

Habitat and Water Quality Standing Advisory Committee
Morehead City - Central District Office
April 19, 2023
6 p.m.

- 6:00 p.m. Call to Order*
- Vote on the Approval of the Agenda****
- Vote on the Approval of the Minutes from January 18, 2023 ****
- 6:05 p.m. Marine Fisheries Commission Update – Lara Klibansky
- 6:15 p.m. July Joint Meeting Planning – Lara Klibansky
- 6:30 p.m. Spotted Seatrout Scoping Period Discussion (no presentation) – Lucas Pensinger, Jason Rock
- 7:00 p.m. Shellfish Sanitation Presentation – Shannon Jenkins, Andy Haines
- 7:20 p.m. Water Clarity Standard Presentation – Nathan Hall
- 7:40 p.m. Public Comment
- 7:50 p.m. Issues from AC Members
- 8:00 p.m. Adjourn

** Times indicated are merely for guidance. The committee will proceed through the agenda until completed.*

***Action Items*

****Applies only to Marine Fisheries Commission members*

*N.C.G.S. 138A-15(e) mandates at the beginning of any meeting of a board, the chair shall remind all members of their duty to avoid conflicts of interest under Chapter 138. The chair also shall inquire as to whether there is any known conflict of interest with respect to any matters coming before the board at that time. ****

*N.C.G.S. 143B-289.54(g)(2) states a member of the Marine Fisheries Commission shall not vote on any issue before the Commission that would have a "significant and predictable effect" on the member's financial interest. For purposes of this subdivision, "significant and predictable effect" means there is or may be a close causal link between the decision of the Commission and an expected disproportionate financial benefit to the member that is shared only by a minority of persons within the same industry sector or gear group. A member of the Commission shall also abstain from voting on any petition submitted by an advocacy group of which the member is an officer or sits as a member of the advocacy group's board of directors. A member of the Commission shall not use the member's official position as a member of the Commission to secure any special privilege or exemption of substantial value for any person. No member of the Commission shall, by the member's conduct, create an appearance that any person could improperly influence the member in the performance of the member's official duties. ****

*Commissioners having questions about a conflict of interest or appearance of conflict should consult with counsel to the Marine Fisheries Commission or the secretary's ethics liaison. Upon discovering a conflict, the commissioner should inform the chair of the commission in accordance with N.C.G.S. 138A-15(e). ****



ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

KATHY B. RAWLS
Director

Jan. 26, 2023

MEMORANDUM

TO: Marine Fisheries Commission
Habitat and Water Quality Advisory Committee

FROM: Anne Deaton, Habitat Program Manager, Habitat and Enhancement Section
Jimmy Harrison, Fisheries Resource Specialist, Habitat and Enhancement Section

SUBJECT: Meeting of the Marine Fisheries Commission's Habitat and Water Quality Advisory Committee, Jan. 18, 2023 for orientation of new members and updates.

The Marine Fisheries Commission's (MFC) Habitat and Water Quality Advisory Committee (AC) held a meeting on Jan. 18, 2023, via webinar and a listening station at the Division of Marine Fisheries, Central District Office, Morehead City, NC. Advisory Committee members could attend in either setting and communicate with other committee members. Public comment could occur online if the public signed up in advance and also if public attended at the listening station.

The following AC members were in attendance: Ana Shellem, Doug Rader, Jack Durham, David Glenn, Joel Fodrie, Nathan Hall, Scott Leahy, Markham Parrish, Lisa Rider, Mark Sonder (Absent: James Hall)

Division of Marine Fisheries (DMF) Staff: Lara Klibansky, Paula Farnell, Hope Wade, Debbie Manley, Corrin Flora, Anne Deaton, Jimmy Harrison, Steve Poland, Jason Parker, Jeff Dobbs, Dan Zapf, Laura Lee

Public: None in attendance, 7 viewers watched on You Tube.

Habitat and Water Quality Chair Ana Shellem called the meeting to order at 6:05 p.m.

Lara Klibansky went over the ethics statement for the MFC members. No conflict was noted among MFC members that serve on the AC.

A call for attendance was performed and a quorum was met.

APPROVAL OF AGENDA AND APPROVAL OF THE MINUTES

A motion was made to approve the agenda by Nathan Hall. Second by Scott Leahy. The motion passed without objection.

A motion was made by Doug Rader to approve the minutes from the Habitat and Water Quality AC meeting held on October 26, 2022. Second by Nathan Hall. Motion passed with one abstention (Mark Sonder).

2023 ANNUAL ADVISORY COMMITTEE'S ORIENTATION PRESENTATION

Klibansky provided a presentation on the MFC orientation, duties of the MFC advisory committees, and the meeting cycle. Lara encouraged AC members to reach out to Lara or other staff if there are any follow-up questions. The presentation focused on the duties of the AC. She started with a brief history on the Division of Marine Fisheries, celebrating its 200-year anniversary this year. The first fisheries specific legislation was passed in 1822 for oysters. To put this long timeline in perspective; in 1822, James Munroe was the fifth President and there were 24 states that comprised the United States.

Fisheries management has been ongoing in NC for a long time and expanded from legislation for a single fishery to many fisheries with both commercial and recreational interests. The Fisheries Reform Act (FRA) adopted in 1997 ushered in new ways to manage fisheries in the state. The FRA is comprehensive legislation forming cooperation between stakeholders, restructured the MFC, mandated the creation of state managed Fishery Management Plans (FMPs) as well as the Coastal Habitat Protection Plan (CHPP), and a new licensing system. General Statute 143B-289.57 establishes the MFC ACs and provides the objectives of the committees to assist the MFC in the performance of its duties.

Klibansky described the FMP process, showed the steps of development, and where the MFC ACs are formally brought the FMPs for their review and input. The quarterly AC meetings will also include staff updates on various issues to keep members updated of MFC business, and to provide opportunity to ask questions and provide feedback, such as tonight's informal chance to discuss striped mullet with biologists. There are 13 FMPs reviewed approximately every five years. Scheduling the reviews can fill up meetings quickly and DMF staff provides the MFC a workplan as a tracking tool to monitor varying work steps in development of a FMP. It is recommended the AC members review the workplan at least once a year to see when a plan comes to the AC for your review and input. Many other tools are available on the website – meeting recordings, annual FMP reviews, and the statistics report otherwise known as the “Big Book”. A lot of resources are available to you. Klibansky noted the three DMF staff in the MFC office, with herself as the Liaison between DMF and the MFC, Paula Farnell is the new Program Assistant, and Catherine Blum is the DMF Rule Coordinator. There is also an attorney with the Department of Justice. Klibansky and Farnell are the two main points of contacts in the MFC office for the MFC Advisory Committees and MFC Commissioners. Farnell went over some of the material provided to the AC and noted members can reach out to her by cell phone. After the January AC meeting the office will be sending the committees an overview of the year ahead and links to documents on the website.

At the conclusion of the presentation, Mark Sonder asked how AC members could provide recommendations to the MFC. Klibansky responded that discussion from AC meetings, issues the committee wants to put forward to the MFC, or any motions made would be included in the minutes. All meeting documents are provided to the MFC at their business meetings. At the last MFC meeting, the Vice Chairman requested that committee chairs be available for questions at MFC meetings. Sonder also asked how to provide suggested topics for future AC meetings. Klibansky responded that at the end of the meetings, there's time to propose items for upcoming meetings. Sonder then asked if AC members could submit questions in the days after meetings. Lara Klibansky responded that they could and that these would then be discussed with staff leads and committee chairs when working on the next meeting agenda.

Doug Rader noted that it's his view that the job of the AC is to consider a wide array of issues that the AC may entertain, then come to a consensus on which to move forward to the MFC. Those could be related to FMPs under development, or not. Because habitat and water quality effects managed species, both habitat and FMP needs should be intertwined, perhaps beyond what a stock assessment-driven model by itself might bring. Rader noted that while the MFC regulatory purview extends primarily to the direct

regulation of fisheries, input through the CHPP Steering Committee (SC) allows integrated management for fisheries since the CHPP SC includes CRC and EMC members that do have regulatory authority over habitat and water quality issues. While the AC can request agenda items, members should recognize that staff will need adequate time to plan and address agenda items. Rader also said the AC needs time to hammer out priority topics, develop a formal action, and then work with staff to present that for response from the commission.

Discussion of Stock Assessment 101 Presentation

A video was sent to the AC to review prior to the meeting. Laura Lee was available to address any questions on stock assessments. Rader asked Lee about the extent that habitat and water quality issues are incorporated into the stock assessments and whether/how the AC can provide useful information for stock assessments. Lee responded that they're still trying to understand correlation between habitat/water quality and population dynamics. It is important to encourage research in those areas so we can improve our understanding and model those relationships. Habitat and water quality variables are used in development/computing of indices in stock assessment models. Shellem indicated that at a previous striped mullet meeting, commercial fishermen discussed their concerns with water quality impacting the stock assessments more than anything, including nets. Shellem asked what kind of information or data can be gathered to bring back to the AC to aid in discussing this controversial issue. Rader said it would be good to get a general understanding of what is known about water quality in relation to striped mullet and then work through the plan thinking about what additional information is needed to improve management outcomes for fishery.

Hall noted that the North Carolina Policy Collaboratory has funded a research project through UNC, and his work in this project involves looking at relationship of water quality to fisheries. He then asked what kind of habitat and water quality conditions are relevant for striped mullet. He can look at the available data and maybe provide answers to these questions through this and other funded projects.

Rader agreed with Hall and suggested framing questions about individual species in terms of broader systems. Start with the species life history – 1) where and when are they at different life stages, and 2) what are the habitat/water quality threats and opportunities in those locations that could be affecting the species. Dan Zapf noted that as part of Amendment 2 of striped mullet FMP, they do a review of the life history and habitat characteristics that are important for striped mullet. It is difficult to pin down specific habitat variables that are important to striped mullet life history because their life history is diverse, and are habitat generalists. Striped mullet spawn in the ocean, then grow and mature in estuaries. Most are observed in mid-salinity upper estuary habitats, but they have been seen very far up the rivers this year due to weather conditions. As Amendment 2 is developed, the team will be putting together life history and habitat and water quality items that are important for striped mullet. Likely won't have anything to provide for next meeting. Klibansky asked if we have this information in annual FMP updates that can be sent to the group, such as the research needs for specific species. Zapf responded that some of it is available in the annual update (<https://deq.nc.gov/about/divisions/marine-fisheries/managing-fisheries/fishery-management-plans>). The 2022 stock assessment has detailed information on research that's been going on regarding habitat and life history characteristics for striped mullet, so this is a really good resource. Deaton added that there's info in 2016 CHPP (source document) and 2021 CHPP Amendment (Habitat Mapping and Monitoring Issue Paper) about water quality trends in different river basins based on DWR water quality monitoring data.

Rader asked Klibansky to remind everyone of upcoming deadlines/forthcoming FMP work. Klibansky responded that this information should be in the MFC workplan and the most recent upcoming FMP updates include striped mullet, spotted seatrout, and oyster/clam. Corrin Flora noted that the blue crab stock assessment update is likely to happen this year. Depending on what the stock assessment update

shows, it may trigger some adaptive management items. This item would go to the regional and shellfish/crustacean ACs, and probably to HWQ AC as well. Rader wanted to ensure that the AC understands that the next couple years will have a broad spectrum of species, habitats, and issues.

Mark Parrish noted that habitat and water quality has been decimated in his area and asked about any studies being done on bay scallops and SAV. Deaton responded that there have been studies on bay scallops but that was from a while ago. Joel Fodrie noted scallops have been so patchy that studies/experiments in real time are difficult. SAV has become more patchy in some areas so they are looking into whether this may be impacting scallop populations. They have also been looking at relationship of bay scallops to water temperatures and predators. Jeff Dobbs noted there's a lot of work in Virginia coming from the hatchery side, but unclear as to the findings of those studies. Some studies in New York have filled in some data gaps. Compiling what is currently known would be helpful. Rader asked Deaton for verification that SAV is a priority habitat under CHPP. Deaton responded yes and noted that the division has a monitoring program to determine if the scallop fishery can open, however they have remained low, restricting harvest in most areas, except for occasional openings. There is local information that scallops in the southern part of the state (Onslow/Pender Counties) were on an uptick, but then declines were observed, possibly due to ray predation. Parrish noted that the decline in SAV in the Sound area has really seemed to correlate to the stock issues with numerous species, but noted that predation is also causing stock declines. Habitat and water quality could be the problem (salinity, acidity, temperature, etc.), as loss of SAV removes protective habitat and food resources for many species. Deaton noted that Bogue Sound has had the highest SAV loss for high salinity water bodies, based on mapping and monitoring. Klibansky suggested bringing this up at our next meeting. Rader indicated that that would be useful, particularly if it's presented from a scallop-SAV perspective.

MARINE FISHERIES COMMISSION UPDATE

Klibansky followed up on an AC request from their last meeting on the CCA lawsuit. In discussion with the DEQ attorney we can only provide a brief statement. The state did not appeal and the case is continuing in Superior Court. The State's response is due today, Jan. 17, 2023 and we are finishing up the response. No further background can be provided.

Klibansky gave an update on the newly appointed MFC commissioner, Sarah Gardner. Sworn in before the Finfish Standing AC in October and she participated at the MFC meeting in November. At their meeting in October the MFC discussed joint fishing waters delineation for the rules shared by MFC and NC Wildlife Resource Commission (WRC). The MFC tasked DMF to work with WRC to make progress on a plan moving forward.

The MFC approved nominees for Mid-Atlantic Council obligatory seat. Nominees included: Mike Blanton, Thomas Newman, Robert Ruhle, and Jess Hawkins. The Striped Bass FMP Amendment 2 was adopted, which includes continuing the closure of gill nets above the Ferry Line on the Tar/Pamlico and Neuse rivers. The division is currently developing Amendment 2 to the Striped Mullet FMP as well as a supplement to Amendment 1 to allow management measures to be in place sooner than what can be developed through Amendment 2. The Supplement is looking at about a 22 percent reduction with a season closure from Nov. 7 – Dec. 31.

The upcoming MFC meeting is Feb 22 – 24, 2023 at the Doubletree Hotel in New Bern. Items on the agenda include an information paper on False Albacore, overviews on the spotted seatrout and striped mullet fisheries, the revision to the latest Blue Crab FMP amendment to look at diamondback terrapin excluder devices that was in consultation with the Shellfish/Crustacean AC this week. In February, the MFC will be provided the public comments received on the supplement for striped mullet and will vote on its final approval.

Striped Mullet FMP Supplement Update

Klibansky noted DMF staff are working on Amendment 2 while the supplement is open to public comment. The MFC selected their preferred recommendation Option 2 – end of season closure from Nov. 7 – Dec. 31 at its meeting in Nov. The closure would be to both recreational and commercial harvest estimated to achieve a 22% reduction. The floor was open for striped mullet leads, Jeff Dobbs or Dan Zapf, to address any questions.

Parrish asked what the Option 2 closure was based on. Zapf replied that it was based on the spawning season. The fish are moving into the ocean during that period to spawn and they become more vulnerable to the fishery while they're moving in schools. That is also the period when highest landings occur, specifically from October 15 through November 15. Targeting the season closure during this time was the only realistic way to have a reduction in commercial landings. It was also based on the life history of the species. Parrish responded that he thought the largest factor affecting stripe mullet is the roe fishery - what was once a local delicacy is now international and that is causing rising prices and targeting of striped mullet roe. When you target a species for its roe, it is pushed towards extinction. Fishermen understand this and appreciate that there is still time before closure to have a market for striped mullet, keeping it commercially viable while allowing spawning migrations to maintain the stock. It was also noted that the time of year restriction is not an arbitrary date and is actually aimed at having the greatest benefit on stock.

Sonder said that when it comes to illegal/unmarked gillnets, the contents of these nets should be documented for conservation and science purposes. He asked why the public cannot take photos of the contents or be made aware of the exact contents of illegal gillnets. Zapf responded that we do have an interest in what's being caught/harvested in the gillnet fishery. The DMF gets harvest information from commercial trip tickets. But regulations on certain species result in discards. Through the gill net observer program, data is collected on everything in the nets (including harvest, discards, and any protected species), but only a percentage of all trips are observed. In NC, there is a law that prohibits the public from interfering with commercial fishing gear. Sonder replied that he meant not necessarily interfering/disrupting, just to know what is in them and that he has been told not to touch or photograph nets. Officer Parker said that if you see any illegal net, call Marine Patrol immediately and they can inspect nets and deal with those as necessary. Officer Parker also noted that the public frequently submit photos to show the location of a net and that is fine, but the public is not allowed to pick up gill nets because it's a permitting/licensing issue. Sonder asked if Marine Patrol document what's in the net (species, how many, etc.)? The Marine Patrol officer replied that the information would be included in the incident report but a variety of factors may affect the detail of what is recorded. Marine Patrol do try to include as much detail as possible on net contents.

PUBLIC COMMENT

There was no public comment.

PLAN AGENDA ITEMS FOR THE NEXT MEETING

Klibansky said the next meeting in April is scheduled in-person and so far, the only agenda item is the February MFC update. The only other item in the long-term planning for the AC is the Striped Mullet FMP Amendment 2 in Oct.

Deaton provided habitat and water quality related information requested at the previous meeting. A Water Quality Summit was held by NCCF, Pew, and DEQ to kick off forming a public-private partnership to

engage in actions to improve water quality, which was a recommendation in the CHPP. Objectives of the Summit were to provide outreach on the state of NCs coastal water quality and how that impacts stakeholders (included farming, fishing, and city representation), educate them on the value and success of public private partnerships, and recruit continuing participation CHPP water quality actions. Stakeholders gave presentations that show how their local area is being impacted by water quality. There were breakout groups to brainstorm on specific actions that could be taken. This resulted in forming two sub workgroups – Working Land and Waters Workgroup and Conservation and Coastal Resilience Workgroup. The former has met and is working on drafting a resolution to send to the General Assembly expressing the need for additional state appropriations for Department of Agriculture’s agricultural cost share program This program allows farmers to voluntarily implement BMPs to improve water quality. The current amount is relatively low and there is more demand than funds.

DWR is continuing to develop water clarity standards through a Nutrient Criteria Development Plan. Water clarity standard language has been drafted as well as a white paper written by Scientific Advisory Council (SAC) members. Additional steps are needed before going to the EMC for review later this year. Once there is a standard, exceedances will have to address nutrient and sediment levels. It’s likely that this will primarily require addressing runoff rather than point sources. Other CHPP implementation underway is interagency planning on how to update wetland maps, enhancing shellfish mapping and monitoring, and continuing to work with APNEP SAV Team on SAV mapping and monitoring.

Deaton reviewed a table provided to the AC in their meeting materials. It lists the habitat and water quality actions in the most recent Oyster and Clam FMPs and the status of those actions. She noted that this is an example of what staff is compiling for all of the FMPs as requested by the HWQ AC. They will be finalizing the spreadsheet and can provide it to the AC as a complete file or by species. AC members can review these at a future meeting and provide input on prioritizing what has not been completed.

APNEP Comprehensive Conservation Management Plan (CCMP) is currently being updated. It is expected to be completed this year.

Deaton provided information on where to find data on fish kills & algal blooms. The DWR has an interactive map of reported and investigated algal blooms and fish kills. There are also reports that include details on species and environmental conditions.

<https://ncdenr.maps.arcgis.com/apps/dashboards/7543be4dc8194e6e9c215079d976e716>

There is also information in 2016 and 2021 CHPP amendments.

<https://deq.nc.gov/about/divisions/marine-fisheries/habitat-information/coastal-habitat-protection-plan>

Another source of water quality information is the UNC-CH MODMON website, although it is specific to the Neuse River. This site contains data pertaining to water quality conditions, as well as a list of publications to look up references utilized. They also post updates on the website. This can be used as an indicator of stress in NC estuaries. The AC may be interested in a presentation on this data/project and AC member Nathan Hall is directly involved with it.

<https://paerllab.web.unc.edu/modmon/>

Future informational agenda items include striped mullet habitat and water quality concerns, habitat and water quality recommendations in FMPs, update on South Atlantic Fishery Management Council (SAFMC) work on climate vulnerability assessments, new information on shellfish and water quality trends, and conditions for striped bass spawning migrations (flow, obstructions, etc.)

Rader noted the spreadsheet should be very helpful moving forward and can be used as a framework as FMPs cycle through to help understand the most important issues. Regarding shellfish and water quality trends, there is information available in the 2016 CHPP Amendment and from the Shellfish Sanitation

section. Rader mentioned the climate vulnerability assessment and generalized that for the committee. Rader discussed how changes due to climate change such as the prevalence of intense storms and droughts are changing the system and we need to understand how these system changes impact habitat and water quality, recruitment, habitat suitability for life history stages, development, and FMP outcomes. Deaton suggested that the AC invite a NOAA scientist to give a presentation on the climate vulnerability assessment. A powerpoint on NOAA South Atlantic Fisheries Science Center Climate Vulnerability Assessment can be found here: https://safmc.net/documents/2022/11/fc3_a5b_esr-cva-update_dec2022.pdf/ . Rader added staff should decide on the best way to brief the AC on the topic (coastwide and locally) so the AC is up to date with what to expect.

Rader asked AC members to bring up any other future topics. He mentioned scallop harvest related to relationships between predators, population, and habitat concentrations. He also said there is more to know about SAV bed dynamics among species that use those areas.

Hall noted that he hasn't seen data on changes in inlet dynamics, which is important because most estuaries are behind the Outer Banks with just the few inlets separating them from the ocean. How will a greater exchange with the ocean impact fisheries/habitats/etc? Rader replied that previous studies looked at general info on likelihood of stability in the Outer Banks area. They discussed getting someone to brief the AC on changing inlets and review NOAA's latest SLR models and how this will affect the inlets and subsequently other habitats and species.

Scott Leahy brought up the issue of waterfront development impacts on fish habitat. He recently went through the CAMA process for building a dock. His takeaway from this process was that for a small permit fee, he could encroach on public trust resources with no mitigation required. For example, installing a living shoreline or constructing an oyster reef. Regarding his dock, he was told he could not put oysters under his own dock to voluntarily mitigate impacts (ie. Under Dock Oyster Culture permit) because it's in closed shellfish harvest waters. He suggested looking at mitigation strategies for public development. Rader replied that the CHPP legislation originally had intent to look at system-wide needs and habitat losses and put in place mitigation/avoidance/offset programs. He suggested it could be useful to pick a habitat type at risk and look at a mitigation strategy pilot program (possibly a voluntary mitigation bank).

Sonder asked if MFC has authority to address hog farm impacts to coastal waters. He noted that it's been well documented that hog farm lagoons (upstream of coast) overflow, which end up in the waterways. Can the MFC put something forward regarding these farms, since their impacts on habitat, water quality, and species have been well documented? Deaton replied that there's a moratorium on new hog farms in the flood plains. There was also a buy-out program that bought out some of the farms. They are regulated by the EMC. There are compliance checks and staff investigations of lagoons. MFC does not have direct authority over hog farms, but the issue could be brought to the CHPP SC. The MFC or the CHPP SC could send a letter to the EMC about their concerns. Sonder replied that there have been lots of letters and lawsuits over many years, yet the problem exists. Lisa Rider noted that the Coastal Carolina Riverwatch has lots of information related to animal farming and agricultural impacts on waterways and habitats. (<https://coastalcarolinariverwatch.org/white-oak-new-river-alliance/>). There was a year-long program that included both recreational and commercial fishermen. A survey among NC fishermen found the primary concern among fishermen was industrial agriculture and factory farming. She said that right now, "boots on the ground" advocacy is what is needed. Rider noted that if the AC made a recommendation to the MFC to raise their concerns to others that have authority over this, it would go a long way to addressing the issue. The lobbying power of fishermen could result in significant change. Sonder asked if there were penalties for violations. Rider replied that much like those that develop illegally, they are given time to get into compliance, but runoff issues may still occur from these facilities.

Jack Durham wanted to know how to get everyone's contact info. Klibansky replied that DMF staff are not allowed to share information, but members can contact each other, and give Klibansky permission to share their contact information.

The meeting adjourned at 8:11 p.m.