stock concerns.

### **REVIEW PUBLIC COMMENT AND ADVISORY COMMITTEE RECOMMENDATIONS**

Division staff (Rock) gave a presentation to the committee on the public comment and other advisory committee recommendations for Amendment 3 to the blue crab fishery management plan. The presentation included public comment from the division's constant contact questionnaire and recommendations from the Marine Fisheries Commission's Northern Regional, Southern Regional, Shellfish/Crustacean, and Habitat and Water Quality advisory committees. There was additional discussion from the committee about the lack of public input, the presentation of logic behind recommendations given to the advisory committees, and the differences between the four committees recommendations.

### **DRAFT BLUE CRAB FISHERY MANAGEMENT PLAN – AMEDEMMENT 3**

Division staff (Rock) informed the committee on changes to draft Amendment 3 since the June 27, 2019 meeting. The committee members discussed the division rational behind recommendations, the differences in the fishery across the state, the North Carolina Fisheries Association recommendation, and the possibility of updated the stock assessment prior to implementation of Amendment 3 verses as part of the adaptive management framework.

**Mike Marshall made a motion that the committee stand on the original recommendations with the addition of adding adaptive management with the additional of language to allow measures to be relaxed if the assessment update says the stock is not overfished and overfishing is not occurring.** This motion was seconded by Robert Bruggesworth, passed 4 to 1.

**Robert Bruggesworth made a motion to recommend updating the stock assessment once 2019 data is available.** This motion was seconded by Perry Beasley and passed 4 to 0 with 1 abstention.

Having no further business to conduct, the meeting adjourned at 8:35 p.m.