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*Director*

January 30, 2024

**MEMORANDUM**

**TO:** Marine Fisheries Commission  
Shellfish/Crustacean Advisory Committee

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

**SUBJECT:** Meeting of the Marine Fisheries Commission's Shellfish Crustacean Advisory Committee, January 11, 2024. For discussion on items to develop in the Eastern Oyster FMP Amendment 5 and Hard Clam FMP Amendment 3.

The Marine Fisheries Commission's Shellfish/Crustacean Advisory Committee (AC) held an in-person meeting on January 11, 2024, at the Division of Marine Fisheries, Central District Office, Morehead City, NC. There was also a virtual option for those that could not attend in person.

The following AC members were in attendance: Lauren Burch, Jim Hardin, Tim Willis, Michael Hardison, Mike Marshall, and Ted Wilgis. Online: Ryan Bethea, Mike Blanton, Mary Sue Hamann, and Brian Shepard. Absent: Bruce Morris

Division of Marine Fisheries (DMF) Staff: Hope Wade, Debbie Manley, Jeff Dobbs, Joe Facendola, Corrin Flora, Tina Moore, Anne Deaton, Carter Witten, Lorena de la Garza, Casey Knight, Charlie Deaton, Steve Poland, Alan Bianchi

Public: There were 13 viewers on YouTube.

Shellfish/Crustacean AC Chair Mike Blanton called the meeting to order at 6:05 p.m.

Chair Blanton provided some introductory remarks and let AC members introduce themselves. The Shellfish/Crustacean AC had a quorum.

**APPROVAL OF AGENDA AND APPROVAL OF THE MINUTES**

**A motion was made by Tim Willis to approve the agenda. Second by Lauren Burch. The motion passed without objection.**

**A motion was made by Mike Marshall to approve the minutes from the Shellfish Crustacean AC meeting held on April 18, 2023. Second by Tim Willis. The motion passed without objection.**

The AC members introduced themselves. This was the first AC meeting for Michael Hardison and Ryan Bethea.

### EASTERN OYSTER FMP AMENDMENT 5 AND HARD CLAM FMP AMENDMENT 3

Jeff Dobbs began by informing the AC the goal and objectives for both plans were approved during the November MFC business meeting. Both plans are looking only at the wild harvest through their development. Staff are beginning to develop issue papers to address potential management and would like early input from the committee. One joint issue for the oyster and clam FMP is the need for a recreational shellfish harvest permit. Because there is currently not a requirement for any type of license or permit for recreational shellfish harvest, data is not available to estimate the number of recreational shellfishers. Staff would like to consider requiring a low cost or free permit. This would provide a means to gain understanding of the total number of people participating.

Tim Willis asked if DMF could sample somehow to get an idea of effort, rather than a permit or license. Dobbs explained that the nature of the fishery with people walking in from shore and private docks year-round makes it difficult for creel clerks to encounter fishers to get an estimate. Lauren Burch noted this is probably the last fishery that does not need a permit or license. Joe Facendola explained that it would require legislative action if the change was incorporated into the CRFL license requirements. Facendola noted that initially shellfish was included in CRFL license rules but was taken out at some point. Mike Marshall explained it was partially because it was considered a subsistence fishery - critical food resource for low-income residents. Steve Poland said the staff is considering incorporating the benefits of having a permit in the plan. If the MFC decides it is worth doing and approve including this as a recommendation in the FMP, it will provide more justification for implementation. Mary Sue Hamann questioned if it would require significant reporting on part of the holder. To address this and other committee comments, Dobbs explained that DMF uses surveys to get information on catch from recreational license holders, but since a license is not required, there is no pool of contacts to reach out to. If they did have a license or permit, DMF could survey and subsample to get an estimate on recreational effort and catch. This information is the first step to determine if recreational landings are significant relevant to commercial landings. Brian Shepard noted that there are no strictly recreational clambers. Rather, they tend to casually collect some shellfish while doing other activities on the water. Michael Hardison said that people must get permits for all types of hunting and we need to have a gauge on recreational effort. Marshall agreed and said it is a big missing piece of information and a permit would be the least obtrusive and no cost. Tina Moore said that these comments are for scoping and it seems there is enough interest from the AC to explore. They would also like to know if AC members would support a permit, and if it should be free or with a nominal cost. Blanton reiterated to the AC that their responsibility tonight is to help the division frame the FMP document. Because of the considerable size of our coast and tourism it might be good idea to have permit. Hamann asked staff to report back about how other states handle this. Ted Wilgis added that NCCF gets lots of calls in the summer about clamming. Any outreach should be provided in Spanish as well as English.

Joe Facendola explained that the Oyster Amendment 5, unlike previous plans, would only include wild harvest - shellfish leasing will be addressed separately through the lease program. There are three major issues that will be addressed. Subtidal oyster management using mechanical harvest, mostly in the north; intertidal hand harvest, mostly in south; and recreational harvest which Dobbs just went over and will be in both amendments. For mechanical harvest Facendola explained we currently use trigger sampling, with a 26% legal threshold. Staff is looking at a different way to manage, with rotational harvest of subtidal cultch planting sites. Subtidal oysters in the Pamlico system need to grow higher in the water column to have adequate oxygen at certain times. Mechanical harvest is not good for that because it lowers the reef profile. Staff is considering large cultch planting sites with a fixed season. Lauren Burch asked how mechanical harvest season is managed now. Facendola explained about trigger sampling, and different seasons in bays versus deeper water. The new method would allow mechanical harvest only on a subset of existing large cultch sites that are about 10 acres in deep water. Harvest would be a fixed season and

fishermen could continue harvesting on a cultch site until it was depleted of legal oysters. Then those sites would close for approximately three years until legal-sized oysters had reestablished.

Blanton asked about the number of participants. Facendola said it has been declining, ranging from 30 to 50 participants. The peak was in 2010. Moore said the high effort was due to shellfish license holders at that time being able to mechanical harvest which can no longer occur due to legislative changes no longer allowing this license for mechanical methods. Marshall added that in the 1990s it was a boom-and-bust fishery, and Dermo was a contributing factor. Late 1990s hardly any mechanical harvest and then in oysters started expanding again in the deep water and like said everyone pulled their gear out to harvest. Blanton thought oyster harvesters in the northern waters was declining in deep water due to the uncertainty of the season openings and closings. He would like that changed for mechanical harvesters. Other states manage through rotational harvesting and it is pretty successful and think it's possible for NC. Brian Shepard noted that some of the shellfish decline is due to increasing wastewater treatment plant discharges into rivers. This creates a dead layer. Maryland buys spat on shell and putting a huge amount out. NC doesn't do that – put rock out and sometimes it works well, sometimes not. Marshall mentioned that the 26% trigger was an attempt to get more data, before we used number of violations and when trips came into the dealer. He supports trying different things. We need to protect the habitat and other factors. Tim Willis mentioned that in Chesapeake Bay and Louisiana they were dredging in dead zones to mix it up. Facendola added there are two issues – sediment and oxygen. Trying to lift shell up out of sediment for spat. Probably more sediment issue in bays since closer to runoff. He said that current management in the bays is working, but not in the deeper sound. Storm events reduce oxygen in the deeper areas and they die off on the bottom but stay alive higher up in the water column. With this strategy, oyster sanctuaries would continue to grow taller to allow survival and increase reproductive potential, and increased cultch around the sanctuaries would provide more recruitment area. Provide more spat to resettle on the sites to re-populate the deep water areas,

We'll need to do this in baby steps over the next few decades. Facendola said ultimately, we would want a stock assessment to identify what is available for harvest. In 10-20 years, a stock assessment might be feasible. Burch asked if you just want to go to season. For this paper the strategy would start with a subset of managed areas. Staff is looking at the trigger data to determine some correlations, such as when a certain percentage of oysters are legal-size, the season can open a specific number of weeks. Some certainty for fishermen on the duration of the season. A lot of effort to gear up for this fishery and they know how long to fish. Then harvest at rotational sites could occur after the set season for example, 8 weeks. The larger cultch planting sites will have 16 sites built this year and could potentially have 4 cultch areas open a year. Ted Wilgis supports looking at different strategies. He suggested that in the plan try to provide estimates on how much material you need to maintain adequate cultch planting areas, where they could be located, and enforcement. If you have records on monetary effort in management, the state can qualify for hurricane assistance funds for oyster planting. Hamann asked if runoff can be addressed. Anne Deaton replied that this is addressed in the Coastal Habitat Protection Plan (CHPP). A large focus of the most recent amendment (DEQ 2021) was addressing water quality.

Shepard thought a set season is a good idea for this fishery. Wilgis asked what tools can be used to adjust the season? Facendola said that changes could be made if necessary, through adaptive management and proclamations. Blanton asked how we can do this successfully if the 26% trigger now is not working for the the number of participants now if we don't know what is sustainable. Facendola said you can look at current bushel limits, how long it takes based on effort now, they are capped in rule at 25 bushels. Can look at changing the bushel limit. Corrin Flora noted that this plan takes effort off the natural reefs, which will enhance natural reefs with no pressure on them. Marshall mentioned for clarification that the 26% trigger was designed by a UNC study as habitat protection measure, to retain enough cultch in the water. The trigger was not a fishery management measure it was a habitat protection measure.

Discussion moved on to intertidal oysters. The fishery is by hand harvest, primarily in the southern coast, and accounts for the majority of landings. The landings have been stable. There currently is no sampling in this area. The only indicator used to gauge the fishery was whether a trip landed less than 5 bushels. The previous FMP reduced the commercial shellfish license holder limits from 5 to 2 bushels. We have seen the number of participants drop since that change in bushel limits. And we'll look into any changes in the participants and trips further in this plan. The previous plan also called for development of an intertidal sampling plan. Facendola explained it is under development by staff in Habitat and Enhancement and Fisheries Management sections. Wilgis asked if the sampling is tied to shellfish mapping and includes open and closed harvest areas and could provide information to aid cultch planting. Anne Deaton said yes, sampling would occur in mapped sentinel sites in closed and open areas. We also are trying a pilot study using drones to look at oyster reef height. Wilgis asked is you could use for cultch planting sites to identify areas needing more material? Facendola, yes that could be used just trying to build the infrastructure with material holding sites as well as people and equipment. Brian Shepard asked if the FMP could look at whether too many shellfish leases could negatively impact wild populations. Too many triploid oysters taking the resources from the wild stock. Wilgis said there are studies that show carrying capacity showing impacts to wild stocks, more of a research question. Willis noted there are studies ongoing in the South Atlantic or possibly the Gulf States. Staff said it could be included as a research question or passed on to the leasing program. Willis asked if there was any understanding between the natural bottom leases versus caged ones. Facendola said that is not my area of expertise. Flora said we could send those questions to the shellfish lease program.

Jeff Dobbs reviewed the major issues to be discussed in the clam FMP - mechanical clam harvest. There has been a decline in effort over the years, with only 4 participants in 2021. That, in addition to habitat concerns, have resulted in closing of some areas to mechanical clamming. Due to encroachment from oysters and seagrass in these mechanical areas. We close the area in Bogue Sound completely due to seagrass and modified other areas. He asked for input on: 1) ending the mechanical clam fishery; and 2) ending the opening of channels prior to navigational dredging. The latter has not been done since 2007. The dredging is problematic due to timing with working with the ACOE and timing when fishermen notifies DMF to open the area before the maintenance dredging activity occurs.

If the mechanical harvest season is removed, they would likely end the other as well. Dobbs noted that the negatives of the fishery are the effort to mark and enforce for low participation, and potential habitat impacts from turbidity and SAV. Willis asked why would we limit fishing activity of the gear when it is only four people now. If so few people why the issue? Dobbs said it was of historically important and of value to more fishers. Dobbs said DMF is responsible for marking the areas, it takes a lot of staff time and resources to mark, and enforce. Also, habitat concerns with dredging up the bottom and turbidity and uprooting seagrass. Willis reiterated it is not many people and so why consider. Flora noted the paper will address the fishery and number of participants. Willis said let the fishermen put out the signs then.

Hardison asked if the four remaining fishermen are increasing landings. Dobbs explained that the active participants are in New River and there is variability in landings as it is opened every other year. Because DMF rotates open areas, numbers are higher when New River is open, and lower when its closed. Shepard said although it is only a few participants it is important to them. He also mentioned that New River has had several clam die offs in deep water. He said stirring up the bottom and removing sediment is helpful, and since we've reduced trawling and clam dredging up there, conditions are worse. He added that for the participants that rely on this fishery, it is important. If we don't have activity up there the bottom will die and Hurricane Florence caused some die off as well.

## **PUBLIC COMMENT**

No public comment.

**ISSUES FROM AC MEMBERS**

A Flounder Symposium will be held at the New Bern Convention Center on March 20, 2024. Details will be on the DMF website soon. No issues were brought forward by other members.

**PLAN AGENDA ITEMS FOR THE NEXT MEETING**

Moore said they don't have ideas from staff yet due to MFC upcoming in February and the MFC Liaison position is vacant. She noted the MFC Habitat and Water Quality AC is meeting next week to discuss an issue through the Shrimp FMP Amendment 2 to look at the open/closed areas to shrimp trawling and overlaps with seagrass presence. This paper will go to the MFC in February and may come back to other MFC ACs, dependent on the discussion with the MFC. No additional items were requested.

Tim Willis made a motion to adjourn. Seconded by Lauren Burch. The meeting adjourned at 7:46 p.m.

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