MARINE FISHERIES COMMISSION BUSINESS MEETING Doubletree by Hilton University Brownstone Hotel, Raleigh, N.C. Aug. 15-16, 2018

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).

<u>Aug. 15</u>

2 p.m. Swearing in of New Commissioners – N.C. Secretary of State Elaine Marshall

Call to Order*

Pledge of Allegiance

Invocation

Review Ethics Evaluations for New Commissioners

Conflict of Interest Reminder

Roll Call

Approval of Agenda**

Approval of Meeting Minutes**

2:30 p.m. Chairman's Report

- Letters
- Ethics Training/Statement of Economic Interest Reminder
- 2018 Meeting Schedule
- 2019 Proposed Meeting Schedule
- Elect Vice Chair**

2:45 p.m. Committee Reports

- Blue Crab Fishery Management Plan Advisory Committee
- Southern Flounder Fishery Management Plan Advisory Committee
- Northern Advisory Committee
- Southern Advisory Committee
- Finfish Advisory Committee
- N.C. Commercial Fishing Resource Fund Committees

2:50 p.m. Director's Report - Steve Murphey

- Division of Marine Fisheries' Quarterly Update
- South Atlantic Fishery Management Council Update Steve Poland
- Highly Migratory Species Update Steve Poland
- Informational Materials:
 - Landings Update for Red Drum and Southern Flounder
 - Protected Resources Update
 - o Observer Program
 - o Incidental Take Permit Annual Reports

4:15 p.m. Stock Overview Report – Lee Paramore

6 p.m. Public Comment Period

Aug. 16

8:30 a.m. Atlantic States Marine Fisheries Commission Update – Chris Batsavage Mid-Atlantic Fishery Management Council Update – Chris Batsavage

8:45 a.m. Standard Commercial Fishing License Eligibility Report/Set Eligibility Pool Cap – Capt. Carter Witten and Stephanie McInerny

• Vote on setting temporary cap on the number of licenses in the Eligibility Pool**

9:15 a.m. Fishery Management Plans – Catherine Blum

- Status of ongoing plan reviews
- 2017 Fishery Management Plan Review
- Streamlining fishery management plan documents
- Vote on five-year schedule**

10 a.m. Blue Crab Fishery Management Plan – Jason Rock and Corrin Flora

- Amendment 2 (current plan)
 - Blue Crab Traffic Light Annual Assessment
- Amendment 3 (under development)
 - Review timeline
 - Vote on approval of goal and objectives**
 - Solicit input from commission on management and sustainable harvest issues

11 a.m. Striped Mullet Fishery Management Plan Amendment 1

- Stock assessment update Laura Lee
- Review Division of Marine Fisheries and Advisory Committee preferred management recommendations Dan Zapf and Tracey Bauer
- Vote on possible management measures**

11:30 a.m. Southern Flounder Fishery Management Plan Amendment 2 Update – Mike Loeffler 11:45 a.m. Periodic Review and Expiration of Existing Rules – Catherine Blum

- 15A NCAC 03 Rules
 - Update on 2018-2019 rulemaking cycle
 - Development of 2019-2020 rulemaking cycle
- 15A NCAC 18A Rules
 - Vote to approve final report on 15A NCAC 18A .0100,
 .0300-.0900, and .3400 rules, per G.S. 150B-21.3A**

12:15 Rules Suspensions – Kathy Rawls

The commission must vote to continue suspension of the following rule(s)

 Vote on continued rule suspension of portions of N.C. Marine Fisheries Commission Rule 15A NCAC 03M .0301 Spanish and King Mackerel **

12:30 p.m. Issues from Commissioners

12:45 p.m. Meeting Assignments and Preview of Agenda Items for November Meeting – Nancy Fish

1 p.m. Adjourn

2018 Meeting Dates

Feb. 14-15 Wrightsville Beach Aug. 15-16 Raleigh May 16-17 New Bern Nov. 14-15 Kitty Hawk

^{*} Times indicated are merely for guidance. The commission will proceed through the agenda until completed.

^{**}Potential Action Items

Minutes



Marine Fisheries Commission Business Meeting Minutes Doubletree by Hilton Riverfront New Bern, North Carolina May 16-17, 2018

The commission held a business meeting May 16-17 at the Doubletree by Hilton Riverfront in New Bern, North Carolina.

The briefing book, presentations and audio from this meeting can be found at http://portal.ncdenr.org/web/mf/05-2018-briefing-book.

Actions and motions from the meeting are listed in **bolded** type.

BUSINESS MEETING - MOTIONS AND ACTIONS

Chairman Sammy Corbett convened the Marine Fisheries Commission business meeting at 2 p.m. on May 16 and reminded commissioners of their conflict of interest and ethics requirements.

The following commission members were in attendance: Sammy Corbett-Chairman, Cameron Boltes, Mark Gorges, Pete Kornegay, Brady Koury, Chuck Laughridge, Janet Rose, Rick Smith, and Alison Willis.

Agenda was approved by consensus.

Minutes from the February 2018 meeting were approved by consensus.

Chairman's Report

Marine Fisheries Commission Liaison Nancy Fish reviewed correspondence that had been sent and received by the commission since the last business meeting.

Commissioners were reminded of their ethics training requirements and their annual requirement to submit their Statement of Economic Interest form by April 15 to the State Board of Elections and Ethics Enforcement.

Commissioners were reminded of their 2018 meeting schedule:

Feb. 14-15

May 16-17

Aug. 15-16

Nov. 14-15

Director's Report

Division of Marine Fisheries Director Steve Murphey updated the commission on division activities occurring since the February 2018 business meeting, including:

• Upcoming changes to the division's stock status report indicating if the stock is overfished or not, if overfishing is occurring or not, or whether information is not sufficient to make such determinations using nationally accepted fishery management principles. Arbitrary terms such as "viable" and "concern" that are not measurable in fisheries science will no longer be used.

- Issues with the Observer Program regarding safety concerns and low observer coverage resulting from fishermen avoiding observers are challenging the division to stay in compliance with incidental take permits.
- Development of the fiscal note for proposed rules associated with the N.C. Wildlife Federation's petition for rulemaking is continuing, with a goal of submitting to the Office of State Budget and Management by July 1.

Beth Govoni, the division's chief budget officer, gave a presentation on Coastal Recreational Fishing License Fund disbursement procedures.

To view the presentation, go to:

http://portal.ncdenr.org/c/document_library/get_file?p_1_id=1169848&folderId=31843509&nam_e=DLFE-138210.pdf

The commission voted to request that the chairman appoint an advisory committee, consisting of the three recreational seats of the Marine Fisheries Commission and the science seat of the Marine Fisheries Commission, to provide advice on projects and grants issued using Coastal Recreational Fishing License trust funds.

Motion by Chuck Laughridge to request the chair appoint an advisory committee consisting of the three recreational seats of the Marine Fisheries Commission and the science seat of the Marine Fisheries Commission to provide advice on the projects and grants issued using Coastal Recreational Fishing License trust funds. This committee should be involved from the beginning to the end of the grant process. Second by Rick Smith.

Motion carries 8-0.

Next, the division's Deputy Director, Dee Lupton, presented information on the Land or Sell License in response to a request form the commission to determine if vessels with a homeport in North Carolina that take fish outside the territorial waters of the state can land or sell catch in the state through a purchase of a Land or Sell License.

The commission voted to send a letter to the governor and the legislature asking that they institute a Land or Sell Permit for North Carolina residents who hold federal permits that costs no more than a N.C. Standard Commercial Fishing License. The Land or Sell License is a commercial, non-transferable fishing license for vessels fishing beyond territorial waters (more than three miles in the ocean), allowing non-resident vessels not licensed in North Carolina the opportunity to come to port and land and sell their catch.

Motion by Chuck Laughridge to send a letter to the governor and the legislature asking that they institute a land or sell permit for NC residents who hold federal permits. We recommend that the amount not exceed the total cost of a standard commercial fishing license. Second by Cameron Boltes.

Motion carries 6-0 with 2 abstentions.

Lupton then reviewed information on how the division processes assignments and transfers of the Standard Commercial Fishing License, which is an annual license for commercial fishermen who harvest and sell fish, shrimp, crabs or any marine species, except for industrial menhaden and shellfish.

The commission requested the division begin rule development to clarify requirements for Standard Commercial Fishing License assignments and transfers and report back at its August meeting on the progress of this request. It was asked if the division could take immediate action on assignments and transfers, possibly not issuing transfers, while rules were being developed; Director Murphey said he would seek legal counsel on this request.

Stephanie McInerny, the head of the division's License and Statistics Section, reviewed several previous commission motions regarding recording additional landings information on trip tickets to capture target/bycatch species and to record catch kept for personal use. She explained how the division had added fields to the trip tickets to capture this data, but that legislative action would be needed to further facilitate mandatory reporting of catch kept for personal use or to require catch of target species and bycatch be sold at to the same dealer.

Stock Assessment 101

Laura Lee, the division's senior stock assessment scientist, gave a presentation on the fundamentals of the stock assessment process.

To view the presentation, go to:

 $\underline{\text{http://portal.ncdenr.org/c/document library/get file?p 1 id=} 1169848\&folderId=31843509\&nam e=DLFE-138213.pdf}$

NCFA vs. NCMFC Litigation

The commission went into closed session to consult with its counsel regarding ongoing litigation in the matter of NCFA vs. NCMFC.

Motion by Chuck Laughridge that the commission go into closed session pursuant to GS 143-318.11(a)(3) to consult with the commission's counsel regarding ongoing litigation in the matter of NCFA vs. NCMFC, et. al. Second by Pete Kornegay. Motion carries with no opposition.

Motion by Chuck Laughridge to go back into open session. Second by Alison Willis. Motion carries with no opposition.

Public Comment Period

The following individuals spoke:

Ron McCoy, a recreational fisherman from Hampstead, said the state had failed to manage fisheries in a sustainable manner based on his analysis of landings data. He talked about a slogan he saw in Alaska that read "No fish; no fishermen" and said that was something that needed to be kept in mind in North Carolina.

Bud Abbott, a recreational fisherman from Harkers Island, said the rhetoric of recreational vs commercial must stop, you are either pro resource or anti-resource. North Carolina is the last

state to allow inshore trawling and the Incidental Take Permit costs more to operate than the value of southern flounder. Abbott said there has been almost 60 years of studies and the bycatch to shrimp ratio is still 4-1. He urged the commission to think about the future of the stocks and stop kicking the can down the road.

Donald Willis, owner of Custom Marine Fabrication in New Bern, told the commission to do their job and that they are supposed to be for the resource. He said he is ready to take the hard cuts to make the resource better and the commission is either part of the solution or part of the problem.

Tim Hergenrader, a conservationist from Pamlico County, complimented the new division director, Steve Murphey, saying he feels a spirit of cooperation and that staff was more friendly. The pro-resource members of the commission finally have a clear majority, but they inherited a mess from former commissions that kicked the can down the road, and now crabs are overfished. He said the new stock status page online looks nice, but the website is still confusing.

Gary Ahlberg said he represented watermen, recreational fishermen and boaters in Masonboro Sound and he asked the commission to continue the moratorium on new shellfish leases from Bogue Sound south. He said proposed leases should not be posted in the winter when many people aren't there or out on the water to be aware of what was happening. He talked about riparian rights being usurped and the impact of leases on people who live on the water or use the water for recreation.

Sandi Fisher, from Wilmington, strongly opposes shellfish leases in the Myrtle Grove area of Masonboro Sound. She said the shoreline is under attack by oyster growers and that residents were not made aware of the proposed leases. She said this area is heavily used for boating and swimming and that PVC pipes stuck in the water in December and January was their only notice. There have been seven shellfish lease applications filed in the area that takes up about one-third of the sound. The leases cause continuous obstruction, she said, because of the floats at high tide.

Jan Willis, from Morehead City, said raising the Coastal Recreational Fishing License fee was briefly discussed at the commission's February 2018 meeting to match fishing license fees charged by the N.C. Wildlife Resources Commission. She opposes any fee increase because she feels license funds have being misused. She questioned funding approved by the commission for research that is unrelated to recreational fishing and for positions at the division. She feels mismanagement of license funds has led to reductions in creel limits and increases in minimum size limits and that the division has failed to improve the condition of coastal fish stocks since the inception of the license.

Peggy Heminway, who lives in The Tides community on Masonboro Sound, said there were three proposed shellfish leases in front the subdivision. She said there was little to no notice about the lease hearing and that she only learned about it two or three days in advance and she was out of state. There are a lot of water activities in her community including kayaking, water skiing, paddle boarding, sailing that will be impacted by the leases.

Bert Owens, from Beaufort, said he was speaking on behalf of the resource, and that catch has declined since the 1997 Fisheries Reform Act. He is concerned that blue crab numbers are going

down. He asked the commission to start saving some of the fish for the future. Owens said commercial fishermen will be out of business in 20 years if current trends continue.

Scott Burrell, with the N.C. Shellfish Grower's Association, said despite the commission's previous vote to temporarily stop issuing shellfish leases and accepting shellfish lease applications from Bogue Sound south, the division is still accepting shellfish applications. He understands the division received legal guidance that it cannot stop accepting applications. He knows no other industry that is so good for the environment because oysters filter and clean the water. He understands some homeowners are upset, but his leases are one-fourth mile from the nearest homes. He feels the commission's previous vote was overreaching and asked them to resume issuing leases.

Jay Styron, president of N.C. Shellfish Grower's Association and lease owner, asked the commission to lift moratorium on issuing leases and accepting applications. He said these are public trust waters and shellfish growers have rights too. Leases are not allowed to impede navigation and do not do any more than existing docks and piers. Also, oysters can help offset low water quality in the waters in the southern part of the state. He realizes we must be good stewards of the resource, but is a public resource, he advised.

David Sneed, executive director of the Coastal Conservation Association-NC, said the state has a lot of problems with its fisheries. Southern flounder is overfished, blue crab is overfished, and the division is spending millions of dollars on incidental take permits. He said there is a common thread in this – that states with progressive fisheries reform measures in pace still have thriving seafood industries.

Nivia Jacobs has a lot in the Patalanda subdivision off of Masonboro Sound that she bought so her family could enjoy the water, she feels that oyster farming will be bad for them and will interfere with their recreational activities.

Thomas Newber, owns a waterfront lot in the Patalanda subdivision that is approximately 400 feet wide. There are two proposed leases in front of his property and they are a hazard because they are too close to the waterway. He asked the commission to keep the moratorium on issuing leases and accepting lease applications in place.

The meeting recessed at 6:42 p.m.

May 17

The meeting reconvened at 8:30 a.m.

Atlantic States Marine Fisheries Commission

Chris Batsavage, the division's special assistant for councils and commissions, gave an overview of the April 30 – May 3, 2018 Atlantic States Marine Fisheries Commission meeting held in Arlington, Virginia.

Fishery Management Plan Update

Catherine Blum, the division's fishery management plan coordinator, updated the commission of the status of ongoing fishery management plans.

Blue Crab Stock Assessment

Division stock assessment scientist Dr. Yan Li presented the commission with the findings of the most recent quantitative stock assessment for the North Carolina blue crab stock. Peer reviewers accepted the sex-specific two-stage model as appropriate for management use, with results of the model indicating that the stock is overfished and overfishing is occurring.

To view the presentation, go to:

 $\underline{http://portal.ncdenr.org/c/document_library/get_file?p_l_id=1169848\&folderId=31843509\&name=DLFE-138212.pdf$

Shrimp Bycatch Reduction Industry Workgroup Results and Recommendations

Kevin Brown, the division's gear development specialist, gave a presentation on the fundamentals of shrimp trawling and bycatch reduction devices. He then reported on the findings of a three-year study between the division, NOAA Fisheries, N.C Sea Grant and the commercial shrimp trawl industry that identified four new gear configurations that reduce finfish bycatch by at least 40 percent.

The study came about from a management strategy adopted by the commission in February 2015 as part of the Shrimp Fishery Management Plan. The strategy called for three years of industry testing of various gear configurations to reduce bycatch to the greatest extent practicable, with a 40-percent target reduction goal. The testing was to be conducted by a stakeholder group consisting of fishermen, net and/or gear manufacturers and scientific and/or gear specialists.

To view the presentation, go to:

http://portal.ncdenr.org/c/document_library/get_file?p_1_id=1169848&folderId=31843509&nam_e=DLFE-138214.pdf

The commission voted to require fishermen to use one of the four gear combinations identified by the collaborative study that achieve at least 40 percent finfish bycatch. The new gear configurations will be required in all shrimp trawls, except skimmer trawls, used in inside waters where greater than 90-foot headrope length is allowed (Pamlico Sound and portions of Core Sound, Pamlico River and Neuse River). The division director will issue the requirement via proclamation to take effect July 1, 2019.

The four new gear configurations that achieved at least 40 percent finfish bycatch without significantly reducing shrimp catch were:

- Double federal fisheyes used with a 1 7/8-inch stretch mesh tailbag and a 4-inch spaced bar turtle excluder device
 - Achieved a 40.8-percent finfish bycatch reduction with a 1-percent increase in shrimp
- Double federal fisheyes used with a 1 3/4-inch stretch mesh tailbag and a 4-inch spaced bar turtle excluder device
 - Achieved a 57.2-percent finfish bycatch reduction with a 12.1-percent decrease in shrimp
- Double federal fisheyes used with a 1 3/4-inch stretch mesh tailbag and a 3-inch spaced bar turtle excluder devise

- Achieved a 44.9-percent finfish bycatch reduction with a 4.9-percent decrease in shrimp
- A single state fisheye used with a 1 3/4-inch stretch mesh tailbag and a Virgil Potter bycatch reduction device
 - Achieved a 44.3-percent finfish bycatch reduction with a 5.5-percent decrease in shrimp

The commission voted to continue the shrimp industry workgroup and explore funding options for more studies; to survey fishermen to determine what bycatch reduction devices the shrimp trawl industry currently uses; and to begin development of Amendment 2 to the Shrimp Fishery Management Plan. The commission's counsel reminded the commission that the Fishery Management Plan Guidelines stipulate the commission can approve or modify the fishery management plan schedule at its first meeting after July 1 of each year. The guidelines further specify the commission must request the Secretary of the Department of Environmental Quality approve any modification to the schedule occurring outside of this time frame.

The commission also instructed the division to acquire independent peer reviews of all reports on the three-year study, which the division is already in the process of doing, and re-evaluate the results following the peer reviews.

Motion by Pete Kornegay to direct the director of the Division of Marine Fisheries to acquire independent peer reviews (from peer reviewers who have had no association with the study whatsoever) of all reports on the three-year study which considered gear modifications to reduce bycatch in the North Carolina shrimp trawl fishery. Second by Cameron Boltes.

Motion carries 5-0 with 3 abstentions

Motion by Cameron Boltes to:

- Continue the NC shrimp industry workgroup and explore funding options
- Require shrimp trawls, with the exception of skimmer trawls, fishing the inside waters where greater than 90-foot headrope length is required to use a gear combination that has been studied and achieves at least a 40 percent finfish bycatch reduction (to be implemented July 1, 2019)
- Following peer review of workgroup study, re-evaluate results and continue bycatch reduction study with industry workgroup
- Task the division to implement a survey to gather information on current bycatch reduction devices used by the industry
- Begin development of Amendment 2 to the Shrimp Fishery Management Plan Second by Chuck Laughridge.

Motion carries 8-0.

Due to a shortage of time, Chairman Corbett advised the commission would not receive presentations on **Potential Solutions to Address Shellfish Lease Conflicts** and **Triploid Oysters.** He advised the commission to let the division know if they had any questions.

Region 4 Strategic Habitat Areas

At its November 2017 meeting, the commission voted to seek input from its advisory committees on nominations for Strategic Habitat Areas in Region 4 to be included in North Carolina's Coastal Habitat Protection Plan. Region 4 includes the Cape Fear River system and estuarine waters from Surf City through Brunswick County.

Casey Knight and Anne Deaton with the division's Habitat Enhancement Section reported that the commission's Southern and Habitat and Water Quality advisory committees recommended approval of the nominations for Region 4 Strategic Habitat Areas.

The commission then approved nominations for Region 4 Strategic Habitat Areas for inclusion in the North Carolina Coastal Habitat Protection Plan.

Motion by Janet Rose to approve the nominations for Region 4 Strategic Habitat Areas for inclusion in the Coastal Habitat Protection Plan. Second by Pete Kornegay. Motion carries 7-0 with one abstention.

Rulemaking

Catherine Blum, the division's rulemaking coordinator, provided the commission with an update on recent actions for the Periodic Review and Expiration of Existing Rules process and then asked the commission to approve the following proposed rules and associated fiscal analyses for Notice of Text for Rulemaking to readopt rules per G.S. 150B-21.3A, Periodic Review and Expiration of Existing Rules:

- Conforming Changes to For-Hire Licenses, 15A NCAC 03O .0112; and
- Readoption of a Portion of Rules in 15A NCAC 03I, 03J, 03K, 03L, 03M, 03O, and 03R.

Motion by Chuck Laughridge to approve the proposed rules and associated fiscal analyses for Notice of Text for Rulemaking to readopt rules per G.S. 150B-21.3A, Periodic Review and Expiration of Existing Rules for Conforming Changes to For-Hire Licenses. Second by Alison Willis.

Motion carries with no opposition.

Motion by Janet Rose to approve the proposed rules and associated fiscal analyses for Notice of Text for Rulemaking to readopt rules per G.S. 150B-21.3A, Periodic Review and Expiration of Existing Rules for Readoption of a Portion of Rules in 15A NCAC 03I, 03J, 03K, 03L, 03M, 03O, and 03R. Second by Rick Smith. Motion carries with no opposition.

The meeting adjourned at 1:04 p.m.

Chairman's Report





NORTH CAROLINA MARINE FISHERIES COMMISSION DEPARTMENT OF ENVIRONMENTAL QUALITY

COMMISSIONERS

ROY COOPER Governor

MICHAEL S. REGAN Secretary

SAMMY CORBETT Chairman CAMERON BOLTES
Washington
MARK GORGES
Wilmington
PETE KORNEGAY
Camden
BRAD KOURY
Burlington

CHUCK LAUGHRIDGE Harkers Island JANET ROSE Moyock RICK SMITH Greenville ALISON WILLIS Harkers Island

June 1, 2018

Dear Members of the North Carolina General Assembly:

At its May 16-17 business meeting in New Bern, the N.C. Marine Fisheries Commission voted to recommend the N.C. General Assembly institute a Land or Sell Permit for North Carolina residents who hold federal permits. The motion and vote are included below for your review.

Motion by Chuck Laughridge to send a letter to the governor and the legislature asking they institute a land or sell permit for N.C. residents who hold federal permits. We recommend that the amount not exceed the total cost of a Standard Commercial Fishing License. Second by Cameron Boltes.

Motion carries 6-0 with two abstentions.

Thank you for your consideration of this request; please feel free to contact me if I may be of assistance to you in this or any other matter.

Sincerely,

Sammy Corbett, Chairman

N.C. Marine Fisheries Commission

SJC:ndf

cc: NC Governor Roy Cooper

DEQ Secretary Michael Regan

DEQ Chief Deputy Secretary John Nicholson

DEQ Legislative Affairs Director Anderson Miller

DMF Director Steve Murphey



TOWN OF KILL DEVIL HILLS

Post Office Box 1719, 102 Town Hall Drive Kill Devil Hills, North Carolina 27948 252-449-5300 www.kdhnc.co

June 15, 2018

Mayor SHEILA F. DAVIES, PhD

> Mayor Pro Tem MIKE HOGAN

Commissioners TERRY L. GRAY BRANDI H. RHEUBOTTOM JOHN L. WINDLEY

> Town Manager DEBORA P. DIAZ

Assistant Town Manager SHAWN R. MURPHY

Town Clerk
MARY E. QUIDLEY

Town Attorney
CASEY C. VARNELL

North Carolina Marine Fisheries Commission c/o Nancy Fish N.C. Division of Marine Fisheries 3441 Arendell Street Morehead City, NC 28557

REF: Enclosed Resolution

Dear Commission Members,

At its June 11, 2018, meeting the Kill Devil Hills Board of Commissioners unanimously adopted the enclosed resolution opposing changes that could negatively affect our commercial fishing industry. The Kill Devil Hills Board of Commissioners has opposed the definition change in a continuing effort by adopting similar resolutions on January 31st and March 12th.

Kill Devil Hills is proud to support commercial fisherman who are a vital part of our state's history, heritage and culture and represent a crucial component of the economy for Dare County and other North Carolina coastal communities.

Sincerely,

Sheila F. Davies

Mayor

Town of Kill Devil Hills

her of Davis

C: Honorable Governor Roy Cooper
Honorable Senator Bill Cook
Honorable Representative Beverly Boswell
Dare County Governments
File



TOWN OF KILL DEVIL HILLS

Land Where Flight Began

RESOLUTION

OPPOSING NORTH CAROLINA HOUSE BILL 1063 THAT WOULD CHANGE THE DEFINITION OF COMMERCIAL FISHING

WHEREAS, the Town of Kill Devil Hills Board of Commissioners has steadfastly supported North Carolina's Commercial Fishers who are a vital part of our State's history, heritage, and culture and represent a crucial component of the economy for the Town of Kill Devil Hills and other coastal communities. According to the N.C. Division of Marine Fisheries, the sales impact of the harvesting and sale of commercial seafood is \$388,325,000 and the income impact of employed commercial fishers is \$166,066,000; and

WHEREAS, House Bill 1063 proposes to drastically raise the annual Commercial Fishing license fee and impose a burdensome requirement that commercial license holders demonstrate a minimum level of participation by documenting at least 1,000 pounds of seafood during any two out of five continuous years; and

WHEREAS, the introduction of House Bill 1063 is yet another attempt to redefine commercial fishing, which would be detrimental to North Carolina's Commercial Fishing Industry. In fact, earlier this year the North Carolina Marine Fisheries Commission embarked on an effort to change the criteria of what constitutes a commercial fishing operation by imposing, among other things, that license holders document annual seafood landings of at least 1,000 pounds; and

WHEREAS, the Town of Kill Devil Hills Board of Commissioners on January 31, 2018 and again on March 12, 2018 adopted unanimous resolutions opposing any change in the definition of commercial fishing based on the following - - -

- No other professional license issued by the State dictates a level of participation in order for its holders to qualify. Furthermore the definition of what constitutes commercial fishing in North Carolina has already been determined by the General Assembly and has long been established in section 113-168 of North Carolina's General Statutes.
- Imposing an arbitrary level of participation based on landings would unfairly have a
 harsh and punitive effect on coastal communities hit by hurricanes and other natural
 disasters where many commercial license holders, whose income generating season may
 have been entirely wiped out by a storm, are forced to temporarily divert their time and
 talents to other business enterprises.
- Those who engage in commercial fishing already suffer because of government overregulation that imposes severe quotas and unnecessary restrictions on fishing seasons, limits, and gear forcing many to take on additional jobs and engage in part-time businesses in order to support their families.

• In October of 2010, the Marine Fisheries Commission empaneled a Fishing License Review Taskforce, which examined in detail the requirements for holding a commercial fishing license and concluded that the definition contained in the General Statutes was adequate and therefore there was no real need to modify the definition of what constitutes a commercial fisher. In its Final Report the Taskforce clearly stated its recommendation that "no changes are needed to the existing definition;"

WHEREAS, House Bill 1063 is an attempt to fix something that is not broken and would jeopardize coastal communities whose economy and wellbeing are dependent upon both full-time and part-time commercial fishers who are small, independent businesses that work hard under adverse conditions to put fresh, healthy North Carolina seafood on American tables.

NOW THEREFORE BE IT RESOLVED that the Town of Kill Devil Hills Board of Commissioners reaffirms its unwavering commitment to North Carolina's commercial fishing industry by strongly opposing House Bill 1063, or any other action, that would change the definition of Commercial Fishing or cause harm to North Carolina's Working Watermen.

Adopted this the 11th day of June, 2018.

Sheila F. Davies, Ph.D.

Sheha I. Davies, I h.D.

ATTEST:

Town Clerk



NORTH CAROLINA MARINE FISHERIES COMMISSION DEPARTMENT OF ENVIRONMENTAL QUALITY

COMMISSIONERS

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PETE KORNEGAY
Camden
BRAD KOURY
Burlington

CHUCK LAUGHRIDGE
Harkers Island
JANET ROSE
Moyock
RICK SMITH
Greenville
ALISON WILLIS
Harkers Island

June 27, 2018

Michael Regan, Secretary N.C. Department of Environmental Quality 1601 Mail Service Center Raleigh, N.C. 27699-1601 Attention: Kathleen Lance

Dear Secretary Regan:

At its May 2018 meeting, the N.C. Marine Fisheries Commission passed a motion that included a provision to begin development of Amendment 2 to the Shrimp Fishery Management Plan. The commission's Fishery Management Plan Guidelines stipulate the commission shall approve or modify the fishery management plan schedule at its first meeting after July 1 of each year – this action generally occurs at the commission's August meeting. The guidelines further specify the Secretary of the Department of Environmental Quality must approve any modification to the schedule occurring outside of this time frame. Therefore, on behalf of the commission, I am respectfully requesting you approve this change in the Shrimp Fishery Management Plan development schedule.

Thank you for your consideration of this request; please feel free to contact me if I may be of assistance to you in this or any other matter.

Sincerely,

Sammy Corbett, Chairman

N.C. Marine Fisheries Commission

SJC:ndf

cc: DMF Director Steve Murphey



NORTH CAROLINA MARINE FISHERIES COMMISSION DEPARTMENT OF ENVIRONMENTAL QUALITY

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BRAD KOURY
Burlington

CHUCK LAUGHRIDGE Harkers Island JANET ROSE Moyock RICK SMITH Greenville ALISON WILLIS Harkers Island

July 18, 2018

Mr. Chris Medlin 2421 Hwy 210E Hampstead, NC 28443

Dear Chris:

Thank you for serving on the Marine Fisheries Commission's Southern Regional Advisory Committee. Advisory committees play a critical role in providing public input into management decisions that impact our fisheries resources.

While robust dialogue is an essential aspect in any deliberation and differing opinions are inevitable, it is imperative that committee members comport themselves in a professional manner and remain respectful of each other's opinions, as well as those of staff and the general public, even where there is disagreement. It is equally critical that each committee be able to operate effectively and without being subject to excessive hindrances or interferences preventing it from conducting its business. It is my understanding that your conduct at the July 11 meeting in Wilmington failed to adhere to these expectations and was disruptive to the point of impeding the committee's ability to effectively operate. Many members of the committee and staff present at the meeting found your behavior not only to be disrespectful, but also very concerning.

Given the circumstances, I have concluded that the most appropriate course of action is to remove you from the Southern Regional Advisory Committee, effective immediately. Should you wish to discuss this matter further, I encourage you to call me at 910-620-1804.

Sincerely,

Sammy Corbett, Chairman

N.C. Marine Fisheries Commission

cc: Chairman Fred Scharf, Southern Regional Advisory Committee Vice Chairman Pam Morris, Southern Regional Advisory Committee



Mailing Address: P.O. Box 27255 Raleigh, NC 27611-7255

Phone: (919) 814-0700 Fax: (919) 715-0135

KIM WESTBROOK STRACH
Executive Director

OCTOBER 26, 2017

TIPS FOR THE ONLINE ETHICS EDUCATION PROGRAM COMPATIBILITY ISSUES.

Please share this information with your Agency's covered employees and the members of your Boards and Commissions:

Computers with Windows 10

- Use Microsoft Edge & Microsoft Internet Explorer
- May also work with Foxfire
- Program does **not** work with Google Chrome

Mac Computers

• Use Firefox to open Online Education; if audio does not work, right click "No Audio" button and allow microphone so that audio works.

Computers with Windows 7 & 8

• Use Internet Explorer as your browser

If the above suggestions do not resolve the problem for the person, we recommend they use a computer at a public library, Community College or University as the program seems to run fine on these computers. **NOTE**: <u>individuals are required to complete the ethics education PRIOR to their education due date even if they encounter problems with the online program.</u>

INDIVIDUALS MUST FULLY COMPLETE THE ONLINE PROGRAM.

Many people are not fully completing the online ethics education program. If within a few minutes after you "completed" the online program you do not receive an emailed certificate of completion from us, you probably have **not** fully completed the program. If one fails to fully complete the online program, we cannot credit them with completing the required ethics education training.

To complete the program, when one comes to the slide that says "Congratulations," they MUST click on the box that says "complete program." Clicking on this box brings them to a form where they enter identifying information and "certify" that they have taken the complete program. After providing this information, they need to click on the "submit" button; we are then notified of their completion, their record is updated and they will be emailed a certificate of completion from us.

If you or any of your people have any questions, please contact us at (919) 814-3600.

Mailing Address: P.O. Box 27255 Raleigh, NC 27611-7255

Phone: (919) 733-7173 Fax: (919) 715-0135

KIM WESTBROOK STRACH
Executive Director

State Board of Elections and State Ethics Commission Merged into One New State Board

On June 1, 2017, a panel of superior court judges dismissed a lawsuit challenging the constitutionality of Session Law 2017-6, the <u>state law</u> creating the Bipartisan State Board of Elections and Ethics Enforcement (State Board). The new State Board merges the N.C. State Board of Elections and the N.C. State Ethics Commission and assumes duties formerly overseen by these two agencies, along with lobbying compliance carried out by the Secretary of State. Though parties to the lawsuit may seek additional review on appeal, for now, the consolidated State Board is the agency to enforce North Carolina's elections, ethics and lobbying laws.

Currently, the ethics staff and the election staff of the State Board are housed in different buildings. However, the goal is for all staff to be housed in one building by September 1, 2017. So, the ethics staff will be moving soon, but until then we will remain at our present location at 424 North Blount Street in Raleigh and our direct telephone number remains 919-814-3600.

Although the State Board is a new entity, the State Government Ethics Act (Ethics Act) remains in effect and applies to the same individuals as it did prior to this merger. The duties and obligations of the Ethics Act remain, including the SEI filing requirements and the Ethics Education training requirements. In addition, the duties of Agency Heads, including Board Chairs, and those of Ethics Liaisons remain the same.

If you have questions or need additional help, please feel free to contact us at 919.814.3600

Sue Lundberg, Education Attorney - Gretchen Aycock, SEI Attorney

2018 Meeting Planning Calendar

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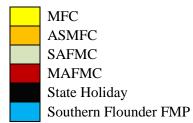
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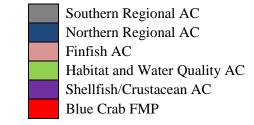
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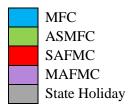
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Southern Regional AC
Northern Regional AC
Finfish AC
Habitat and Water Quality AC
Shellfish/Crustacean AC

Committee Reports





ROY COOPER
Governor
MICHAEL S. REGAN
Secretary
STEPHEN W. MURPHEY

June 22, 2018

MEMORANDUM

TO: Marine Fisheries Commission

FROM: Jason Rock, Co-lead Blue Crab Plan Development Team

Corrin Flora, Co-lead Blue Crab Plan Development Team

SUBJECT: Blue Crab Fishery Management Plan Advisory Committee Meeting

The Blue Crab Fishery Management Plan Advisory Committee met on June 13, 2018 at 6 p.m., at the NCDEQ Washington Regional Office located at 943 Washington Square Mall in Washington, NC. The following attended:

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

Bruggeworth, Thomas Roller, Elizabeth Cox

Staff: Catherine Blum, Corrin Flora, Kathy Rawls, Jason Rock, Katy West, Odell

Williams, Joey Williams

Public: Vic White, Mike Blanton, Jack Cox, Wayne Dunbar

Chairman Romano called the meeting to order at 6:02 p.m.

APPROVAL OF THE AGENDA AND MINUTES/PUBLIC COMMENT

Chairman Romano entertained a motion to approve the agenda. Marshall moved to approve the agenda as presented and Roller seconded the motion. The motion passed unanimously. Chairman Romano entertained a motion to approve the draft minutes from the May 2 meeting. Beasley moved to approve the minutes as presented and Marshall seconded the motion. The motion passed unanimously. No members of the public provided comment during the formal public comment period.

COMMISION UPDATE

Staff informed the committee the stock assessment was presented to the Marine Fisheries Commission at their May 2018 meeting. The commission had general questions on habitat impact on the stock and working with fishermen to acquire better data. Staff noted the stock assessment results are approved and we will be moving fully into the fishery management plan development process.

FISHERY MANAGEMENT PLAN PRESENTATION: DESCRIPTION OF THE FISHERY

Division staff (Rock) gave a presentation to the committee on the fishery management plan description of the fishery section. Discussion covered the picking house labor force, public awareness of imported vs local products, tracking sources of crabmeat, coastal recreational fishing license requirements, other state requirements, pot usage, and using pounds vs number of crabs. The committee agreed with the noted 2008 increase in crab trawl landings and inquired how may permitted operations were picking crab meat as opposed to those that only package product. Staff noted that questions on peelers and other state requirements will be covered during the development of issue papers. The committee asked that language be added to the section clarifying number of pots fished on a trip ticket does not necessarily equate to number of pots in the water. Additionally, clarification on the differences in crabbing among regions in the state was requested.

FISHERY MANAGEMENT PLAN PRESENTATION: BIOLOGICAL PROFILE

Division staff (Flora) gave a presentation to the committee on the fishery management plan biological profile section. Committee members discussed age and growth and the apparent difference in maximum age with reports from Virginia. The predatory impact of black drum was also noted.

For both sections presented the committee agreed they represented the proper level of content to engage and educate the various stakeholders. They also suggested the division should continue to update various historical datasets so that information would be readily available if needed for committee discussion or issue paper development.

FISHERY MANAGEMENT PLAN GOAL AND OBJECTIVES

Staff and committee members discussed the goals and objectives for the fishery management plan. The committee noted the need to make sure the environment and the stock are being looked at and additionally the need for public awareness of the fishery and the resource. The committee did not amend the presented goals and objectives.

SOLICITATION OF ISSUES

Staff opened up discussion to the committee for substantive issues related to the fishery. It was noted that minor rule changes or clarifications can be handled outside the plan in order to not

slow the process with minor issue papers. Those fixes can be addressed between plans as they come up if not changing management strategy of the plan. The committee discussed cull rings, water quality, zygotes, derelict gear, pot limits, and seasonal closures. Division staff informed the committee that the majority of their discussed topics would be covered in research recommendations rather than issue papers. The committee agreed the primary issue was measures to address overfishing as stated in Objective One. One member also wanted to increase opportunities to remove derelict pots.

OTHER BUSINESS

Staff and committee members discussed the upcoming meeting schedule. Next meeting is scheduled for Wednesday August 8, 2018 and meetings will switch to Thursday beginning in October.

The meeting adjourned at 8:06 p.m.

cc:	Catherine Blum	Dee Lupton	Patricia Smith
	Anne Deaton	Stephen Murphey	District Managers
	Nancy Fish	Phillip Reynolds	Committee Staff Members
	Christine Goebel	Jerry Schill	Marine Patrol Captains
	Jess Hawkins	Section Chiefs	-

MICHAEL S. REGAN

STEPHEN W. MURPHEY

MEMORANDUM

TO: Marine Fisheries Commission

Southern Flounder FMP Advisory Committee

FROM: Michael Loeffler, Co-lead Southern Flounder Plan Development Team

Anne Markwith, Co-lead Southern Flounder Plan Development Team

July 19, 2018 DATE:

SUBJECT: Southern Flounder FMP Advisory Committee Meeting

The Southern Flounder FMP Advisory Committee met on Wednesday, July 18, 2018 at 6 p.m. at the NCDEQ Washington Regional Office located at 943 Washington Square Mall in Washington, NC. The following attended:

Advisers: Fred Scharf (chairman), Michael Oppegaard, Tom Roller, Kurt Tressler, Robert

Lee Cox, Mary Ellon Ballance, Keneth Johnson, Joe Romano, James Williams.

Absent: **Bradley Styron**

Staff: Michael Loeffler, Charlton Godwin, Steve Murphey, Katy West, Kathy Rawls,

Trevor Scheffel, Lisa Hollensead, Donnie Twyne, Carter Witten

Public: Glenn Skinner, Greg Judy, Tim Ellis

Fred Scharf, serving as chair, called the meeting to order at 6:06 p.m.

APPROVAL OF AGENDA

Motion by Mary Ellon Balance to approve agenda, seconded by Joe Romano – motion was approved unanimously.

APPROVAL OF MINUTES

Motion by Joe Romano to approve meeting minutes from May 9, 2018, seconded by Kirk Tressler – motion was approved unanimously.

PUBLIC COMMENT

No members of the public provided comment.

PRESENTATION ON RESEARCH RECOMMENDATIONS

Division staff presented an overview on research needs from the 2013 Amendment 1 to the fishery management plan and the 2018 stock assessment and peer review panel. The need is for the advisory committee to provide recommendations critical to the southern flounder stock assessment. The Division will present these recommendations in a section of the FMP. The recommendations are ranked high, medium and low, as well as in categories such as habitat, by-catch, life history, etc. Some of the prior recommendations have been completed and some are in the process of completion.

A question was raised as to the recreational gig discards not being included in the discard research recommendations. Continued research into the recreational gig fishery will be included in Amendment 2 and is currently being worked on and in other research recommendations. There was group discussion on the recreational gig fishery. The data comes from a mail survey of CRFL holders that self-report about their use of gigs. Landings and effort from the gig fishery had increased, but now has leveled off. Mostly private recreational boats are gigging, not guides. Questions about identifying the different species of flounder were raised, as well as identifying flounder by area and fisheries. The committee indicated there is a need to make recreational identification of species a priority. Additional discussion occurred on where flounder are going, how far offshore, and how habitat changes with fish size. There was group discussion on sex ratio of the eggs produced and migration and size of male fish. The sex ratio of the eggs produced is assumed to be 50/50. Males tend to leave the first year and do not get as large as the females.

PRESENTATION ON THE MANAGEMENT HISTORY OF SOUTHERN FLOUNDER

Division staff presented the management history of southern flounder. The main management options implemented in North Carolina have been size limit changes, gear restrictions, creel limit changes, and seasonal and area closures. There was group discussion on what management options other states have implemented and how the regulation changes have or have not helped. It was noted that the stock must be given time to react to the regulatory changes that were implemented to know what worked. Even though the assessment was coastwide the group cannot worry about what the other states are doing, but should focus on what North Carolina can do. There was additional discussion on complying with the Atlantic States Marine Fisheries Commission (ASMFC) Summer Flounder, Black Sea Bass and Scup FMP regulations and conservation equivalency; as a committee it is necessary to know what the constraints are. Staff indicated that the equivalency evaluations are unknown; unless the committee comes up with options that would be less restrictive than those implemented through the ASMFC Summer Flounder, Black Sea Bass and Scup FMP, conservationally equivalent calculations would not be required.

OTHER QUESTIONS FROM THE ADVISORY COMMITTEE

Staff also discussed proclamation authority and what could and could not be done under that authority. The Director has proclamation authority for management of flounder, but that is only a part of the FMP process.

OTHER BUSINESS

Staff discussed the upcoming September meeting which will bring the first one or two sections of the FMP to the advisory committee. The November meeting will include a presentation on the updated stock assessment with data through 2017, including projections. At this meeting staff would also like to settle on the goals and objectives for Amendment 2 to present to the MFC at the February 2019 meeting.

The meeting adjourned at 8:18 p.m.

cc: John Batherson Ellie Davis Christine Goebel Laura Lee Stephen Murphey Phillip Reynolds Patricia Smith Committee Staff Marine Patrol Captains	Anne Deaton Jess Hawkins Dee Lupton Hardy Plyler Jerry Schill Jason Walker District Managers Section Chiefs	Nancy Fish David Hilton Shawn Maier Steve Poland Isaiah Smith Biological Supervisors Marine Fisheries Commission
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ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

STEPHEN W. MURPHEY

MEMORANDUM

TO: N.C. Marine Fisheries Commission

Northern Regional Advisory Committee

FROM: Katy West

Michael S. Loeffler

Division of Marine Fisheries, NCDEQ

DATE: July 12, 2018

SUBJECT: Northern Regional Advisory Committee Meeting

The Northern Regional Advisory Committee met at Thursday, July 12, 2018 at 6 p.m. at the NCDEQ Washington Regional Office located at 943 Washington Square Mall in Washington, NC. The following attended:

Advisors: Glenn Barnes, Michael Blanton, Steven Bradshaw, Keith Bruno, Jim Rice, Gilbert

Tripp, Sara Winslow

Absent: Everett Blake, Raymond Pugh Jr, Dell Newman, Sam Liverman Jr.

Staff: Katy West, Michael S. Loeffler, Dan Zapf, Tracey Bauer, Jason Rock, Kathy

Rawls, Brian Long, Steve Anthony

Public: None

Sara Winslow, serving as chair, called the meeting to order.

APPROVAL OF THE AGENDA

Steve Bradshaw moved to approve the agenda; Jim Rice seconded the motion. The motion passed unanimously.

APPROVAL OF MINUTES

Jim Rice moved to approve the October 24, 2017 minutes to provide the Northern AC's recommendation for the 2018 cobia season and management measures to the Marine

Fisheries Commission; Steve Bradshaw seconded the motion. The motion passed unanimously with the stipulation to remove duplicate text from pages one and two.

STRIPED MULLET STOCK ASSESSMENT UPDATE

Dan Zapf provided an overview of the striped mullet stock assessment conducted by Laura Lee who could not attend the meeting. This assessment was an update of the benchmark completed in 2013. This update includes data through 2017, and all data sources and framework used were the same as in the benchmark assessment completed in 2013. Landings were higher in the earlier part of the time series, and levelled out in 2002. Landings were very low in 2016 (below one million pounds) which hit the threshold. Three independent indices were used in the model and were standardized to account for environmental factors. Zapf described the sampling programs and the indices they produced for the two multispecies independent gill net surveys and the electroshocking sampling program which targets striped mullet. Most indices had little variability throughout the time series, but showed declines in striped mullet abundance in the most recent part of the sampling period.

The unit stock was determined as all waters of North Carolina. All data included were in the time series from 1994 to 2017, a birthdate of January 1 was noted for ageing, and both sexes were included in the model. Selectivity for the commercial fisheries was domed shaped, the gill nets surveys were asymptotic (flat top), and electroshocking sampling selectivity was freely estimated by the model.

Zapf continued the presentation with the model fit to the standardized data sets, including the program indices, average body weights, and lengths. Fishing mortality was variable from 1994 through 2002, consistent from 2003 through 2016 without much variability and then showed a slight increase in 2017. The predicted catch at age showed the commercial catch was dominated by age 1 and 2 fish. Recruitment was variable among years with a decrease in the mid-2000 period and then a slight increase in 2017. The female spawning stock biomass showed an increasing trend early in the time series and then a decline starting at the middle through the end of the time series.

To determine stock status, an $F_{25\%}$ threshold and $F_{35\%}$ target were chosen in the 2013 benchmark assessment and continued for the update. Based on the selected biological reference F values, threshold and target, overfishing was not occurring during the entire time series. There is a poor stock recruit relationship with the data and biomass estimates were unreliable so it could not be determined whether the stock was overfished. The most recent abundance indices are the lowest on record in the times series. Poor model fits to survey indices, average body weights, length frequencies, along with lack of contrast in the observed data suggests model results are more uncertain than the 2013 benchmark assessment.

A committee member asked what was causing the decline in striped mullet? Zapf said it was tough to identify from the results and there are potential environmental variables that could be affecting the population. Zapf added to the discussion that the commercial landings have changed quite a bit over time. In the mid-1990s there was a high demand for roe to the Asian

markets and fishermen were getting good prices for the roe. There was a lot of effort directed at striped mullet in that period when their value was high, but that market is no longer prevalent. Today fishermen are putting their effort into other fisheries, such as shrimp that have a much higher value. Considerable discussion on hurricanes impacts to the striped mullet landings in a year. From the graph of landings, an advisor noted there are similar declines from hurricanes shown but in 2016 the trigger was hit because the prior year's landings were already at a low point (absolute hurricane decline in 2016 was similar to other hurricane years). Advisors also noted the month of the hurricane would have a differential impact because of the temporal differences in out migration down the coast.

Further discussions occurred on the limitations with the model and how it is predicting a decrease in recruitment in recent years and a decline stock abundance, even with low mortality (F) values. There are no juvenile abundance surveys included in the model. The one change in the model update is that the fishing mortality estimates were based on ages 1 through 5 through 2017 and the previous model looked at ages 2 through 5. The age range was changed because the update data show ages 1 to 5 were present; Zapf noted the fishing mortality rates with this change in the model showed the same trends between the two.

ADAPTIVE MANAGEMENT FRAMEWORK FOR THE N.C. STRIPED MULLET STOCK

Tracey Bauer provided a presentation on the adaptive management framework for striped mullet. She provided the timeline of how we came to this stock assessment update and issue paper development. Bauer explained the commercial landings triggers and the years when hurricanes occurred. Landings were 15% below the lower landings threshold in 2016 that started this adaptive management review. Results of the updated stock assessment determined with data through 2017 that overfishing is not occurring and overfished could not be determined.

The initial benchmark assessment used data from 1994 - 2011 and adopted in Amendment 1 in 2015. No overfishing was occurring through 2011 and an overfished status was not determined. For the assessment update through 2017 only limited adjustments could be made to the model parameters. Because the fishery is a roe mullet there is concern recruitment overfishing could occur, which led to the implementation of the current adaptive management framework in Amendment 1.

Bauer went over the options for recommendations to the Marine Fisheries Commission and the positive and negative attributes for each option. Information was also provided on the potential reductions for various scenarios on seasonal closures. The commercial fishery has shifted in the time series to peak later (November) in the calendar year.

The division recommendations are to retain the FMP schedule review for 2020, no management action, and continue to monitor trends in the striped mullet fishery fishery-independent indices.

A committee member confirmed the division's recommendation of no management measures. Another committee member stated that essentially the model is saying that overfishing is not an issue, although there is a decline in the population, fishing is not influencing the population.

Some committee members stated the commercial fishery is not part of the decline and therefore measures should not be put in place to impact the fishermen. One committee member said that maybe in the next benchmark assessment we can try to get a better understanding on what happens to these fish in other areas of the coast. The division's recommendations also include annual updates and if the population shows further decline or if effort increases on these fish between now and the full review we could still come back to implement management measures.

PUBLIC COMMENT

No public were in attendance

<u>VOTE ON RECOMMENDATIONS TO THE MARINE FISHERIES COMMISSION ON</u> THE ADAPTIVE MANAGEMENT OF THE STRIPED MULLET FISHERY

Steve Bradshaw moved to accept the division's recommendations; Keith Bruno seconded the motion. The motion passed with a vote of 6 in favor and one oppose.

No further discussion occurred.

MARINE FISHERIES COMMISSION UPDATE

Katy West provided updates from the May 2018 MFC meeting in New Bern. The MFC addressed shrimp bycatch with a recommendation to require the use of four gears in otter trawls in areas where 90 foot or greater headrope length are allowed to go into effect July 1, 2019, support funding for Industry workgroup, characterize shrimp gears and open shrimp FMP. The Marine Fisheries Commission also supported the nomination for Region 4 and recommended the creation of a MFC CRFL committee. West updated the committee on the FMP schedules for southern founder and blue crab with advisory committees' input, also staff continue to work on data on striped bass for benchmark assessments in the Central/Southern and Albemarle/Roanoke systems. She updated the group on the spotted seatrout harvest re-opening in June, the cobia amendment through the Atlantic States Marine Fisheries Commission to establish regulations in federal waters, and there is a Commercial Resource Fund meeting on July 19, 2018 in Washington. The fiscal note for rulemaking from the shrimp petition was sent to the Office of State Budget and Management for their input and review. And the new calibration changes to recreational harvest statistics (MRIP) were posted on July 9th which will change recreational landings for many species.

PLAN AGENDA ITEMS FOR NEXT MEETING

The next meeting will be upon request of the Marine Fisheries Commission but will likely be in October 2018.

Gilbert Tripp moved to adjourn; Steve Bradshaw seconded the motion. The motion passed unanimously.

The meeting adjourned at 8:00 p.m.





ROY COOPER Governor MICHAEL S. REGAN Secretary

STEPHEN W. MURPHEY

MEMORANDUM

TO: N.C. Marine Fisheries Commission

Southern Regional Advisory Committee

FROM: Tina Moore

Chris Stewart

Division of Marine Fisheries, NCDEQ

DATE: July 12, 2018

SUBJECT: Southern Regional Advisory Committee Meeting

The Southern Regional Advisory Committee met at 6 p.m. on Wed. July 11, 2018 at the Wilmington Regional Office, 127 Cardinal Drive Extension, Wilmington. The following attended:

Advisors: Adam Tyler, Dr. Fred Scharf, Ron McCoy, Randy Proctor, Pam Morris, Ruth King, Christopher Hunt, Chris Medlin, Phillip Smith, Tom Smith

Absent: Charles Griffin

Staff: Chris Stewart, Tina Moore, Carter Witten, Dan Zapf, Tracey Bauer

Public: None

Dr. Fred Scharf called the meeting to order.

APPROVAL OF THE AGENDA

Randy Proctor moved to approve the agenda; Ruth King seconded the motion. The motion passed unanimously.

APPROVAL OF MINUTES

Adam Tyler moved to approve the April 4, 2018 minutes to provide input to the Marine Fisheries Commission to approve Strategic Habitat Area Region 4 Nominations; Ruth King seconded the motion. The motion passed unanimously.

STRIPED MULLET STOCK ASSESSMENT UPDATE

Dan Zapf provided an overview of the striped mullet stock assessment conducted by Laura Lee who could not attend the meeting. This assessment was an update of the benchmark completed in 2013. This update takes the data through 2017; all data sources and framework used were the same as in the benchmark assessment completed in 2013. Landings were higher in the earlier part of the time series, and leveled out in 2003. Landings were very low in 2016 (below one million pounds) which hit the threshold. Three independent indices were used in the model and were standardized to account for environmental factors as well. Zapf described the sampling programs and the indices they produced for the two multispecies independent gill net surveys and the electroshocking sampling program which targets striped mullet. Most indices had little variability throughout the time series, but showed declines in striped mullet abundance in the later part of the sampling period.

The unit stock was determined as all waters of North Carolina. All data included were in the time series from 1994 to 2017, a birthdate of January 1 was noted for ageing, and both sexes were included in the model. Selectivity for the commercial fisheries was domed shaped, the gill net surveys were asymptotic (flat top), and electroshocking sampling selectivity was freely estimated by the model.

Zapf continued the presentation with the model fit to the standardized data sets, including the program indices, average body weights, and lengths. Fishing mortality was variable from 1994 through 2002, consistent from 2003 through 2016 without much variability and then showed a slight increase in 2017. The predicted catch at age showed the commercial catch was dominated by age 1 and 2 fish. Recruitment was variable among years with a decrease in the mid-2000 period and then a slight increase in 2017. The female spawning stock biomass showed an increasing trend early in the time series and then a decline starting at the middle through the end of the time series.

To determine stock status, an $F_{25\%}$ threshold and $F_{35\%}$ target were chosen in the 2013 benchmark assessment and continued for the update. Based on the selected threshold and target, overfishing was not occurring during the entire time series. There is a poor stock recruit relationship with the data and biomass estimates were unreliable so it could not be determined whether the stock was overfished or not overfished. The most recent abundance indices are the lowest on record in the times series. Poor model fits to survey indices, average body weights, length frequencies, along with lack of contrast in the observed data suggests model results are unreliable.

A committee member asked what was causing the decline in striped mullet? Zapf said it was tough to identify from the results and there are potential environmental variables that could be affecting the population. Discussions continued on the effects of the removal of the females for the roe market on the population and the abundance of striped mullet seen in the past in some areas no longer present now. Some committee members said striped mullet were very abundant right now in Core Sound. Zapf added to the discussion that the commercial landings have changed quite a bit over time. In the mid-1990s there was a high demand for roe to the Asian markets and fishermen were getting good prices for the roe. There was a lot of effort directed at striped mullet in that period when their value was high, but that market is no longer prevalent.

Today fishermen are putting their effort into other fisheries, such as shrimp that have a much higher value. Also hurricanes impact the striped mullet landings in a year.

Further discussions occurred on the limitations with the model and how it is predicting a decrease in recruitment in recent years. There are no juvenile abundance surveys included in the model. The one change in the model update is that the fishing mortality estimates were based on ages 1 through 5 through 2017 and the previous model looked at ages 2 through 5. The age range was changed because the data looked more like ages 1 to 5 were present, and Zapf determined the fishing mortality rates with this change showed the same trends between the two.

A committee member stated, that there is either something happening to recruitment causing it to be poor or something else is not allowing the fish grow to become adults. Zapf said that we do not know a lot about their spawning since it occurs offshore and we are not sure whether those fish that leave the estuary return to the estuary. Discussion continued on the history of the run around gill net fishery and effort currently occurring on striped mullet. Zapf added that ocean nearshore landings also from the stop net fishery are not as high as they were in the past. The ocean stop net fishery is heavily restricted and effort has declined considerably.

More discussion occurred on whether any of the surveys track with the landings. Zapf explained the specific trends for each survey and whether they tracked with the landings, and other factors that can affect the catch rates in these sampling programs.

ADAPTIVE MANAGEMENT FRAMEWORK FOR THE N.C. STRIPED MULLET STOCK

Tracey Bauer provided a presentation on the adaptive management framework for striped mullet. She provided the timeline of how we came to this stock assessment update and issue paper development. Bauer explained the commercial landings triggers and the years when hurricanes occurred. Landings were 15% below the lower landings threshold in 2016 that started this adaptive management review. Results of the updated stock assessment determined with data through 2017 that overfishing is not occurring and the overfished status could not be determined.

The initial benchmark assessment used data from 1994 – 2011 and was adopted in Amendment 1 in 2015. No overfishing was occurring through 2011 and an overfished status was not determined. For the assessment update through 2017 only limited adjustments could be made to the model parameters. Because the fishery is a roe mullet fishery, data will be reviewed annually and looked at closely.

Bauer went over the options for recommendations to the Marine Fisheries Commission and the positive and negative attributes for each option. Information was also provided on the potential reductions for various scenarios on seasonal closures. The commercial fishery has shifted in the time series to peak later in the calendar year.

The division recommendations are to retain the FMP schedule review for 2020, no management action, and continue to monitor trends in the striped mullet fishery and fishery-independent indices.

A committee member confirmed the division's recommendation of no management measures. Another committee member stated that essentially the model is saying that overfishing is not an issue, although there is a decline in the population, fishing is not having an effect on the population. One member asked if the assessment just included fish from North Carolina, and asked if fish were going or coming to other states? Zapf explained there is little commercial effort for striped mullet in South Carolina and Georgia, and there is a significant fishery in Florida. The Florida fishery is both a bait and roe fishery. A committee member also asked if there was any survey data from other states, particularly Florida. It is unknown how much movement occurs between states and whether striped mullet leaving the estuaries ever return. Tagging on striped mullet occurred in North Carolina in the early 2000s from the Neuse River and most returns came from the sounds and showed some southward migration. We don't know if the fish remain in the ocean or return when they go out to spawn.

Some committee members stated the commercial fishery is not part of the decline and therefore measures should not be put in place to impact the fishermen. One committee member said that maybe in the next benchmark assessment we can try to get a better understanding on what happens to these fish in other areas of the coast. The division's recommendations also include annual updates and if the population shows further decline or if effort increases on these fish between now and the full review we could still come back to implement management measures.

PUBLIC COMMENT

No public were in attendance

<u>VOTE ON RECOMMENDATIONS TO THE MARINE FISHERIES COMMISSION ON</u> THE ADAPTIVE MANAGEMENT OF THE STRIPED MULLET FISHERY

Pam Morris moved to accept the division's recommendations; Ruth King seconded the motion. The motion passed with a vote of 8 in favor and one abstention. One member left the meeting at 7:30 p.m. before the vote.

One committee member updated the committee that the Marine Fisheries Commission (MFC) has been asking about ways to collect better information on effort coupled with landings data. Because there are so many things that affect effort (i.e., environmental factors, shifts to other fisheries), any new information will help with understandings the commercial and recreational landings. Zapf stated an initial data analysis was brought to the MFC looking and value and effort on the striped mullet fisheries, which is available on the website under the MFC webpage February 2018 meeting.

MARINE FISHERIES COMMISSION UPDATE

Chris Stewart provided updates from the May 2018 MFC meeting in New Bern. The MFC addressed shrimp bycatch with a recommendation to require the use of four gears in otter trawls in areas where 90 foot or greater headrope length are allowed to go into effect July 1, 2019, support funding for Industry workgroup, characterize shrimp gears and open shrimp FMP. The Marine Fisheries Commission also supported the nomination for Region 4 and recommended the creation of a MFC CRFL committee. Stewart updated the committee on the FMP schedules for

southern founder and blue crab with advisory committees' input, also staff continue to work on data on striped bass for benchmark assessments in the Central/Southern and Albemarle/Roanoke systems. He updated the group on the spotted seatrout harvest re-opening in June, the cobia amendment through the Atlantic States Marine Fisheries Commission to establish regulations in federal waters, and there is a Commercial Resource Fund meeting on July 19, 2018 in Washington The petition for rulemaking was sent to the Office of State Budget and Management for their input and review. And the new calibration changes to recreational harvest statistics (MRIP) were posted on July 9th which will change recreational landings for many species.

PLAN AGENDA ITEMS FOR NEXT MEETING

The next meeting will be upon request of the Marine Fisheries Commission, and is tentatively scheduled on October 3, 2018 in Morehead City at the Central District Office.

Pam Morris moved to adjourn; Tom Smith seconded the motion. The motion passed unanimously.

The meeting adjourned at 8:00 p.m.

cc:	John Batherson Ellie Davis Christine Goebel Dee Lupton Steve Poland Patricia Smith Committee Staff	Chris Batsavage Anne Deaton Jess Hawkins Shawn Maier Phillip Reynolds Jason Walker District Managers	Catherine Blum Nancy Fish Laura Lee Stephen Murphey Jerry Schill Biological Supervisors Marine Fishering Commission
	Patricia Smith Committee Staff Marine Patrol Captains	District Managers Section Chiefs	Marine Fisheries Commission



ROY COOPER
Governor
MICHAEL S. REGAN
Secretary
STEPHEN W. MURPHEY

MEMORANDUM

TO: N.C. Marine Fisheries Commission

Finfish Advisory Committee

FROM: Lee Paramore

Kathy Rawls

Division of Marine Fisheries, NCDEQ

DATE: July 17, 2018

SUBJECT: Finfish Advisory Committee Meeting

The Finfish Advisory Committee met at 6 p.m. on Tue. July 10, 2018 at the Morehead City Central District Office, at 5285 Highway 70 W, Morehead City. The following attended:

Advisors: Thomas Brewer, Jeff Buckel, David Clem, Sammy Corbett, Brent Fulcher, Bradley Styron, Ken Siegler, Sara Winslow

Absent: Cameron Boltes, Melvin Shephard, Scott Whitley

Staff: Lee Paramore, Kathy Rawls, Carter Witten, Dan Zapf, Tracey Bauer, Catherine Blum, Steve Murphey, Katy West, Tina Moore, Jason Rock, Amanda Tong, Nancy Fish

Public: Glenn Skinner, Kathy Fulcher

Chairman Corbett called the meeting to order.

APPROVAL OF THE AGENDA

Chairman Corbett asked for any changes to agenda and hearing none, he asked for approval by consensus. Agenda was approved as written.

APPROVAL OF MINUTES

Chairman Corbett asked for any changes to October 26, 2017 minutes and hearing none, he asked for approval by consensus. October 26, 2017 minutes were approved as written.

STRIPED MULLET STOCK ASSESSMENT UPDATE

Dan Zapf provided an overview of the striped mullet stock assessment conducted by Laura Lee who could not attend the meeting. This assessment was an update of the benchmark completed in 2013. This update takes the data through 2017; all data sources and framework used were the same as in the benchmark assessment completed in 2013. Landings were higher in the earlier part of the time series, and levelled out in 2003. Landings were very low in 2016 (below one million pounds) which hit the threshold. Three independent indices were used in the model and were standardized to account for environmental factors as well. Zapf described the sampling programs and the indices they produced for the two multispecies independent gill net surveys and the electroshocking sampling program which targets striped mullet. Most indices had little variability throughout the time series, but showed declines in striped mullet abundance in the later part of the sampling period.

The unit stock was determined as all waters of North Carolina. All data included were in the time series from 1994 to 2017, a birthdate of January 1 was noted for ageing, and both sexes were included in the model. Selectivity for the commercial fisheries was domed shaped, the gill nets surveys were asymptotic (flat top), and electroshocking sampling selectivity was freely estimated by the model.

Zapf continued the presentation with the model fit to the standardized data sets, including the program indices, average body weights, and lengths. Fishing mortality was variable from 1994 through 2002, consistent from 2003 through 2016 without much variability and then showed a slight increase in 2017. The predicted catch at age showed the commercial catch was dominated by age 1 and 2 fish. Recruitment was variable among years with a decrease in the mid-2000 period and then a slight increase in 2017. The female spawning stock biomass showed an increasing trend early in the time series and then a decline starting at the middle through the end of the time series.

To determine stock status, an $F_{25\%}$ threshold and $F_{35\%}$ target were chosen in the 2013 benchmark assessment and continued for the update. Based on the selected threshold and target, overfishing was not occurring during the entire time series. There is a poor stock recruit relationship with the data and biomass estimates were unreliable so it could not be determined whether the stock was overfished or not overfished. The most recent abundance indices are the lowest on record in the times series. Poor model fits to survey indices, average body weights, length frequencies, along with lack of contrast in the observed data suggests model results are unreliable.

A committee member asked what was causing the large spikes in the Program 135 striped bass independent gill net survey in Albemarle Sound in 2014 and 2015. Dan Zapf noted that the index values in 2014 and 2015 had an associated large amount of error around the mean. He further explained that this likely indicated that the larger indices in those years were being driven by a few large catches. It was further noted that the model was not fitting these spikes, in part because of the large amount of error.

A committee member asked if the indices had been standardized. Dan Zapf explained the surveys used were standardized based on the influence of area, season and environmental factors that were available.

A committee member expounded on the low landings particularly in 2016. He noted several factors are in play each year including very good shrimping which shifts effort away from the mullet fishery, poor mullet prices from market conditions and impacts of hurricanes. Also, it was added that very good shrimping in 2017 likely impacted participation in the mullet fishery as well. Dan Zapf acknowledged these factors but also noted that hurricane years were not uncommon and historically have not caused landings below the threshold.

A committee member questioned if effort in the fishery had been down. Dan Zapf explained that effort data had recently been presented to the Marine Fisheries Commission in February. Some decline was seen in trips landing striped mullet and also trips that caught striped mullet were catching less. Committee member noted that in the last three year's effort and participants has been curtailed by shrimping and many of the best fisherman have not been active in fishery.

A committee member asked why the F values in current assessment have shifted so significantly from those reported in like years from the benchmark assessment. Dan Zapf explained that while the benchmark calculated F based on ages 2-5, current assessment uses F based on ages 1-5 because age-1 is a significant portion of the catch.

A committee member noted that selectivity from gillnet surveys were asymptotic while the industry gill net selectivity was dome shaped. It was questioned why an asymptotic shape was assumed for the surveys when gill nets are known to be dome shaped. Dan Zapf explained that this is what was assumed in the 2013 benchmark assessment so that is what had to be used for the update. He noted than an updated benchmark would certainly consider that change in the future.

ADAPTIVE MANAGEMENT FRAMEWORK FOR THE N.C. STRIPED MULLET STOCK

Tracey Bauer provided a presentation on the adaptive management framework for striped mullet. She provided the timeline of how we came to this stock assessment update and issue paper development. Bauer explained the commercial landings triggers and the years when hurricanes occurred. Landings were 15% below the lower landings threshold in 2016 that started this adaptive management review. Results of the updated stock assessment determined with data through 2017 that overfishing is not occurring and the overfished status could not be determined.

The initial benchmark assessment used data from 1994 – 2011 and was adopted in Amendment 1 in 2015. No overfishing was occurring through 2011 and an overfished status was not determined. For the assessment update through 2017 only limited adjustments could be made to the model parameters. Because the fishery is a roe mullet fishery and data will be reviewed annually and looked at closely.

Bauer went over the options for recommendations to the Marine Fisheries Commission and the positive and negative attributes for each option. Information was also provided on the potential

reductions for various scenarios on seasonal closures. The commercial fishery has shifted in the time series to peak later in the calendar year.

The division recommendations are to retain the FMP schedule review for 2020, no management action, and continue to monitor trends in the striped mullet fishery and fishery-independent indices.

Committee members stated that while the roe mullet fishery was strong beginning in the mid to late 1980's, since around 1998 the Japanese market that once supported our roe mullet fishery has fallen off, corresponding to when we have seen reductions in commercial landings. The market has never fully recovered in terms of the value of roe mullet fishery. It was further noted that the low landings in recent years have been exacerbated by hurricanes and good shrimping years.

The committee commended the division for taking into account environmental factors in standardizing the indices.

A committee member also asked about migration of striped mullet. Staff noted that fish move offshore to spawn and that tagging data indicate a southern movement. Committee members agreed that they leave in the fall, migrate south and are harvested by southern states. In the past, fishermen have typically followed fish as far south as Florida.

Sara Winslow moved to support the DMF recommendation of no action and retain the FMP schedule of a 2020 review and in the interim, continue to monitor trends in fishery and indices.

Discussion was halted to take public comment.

PUBLIC COMMENT

Glenn Skinner provided public comment. He noted that the committee discussion had covered most of his concerns. He emphasized the importance of salinity on the electroshocking survey that the division conducts. Fish tend to move upriver when salinity is higher. He wanted to make sure that the data used in the assessment accounts for variability in sampling due to environmental changes. He highly recommended that fishery be monitored instead of doing any management immediately. He thought we are beginning to see an uptick in the abundance of fish this year and would like to see if fishery shows some rebound.

The committee discussed that the stock may not be North Carolina specific, and stated that next benchmark assessment should probably consider if the model needs to be more regionally based similar to the change that was made for southern flounder.

VOTE ON RECOMMENDATIONS TO THE MARINE FISHERIES COMMISSION ON THE ADAPTIVE MANAGEMENT OF THE STRIPED MULLET FISHERY

Motion as stated by Sara was seconded by Bradley Styron. Motion passed unanimous.



MARINE FISHERIES COMMISSION UPDATE

Lee Paramore provided updates from the May 2018 MFC meeting in New Bern. The MFC addressed shrimp bycatch with a recommendation to require the use of four gears in otter trawls in areas where 90 foot or greater headrope length are allowed to go into effect July 1, 2019, support funding for Industry workgroup, characterize shrimp gears and open shrimp FMP. The committee was updated on the FMP progress for southern founder and estuarine striped bass. He updated the group on the spotted seatrout harvest re-opening in June, the cobia amendment through the Atlantic States Marine Fisheries Commission to establish regulations in federal waters, and there is a Commercial Resource Fund meeting on July 19, 2018 in Washington The petition for rulemaking was sent to the Office of State Budget and Management for their input and review. And the new calibration changes to recreational harvest statistics (MRIP) were posted on July 9th which will change recreational landings for many species.

PLAN AGENDA ITEMS FOR NEXT MEETING

The next meeting will be upon request of the Marine Fisheries Commission, and is tentatively scheduled on October 17, 2018 in Washington at the Washington Regional Office.

A committee member noted that a federal aquaculture bill is being proposed in congress that will impact aquaculture in federal waters and may impact state waters. He noted that this bill is not being funneled through regional councils and their established guidelines. Wanted division to be aware. It was noted that the Director is aware and had sent a letter on this issue to the SAFMC.

Meeting was adjourned by the chairman.

The meeting adjourned at 7:02 p.m.



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

STEPHEN W. MURPHEY

MEMORANDUM

TO: N.C. Marine Fisheries Commission

N.C. Marine Fisheries Commission's Commercial Fishing Resource Fund Committee

FROM: Nancy Fish, Marine Fisheries Commission Liaison

Division of Marine Fisheries, NCDEQ

DATE: July 26, 2018

SUBJECT: Marine Fisheries Commission's Commercial Fishing Resource Fund Committee Meeting

The Marine Fisheries Commission's Commercial Fishing Resource Fund Committee met at 2 p.m. on Thursday, July 26, 2018 at the Division of Marine Fisheries Headquarters, 3441 Arendell Street, Morehead City. The following attended:

Committee Members: Sammy Corbett – chair, Allison Willis and Janet Rose (all committee members participated via phone)

Staff: Dee Lupton, Nancy Fish, Beth Govoni, Wayne Johannessen and Patricia Smith

Public: Mike Shutak, Carteret News Times

Chairman Sammy Corbett called the meeting to order.

APPROVAL OF THE AGENDA

Alison Willis moved to approve the meeting agenda; Janet Rose seconded the motion. The motion passed unanimously.

APPROVAL OF MINUTES

Janet Rose moved to approve the Feb. 1, 2018 minutes; Alison Willis seconded the motion. The motion passed unanimously.

PUBLIC COMMENT

The committee was provided written comment from Chris McCaffity regarding proposed uses for fund expenditures. No public wished to speak at the meeting.



MEMORANDUM OF UNERSTANDING BETWEEN THE N.C. MARINE FISHERIES COMMISSION AND THE FUNDING COMMITTEE FOR THE N.C. COMMERCIAL FISHING RESOURCE FUND

The committee approved a Memorandum of Understanding providing procedures for agreeing to and authorizing disbursement of certain funds from the N.C. Commercial Fishing Resource Fund. The Memorandum of Understanding is between the commission and a Funding Committee comprised of members from various commercial fishing associations. The Funding Committee had previously met on July 19, 2018 and approved the Memorandum of Understanding.

Alison Willis moved to approve the Memorandum of Understanding; Janet Rose seconded the motion. The motion passed unanimously.

ADMINISTRATIVE PROCEDURES FOR FUNDING FROM THE N.C. COMMERCIAL FISHING RESOURCE FUND AND STRATEGIC PLAN FOR THE N.C. COMMERCIAL FISHING RESOURCE FUND

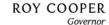
Committee members also approved associated Administrative Procedures for funding from the N.C. Commercial Fishing Resource Fund and the Strategic Plan for the fund. The Funding Committee had also approved these documents at its July 19 meeting.

Alison Willis moved to approve the Administrative Procedures and Strategic Plan for the N.C. Commercial Fishing Resource Fund; Janet Rose seconded the motion. The motion passed unanimously.

OTHER BUSINESS

The committee was provided draft scopes of work for potential projects discussed by the Funding Committee at its July 19 meeting. The committee wanted time to evaluate these documents and discussed the need to meet at a future date, possibly in September, to begin deliberating about the types of proposals it would like to consider for funding.

The meeting adjourned at 2:12 p.m.





MICHAEL S. REGAN

STEPHEN W. MURPHEY

Director

MEMORANDUM

TO: N.C. Commercial Fishing Resource Funding Committee

FROM: Wayne Johannessen, Staff lead for the Commercial Fishing Resource Fund

Division of Marine Fisheries, NCDEQ

DATE: July 19, 2018

SUBJECT: Commercial Fishing Resource Funding Committee Meeting

The Commercial Fishing Resource Funding Committee met at 1:00 p.m. on Thursday, July 19, 2018 at the N.C. Department of Environmental Quality Washington Regional Office. The following attended:

Funding Committee: Glenn Skinner, Steve Weeks, Doug Todd, Gilbert Baccus

Absent: Ernie Doshier, Andrew Berry

Commissioners: Janet Rose

DMF Staff – Dee Lupton, Beth Govoni, Wayne Johannessen, Katy West

Public: None

APPROVAL OF AGENDA AND MINUTES

Glenn Skinner, serving as Chair in the absence of Chairman Doshier, called the meeting to order and gave a reminder of the duty of notification of conflict of interest.

Steve Weeks made a motion to approve the meeting agenda. Doug Todd seconded the motion. The motion carried unanimously.

Doug Todd made a motion to approve the February 1, 2018 meeting minutes. Steve Weeks seconded the motion. The motion carried unanimously.

PUBLIC COMMENT

None offered

Wayne Johannessen then read for the record public comment received by Mr. Chris McCaffity via email.

July 2018 Commercial Fishing Resource Funding Committee Meeting Public Comments

Please apply any extra money in the Commercial Fishing Resource Fund toward stocking native species and creating Hatchery Supported Quotas. River Herring and Striped Bass would be two good species to start with. Please also consider setting up a website where license holders can debate and vote on how our license fees are used.

I am happy to answer any questions and/or go into greater detail.

Thank you,

Chris McCaffity

Mr. Skinner opened discussion in regard to approval of the Memorandum of Understanding (MOU). All in attendance agreed it was acceptable as written.

Doug Todd made a motion to approve the Memorandum of Understanding.

Mr. Weeks requested discussion about the Administrative Procedures for Funding and the Strategic Plan documents at the same time since they are referenced in the MOU.

Mr. Todd tabled his motion for further discussion.

In response to a question by Mr. Weeks clarification was given by Mr. Johannessen that the Administrative Procedures for Funding document was mostly based on the Statute (§ 113-173.1) as well as State contracting and accounting procedures to issue a request for proposal or contract. Clarification was also given by Deputy Director Lupton that the updated version of the Strategic Plan removed items that were repetitive with the MOU and ensured it was focused on the purpose of the fund which is "development of sustainable commercial fishing." Mr. Weeks inquired about modifications to the documents. Deputy Director Lupton explained the Funding Committee may modify the Administrative Procedures for Funding and the Strategic Plan. If they want to make changes to the MOU it would require vote/approve by the Funding Committee and the Marine Fisheries Commission (MFC) Commercial Fishing Resource Funding Committee. Mr. Johannessen pointed out section 7 of the MOU outlines the process for modifications to the MOU.

Doug Todd re-offered his motion to approve the Memorandum of Understanding along with the Administrative Procedures for Funding and the Strategic Plan. Steve Weeks seconded the motion. The motion carried unanimously.

Deputy Director Lupton advised that the next step will be to present the MOU to the MFC Commercial Fishing Resource Funding Committee for approval and signature by Chairman Corbett at the next Marine Fisheries Commission meeting August 15-16. Then the document will be sent to Chairman Doshier for signature.

Additional Items

Committee began discussion on funding opportunities. Katy West offered copies of the NC Division of Marine Fisheries Research Priorities for 2018 for information as to needs of the Division related to species in the Fisheries Management Plans (FMP) process.

Discussion began regarding the scopes of work requested by the Funding Committee at the February meeting.

1. Disease and Pathology Research and Monitoring

Designate funds, on an annual basis, for the division to collect, prepare, and send samples to pathology facility for analysis.

2. Sustainable Commercial Fishing Economic Impact Study

Funds would be used to hire contractor to collect data on expenses incurred by commercial fishermen and costs throughout the supply chain including dealer costs, processing and transporting costs, and overhead. Funds would also be used to conduct an economic analysis and impact study of the commercial fishing industry through the entire supply chain to the local, state, and national levels to provide the information necessary to maximize their overall economic benefits of sustainable commercial fishing in North Carolina. Mr. Weeks requested that this scope of work be used to develop a request for proposal by the state economist that could then be reviewed by an independent economist and the Funding Committee before being released to the public. The division would collect the proposals and forward them to the Funding Committee and MFC Commercial Fishing Resource Funding Committee for review and approval. The division would then handle the process of establishing a contract for the project.

3. Commercial Fishing Gear Research

Designate funds, on an annual basis, to support the division's commercial gear research program. The Funding Committee requested that the division develop a detailed project proposal outlining how the funds would be used.

4. Sustainable Commercial Fishing Public Relations

Develop a request for proposal for a public relations agency to develop a plan on North Carolina's sustainable fishing industry to help educate the fishing and general public and implement the plan. This scope of work would be used to develop a request for proposal that would be reviewed by the Funding Committee before being released to the public. The division would collect the proposals and forward them to the Funding Committee and MFC Commercial Fishing Resource Funding Committee for review and approval. The Division would then handle the process of establishing a contract for the project.

There was discussion about forwarding the scopes of work to the MFC Commercial Fishing Resource Funding Committee for review at their next meeting.

A fifth project was introduced by Deputy Director Lupton.

5. Commercial Fishery Statistics

The division uses several funding sources to fund the Trip Ticket Program, including commercial fishing receipts and federal grants. Current receipts and federal grants can no longer afford staff who are dedicated to the Trip Ticket Program. The division will develop a full proposal with funding needs.

Mr. Baccus expressed concern about the accuracy of landings and Deputy Director Lupton stressed the importance of the need to continue the funding to ensure accurate data.

Doug Todd offered a motion to forward the four scopes of work and to also include the trip ticket program requested by the division to the MFC Commercial Fishing Resource Funding Committee for review and approval. Steve Weeks seconded the motion adding the comment that the Committee will approve individual projects as full proposal are received and reviewed. Motion carried unanimously.

The Funding Committee would like to plan the next meeting for September to review the detailed project proposals related to the five scopes of work approved at this meeting. Mr. Johannessen inquired about best months for meeting of both committees since the MOU specifies at least two meetings a year. Members indicated the slowest time for their industry is approximately December through March.

Motion to adjourn by Mr. Baccus. Mr. Todd seconded. Motion carried unanimously.

Meeting adjourned at 2:10 pm.

Director's Report





ROY COOPER

MICHAEL S. REGAN

STEPHEN W. MURPHEY

Director

August 3, 2018

MEMORANDUM

TO: Marine Fisheries Commission

FROM: Dee Lupton, Deputy Director

SUBJECT: Standard or Retired Standard Commercial Fishing License Transfers and

Assignments

The Marine Fisheries Commission ("Commission") asked the Division of Marine Fisheries ("Division") to consider solutions to address Standard Commercial Fishing License ("SCFL") transfer issues raised by the Commission at its May 2018 meeting. Of interest were third-party transfers. Staff implemented additional tracking measures and looked closely at the language and history of the statute and rule which authorize SCFL transfers. Staff also conferred with Department of Environmental Quality ("DEQ") and Commission legal counsel, as well as DEQ leadership.

After careful review, the Division recommends the following actions:

- 1. Issue a press release to inform the public of unauthorized license transfers including third-party internet advertised transfers and business to business transfers. The release would also provide information on the Eligibility Board process, and reaffirm the five specific statutory conditions under which a licensee may request that the Division authorize a SCFL transfer:
 - a. To an immediate family member;
 - b. To an Administrator or executor of deceased licensee's estate:
 - c. From Administrator or executor of deceased licensee to a surviving immediate family member of the deceased licensee;
 - d. From surviving member of deceased licensee to a third-party purchaser of the deceased licensee's vessel; or
 - e. From a licensee who is retiring from commercial fishing to a third-party purchaser of the licensee's fishing vessel.
- 2. Continue enhanced tracking to document reasons for 'other' sales with the license database.
- 3. Create a new license certification form that all licensee's sign to certify that the information and supporting documentation submitted with the transfer application is true

- and correct, and that the licensee acknowledges that it is unlawful for a person to accept transfer of a license for which they are ineligible.
- 4. Start Commission rule-making to add grandparents, grandchildren, and legal guardians to the "immediate family" definition (to match the eligibility rule).
- 5. Research business to business transactions and suggest rules that facilitate limited business entity related license transfers, where applicable.

In addition, the Commission requested that the Division provide the previous assignment rule language related to resident SCFL assignments to non-residents. That language, removed from the rule by amendment effective August 1, 2000, is underlined below. The Division recommends pursuing rule-making to amend the rule to add the stricken language back into the rule.

Amend Commission rule 03O.0109(f):

It is unlawful for a person to accept assignment of a Standard Commercial Fishing License for which they are ineligible. <u>A nonresident is not eligible for assignment of a resident Standard Commercial Fishing License</u>.



ROY COOPER

MICHAEL S. REGAN

STEPHEN W. MURPHEY

June 22, 2018

MEMORANDUM

TO: Marine Fisheries Commission

FROM: Michelle Duval, Special Assistant for Councils

SUBJECT: South Atlantic Fishery Management Council Meeting Summary (June 11-15, 2018)

The South Atlantic Fishery Management Council (council) met June 11-15, 2018 in Fort Lauderdale, Florida. The attached meeting report contains a summary of the major items addressed and actions taken. The report includes links to the post-meeting news release, briefing materials, and the graphical and more detailed summary of the meeting via the March 2018 Council Meeting Round-up Story Map (https://www.arcgis.com/apps/MapJournal/index.html?appid=a88e097b4bcd4a289251d0a59303a1de). Links to summary motions, public comments, the meeting report, as well as the above items for any council meeting can be found on the main Council Meetings webpage (http://safmc.net/safmc-meetings/). Items that may be of interest to the commission are highlighted below:

- Cobia: The council approved Coastal Migratory Pelagics Amendment 31 for formal review. Once implemented, the amendment will remove Atlantic cobia (Georgia through New York) from the federal fishery management plan and transfer management authority to the Atlantic States Marine Fisheries Commission. In March, the council delayed final approval of the amendment until June when preliminary results of the stock identification workshop would be available, as well as clarification regarding federal waters regulations recommended by the Atlantic States Marine Fisheries Commission. The stock identification workshop proposed no change in the existing boundary between Gulf and Atlantic stocks (Florida/Georgia state line); the subsequent peer review supported this conclusion. In May, the Atlantic States Marine Fisheries Commission voted to develop an amendment to its interstate fishery management plan for Atlantic cobia to address management in federal waters, should Coastal Migratory Pelagics Amendment 31 be approved. In the interim period between removal of Atlantic cobia from the federal fishery management plan (expected early 2019) and the implementation of an amendment to the interstate plan (expected early 2020), the Atlantic States Marine Fisheries Commission recommended that NOAA Fisheries maintain the existing regulations in federal waters. Where state and federal waters regulations differ (i.e., size or possession limits), anyone fishing in federal waters would be required to comply with the more restrictive of the two sets of regulations.
- Red Snapper: The council received an update on timing of the final rule for Snapper Grouper Amendment 43. This amendment would implement a revised annual catch limit for red snapper beginning in 2018 to allow for limited commercial and recreational harvest ("mini-seasons") as in previous years. Existing regulations regarding recreational bag limits (1fish per person per day), commercial trip limits (75 pounds gutted weight), and minimum size limits (none for either sector)

that were established via Snapper Grouper Amendment 28 would remain unchanged. The council also provided input to NOAA Fisheries concerning the timing of a potential mini-season, as for-hire operators and recreational anglers require more notice than commercial operators to book and prepare for trips. If approved, the final rule would result in harvest beginning sometime in August.*

*The rule took effect on July 26, 2018, season dates are:

- The recreational sector will open for harvest on weekends only (Friday, Saturday, Sunday) on the following days:
 - August 10, 11, and 12, 2018 The recreational season opens at 12:01 a.m., local time, on August 10, 2018, and closes at 12:01 a.m., local time, on August 13, 2018.
 - O August 17, 18, and 19, 2018 The recreational season opens again at 12:01 a.m., local time, on August 17, 2018, and closes at 12:01 a.m., local time, on August 20, 2018.
- The commercial sector opened for harvest on July 26, 2018, and will close at 11:59 p.m., local time, on Dec. 31, 2018, unless the commercial annual catch limit is met or projected to be met before this date.
 - NOAA Fisheries will announce if the commercial sector needs to close before Dec. 31, 2018.
- For-Hire Electronic Reporting Amendment: This amendment would require weekly electronic reporting by federally-permitted charter vessels* and would modify the existing electronic reporting timeframe for headboats. NOAA Fisheries approved the amendment on June 12, 2018; the final rule to implement the amendment will likely publish in August, with regulations becoming effective by Jan. 1, 2019. Council staff will continue outreach and trainings through 2018. A successful initial round of trainings were held in North Carolina in late January/early February and a second round is planned for the late fall.

*Dolphin-wahoo, coastal migratory pelagics (cobia, king and Spanish mackerel), and snapper-grouper (South Atlantic snapper-grouper complex species) federal for-hire permit holders

- For-Hire Permit Modifications Amendment: The council reviewed and approved a scoping document that will be used to solicit input on issues pertaining to the snapper grouper for-hire fishery. This includes consideration of a permit moratorium, and how (and if) this could address some of the perceived problems and inequities in the fishery. Scoping webinars will be held in August, with additional in-person scoping meetings to be scheduled for the fall (late September/early October).
- Commercial Vision Blueprint Amendment: This amendment addresses input received during development of the Snapper Grouper Vision Blueprint pertaining to geographic access, retention and discards through split seasons and/or trip limits for blueline tilefish, snowy grouper, greater amberjack, red porgy and vermilion snapper. It also addresses size limits for several deep-water snappers, as well as almaco jack and gray triggerfish (off Florida only) and establishes a trip limit for the Other Jacks complex. The council reviewed public comment, selected preferred alternatives and will take final action on the amendment in September. The preferred alternatives for a commercial snowy grouper split season and a blueline tilefish split trip limit (i.e., a different trip limit early part of the year) address concerns raised by fishermen in northern North Carolina regarding access to the resource during the time of year the fish are available.
- Recreational Vision Blueprint Amendment: Actions contained in the recreational amendment address reorganization of the existing bag limit aggregates to better reflect how anglers fish and the characteristics of a recreational trip. Based on the limited public comment received, the council elected to maintain only those actions pertaining to the creation of a deep-water species aggregate,

modification of size limits for gray triggerfish (off Florida only) and several deep-water snappers, and changes to retention limits for species within the existing 20-fish recreational aggregate. The council will review the revised amendment in September and take final action in December.

• Voluntary Electronic Reporting (commercial and private anglers): A long-standing effort between NOAA Fisheries and the Atlantic Coastal Cooperative Statistics Program to develop an electronic version of the commercial logbook to allow voluntary electronic reporting is almost complete; fishermen should be able to start using this tool in July. Additionally, the council's MyFishCount app, a voluntary reporting tool for private anglers, is now available for download (see http://safmc.net/electronic-reporting-projects/myfishcount/ for more information). The app builds on the MyFishCount reporting website, which was used during the 2017 red snapper mini-season.



SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

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Charlie Phillips, Chair | Captain Mark Brown, Vice Chair Gregg T. Waugh, Executive Director

JUNE 10-15, 2018 COUNCIL MEETING REPORT FORT LAUDERDALE, FLORIDA

The following summary highlights the major issues discussed and actions taken at the South Atlantic Fishery Management Council's June 2018 meeting in Fort Lauderdale, Florida. Briefing materials, presentations, and public comments are available on the Council's website at: http://safmc.net/safmc-meetings/council-meetings/

Final Committee Reports contain more details of what was accomplished for each committee and are located on the June 2018 briefing book page. In addition, the Summary of Motions on the Council's website includes all motions from the meeting. Read further details and see images and other links at the March 2018 Council Meeting Round-up Story Map:

https://www.arcgis.com/apps/MapJournal/index.html?appid=a88e097b4bcd4a289251d0a59303a1de The Meeting News Release is available at: http://safmc.net/news-releases/06-15-18-safmc-news-release/

Issue:	Action Taken:	Schedule:
Red Snapper	Amendment 43 is currently under review by NMFS. The amendment was sent to NMFS on November 20, 2017. Comments on the proposed rule are due by June 18, 2018.	If approved, the 2018 recreational and commercial seasons would begin sometime in August. [In future years, the recreational season would begin on July 13, 2018 (2 nd Friday) and the commercial season on July 9, 2018.] Recreational bag = 1 with no size limit. Commercial trip limit = 75 pounds gutted weight with no size limit.
	The Council provided guidance on actions to include in Amendment 46: • Private Recreational Permit • Private Recreational Electronic Reporting	Approved for scoping.
	 The Council provided guidance on Regulatory Amendment 29: Require use of Best Fishing Practices (e.g., descending devices, venting, hook type) Adjust Powerhead Prohibitions in the South Atlantic (allow in the EEZ off SC or prohibit use of powerheads in entire EEZ) 	Approved for scoping in August.

Issue:	Action Taken:	Schedule:
Recreational Visioning Amendment	Regulatory Amendment 26: reviewed comments and simplified document:	Review/modify document and approve all actions in September 2018. Review and approve for
	Deep-water species aggregate to include snowy grouper, misty grouper, golden tilefish, blueline tilefish, wreckfish, and yellowedge grouper Removal of minimum size limits for the three deep-water snappers (queen snapper, blackfin snapper, silk snapper) Season and aggregate bag limit for deep-water species aggregate Recreational bag limits for the current 20-Fish Aggregate species (the Council can select some or all of these)	formal review in December 2018.
Commercial Visioning Amendment	Regulatory Amendment 27: reviewed comments and provided guidance. Approved all actions.	Review and approve for formal review in September 2018.
For-Hire Moratorium Amendment	Reviewed the scoping document and provided guidance on what to include.	Approved for webinar scoping in August with additional scoping in September and October. Review and provide guidance at September meeting.
Golden Tilefish	The Council discussed the conversion factor for whole weight to gutted weight and decided to use the factor included in the stock assessment that results in a slightly higher ACL. The Council approved all action and approved for formal review.	The document will be revised and sent for formal review so that the new ACL can be in place by January 1, 2019. The Council also requested and extension of the interim rule for an additional 186 days.
Red Grouper	The Council added actions to the amendment and approved for public hearings.	Hold public hearing at the September meeting and approve for formal review.
Yellowtail Snapper	The Council is proposing to modify the accountability measure as a short-term solution to the early closure of the commercial fishery.	Approved for scoping in August. Review at September meeting.
Modifications to Sea Turtle Release Gear	The Council reviewed scoping comments and provided guidance on actions and alternatives to include.	Review at a future meeting.
Vermilion Snapper & Black Sea Bass	The Council directed staff to begin an abbreviated framework document to increase the ACL for vermilion and reduce the ACL for black sea bass.	Public hearing at September meeting and approve for formal review.

Issue:	Action Taken:	Schedule:
Mackerel Cobia	The Council approved CMP Amendment 31 (Atlantic Cobia) for formal review and retained Alternative 2 as preferred: Remove Atlantic cobia from the CMP Fishery Management Plan.	The Gulf Council is scheduled to take final action at their June 18-21, 2018 meeting.
	The Council retained Preferred Alternative 3 in the framework amendment to change the Atlantic king mackerel commercial trip limit.	The Council approved the document for a public hearing at the September meeting and they will consider final action then also.
Spiny Lobster	The Council revised the Actions & Alternatives to be analyzed in Spiny Lobster Amendment 13 (Modifications to Gear Requirements & Cooperative Management Procedure).	This is a joint Amendment with the Gulf Council. Public hearings are expected in July/August with final approval by the Gulf in August and the South Atlantic in September.
Habitat and Ecosystem Based Management	The Council reviewed the AP report and Habitat Dashboard.	Support completion of Ecopath model for the fall SSC meeting.
Citizen Science Program	The Council made appointments to the Operations Team and received updates on the program and research needs.	Work will continue on the pilot and the program infrastructure.
For-Hire Recreational Reporting	The Council received an update on the amendment: the Amendment was approved on June 12, 2018 and the Final Rule is expected to publish in August.	Regulations are likely to be effective 1/1/19 to give individuals time to become familiar with the program.
	Council staff conducted a training session at the meeting.	For-Hire reporting training and outreach will continue in 2018.
MyFishCount	Council staff gave a presentation at a local store on Wednesday and for the Council on Friday.	The app is now available and Council staff will be working with private recreational fishermen to have them report. This experience will be used by the Council as they continue to work on a permitting and reporting amendment.

Issue:	Action Taken:	Schedule:
SEDAR	Dr. Clay Porch, SEFSC Director,	The Council approved the
	participated during the meeting this week.	schedules for upcoming stock
	The Council made appointments to	assessments.
	SEDAR 64 (Yellowtail), SEDAR 58	
	(Cobia), Cobia Stock ID, Red Porgy	
	Assessment, and to the SEDAR AP. The	
	Council also approved the terms of	
	reference and schedule for the yellowtail	
	and cobia stock assessments.	
ABC Control Rule &	The Council provided directions to staff.	Review at a future meeting.
Accountability		_
Measures		
Highly Migratory	The Council reviewed the issue of pelagic	Letters will be sent on both topics.
Pelagics	longline gear in spawning special	
	management zones and the process for	
	reviewing the pelagic longline EFP.	
Golden Crab, Habitat,	The Council reviewed recommendations	Conduct scoping later this year and
Shrimp	from the advisory panels and approved	review at a future meeting.
	development of an amendment to review	_
	alternatives to modify fishing areas.	
SSC Selection	The Council approved appointments to	
	the Scientific and Statistical Committee.	



ROY COOPER

MICHAEL S. REGAN

STEPHEN W. MURPHEY

August 1, 2018

MEMORANDUM

TO: Marine Fisheries Commission

Randy Gregory, Staff Lead for Highly Migratory Species

Fisheries Management Section

SUBJECT: Highly Migratory Species Update

The Highly Migratory Species Advisory Panel will meet Sept. 5-6, 2018 in Silver Spring, Maryland. The advisory panel will discuss the final rule to revise the regulations related to closures of the Atlantic commercial shark fisheries, draft Amendment 11 scoping review for shortfin mako sharks, recreational and commercial bluefin tuna fisheries, and receive updates from the Marine Recreational Information Program and the State Department regarding Bahamian boundary discussions.

Tuna

The National Marine Fisheries Service proposes to modify the baseline annual United States quota and sub quotas for Atlantic bluefin tuna. The proposed rule would increase the baseline annual Atlantic bluefin tuna quota from the 1,058.79 metric ton level established via a 2015 quota rule to 1,247.86 metric tons, the level recommended for each of 2018, 2019 and 2020 by the International Commission for the Conservation of Atlantic Tunas at its 2017 annual meeting. The proposed rule would modify the baseline quota and sub quotas, which would be effective for the 2018 fishing year. The December and January baseline sub quotas would increase to 28.9 metric tons and 29.5 metric tons, respectively.

The National Marine Fisheries Service also is proposing minor modifications to the Atlantic tuna size limit regulations to address retention, possession, and landing of bigeye and yellowfin tuna damaged by shark bites. National Marine Fisheries Service implemented similar measures for shark-damaged swordfish in 1996. This change would allow retention, possession, and landing of tuna for which a measurement to the fork of the tail may not be possible, provided the remainder of the fish meets the applicable minimum size limit (27 inches curved fork length for yellowfin and bigeye tuna). For enforcement purposes to preserve evidence the carcass was shark-bitten, the action also proposes that no tissue may be cut away from or other alterations made to the shark-damaged area of the fish.

Sharks



The National Marine Fisheries Service increased the retention limit for the commercial aggregated large coastal shark and hammerhead shark management groups for directed shark limited access permit holders in the Atlantic region from 3 to 36 large coastal sharks other than sandbar sharks per vessel per trip as of July 18, 2018. This adjustment is intended to promote equitable fishing opportunities in the Atlantic region, while allowing quota to be harvested throughout the year. The Division of Marine Fisheries complemented this action with proclamation FF-27-2018.

On July 6, 2018, the National Marine Fisheries Service announced the final rule to revise the regulations related to closures of the Atlantic commercial shark fisheries. This rule will allow a commercial shark fishery to remain open after the fishery's landings have reached or are projected to reach 80 percent of the available overall, regional, and/or sub-regional quota, if the fishery's landings are not projected to reach 100 percent of the applicable quota before the end of the season. This rule will also change the minimum notification time for closures from 5 days to 4 days for filing with the Office of the Federal Register.

In March, the National Marine Fisheries Service announced an emergency rule to implement management measures to address overfishing of North Atlantic shortfin mako sharks. Commercial measures require the live release of shortfin mako sharks in the commercial pelagic longline fishery (retention is only allowed if a shortfin mako shark is dead at haul back) and no landings of shortfin mako sharks by commercial fishermen using other commercial gear types. Recreational measures require a minimum size limit of 83 inches fork length for shortfin mako sharks. The measures are based on the International Commission for the Conservation of Atlantic Tuna's Standing Committee for Research and Statistics 2017 benchmark stock assessment for North Atlantic shortfin mako sharks, which found the stock to be overfished* with overfishing* occurring. As a result, the National Marine Fisheries Service will begin the process to draft Amendment 11 to implement conservation and management measures to rebuild the North Atlantic shortfin mako shark stock. Two public hearings will be held in North Carolina on Aug. 28 in Manteo and Aug. 29 in Morehead City.

*Definitions

Overfished: The condition of a fishery that occurs when the spawning stock biomass of the fishery is below the

level that is adequate for the recruitment class of a fishery to replace the spawning class of the

fishery.

Overfishing: Fishing that causes a level of mortality that prevents a fishery from producing a sustainable harvest.

Red Drum Landings 2017-2018

Landings are complete through April 30, 2018

2017 landings are final. 2018 landings are preliminary.

				2009-2011	2013-2015
Year	Month	Species	Pounds	Average	Average
2017	9	Red Drum	28,280	28,991	35,003
2017	10	Red Drum	58,824	43,644	63,662
2017	11	Red Drum	27,705	14,318	27,643
2017	12	Red Drum	4,714	3,428	2,197
2018	1	Red Drum	2,056	5,885	1,699
2018	2	Red Drum	2,176	3,448	3,996
2018	3	Red Drum	4,797	5,699	3,971
2018	4	Red Drum	17,096	7,848	6,528
2018	5	Red Drum	14,313	13,730	9,664 *
2018	6	Red Drum	9,754	12,681	6,985 *

Fishing Year (Sept 1, 2017 - Aug 31, 2018) Landings

169,715

^{*}partial trip ticket landings only
***landings are confidential

Year	Month	Species	Pounds	Dealers	Trips	Average (2007-2009)
2015	1	SOUTHERN FLOUNDER	1,984	30	237	7,713
2015	2	SOUTHERN FLOUNDER	495	21	93	4,617
2015	3	SOUTHERN FLOUNDER	10,750	62	768	23,512
2015	4	SOUTHERN FLOUNDER	20,812	88	1,072	68,389
2015	5	SOUTHERN FLOUNDER	42,424	117	1,279	122,514
2015	6	SOUTHERN FLOUNDER	53,835	116	1,481	154,090
2015	7	SOUTHERN FLOUNDER	42,806	106	1,144	170,387
2015	8	SOUTHERN FLOUNDER	43,900	111	1,152	201,862
2015	9	SOUTHERN FLOUNDER	255,067	122	2,335	396,301
2015	10	SOUTHERN FLOUNDER	429,234	127	2,554	781,717
2015	11	SOUTHERN FLOUNDER	301,489	90	1,755	392,150
2015	12	SOUTHERN FLOUNDER	89	7	10	37,303
2016	1	SOUTHERN FLOUNDER	2,625	33	264	7,713
2016	2	SOUTHERN FLOUNDER	1,643	31	291	4,617
2016	3	SOUTHERN FLOUNDER	9,183	58	914	23,512
2016	4	SOUTHERN FLOUNDER	10,558	72	628	68,389
2016	5	SOUTHERN FLOUNDER	24,522	90	821	122,514
2016	6	SOUTHERN FLOUNDER	44,952	100	1,242	154,090
2016	7	SOUTHERN FLOUNDER	43,574	102	1,132	170,387
2016	8	SOUTHERN FLOUNDER	53,057	106	1,409	201,862
2016	9	SOUTHERN FLOUNDER	245,870	131	3,004	396,301
2016	10	SOUTHERN FLOUNDER	279,618	117	2,161	781,717
2016	11	SOUTHERN FLOUNDER	182,148	102	1,465	392,150
2016	12	SOUTHERN FLOUNDER	14	5	5	37,303
2017	1	SOUTHERN FLOUNDER	1,677	38	122	7,713
2017	2	SOUTHERN FLOUNDER	2,758	55	215	4,617
2017	3	SOUTHERN FLOUNDER	8,254	67	874	23,512
2017	4	SOUTHERN FLOUNDER	9,591	83	787	68,389
2017	5	SOUTHERN FLOUNDER	33,105	105	1,121	122,514
2017	6	SOUTHERN FLOUNDER	74,785	115	1,904	154,090
2017	7	SOUTHERN FLOUNDER	74,879	108	1,755	170,387
2017	8	SOUTHERN FLOUNDER	102,751	116	2,364	201,862
2017	9	SOUTHERN FLOUNDER	235,915	128	2,849	396,301
2017	10	SOUTHERN FLOUNDER	548,723	142	3,970	781,717
2017	11	SOUTHERN FLOUNDER	301,670	123	1,993	392,150
2017	12	SOUTHERN FLOUNDER	166	7	8	37,303
2018	1	SOUTHERN FLOUNDER	610	14	43	7,713
2018	2	SOUTHERN FLOUNDER	1,833	34	154	4,617
2018	3	SOUTHERN FLOUNDER	3,873	43	385	23,512
2018	4	SOUTHERN FLOUNDER	7,771	69	749	68,389
2018	5	SOUTHERN FLOUNDER	14,953	65	799	122,514
2018	6	SOUTHERN FLOUNDER	33,463	51	1,002	154,090
2018	7	SOUTHERN FLOUNDER	***	2	27	170,387

^{*2018} data are preliminary and only complete through April.

^{***}data are confidential

Year	Species	Gear	Pounds	Dealers	Trips
2012	SOUTHERN FLOUNDER	GIGS	149,387	112	3,000
2012	SOUTHERN FLOUNDER	GILLNETS	879,373	168	14,713
2012	SOUTHERN FLOUNDER	OTHER	47,989	105	1,462
2012	SOUTHERN FLOUNDER	POUND NET	569,388	35	1,754
2013	SOUTHERN FLOUNDER	GIGS	118,489	101	2,408
2013	SOUTHERN FLOUNDER	GILLNETS	1,096,060	178	16,968
2013	SOUTHERN FLOUNDER	OTHER	46,953	104	2,093
2013	SOUTHERN FLOUNDER	POUND NET	924,889	41	2,112
2014	SOUTHERN FLOUNDER	GIGS	135,273	109	2,655
2014	SOUTHERN FLOUNDER	GILLNETS	659,394	145	11,778
2014	SOUTHERN FLOUNDER	OTHER	18,628	115	1,887
2014	SOUTHERN FLOUNDER	POUND NET	860,216	39	1,806
2015	SOUTHERN FLOUNDER	GIGS	130,277	92	2,616
2015	SOUTHERN FLOUNDER	GILLNETS	392,339	133	8,465
2015	SOUTHERN FLOUNDER	OTHER	12,422	102	1,002
2015	SOUTHERN FLOUNDER	POUND NET	667,847	40	1,803
2016	SOUTHERN FLOUNDER	GIGS	126,983	92	2,657
2016	SOUTHERN FLOUNDER	GILLNETS	361,570	126	8,422
2016	SOUTHERN FLOUNDER	OTHER	10,953	84	838
2016	SOUTHERN FLOUNDER	POUND NET	398,258	39	1,423
2017	SOUTHERN FLOUNDER	GIGS	136,094	90	2,752
2017	SOUTHERN FLOUNDER	GILLNETS	551,949	128	12,362
2017	SOUTHERN FLOUNDER	OTHER	8,360	90	939
2017	SOUTHERN FLOUNDER	POUND NET	697,870	45	1,912
2018	SOUTHERN FLOUNDER	GIGS	20,473	43	566
2018	SOUTHERN FLOUNDER	GILLNETS	38,339	72	2,200
2018	SOUTHERN FLOUNDER	OTHER	2,254	37	152
2018	SOUTHERN FLOUNDER	POUND NET	1,436	12	241

^{*2018} data are preliminary and only complete through January.

^{***}data are confidential



ROY COOPER
Governor
MICHAEL S. REGAN
Secretary

STEPHEN W. MURPHEY

July 27, 2018

MEMORANDUM

TO: Marine Fisheries Commission

FROM: Chris Batsavage, Protected Resources Section Chief/Special Assistant for

Councils

SUBJECT: Protected Resources Section Update

Observer Program

Tables summarizing the 2017 Observer Program (based on finalized 2017 trip numbers) are found in the briefing book. Overall, observer coverage for the anchored large mesh gill net fishery was 9.6 percent and coverage for the anchored small mesh gill net fishery was 3.0 percent. There were fewer anchored large and small mesh gill net trips in 2017 compared to prior years, which resulted in a higher percent coverage for both gear types.

A total of 54 sea turtle interactions* were observed in in large and small mesh gill nets in 2017 with green sea turtles (34 alive and 15 dead) comprising most of the interactions. A total of 15 self-reported sea turtle interactions by gill net fishermen occurred in 2017.

A total of 53 (50 alive and three dead) Atlantic sturgeon interactions were observed in in large and small mesh gill nets in 2017, with the majority occurring in Management Unit A. One self-reported Atlantic sturgeon interaction by a gill net fisherman occurred in 2017.

Tables summarizing observer coverage and protected species interactions from January through May 2018 are included. These tables provide the number of trips, observed trips, observer coverage, and protected species interactions for anchored large and small mesh gill nets by month and management unit. Please note that observer coverage is based on the average number of trips from previous years' finalized data, because 2018 trip data are preliminary.

A total of six sea turtle interactions were observed in large mesh gill nets and zero in small mesh gill nets from January through May 2018, and no self-reported sea turtle interactions by gill net fishermen occurred during this time.

A total of 15 (14 alive and one dead) Atlantic sturgeon interactions were observed in large mesh gill nets and zero in small mesh gill nets from January through May 2018, with most of the



interactions occurring in March. One self-reported Atlantic sturgeon interaction by gill net fishermen occurred during this time.

Management Unit Openings and Closures

The following management units opened or closed as a requirement of the Sea Turtle and Atlantic Sturgeon Incidental Take Permits:

- Management Unit B closed for large mesh gill nets on May 18, 2018 due to the allowed number of live and dead Kemp's ridley sea turtle interactions being approached.
- No other management units closed during this time.

*Definition

Incidental Take Permit Interaction - when a protected species is caught or otherwise comes in contact with a gill net.

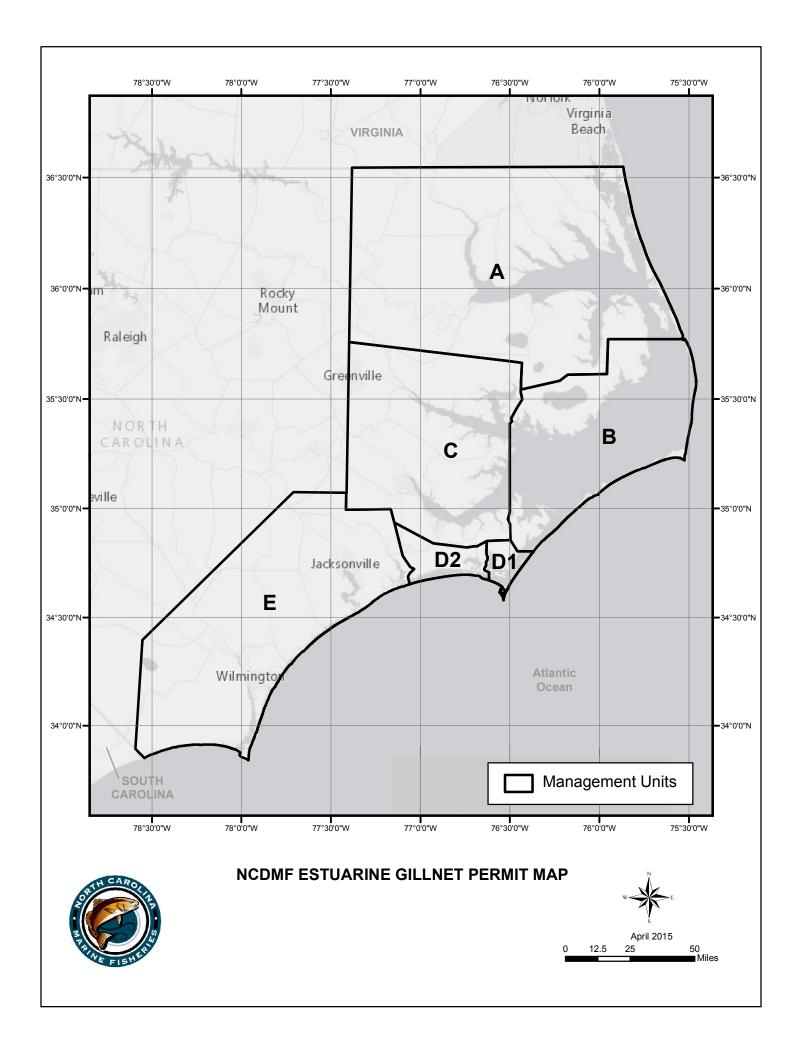


Table 1. Finalized data collected for anchored large mesh gill nets by month through the NCDMF Observer Program through December 2017.

										Observe	d Takes	By Spec	cies		
	Trij	ps	Ol	oserver La	arge Mesh		Keı	np's	Gr	een	Logge	erhead	Unknown	A. Stu	argeon
Month	Estimated ¹	Actual ²	AP Attempts ³	Trips	Yards	Coverage 4	Live	Dead	Live	Dead	Live	Dead	Live	Live	Dead
January	316	100	108	4	3,700	4.0	0	0	0	0	0	0	0	0	0
February	705	361	117	94	58,565	26.0	0	0	0	0	0	0	0	1	0
March	1,936	1,464	126	159	115,755	10.9	0	0	0	0	0	0	0	36	0
April	1,156	1,027	94	95	51,540	9.3	0	0	0	0	0	0	0	1	0
May	847	533	148	72	34,700	13.5	0	0	0	0	0	0	0	0	0
June	1,155	1,009	148	106	60,720	10.5	0	0	2	4	0	0	0	0	0
July	990	1,058	94	115	65,700	10.9	2	0	3	2	1	0	0	0	0
August	1,273	1,693	146	136	88,339	8.0	0	0	2	0	0	0	0	1	0
September	2,315	2,038	77	189	125,125	9.3	0	0	2	2	0	0	0	5	0
October	2,216	2,668	68	211	169,536	7.9	1	1	16	5	0	0	0	4	3
November	1,137	1,096	114	77	55,400	7.0	0	0	8	2	0	0	0	0	0
December	261	157	91	10	6,199	6.4	0	0	0	0	0	0	0	0	0
Total	14,307	13,204	1,331	1,268	835,279	9.6	3	1	33	15	1	0	0	48	3

¹ Finalized trip ticket data averaged from 2012-2016

² Finalized trip ticket data for 2017

 $^{^{\}rm 3}$ Alternative Platform trips where no fishing activity was found

⁴ Based on finalized 2017 trip ticket data and observed 2017 large mesh trips

Table 2. Finalized data collected for anchored large mesh gill nets by season and management unit through the NCDMF Observer Program through December 2017.

										(Observe	d Take	s By S _I	pecies		
		Trip	OS	Ob	server L	arge Mesh	1	Kemp's		Green		Loggerhead		Unknown	A.Stı	ırgeon
Season	Unit	Estimated ¹	Actual ²	AP Attempts ³	Trips	Yards	Coverage 4	Live	Dead	Live	Dead	Live	Dead	Live	Live	Dead
Winter ⁵	A	792	348	61	68	50,835	19.5	0	0	0	0	0	0	0	0	0
	В	82	10	17	0	0	0.0	0	0	0	0	0	0	0	0	0
	C	117	79	31	23	10,585	29.1	0	0	0	0	0	0	0	1	0
	D1	0	0	6	0	0	0.0	0	0	0	0	0	0	0	0	0
	D2	2	6	13	1	600	16.7	0	0	0	0	0	0	0	0	0
	E	29	18	97	6	245	33.3	0	0	0	0	0	0	0	0	0
Spring	A	2,189	1,549	102	167	125,765	10.8	0	0	0	0	0	0	0	34	0
	В	496	73	41	0	0	0.0	0	0	0	0	0	0	0	0	0
	C	914	1,024	43	92	52,655	9.0	0	0	0	0	0	0	0	3	0
	D1	15	0	5	0	0	0.0	0	0	0	0	0	0	0	0	0
	D2	71	119	15	11	4,600	9.2	0	0	0	0	0	0	0	0	0
	E	254	259	161	56	18,975	21.6	0	0	0	0	0	0	0	0	0
Summer	Α	1,338	1,018	116	65	75,184	6.4	0	0	0	0	0	0	0	1	0
	В	812	1,464	56	129	71,180	8.8	2	0	6	1	1	0	0	0	0
	C	640	380	76	28	13,395	7.4	0	0	1	2	0	0	0	0	0
	D1	0	0	8	0	0	0.0	0	0	0	0	0	0	0	0	0
	D2	123	255	26	22	10,950	8.6	0	0	0	1	0	0	0	0	0
	E	505	643	105	113	44,050	17.6	0	0	0	2	0	0	0	0	0
Fall	A	2,797	1,936	54	135	167,228	7.0	0	1	0	1	0	0	0	9	3
	В	1,233	1,490	59	126	102,610	8.5	1	0	18	5	0	0	0	0	0
	C	768	988	41	75	35,960	7.6	0	0	0	0	0	0	0	0	0
	D1	35	27	7	9	4,233	33.3	0	0	5	2	0	0	0	0	0
	D2	319	531	13	29	8,375	5.5	0	0	0	1	0	0	0	0	0
	Е	516	828	85	103	31,655	12.4	0	0	3	0	0	0	0	0	0
Total		14,047	13,045	1,238	1,258	829,080	9.6	3	1	33	15	1	0	0	48	3

¹ Finalized trip ticket data averaged from 2012-2016

² Finalized trip ticket data for 2017

³ Alternative Platform trips where no fishing activity was found

⁴ Based on finalized 2017 trip ticket data and observed 2017 large mesh trips

⁵ Does not include December 2017 as that counts towards the winter 2018 season

Table 3. Finalized data collected for anchored small mesh gill nets by month through the NCDMF Observer Program through December 2017.

				Observed Takes By Species										
	Trij	ps	Ob	server Smal	ll Mesh	Keı	np's	Gr	een	Logge	erhead	Unknown	A. Stı	ırgeon
Month	Estimated ¹	Actual ²	Trips	Yards	Coverage ³	Live	Dead	Live	Dead	Live	Dead	Live	Live	Dead
January	639	808	24	9,710	3.0	0	0	0	0	0	0	0	0	0
February	713	862	49	23,535	5.7	0	0	0	0	0	0	0	0	0
March	957	1,082	26	9,720	2.4	0	0	0	0	0	0	0	0	0
April	1,235	1,085	28	12,835	2.6	0	0	0	0	0	0	0	2	0
May	781	473	15	6,300	3.2	0	0	0	0	0	0	0	0	0
June	659	378	22	10,780	5.8	0	0	1	0	0	0	0	0	0
July	604	375	6	950	1.6	0	0	0	0	0	0	0	0	0
August	704	416	5	1,500	1.2	0	0	0	0	0	0	0	0	0
September	697	432	11	2,725	2.5	0	0	0	0	0	0	0	0	0
October	1,035	881	21	7,510	2.4	0	0	0	0	0	0	0	0	0
November	768	721	15	7,100	2.1	0	0	0	0	0	0	0	0	0
December	617	538	19	8,060	3.5	0	0	0	0	0	0	0	0	0
Total	9,409	8,051	241	100,725	3.0	0	0	1	0	0	0	0	2	0

¹Finalized trip ticket data averaged from 2013-2016 ² Finalized trip ticket data for 2017

³ Based on finalized 2017 trip ticket data and observed 2017 small mesh trips

Table 4. Finalized data collected for anchored small mesh gill nets by season and management unit through the NCDMF Observer Program through December 2017.

							Observed Takes By Species								
		Trip	os	Ob	server Sm	all Mesh	Kei	mp's	Gr	een	Logge	erhead	Unknown	A.Stu	ırgeon
Season	Unit	Estimated ¹	Actual ²	Trips	Yards	Coverage ³	Live	Dead	Live	Dead	Live	Dead	Live	Live	Dead
Winter ⁴	A	908	686	38	21,540	5.5	0	0	0	0	0	0	0	0	0
	В	258	622	5	1,435	0.8	0	0	0	0	0	0	0	0	0
	C	110	292	21	8,150	7.2	0	0	0	0	0	0	0	0	0
	D1	2	3	0	0	0.0	0	0	0	0	0	0	0	0	0
	D2	33	22	7	1,400	31.8	0	0	0	0	0	0	0	0	0
	E	40	45	2	720	4.4	0	0	0	0	0	0	0	0	0
Spring	A	1,152	572	10	3,740	1.7	0	0	0	0	0	0	0	0	0
	В	1,341	1,517	21	13,145	1.4	0	0	0	0	0	0	0	1	0
	C	221	327	16	4,085	4.9	0	0	0	0	0	0	0	0	0
	D1	38	35	8	3,045	22.9	0	0	0	0	0	0	0	0	0
	D2	37	49	0	0	0.0	0	0	0	0	0	0	0	0	0
	E	184	141	14	4,840	9.9	0	0	0	0	0	0	0	1	0
Summer	A	289	101	4	1,500	4.0	0	0	0	0	0	0	0	0	0
	В	1,049	674	10	4,500	1.5	0	0	0	0	0	0	0	0	0
	C	312	130	10	4,710	7.7	0	0	0	0	0	0	0	0	0
	D1	10	14	0	0	0.0	0	0	0	0	0	0	0	0	0
	D2	53	47	4	980	8.5	0	0	0	0	0	0	0	0	0
	E	253	203	5	1,540	2.5	0	0	1	0	0	0	0	0	0
Fall	A	645	193	3	1,800	1.6	0	0	0	0	0	0	0	0	0
	В	773	810	7	2,300	0.9	0	0	0	0	0	0	0	0	0
	C	169	162	5	6,000	3.1	0	0	0	0	0	0	0	0	0
	D1	99	59	8	1,740	13.6	0	0	0	0	0	0	0	0	0
	D2	293	249	14	2,475	5.6	0	0	0	0	0	0	0	0	0
	Е	564	561	10	3,020	1.8	0	0	0	0	0	0	0	0	0
Total		8,833	7,514	222	92,665	3.0	0	0	1	0	0	0	0	2	0

¹ Finalized trip ticket data averaged from 2013-2016

² Finalized trip ticket data for 2017

³ Based on finalized 2017 trip ticket data and observed 2017 small mesh trips

⁴ Does not include December 2017 as that counts towards the winter 2018 season

Table 1. Preliminary data collected for large mesh gill nets by month and management unit through the NCDMF Observer Program through May 2018.

							Obse	rved Ta	kes By	Species				
		Trip	os	Ob	server L	arge Mesh	1	Kemp's	Green	Logg	gerhead	Unknown	A.Stu	ırgeon
Month	Unit	Estimated ¹	Actual ²	AP Attempts ³	Trips	Yards	Coverage 4	Live Dead	Live Dea	d Live	Dead	Live	Live	Dead
January	A	248	192	8	15	10,260	6.1							
	В	28	2	14	0	0	0.0							
	C	7	4	5	1	50	13.9							
	D1	0	0	0	0	0	0.0							
	D2	0	3	1	0	0	0.0							
	E	6	5	35	0	0	0.0							
February	A	433	254	29	25	12,490	5.8						1	
	В	44	7	21	0	0	0.0							
	C	77	38	21	16	12,180	20.8						1	
	D1	0	0	0	0	0	0.0							
	D2	2	2	6	1	100	50.0							
	E	18	15	41	0	0	0.0							
March	A	1,001	468	24	90	41,640	9.0						9	1
	В	48	46	17	1	600	2.1							
	C	680	428	11	29	18,610	4.3							
	D1	0	0	4	0	0	0.0							
	D2	6	5	2	3	1,100	50.0							
	E	52	25	52	2	180	3.8							
April	A	774	649	38	57	24,655	7.4						2	
	В	104	176	16	4	1,700	3.9							
	C	190	350	9	13	5,950	6.8							
	D1	1	0	1	0	0	0.0							
	D2	22	5	7	4	2,700	18.3							
	E	77	82	39	14	6,330	18.1							
May	A	250	83	56	7	1,405	2.8						1	
	В	193	128	24	6	3,975	3.1	2 1	1					
	C	107	102	29	17	11,165	15.9							
	D1	5	0	2	0	0	0.0							
	D2	43	27	11	1	500	2.3							
1	Е	122	133	50	28	11,020	23.0		2					
Total		2,650	1,494	457	275	166,610	10.4	2 1	3 0	0	0	0	14	1

¹ Finalized trip ticket data averaged from 2013-2017

² Preliminary trip ticket data for 2018

³ Alternative Platform trips where no fishing activity was found

⁴ Based on estimated trips and observer large mesh trips

Table 2. Preliminary data collected for large mesh gill nets by month through the NCDMF Observer Program through May 2018.

							Observed Takes By Species								
	Trip	os	Ot	Observer Large Mesh			Ke	mp's	Gı	een	Logg	erhead	Unknown	A. St	urgeon
Month	Estimated ¹	Actual ²	AP Attempts ³	Trips	Yards	Coverage 4	Live	Dead	Live	Dead	Live	Dead	Live	Live	Dead
January	289	206	63	16	10,310	5.5	0	0	0	0	0	0	0	0	0
February	574	316	118	42	24,770	7.3	0	0	0	0	0	0	0	2	0
March	1,787	972	110	125	62,130	7.0	0	0	0	0	0	0	0	9	1
April	1,168	1,262	110	92	41,335	7.9	0	0	0	0	0	0	0	2	0
May	720	473	172	59	28,065	8.2	2	1	3	0	0	0	0	1	0
Total	4,538	3,229	573	334	166,610	7.4	2	1	3	0	0	0	0	14	1

¹ Finalized trip ticket data averaged from 2013-2017

² Preliminary trip ticket data for 2018

³ Alternative Platform trips where no fishing activity was found

⁴ Based on estimated trips and observer large mesh trips

Table 3. Preliminary data collected for small mesh gill nets by month and management unit through the NCDMF Observer Program through May 2018.

							Observed Takes By Species								
		Trip	S	Ob	server Sm	all Mesh	Kem	ıp's	Gr	een	Logg	erhead	Unknown	A. St	urgeon
Month	Unit	Estimated ¹	Actual ²	Trips	Yards	Coverage ³	Live	Dead	Live	Dead	Live	Dead	Live	Live	Dead
January	A	385	153	1	150	0.3									
	В	178	58	1	300	0.6									
	C	63	21	4	1,000	6.3									
	D1	1	0	0	0	0.0									
	D2	20	1	5	900	24.8									
	E	26	4	1	800	3.9									
February	Α	479	260	12	3,700	2.5									
	В	153	234	1	700	0.7									
	C	83	150	8	3,130	9.6									
	D1	1	1	0	0	0.0									
	D2	11	2	3	400	27.8									
	E	16	4	1	300	6.4									
March	A	521	221	3	750	0.6									
	В	316	156	6	2,080	1.9									
	C	111	136	3	1,000	2.7									
	D1	7	1	0	0	0.0									
	D2	4	2	0	0	0.0									
	E	23	7	1	600	4.4									
April	A	343	327	6	2000	1.7									
	В	700	623	18	8610	2.6									
	C	61	40	1	220	1.6									
	D1	24	31	3	1200	12.6									
	D2	15	4	0	0	0.0									
	E	61	36	1	255	1.6									
May	A	172	132	2	500	1.2									
	В	360	335	5	1050	1.4									
	C	70	8	1	800	1.4									
	D1	6	9	2	825	32.3									
	D2	20	12	0	0	0.0									
	E	92	27	0	0	0.0									
Total		4,321	2,996	89	31,270	2.1	0	0	0	0	0	0	0	0	0

¹ Finalized trip ticket data averaged from 2013-2017

² Preliminary trip ticket data for 2018

³ Based on estimated trips and observer small mesh trips

Table 4. Preliminary data collected for small mesh gill nets by month through the NCDMF Observer Program through May 2018.

						Observed Takes By Species									
	Trip	S	Observer Small Mesh		Kemp's		Green		Loggerhead		Unknown	n A. Sturge			
Month	Estimated ¹	Actual ²	Trips	Yards	Coverage ³	Live	Dead	Live	Dead	Live	Dead	Live	Live	Dead	
January	673	237	12	3,150	1.8	0	0	0	0	0	0	0	0	0	
February	743	651	25	8,230	3.4	0	0	0	0	0	0	0	0	0	
March	982	523	13	4,430	1.3	0	0	0	0	0	0	0	0	0	
April	1,205	1,061	29	12,285	2.4	0	0	0	0	0	0	0	0	0	
May	719	523	10	3,175	1.4	0	0	0	0	0	0	0	0	0	
Total	4,322	2,995	89	31,270	2.1	0	0	0	0	0	0	0	0	0	

¹ Finalized trip ticket data averaged from 2013-2017

² Preliminary trip ticket data for 2018
³ Based on estimated trips and observer small mesh trips

Issues/Reports





ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

STEPHEN W. MURPHEY

Director

Aug. 1, 2018

MEMORANDUM

TO: Marine Fisheries Commission

FROM: Lee Paramore, Chair, Biological Review Team

SUBJECT: 2018 Stock Overview Report

Attached is the Division of Marine Fisheries 2018 Stock* Overview Report. The annual report, released each July, serves as an overview summarizing available information used to determine the overall condition of North Carolina's fishery resources. The overview covers information for each species through 2017.

Last year, the report format was changed to provide better clarification to the public on North Carolinas role in managing each species. This included partitioning the 14 species solely managed by North Carolina from the other 23 stocks where management is deferred to other principal entities, including the Atlantic States Marine Fisheries Commission, the South Atlantic Fishery Management Council and the Mid-Atlantic Fishery Management Council.

This year, additional changes have been implemented aimed at better informing the public. The division will no longer assign each stock to one of the five former stock status categories: viable, recovering, depleted, concern and unknown. Assigning species to these predefined categories can be subjective as the term definitions have some overlap and stock conditions are often in transition. Instead, the 2018 report provides direct classifications for each stock based on the most recent peer-reviewed stock assessment. As such, assignments are directly related to the overfishing* and overfished*/depleted state of each stock. Species reports without overfished/overfishing determinations will still provide pertinent information on trends and management of the species.

Four species: blue crab, southern flounder, striped mullet and striped bass stocks in the Tar/Pamlico, Neuse and Cape Fear rivers are highlighted in this year's report due to ongoing concerns. A benchmark stock assessment approved in 2018 indicates that the blue crab stock is overfished and overfishing is occurring. Amendment 3 to the state blue crab plan is currently under development. Southern flounder are classified as overfished with overfishing occurring. This species is currently undergoing an assessment update through 2017 based on recent peerreview recommendations. Amendment 2 to the state southern flounder plan is currently under development. Striped mullet hit a management trigger in 2016 due to low landings. Declining

trends in landings and adult indices are of concern for this species. The division updated the striped mullet stock assessment to evaluate if stock conditions warrant management changes. Results of the stock assessment update indicate overfishing is not occurring through 2017. The Central Southern Management Area striped bass stocks include the Tar/Pamlico, Neuse and Cape Fear rivers. The major management issue is that with very limited natural reproduction occurring, most of the fishery is supported by hatchery-reared fish. The fishery management plan, which is a joint plan with the Wildlife Resources Commission, is currently under review for these stocks with the results of a benchmark stock assessment anticipated in early 2019.

The complete 2018 Stock Overview Report can be found on the division's website at: http://portal.ncdenr.org/web/mf/stock-overview.

The annual stock overview report for state-managed species is informed by annual fishery management plan updates. These updates are compiled to create the annual Fishery Management Plan Review. A copy of this document will be provided to each commissioner at the August 2018 business meeting. The annual Fishery Management Plan Review is a good resource about species management and provides information critical to our understanding of stock conditions on a state and coastwide basis.

*Definitions

Stock – A group of fish of the same species in a given area. Unlike a fish population, a stock is defined as much by management concerns (jurisdictional boundaries or harvesting locations) as by biology.

Overfishing – Occurs when the rate that fish that are harvested or killed exceeds a specific threshold. Overfished/Depleted – Occurs when the spawning stock size of a population is below a specified threshold. This condition significantly reduces the stock's reproductive capacity to replace fish removed by harvest.

Roy Cooper Governor Michael S. Regan Secretary



Release: Immediate Contact: Patricia Smith Date: July 25, 2018 Phone: 252-726-7021

Changes to fisheries annual report changes terminology to reflect stock assessment determinations

MOREHEAD CITY – The North Carolina Division of Marine Fisheries is continuing efforts to better explain the health of the state's fisheries by tying its annual stock overview report to terminology commonly used in peer reviewed stock assessments.

In this year's report, the division no longer assigns fish stocks to one of the five former categories: viable, recovering, depleted, concern, and unknown. Instead, the stock status for a species is tied directly to the most recent peer reviewed stock assessment determination of overfishing and overfished/depleted.

Assigning species stock status to one of the former five categories had become increasingly difficult over time because definitions of the terms overlapped, and stock conditions were often in transition. Tying the stock status determinations to peer reviewed stock assessments removes subjectivity. For species that do not have an overfishing/overfished status, the report still documents trends in biological data and summarizes management.

It is the second consecutive year that the division has substantially changed the stock overview. Last year, the division altered the format of the report to clarify the role the state plays in management of each species, separating state-managed species from those cooperatively managed through a federal or interstate entity.

Three state managed species warrant notation in this year's stock overview:

Blue crab – Results of the 2018 benchmark stock assessment indicate the blue crab stock is overfished and overfishing is occurring. This assessment passed peer review and the model was accepted for use in management. The division is developing Amendment 3 to the Blue Crab Fishery Management Plan in conjunction with an advisory committee.

Striped mullet – Amendment 1 to the N.C. Striped Mullet Fishery Management Plan, adopted in 2015, requires the division to initiate further analysis of the striped mullet data if commercial landings fall below 1.13 million pounds or above 2.76 million pounds in any given year. In 2016, commercial landings of striped mullet fell below the 1.13 million pound minimum to 964,348 pounds, triggering the analysis. A 2018 update of the state's 2013 striped mullet stock assessment found that overfishing is not occurring; however, it cannot be determined if the stock is overfished. The N.C. Marine Fisheries Commission will discuss potential management options at its August meeting.

Southern flounder – A January 2018 stock assessment of southern flounder in the south Atlantic indicated that the stock is overfished and overfishing is occurring. This assessment passed peer review, and the model was accepted for use in management with the condition that it be updated with information through 2017 so management is based on the most current data available. The update is underway and expected to be complete this fall. The division is developing Amendment 2 to the Southern Flounder Fishery Management Plan in conjunction with an advisory committee.

Roy Cooper Governor Michael S. Regan Secretary



Steve Murphey *Director*

For more information, read the entire <u>2018 Stock Overview</u> and read this month's Division of Marine Fisheries <u>INSIGHT</u> <u>newsletter</u> or contact Division Biologist Lee Paramore at <u>Lee.Paramore@ncdenr.gov</u> or 252-473-5734.

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ASMFC

FISHERIES FOCUS

Vision: Sustainably Managing Atlantic Coastal Fisheries

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ASMFC Presents Annual Awards of Excellence

At its Spring Meeting, the Atlantic States Marine Fisheries Commission presented Mr. Dan McKiernan, Dr. Larry Jacobson and Colonel Kyle Overturf with its Annual Awards of Excellence (AAE) for their outstanding contributions to science and law enforcement along the Atlantic coast.

"The Atlantic coast has no shortage of skilled and dedicated fisheries policy, science and law enforcement

professionals. However, Dan, Larry and Kyle represent the cream of the crop" said ASMFC Chair Jim Gilmore of the New York State Department of **Environmental Conservation.** "The Commission's 2018 Annual Awards of Excellence reflect a diversity of accomplishments from management to science to law enforcement. It is an honor to present the 2018 AAE to three exceptional individuals for their contributions to the management and conservation of Atlantic coast fisheries."



From left: ASMFC Chair Jim Gilmore, AAE Recipients Dan McKiernan and Colonel Kyle Overturf, and ASMFC Executive Director Bob Beal

Management & Policy Contributions

Mr. Dan McKiernan, Massachusetts Division of Marine Fisheries

Dan McKiernan has been a vital contributor to the Commission's management and policy programs for over three decades. Throughout his career, he has worked tirelessly to meet the needs of Massachusetts' fishermen while ensuring the health of the fisheries resources on which they depend. At the management board level, Mr. McKiernan approaches problem solving in a pragmatic, collaborative way. His recipe for success has been one part engagement and one part persuasion, bringing his colleagues together during board meetings or over a friendly meal to make his case for Massachusetts' position while finding effective solutions to difficult interstate fisheries management problems.

Mr. McKiernan's efforts on the development and adoption of Amendment 1 to the Tautog Fishery Management Plan illustrate his dedication to the collaborative process. Working closely with neighboring Rhode Island officials, he helped to develop uniform rules throughout the region. He was also a staunch

continued, see AAE on page 9

Atlantic States Marine Fisheries Commission

1050 North Highland Street, Suite 200 A-N • Arlington, Virginia 22201 • www.asmfc.org

he Atlantic States Marine Fisheries Commission was formed by the 15 Atlantic coastal states in 1942 for the promotion and protection of coastal fishery resources. The Commission serves as the deliberative body of the Atlantic coastal states, coordinating the conservation and management of nearshore fishery resources, including marine, shell and diadromous species. The fifteen member states of the Commission are: Maine, New Hampshire, Massachusetts. Rhode Island, Connecticut, New Vork, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina,

Atlantic States Marine Fisheries Commission

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Director of Communications
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Upcoming Meetings

June 5 - 7

Mid-Atlantic Fishery Management Council, Doubletree by Hilton, 237 South Broad Street, Philadelphia, PA

June 11 - 15

South Atlantic Fishery Management Council, Bahia Mar Doubletree by Hilton, 801 Seabreeze Boulevard. Fort Lauderdale. FL

June 12 - 14

New England Fishery Management Council, Holiday Inn by the Bay, Portland, ME

June 19 - 20

ACCSP Recreational Technical Committee, ASMFC Offices, 1050 N. Highland Street, Suite 200A-N, Arlington, VA

June 26 (10 a.m. - 4:30 p.m.)

ASMFC and MAFMC Summer Flounder, Scup and Black Sea Bass Advisory Panel, Hilton Garden Inn, BWI Airport, 1516 Aero Drive, Linthicum, MD

July 23 - 26

SEAMAP Annual Meeting, Hilton St. Petersburg Bayfront, 333 $1^{\rm st}$ Street South, St. Petersburg, FL

August 7 - 9

ASMFC Summer Meeting, Westin, 1800 South Eads Street, Arlington, VA

August 14 - 18

Mid-Atlantic Fishery Management Council, Hilton Virginia Beach Oceanfront, 3001 Atlantic Avenue, Virginia Beach, VA

August 19 - 23

148th Annual Meeting of the American Fisheries Society: Communicating the Science of Fisheries Conservation to Diverse Audiences, Atlantic City Convention Center, Atlantic City, NJ

September 17 - 21

South Atlantic Fishery Management Council, Town and Country Inn, 2008 Savannah Highway, Charleston, SC

September 25 - 27

New England Fishery Management Council, Hotel 1620, Plymouth, MA

October 2 - 4

Mid-Atlantic Fishery Management Council, Congress Hall, 200 Congress Place, Cape May, NJ

October 21 - 25

ASMFC 77th Annual Meeting, The Roosevelt Hotel, 45 East 45th Street and Madison Avenue, New York City, NY

December 3 - 7

South Atlantic Fishery Management Council, Hilton Garden Inn/Outer Banks, 5353 N. Virginia Dare Trail, Kitty Hawk, NC

December 4 - 6

New England Fishery Management Council, Hotel Viking, Newport, RI

December 11 - 13

Mid-Atlantic Fishery Management Council, Westin Annapolis, 100 Westgate Circle, Annapolis, MD

From the Executive Director's Desk

Black Sea Bass: Seeking Solutions through Compromise



I don't know whether you had a chance to listen to Commissioners discuss recreational black sea bass management during our Spring Meeting at the beginning of May. If you did, you had the chance to witness the states coming together to handle a difficult and controversial management issue through compromise for the benefit of the states, their recreational fisheries, and the resource. This is what the Commission is designed to do.

Black sea bass is a tricky species to manage with lots of moving parts. From a policy perspective, the species is managed jointly by the Commission and the Mid-Atlantic Fishery Management Council. As such, the states strive to implement recreational measures to achieve but not exceed the annual recreational harvest limit (RHL). The Council's Scientific and

The revised
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Region states who
worked closely to come
up with a compromise...

Statistical Committee recommends the allowable biological catch, which constrains the RHL based on the latest stock status information. Magnuson-Stevens requirements for annual catch limits and accountability measures, combined with uncertainty surrounding recreational estimates, create even greater difficulties at the state level, with states having to adjust recreational measures on an annual basis.

Black sea bass biology and life history

characteristics present additional challenges. Although the species was declared rebuilt in 2009, black sea bass' unique characteristics contribute to uncertainty about the size of the stock. Black sea bass are protogynous hermaphrodites, which mean they start life as females and when they reach 9-13 inches (2 - 5 years of age) they change sex to become males. Because of this trait, the response of this species to fishing pressure is difficult to account for. More profoundly, as water temperatures have warmed along the coast, the distribution and abundance of this species has begun to shift northward. This means northern states are catching more black sea bass

even under restrictive management measures simply because there are more fish.

Yet our current management program and the distribution of fish to the states is based on traditional fishing patterns that do not reflect recent changes in the stock's distribution and availability. This last point and the potential reduction in recreational harvest for the states in Southern New England motivated the states of Massachusetts, Rhode Island, Connecticut and New York to appeal a recent decision by the Summer Flounder, Scup and Black Sea Bass Management Board (Board) regarding 2018 recreational management measures approved in response to Addendum XXX. However, before the appeal was actually brought before the Interstate Fisheries Management Program Policy Board, the Northern Region states offered a potential management program for the 2018 black sea bass recreational fishery to replace the allocations specified in Addendum XXX. The revised management program, which was approved by the Board, was the result of extensive work and deliberations among the Northern Region states, who came up with a compromise to meet the needs of the Northern Region without impacting the remaining states, while constraining the harvest to the 2018 RHL of 3.66 million pounds.

Further, in response to the appeal, the Board initiated new management action for the 2019 black sea bass recreational fishery and tasked the Plan Development Team to develop a white paper to consider the impacts of changes in black sea bass abundance and distribution on the management of commercial and recreational fisheries.

While the path getting to the compromise was not an easy one, it not only affirmed why the Commission has been so successful for three-quarters of a century, but also highlighted the importance of the processes we have developed to ensure that states have an opportunity to challenge management decisions and seek solutions though compromise and debate. Our deliberations in May provided a fix for the 2018 recreational black sea bass fishery; however, there is still much work to be done and many discussions to be had about how we best address shifting resource abundance, distribution, and productivity due to warming waters. There are as many states who hope for a new management regime that reflects changing resource availability as there are those who feel strongly about allocating the resource based on historical landings. Perhaps the solution lies somewhere in the middle. I look forward to working with our Commissioners to help find that middle ground, where we account for historical harvest while acknowledging the new realities brought about by changes in our marine environment.

Species Profile: Atlantic Sturgeon

Benchmark Assessment Indicates Signs of a Slow Recovery Though Challenges Towards Sustainability Remain

Introduction

For almost 30 years, the 15 Atlantic coastal states have worked together to effectively manage Atlantic sturgeon throughout its range from Maine to Florida. Recognizing both the importance of this ancient species and the dire status of the population, the states implemented a 40-year coastwide moratorium on harvest through Amendment I to the Atlantic Sturgeon FMP in 1998 with the goal of restoring the population of this once thriving fishery. Since then, the states have invested considerable resources to research the species' biology and life history. Despite the strong conservation efforts taken, Atlantic sturgeon was added to the Endangered Species List in February 2012. A coastwide benchmark stock assessment completed by the Commission in the fall of 2017 concluded that the population remains depleted at the coastwide and distinct population segment (DPS) levels relative to historic abundance, although the population appears to be recovering slowly since implementation of the 1998 moratorium.

Life History

Atlantic sturgeon (Acipenser oxyrhynchus oxyrhynchus) are ancient fish, dating back to at least the late Cretaceous Period (66-100 million years ago). Historically, they have been found along the entire Atlantic coast from Labrador, Canada to St. Johns River, Florida. Atlantic sturgeon were once present in about 38 rivers along the U.S. Atlantic coast, 35 of which contained spawning populations. Today, Atlantic sturgeon can be found in 32 of those rivers, 20 of which have spawning populations. Atlantic sturgeon are anadromous fish, living their adult lives in the ocean and migrating into coastal estuaries and rivers to spawn once every two to five years. There are five DPSs of Atlantic sturgeon: Gulf of Maine, New York Bight, Chesapeake Bay, Carolina, and South Atlantic.

Atlantic sturgeon are one of the largest and longest-lived anadromous fish in North America, although individual's growth rates and maturity schedules vary widely along the coast. Typically, populations in the southern part of the species range mature faster and grow larger than those in the northern part of the range. Females reach sexual maturity between the ages of seven and 30, and males between the ages of five and 24. The number of eggs a female produces increases with age and size, which means older and larger females are more valuable to the population because they produce more eggs (up to eight millions eggs per spawning event) than younger, smaller females (estimated 400,000 eggs per spawning event). Most juveniles remain in freshwater rivers for one to six years before migrating out to the ocean. As mature adults, they return to their natal streams to spawn.



Acipenser oxyrhynchus oxyrhynchus

Management Unit: Maine to Florida

Interesting Facts

- The species name 'oxyrhynchus' means sharp
- Sturgeon were a key food source for U.S. settlers along the Atlantic coast.
- In the late 1800s, fishing for sturgeon eggs (to sell as caviar) attracted so many people, the trend was referred to as the "Black Gold Rush."
- Atlantic sturgeon are river-specific, returning to their natal rivers to spawn.
- Rather than having true scales, Atlantic sturgeon have five rows of bony plates known as scutes.
- When sturgeon wash up on beaches, many people mistake them for dinosaurs or sea monsters. In fact, sturgeon were around throughout the Cretaceous Period when dinosaurs roamed the earth.
- Young sturgeon are known to travel widely at sea, along the whole East Coast and as far north as Iceland.

Maximum Size: 14 feet, 811 pounds, Canada

Oldest Recorded: 60 years old, captured from the St. Lawrence River

Stock Status: Depleted and not experiencing overfishing



Sturgeon don't have teeth. Instead, they suck up prey using their downward projecting vacuum-like mouth. As juveniles, Atlantic sturgeon feed on flies, worms, shrimp, and small mollusks and crustaceans. As adults, they are opportunistic feeders and prey mainly on mollusks, snails, worms, shrimp and benthic fish. Very little is known about their natural predators.

Commercial Fishery

Atlantic sturgeon have been taken for food by humans in North America for at least 3,000-4,000 years, and have supported commercial fisheries of varying magnitude since colonial times. There are reports from Maine and Massachusetts from as early as the 1600s that cite sturgeon as an important fishery in those states. Atlantic sturgeon eggs were valued as high-quality caviar both in the U.S. and in Europe, attracting a large number of fishers and placing a huge strain on the population. Other parts of the sturgeon were used for a variety of products. Sturgeon skin was made into leather for clothes and bookbinding. The swim bladder was used to make a gelatin that served as a clarifying agent in jellies, wine, beer, and glue, and was also fashioned into windows for carriages.

The fishery was once considered second in value only to lobster. In 1888, the U.S. Fish Commission reported that there were 7.3 million pounds of sturgeon caught on the U.S. Atlantic coast. Landings declined significantly from 1950 through the mid-1990s to between 100,000 and 250,000 pounds, annually. In 1998, the Commission implemented a coastwide moratorium on the harvest of wild Atlantic sturgeon stocks, although many states had already closed their fisheries.

Status of the Stock

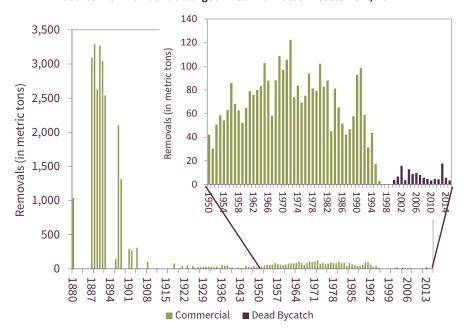
In 1998, a benchmark stock assessment conducted by the Commission concluded that Atlantic sturgeon populations throughout the species' range were either extirpated or

Table 1. Atlantic Sturgeon Coastwide and DPS-level Stock Status Based on Mortality Estimates (Z) and Biomass/Abundance Status Relative to Historic Levels and the Last Year of Available Indices Data Relative to the Start of the Coastwide Moratorium

	Mortality Status	Biomass/Abundance Status			
Population	Probability that Z > Z _{50%EPR} 80%	Relative to Historical Levels	Average probability of terminal year of indices > 1998* value		
Coastwide	7%	Depleted	95%		
Gulf of Maine	74%	Depleted	51%		
New York Bight	31%	Depleted	75%		
Chesapeake Bay	30%	Depleted	36%		
Carolina	75%	Depleted	67%		
South Atlantic	40%	Depleted	Unknown (no suitable indices)		

^{*}For indices that started after 1998, the first year of the index was used as the reference value.

Coastwide Atlantic Sturgeon Commercial Landings and Dead Bycatch, 1880–2014
Inserted graph provides same information but for a more recent timeframe, 1950–2014.
Source: ASMFC Atlantic Sturgeon Bechmark Stock Assessment, 2017



at historically low abundances. In 2013, in response to the Endangered Species Act (ESA) listing, the Board initiated the development of a coastwide benchmark stock assessment to evaluate stock status, stock delineation, and bycatch. The Board approved the 2017 Atlantic Sturgeon Benchmark Stock Assessment and Peer Review Report for management use in October 2017.

The assessment results indicate that at the coastwide and DPS level, Atlantic sturgeon are depleted relative to historical levels (Table 1). The 'depleted' status was used instead of 'overfished' because many factors, not just directed historical fishing, contributed to the low abundance of Atlantic sturgeon. For example, bycatch, habitat loss and ship strikes also contribute to population status. However, there are signs that populations have started a slow recovery from 1998 levels. On a coastwide scale, it is highly likely that abundance is higher than it was in 1998. At

the DPS level, the Gulf of Maine, New York Bight, and Carolina DPSs are most likely to have increased, while the Chesapeake Bay DPS only has a 36% chance of having increased. The abundance status of the South Atlantic DPS is unknown because the assessment was unable to develop a usable index of relative abundance from that region.

Despite the moratorium on commercial fishing, Atlantic sturgeon still experience mortality coastwide from several sources.

continued, see SPECIES PROFILE on page 12

Fishery Management Actions

Atlantic Menhaden

In early May, the Commission's Atlantic Menhaden Management Board initiated a noncompliance finding in response to the Commonwealth of Virginia's failure to fully implement the mandatory provisions of Amendment 3 to the Interstate Fishery Management Plan. Specifically, the Commonwealth has not established the Chesapeake Bay reduction fishery cap of 51,000 mt. Rather than forwarding that finding to the Commission's Interstate Fisheries Management Program, the Board postponed action on the noncompliance finding until the Commission's Summer Meeting in August 2018. In the interim, the Board has requested the Commission send a letter to the Commonwealth of Virginia stating its intent to consider the noncompliance finding in August if the Commonwealth has not implemented Amendment 3's Chesapeake Bay reduction fishery cap. Staff will monitor the fishery and inform the Board if harvest is approaching 51,000 mt in the Bay.

There are several reasons why the Board postponed action. The Commonwealth's General Assembly, which oversees Atlantic menhaden management in Virginia, is still in session and has an opportunity to implement the 51,000 mt Bay cap. The reduction fishery is just beginning for the year and is highly unlikely to exceed the Bay cap prior to August given the performance of the fishery for the past five years (i.e., the reduction fishery in the Chesapeake Bay has been significantly below 51,000 mt over that time period).

Upon notification by the Commission of a noncompliance finding, the Secretary of Commerce has 30 days to review the recommendation and determine appropriate action, which may include a federal moratorium on fishing for Atlantic menhaden in Virginia's state waters.

For more information, please contact Max Appelman, Fishery Management Plan Coordinator, at mappelman@asmfc.org or 703.842.0740.

Black Drum

On May 3rd, the South Atlantic State/Federal Fisheries Management Board approved

Addendum I to the Black Drum Interstate Fishery Management Plan (FMP). The Addendum allows Maryland to reopen its black drum commercial fishery in the Chesapeake Bay with a daily vessel limit of up to 10 fish and a 28-inch minimum size.

In the late 1990s, Maryland closed its Bay commercial black drum fishery in order to conduct a tagging and migration study. The fishery was not reopened after the study. In 2013, the Black Drum FMP extended this closure by requiring states to maintain management measures in place at the time of the FMP's approval.

In approving Addendum I, the Board considered the status of the resource, which is not overfished nor experiencing overfishing, and the estimated relatively small size of the reopened commercial fishery. When the fishery was open in the 1970s under more liberal management than that in Addendum I, it was a small scale fishery with an average annual harvest of 11,475 pounds. Over the next year, Maryland will develop a management program for the commercial fishery for implementation by April 1, 2019.

The Addendum will be available on the Commission's website, www.asmfc.org (under Black Drum). For more information, please contact Dr. Mike Schmidtke, FMP Coordinator, at mschmidtke@asmfc.org or 703.842.0740.

Black Sea Bass

Upon the direction of the Commission's Interstate Fisheries Management Program (ISFMP) Policy Board, the Summer Flounder, Scup and Black Sea Bass Management Board approved revised 2018 recreational measures for the Northern Region states of Massachusetts, Rhode Island, Connecticut and New York (see accompanying table). Further, the Board initiated new management action for the 2019 black sea bass recreational fishery and tasked the Plan Development Team to develop a white paper to consider the impacts of changes in black sea bass abundance and distribution to the management of commercial and recreational fisheries.

This action is taken in response to a Northern Region state appeal of the approved 2018 recreational measures under

> continued, see FISHERY MANAGEMENT ACTIONS on page 8

Black Sea Bass State-by-State Recreational Management Measures for 2018

State	Minimum Size	Possession Limit	Open Season
ME	13"	10 fish	May 19-Sep 21; Oct 18-Dec 31
NH	13"	10 fish	Jan 1–Dec 31
MA	15"	5 fish	May 19–Sep 12
RI	15"	3 fish	Jun 24–Aug 31
NI	15	7 fish	Sep 1-Dec 31
CT, Private/Shore	15"	5 fish	May 19–Dec 31
CT, Authorized	15"	5 fish	May 19–Aug 31
Party/Charter	15	7 fish	Sep 1-Dec 31
NY*	15"	3 fish	Jun 23–Aug 31
INT	13	7 fish	Sep 1-Dec 31
	12.5"	10 fish	May 15-Jun 22
NJ	12.5"	2 fish	Jul 1–Aug 31
INJ	12.5"	10 fish	Oct 8-Oct 31
	13"	15 fish	Nov 1–Dec 31
DE, MD, VA, & NC (North of Cape Hatteras)	12.5"	15 fish	May 15–Dec 31

^{*} NY is in the process of promulgating its measures, which should be finalized in June.

ASMFC Habitat Committee Revisits 20-Year Policy on Submerged Aquatic Vegetation

In honor of the 20-year anniversary of the Atlantic States Marine Fisheries Commission's (Commission) Policy on Submerged Aquatic Vegetation (SAV), the Commission's Habitat Committee conducted a thorough review of the policy, re-evaluating its recommendations and importance. Upon review, it was determined that the policy is still relevant and, arguably, more important now than ever. SAV continues to be vital to many Commission-managed fish species, and is afforded different degrees of protection up and down the coast.

SAV comprise some of the most productive ecosystems in the world. According to the Blue Carbon Initiative, SAV covers 43.7 – 148 million acres worldwide. This is only 0.2% of the ocean floor, yet SAV binds approximately 10% of carbon (as sediments) each year. In fact, they're twice as effective at storing carbon as terrestrial forests by acre. SAV roots also stabilize sediments and absorb excess nutrients. Their stabilizing properties reduce shoreline erosion, benefiting not only estuarine communities, but coastal property owners. SAV also improves water quality and provides food and habitat for many species, especially juveniles. Overall, SAV contributes to healthy fisheries and ecosystems. Unfortunately, SAV is one of the most rapidly declining habitats around the world, with up to a 7% loss in area annually due to human activities.

In 1997, the Commission's Habitat Committee developed a policy to communicate the need for conservation of coastal SAV resources, and to highlight state and Commission-based activities for implementation of a coastal SAV conservation and enhancement program. The Commission encouraged implementation of this policy by state, federal, local, and cooperative programs that influence and regulate fish habitat and activities impacting fish habitat, specifically SAV.

In updating the policy, the Habitat Committee left the goals largely unchanged from the 1997 version. The primary goal is to preserve, conserve, and restore SAV where possible, in order to achieve a net gain in distribution and abundance along the Atlantic coast and in tidal tributaries, and to prevent any further losses of SAV in individual states by encouraging the following:

- 1. Protect existing SAV beds from further losses due to degradation of water quality, physical destruction to the plants, or disruption to the local benthic environment;
- 2. Continue to promote state or regional water and habitat quality objectives that will result in restoration of SAV through natural re-vegetation;
- 3. Continue to promote, develop, attain, and update, as needed, state SAV restoration goals in terms of acreage, abundance, and species diversity, considering historical distribution records and estimates of potential habitat; and
- 4. Continue to promote SAV protection at local, state and federal levels and when unavoidable impacts to SAV occur from permitted coastal alterations or other unintended actions, agencies should implement compensatory mitigation for the functional and temporal impacts.

There are six key components to achieving the goal of this policy: (1) assessment of historical, current and potential distribution and abundance of SAV; (2) protection of existing SAV; (3) SAV restoration and enhancement; (4) public education and involvement; (5) research; and (6) implementation. The background information, policies and recommended actions have been updated based on emerging issues and new information released over the past 20 years. A summary of SAV initiatives conducted by the Commission's state and federal partners is also included in this updated policy. The policy can be found here – http://www.asmfc.org/files/Habitat/HMS15 SAV PolicyUpdate.pdf.

For more information on SAV, visit the Commission website at http://www.asmfc.org/habitat/hot-topics or contact Dr. Lisa Havel, Habitat Committee Coordinator, at http://www.asmfc.org/habitat/hot-topics or contact Dr. Lisa Havel, Habitat Committee Coordinator, at http://www.asmfc.org, http://www.asmfc.org.







Photos from top to bottom: Winter flounder in eel grass © Chris Pickerel, Cornell Cooperative Extension; Peconic bay scallops (Argopecten irradians) inhabiting transplanted eelgrass © Kimberly Manzo, Cornell Cooperative Extension; and Lady crab (Ovalipes ocellatus) in eelgrass © Kimberly Manzo, Cornell Cooperative Extension

On the Legislative Front

Federal Funding for 2019 Advances in U.S. House of Representatives

On May 17th, the U.S. House of Representatives Committee on Appropriations approved its Fiscal Year 2019 Commerce, Justice, and Science (CJS) Appropriations Bill on a vote of 32-19. The bill funds the Department of Commerce, NOAA and the National Marine Fisheries Service.

Similar to last year, President Trump identified a number of fisheries conservation and research programs for elimination. These include Interjurisdictional Fisheries Act grants, Sea Grant, Coastal Zone Management grants, and the National Estuarine Research Reserve System. Additionally, the President is seeking to eliminate Joint Enforcement Agreement (JEA) funding in Fiscal Year 2019. JEAs provide federal funding to state law enforcement agencies to enforce federal regulations. The House Appropriations Committee has rejected all of these proposals put forward by President Trump.

The Committee Report accompanying the CJS Appropriations bill contains instructions for two ASMFC-managed species. NOAA is

National Oceanic and Atmospheric Administration (in \$ thousands) 2019 2016 2017 2018 2019 Enacted Enacted House Enacted Trump **Fisheries Science and Management Fisheries and Ecosystem Science** 139,489 139,489 144,196 141,185 144,196 **Programs and Services** Fisheries Data Collections, Surveys 164,000 164,749 156,558 165,249 163,271 and Assessments 43,655 43,655 53,955 43,768 43,955 **Observers and Training** 112,598 112,643 **Fisheries Management Programs** 115,995 117,051 118,659 and Services 6,300 9,300 15,000 9,327 15,000 Aquaculture 33,500 31,524 Salmon Management Activities 31,500 35,500 37,000 33,470 34,254 35,871 34,495 37,000 **Regional Councils and Fisheries** Commissions **Interjurisdictional Fisheries Grants** 3,000 3,004 3,004 0 3,500 **Enforcement** 69,000 69,000 69,073 51,495 70,000 **Habitat Conservation and** 61,408 52,524 53,384 47,919 54,000 Restoration Other 0 **National Sea Grant College Program** 64,000 63,000 65,000 68,500 9,000 9,500 11,500 0 Marine Aquaculture Program 11,500 **National Estuarine Research** 23,000 23,500 25,000 0 27,000 **Reserve System**

explicitly instructed to continue the Mid-Atlantic horseshoe crab trawl survey in 2019 and review the federal moratorium on Atlantic striped bass. Other topics addressed in the Committee Report include the Marine Recreational Information Program, Fishery Information Networks, lionfish, SEAMAP, and the oyster restoration program in the Chesapeake Bay. The bill text and Committee Report can be read in their entirety by visiting https://appropriations.house.gov/.

The Senate Committee on Appropriations is expected to consider and approve its Fiscal Year 2019 CJS Appropriations bill during the week of June 11th. Members of both the upper and lower Chamber intend to send as many of the 12 annual spending bills as possible to the President before the August recess. Fiscal Year 2019 begins on October 1, 2018.

H.R. 5248/S. 2764 – the Sustainable Shark Fisheries and Trade Act

The Sustainable Shark Fisheries and Trade Act replaces controversial

legislation to ban the sale of all shark fins in the U.S. H.R. 5248 and S. 2764 require the Secretary of Commerce to establish a certification program for importing shark products into the U.S. To gain certification, a nation must enact and enforce shark conservation and management programs comparable to those of the U.S., and explicitly prohibit shark finning. The Secretary may grant partial certifications for individual shark species. Certifications must be renewed every three years. Finally, the bill requires the Secretary of Commerce to include rays and skates in the Seafood Traceability Program for imported fish.

The House Natural Resources Subcommittee on Water, Power and Oceans convened a legislative hearing for H.R. 5428 on April 17th; and the Senate Committee on Commerce, Science, and Transportation advanced S. 2764 out of committee on May 22nd. For more information, please contact Deke Tompkins, Legislative Executive Assistant, at dtompkins@asmfc.org.

FISHERY MANAGEMENT ACTIONS continued from page 6

Addendum XXX. The appeal argued the Board's action under Addendum XXX incorrectly applied technical data and was inconsistent with the Summer Flounder, Scup and Black Sea Bass Fishery Management Plan. After reviewing the appeal, Commission Leadership agreed there was adequate justification to bring portions of the appeal forward to the ISFMP Policy Board.

During the ISFMP Policy Board's deliberations regarding consideration of the appeal, a potential management program for the 2018 black sea bass recreational fishery was presented to replace the allocations specified in Addendum XXX. The revised management program was developed to meet the needs of the Northern Region without impacting the remaining states, while still constraining harvest to the 2018 recreational harvest limit of 3.66 million pounds.

For more information, please contact Caitlin Starks, Fishery Management Plan Coordinator, at cstarks@asmfc.org or 703.842.0740.



Photo © Steve Withuhn

AAE continued from page 1

advocate of a harvester tagging program to improve tracking of fish in commerce, thereby addressing a longstanding poaching problem in the fishery.

Having spent much of his career working on science and management of the lobster fishery, there are few who are more passionate and dedicated to this species. As Chair of the American Lobster Management Board, Mr. McKiernan skillfully led the Board through difficult deliberations regarding the findings of the 2015 benchmark assessment and the future management of the species. In response to the decline of the Southern New England stock, Mr. McKiernan was integral to right-sizing the industry in Lobster Conservation Management Areas 2 (inshore Southern New England) and 3 (offshore waters) to the abundance of the resource. This was accomplished through trap reductions over a six-year period.

Mr. McKiernan understands that on-the-water experience and talking to fishermen are critical components of any fisheries manager job. That is why he has spent considerable time on fishing vessels acquiring the hands-on knowledge and perspective necessary to understand and respect fishermen's views. Throughout his career, Mr. McKiernan has been a proponent of working with the fishing industry to understand their unique perspective, get advice about management issues, and engage them in cooperative fisheries research.

Science, Technical & Advisory Contributions

Dr. Larry Jacobson, formerly with NOAA Fisheries Northeast Fisheries Science Center
Dr. Larry Jacobson has greatly advanced the scientific understanding of American
lobster biology through his contributions on the Commission's American Lobster Stock
Assessment Subcommittee. In 2004, Dr. Jacobson was one of the lead model developers
for the Lobster Model Technical Review. He played an important role in shifting away
from the historical Delury stock assessment model to the current statistical length-based
approach developed by Dr. Yong Chen. Dr. Jacobson's extensive knowledge in population
dynamics and statistics, combined with his model programming skills, were invaluable
during this transition and the continued development of Dr. Chen's assessment model.

During the 2015 lobster assessment, Dr. Jacobson took over the assessment responsibilities for the Gulf of Maine stock. Under his leadership, the assessment model was substantially improved to incorporate spatial dynamics within a stock and show changes in climate and stock productivity. These improvements allowed for accurate modeling of the Southern New England stock decline, as well as the rapid increase in the combined Gulf of Maine/Georges Bank stocks. The 2015 lobster assessment could not have been completed in a timely fashion without Larry's skill and commitment.

Dr. Jacobson's willingness to step into a leadership role when needed, his commitment to seeking out and using the best scientific methods available, and his dedication to sharing his knowledge of lobster biology and stock dynamics with his colleagues are several reasons why American lobster is one of our best understood marine species.

Law Enforcement Contributions

Colonel Kyle Overturf, Connecticut Environmental Police

Colonel Kyle Overturf exemplifies the lifelong commitment and spirit of public service that is common among his natural resource enforcement peers. Growing up hunting and fishing, Colonel Overturf learned the "game warden" lifestyle firsthand from his father, who served 25 years with Connecticut's Environmental Police.

Colonel Overturf began his law enforcement career in 1986, serving as a Conservation Enforcement Officer in the Central Marine Sector for the State Environmental Police. Progressing through his career, Colonel Overturf was promoted to Sergeant, then to

continued, see AAE on page 10

Comings and Goings



COMMISSIONERS

PETER AARRESTAD
In April, Peter Aarrestad,
Director of the Fisheries
Division for the Connecticut
Department of Energy and
Environmental Protection (CT
DEEP), became Connecticut's

Administrative Commissioner to the ASMFC. Peter has worked for CT DEEP in fisheries programs since 1987. He was Director of the Inland Fisheries Program for many years and recently became Director of the Fisheries Division, which has included both marine and inland programs since 2017. Welcome, Peter!



MARK ALEXANDER

On April 1st, with his retirement from CT DEEP, Mark Alexander stepped down as Connecticut's Administrative Commissioner. Mark served as Commissioner since 2017 and as

Connecticut's administrative proxy since 2008. For many years prior to 2008, Mark participated on the Commission's Management and Science Committee, and was both a member and Chair of ACCSP's Coordinating Council. Mark was also a longstanding member of the New England Fishery Management Council. We wish Mark a long, healthy, and happy retirement.



CATHY DAVENPORT

On April 27th, the Commission was notified that Cathy Davenport would no longer be serving as the Commonwealth's Governor Appointee. Cathy served in that position for nearly two decades, representing

several governors and working with many VMRC Commissioners from Bill Pruitt to Steve Bowman. Over that time, she faithfully represented the interests of Virginia's commercial fishing industry. We are grateful for Cathy's longstanding commitment to the Commission and wish her the very best in all her future endeavors.

continued, see COMINGS & GOINGS on page 10

AAE continued from page 9

Eastern District Supervisor in Recreational Law Enforcement. He later went on to serve as Captain and Commander of the State's Western and Marine Districts. In recognition of his leadership and professionalism, Colonel Overturf was promoted to Colonel in 2010 and continues to lead the Connecticut Environmental Conservation Police as Director.

That leadership and professionalism has been reflected in Colonel Overturf's work throughout his career, where he has focused on the mentoring, instruction and professional development of fellow marine and conservation officers. Colonel Overturf has served as an instructor at the Connecticut Police Academy and currently serves as an Adjunct Instructor at the University of Connecticut, where he teaches Conservation Law Enforcement. He has been a leader in resource conservation at regional and national levels, serving in the National Association of Conservation Law Enforcement Chiefs, including as President of the Northeast Association of Chiefs. He supported the development of an enforcement group within the Association of Fish and Wildlife Agencies, and for many years has been a positive presence on the Commission's Law Enforcement Committee. Colonel Overturf served as Law Enforcement Committee Chair from 2011-2013.

Reflecting his concern for professional development and training in the field of marine and conservation enforcement. Colonel Overturf has been a staunch advocate and supporter of a nationwide Conservation Law Enforcement Leadership Academy, administered through the National Association of Conservation Law Enforcement Chiefs and with support from the United States Fish and Wildlife Service. He serves on the Academy Steering Team and was a member of the first graduating class in 2014. He actively encourages and supports future leaders through this program, carrying on a tradition of care and passion for protecting all our natural resources that was bestowed on him by his father.

COMINGS & GOINGS continued from page 9

RACHEL DEAN

In March, Rachel Dean stepped down as Maryland's Governor Appointee to refocus her efforts on a number of fronts, including teaching English at Patuxent High School, operating Solomons Island Heritage Tours, and commercially fishing and co-owning Patuxent River Seafood. We are grateful for Rachel's contributions these past two years and wish her and her family the very best!

RUSSEL DIZE

No stranger to the Commission, having served as legislative proxy from 2002 to 2015, Russel Dize rejoins us as Maryland's Governor Appointee. He has a long history as a waterman, working the waters of Talbot County and the Chesapeake Bay since 1959. Now retired from commercial fishing, Russell owns and operates the charter boat *Riley Kat*. Welcome back, Russell!



SARAH MURRAY

In late April, Sarah Murray joined the Commission staff as its new Fisheries Science Coordinator. As Coordinator, Sarah is the staff lead for a number of science committees, including the Assessment Science Committee, the Management & Science Committee, and the Committee on Economics and Social Sciences. She will also coordinate the activities of the South Atlantic component of the Southeast Area Monitoring and Assessment Program, the Northeast Area Monitoring and Assessment Program, the Ecological Reference Points Work Group and the Risk & Uncertainty Policy Work Group. Sarah will serve on the ACCSP Biological Review and Bycatch Prioritization Panels.







Sarah completed a dual master's degree from American University in Natural Resources and Sustainable Development and International Affairs. Her studies included an internship in Costa Rica sampling fisheries and conducting a survey on social capital in the fishing community. Before joining the Commission, Sarah conducted research on the Galician octopus fishery as a Fulbright Researcher in Spain. She also worked at the Seacoast Science Center in New Hampshire and the National Oceanographic Partnership Program in DC. Welcome, Sarah!

AMY PAQUETTE

In May, Amy Paquette began her summer internship helping with the data capture process for the Access Point Angler Intercept Survey (APAIS) of the Marine Recreational Information Program (MRIP) along the Atlantic coast, primarily scanning and OCR verification.

Amy completed a B.S. in Coastal Studies from the University of Connecticut and a M.S. in Environmental Law and Policy with Vermont Law School. She has been helping CT DEEP as an APAIS interviewer and entering commercial fisheries logbooks. She has interests in both data management and supporting fisheries management and policy. Welcome, Amy!



MIKE RINALDI

After spending last summer with the APAIS team as a Seasonal Scan Technician, Mike Rinaldi has joined the ACCSP's Data Team as its new Fisheries Data Coordinator. In his new role, Mike works with ACCSP Partners and staff to provide support for data activities. He also provides quality control and monitoring for Partner data feeds and the ACCSP data management systems.



Mike holds two Bachelors degrees, one in Political Science and one in Marine Affairs, and a Master's degree in Marine Affairs, all from the University of Rhode Island. While studying for his Master's, Mike worked as an ArcGIS research and teaching assistant supporting marine spatial planning. He then went on to work in commercial aquaculture and as a Marine Specialist at TruWeather Solutions before joining ACCSP. Welcome, Mike!

States Seek Input on American Eel Draft Addendum V

Throughout May and into June, Atlantic coastal states from Maine through Florida are conducting hearings to gather public input on Draft Addendum V to the American Eel Fishery Management Plan. The Draft Addendum, released in May for public comment, considers a number of potential modifications to the current management program. These include changes to the coastwide cap, management triggers, state-by-state allocations, and quota transfer provisions for the yellow eel commercial fishery; as well as to the current Maine glass eel commercial quota and the aquaculture provisions of the plan.

Currently, the yellow eel fishery is managed to an annual coastwide landings cap (referred to as the coastwide cap) of 907,671 pounds and evaluated against two management triggers: (1) the coastwide cap is exceeded by more than 10% in a given

year; or (2) the coastwide cap is exceeded in two consecutive years, regardless of the percent overage. If either of these triggers are met, state-by-state quotas are required to be implemented. 2016 landings exceeded the coastwide cap by less than 10%. If landings in 2017 exceed the coastwide cap, state-by-state quotas will need to be implemented. These current management provisions are concerning to some jurisdictions given uncertainty in the landings data.

If approved, changes to the current management program would be implemented for use in the 2019 fishing season. Since the four management issues related to the yellow eel fishery are linked (e.g., coastwide cap, management trigger, state-by-state allocations, quota transfers), the public is encouraged to specify their preferred alternatives for each issue.

The Draft Addendum is available at http://www.asmfc.org/files/PublicInput/ AmEelDraftAddendumV PublicComment April2018revised.pdf or on the Commission website, www.asmfc.org, under Public Input. Fishermen and other interested groups are encouraged to provide input on the Draft Addendum either by attending state public hearings or providing written comment. Public comment will be accepted until 5:00 PM (EST) on June 15, 2018 and should be forwarded to Kirby Rootes-Murdy, Senior FMP Coordinator, 1050 N. Highland St, Suite A-N, Arlington, VA 22201; 703.842.0741 (FAX) or at comments@ asmfc.org (Subject line: Draft Addendum V).

Final action on the Addendum is scheduled to occur at the Commission's Summer Meeting. For more information, please contact Kirby Rootes-Murdy at krootes-murdy@asmfc.org or 703.842.0740.

In the News: Maine's Elver Fishery Shuts Down, Charges Pending for Illegal Sales

On May 23rd, the Maine Department of Marine Resources (ME DMR) announced that it would be shutting down the elver fishery two weeks early, on May 24 at 6:00 a.m. The closure, done through emergency rulemaking, is being implemented because of illegal sales which jeopardize the department's ability to manage the fishery.

An investigation by the Maine Marine Patrol revealed that some Maine elver dealers were paying a cash amount that was substantially less than the per pound price for elvers that were harvested and accounted for through the state's swipe card system. The investigation is on-going and charges will be filed against dealers and harvesters who bought and sold elvers without using the state's swipe card system. The swipe card system records the weight and value of each sale, allowing the state to ensure that harvesting does not exceed individual and overall state quotas.

The state's overall quota is set by the Atlantic States Marine Fisheries Commission (ASMFC), and individual quotas that add up to the overall quota are established by the state.

The value and weight of the illegally harvested and sold elvers were not recorded with the swipe card system and not accounted for in the Department's quota management system. The swipe card system was established in 2014 to allow DMR to obtain accurate, timely information on the amount of elvers landed and sold in Maine, and has been key in the state's ability to comply with the overall quota requirement.

"This is a fishery that stood to net Maine license holders nearly \$24 million this year, and now because of the greed of some dealers and harvesters, I am obligated to cut that opportunity short," said ME DMR Commissioner Patrick Keliher.

As of May 22nd, 9,090.629 pounds of the state's 9,688-pound quota had been sold legally, using the swipe card system.

"We believe that if the illegal sales had been recorded, the 2018 elver quota would have already been exceeded," said Commissioner Keliher. "For this reason, an immediate closure of the fishery, done through emergency rulemaking, is necessary to prevent depletion of the elver resource, caused by exceeding the 2018 elver fishing quota.

"The future of this lucrative fishery is now in question," said Commissioner Keliher. "We clearly have to consider additional measures to ensure that Maine can remain compliant with ASMFC, that we can continue to protect our state's valuable marine resources, and that we can hold accountable anyone who chooses to squander the opportunity those resources represent."

Under the regulation, licensed harvesters may not fish for or take elvers after 6:00 a.m. on May 24, but may possess and sell elvers until noon on May 24. Licensed dealers may purchase elvers until noon on May 24, and may possess legally purchased elvers until 6:00 a.m. on May 29.

SPECIES PROFILE continued from page 5

While the stock assessment indicated that the mortality rate is sustainable on a coastwide basis, estimates of total mortality for each DPS are more uncertain due to low sample sizes. The Gulf of Maine and Carolina DPS are most likely to have mortality rates exceeding sustainable levels.

Efforts to assess the status of Atlantic sturgeon are still hampered by a lack of data. Atlantic sturgeon are not well monitored by existing fishery-independent data collection and bycatch observer programs, and landings information is nonexistent after 1998

due to implementation of the coastwide moratorium. Better information on population trends, especially at the DPS level, is a high priority. More work is needed to establish reliable indices of abundance for spawning populations and juveniles. The assessment recommended observer programs that monitor bycatch should be expanded to include more estuarine waters and to increase the number of trips and gears covered in order to improve estimates of bycatch. In addition, ship strikes may be a significant source of mortality for some DPSs, and more data are needed to quantify the numbers of Atlantic sturgeon killed by ship strikes each year. Tagging data provide important information on current mortality rates. It is critical to maintain and support current networks of acoustic receivers and acoustic tagging programs, and expand the programs in underrepresented DPSs to improve the estimates of total mortality.

Atlantic Coastal Management

Despite the genetic differences between Atlantic sturgeon in each of the five DPSs, the Commission manages the species as a single coastwide population. Atlantic sturgeon is managed through Amendment 1 to the Interstate Fishery Management Plan for Atlantic Sturgeon



Atlantic sturgeon being measured as part of a Cooperative Federal/State/ Industry Atlantic Sturgeon Bycatch Reduction Survey. Photo © ASMFC.

(July 1998) and its subsequent addenda (Addendum I – IV). The primary measure of Amendment 1 is the implementation of a coastwide moratorium, prohibiting the take, harvest, possession, harassment and/or other actions that may cause the species harm. Exemptions to the moratorium on possession may be obtained for scientific research and educational display, and several facilities culture Atlantic sturgeon for research and potential stocking efforts.

Endangered Species Listing

NOAA Fisheries has investigated whether Atlantic sturgeon should be listed under the Endangered Species Act (ESA) several times since the Commission instituted a moratorium on the species in 1998. The first three status reviews, in 1998, 2005, and 2007, all concluded that listing was not warranted. The 2007 review additionally identified the five DPSs recognized today. The last status review, initiated in 2009, declared the Gulf of Maine DPS threatened and the remaining four DPSs (New York Bight, Chesapeake Bay, Carolina and South Atlantic) endangered (the ESA listing became effective in April 2012). The Status Review determined the most significant threats to the species are bycatch mortality, poor water quality, lack of adequate state and/or federal regulatory mechanisms,

and dredging activities.
Additional stressors include
habitat impediments and ship
strikes. In December 2013,
NOAA Fisheries published an
Interim Final 4(d) Rule for the
threatened Gulf of Maine DPS,
which provides essentially
the same protection as an
endangered listing.

In August 2017, NOAA
Fisheries designated critical
habitat for Atlantic sturgeon.
This is required for any
species listed as threatened
or endangered under the ESA,
and indicates areas within
the species' range that have
physical or biological features
necessary to the species'
survival and recovery, or
that may require additional

management considerations. 3,968 miles of coastal river habitat was included in the critical habitat designation. With this action, federal agencies funding or conducting activities that may affect the critical habitat are now required to consult NOAA Fisheries on how to best minimize impacts before starting those projects.

Next Steps for Management

Although the lack of historical data remains an issue, it is important to note there has been a tremendous amount of new information about Atlantic sturgeon collected in recent years, which helps stock assessment scientists and fisheries managers in their efforts to monitor stocks of Atlantic sturgeon and work towards its restoration. The Commission's Atlantic Sturgeon Management Board discussed the need to support management actions that have contributed to recovery seen to date (e.g., the moratorium, habitat restoration/ protection, better bycatch monitoring) and continue to work on improving them (e.g., identifying bycatch and ship strike hotspots and ways to reduce those interactions).

For more information, please contact Max Appelman, FMP Coordinator, at mappelman@asmfc.org.



FY19 Proposals Due June 11

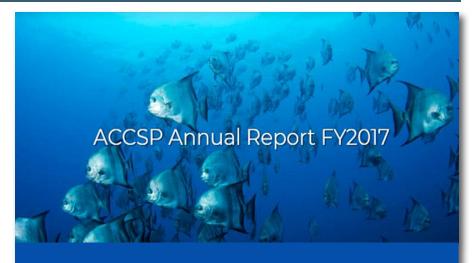
Over the past 19 years, Atlantic Coastal Cooperative Statistics Program (ACCSP) funds have supported more than 100 unique fisheries data collection and processing projects conducted by our state and federal partners and committees.

On May 7th, ACCSP issued its request for proposals to program partners and committees for FY19 funding. Project proposals are evaluated based on their potential to help meet ACCSP goals. These goals, listed in order of priority, are improvements in:

- Catch, effort, and landings data (including licensing, permit and vessel registration data);
- 1b. Biological data (equal to 1a.);
- Releases, discards and protected species data
- 3. Economic and sociological data

Project activities that will be considered according to priority may include:

- Partner implementation of data collection programs
- Continuation of current Program funded partner programs
- Funding for personnel required to implement Program related projects/ proposals



2017 ACCSP ANNUAL REPORT NOW AVAILABLE

The ACCSP has released its 2017 Annual Report. Highlights include:

- More than 100 custom data requests fulfilled by the Data Team
- eTrips/Mobile used to help the for-hire industry move toward census reporting
- · Redesign of SAFIS initiated
- 10% increase in APAIS intercepts over 2016
- SAFIS API created to support seafood traceability
- · Priorities for improving Atlantic recreational data identified

This year, the report is provided in a digital, responsive format that can be accessed on your computer, tablet, or phone. A PDF version of the digital report will be made available at a later date.

• Data management system upgrades or establishment of partner data feeds to the Data Warehouse or Standard Atlantic Fisheries Information System.

Projects in areas not specifically addressed may still be considered for funding if they help achieve Program goals. For further guidance, please see the supporting materials provided at http://www.accsp.org/funding.

Proposals should be submitted by June 11, 2018 to Mike Cahall, ACCSP Director, at mike.cahall@accsp.org and Ali Schwaab, Program Manager, at alexandra.schwaab@accsp.org.

Reminder: FY19 will be the final year of full funding for some maintenance projects. Maintenance projects that have been funded for four or more years will receive a funding cut of 33% in FY20.

ACCSP is a cooperative state-federal program focused on the design, implementation, and conduct of marine fisheries statistics data collection programs and the integration of those data into a single data management system that will meet the needs of fishery managers, scientists, and fishermen. It is composed of representatives from natural resource management agencies coastwide, including the Atlantic States Marine Fisheries Commission, the three Atlantic fishery management councils, the 15 Atlantic states, the Potomac River Fisheries Commission, the D.C. Fisheries and Wildlife Division, NOAA Fisheries, and the U.S. Fish & Wildlife Service. For further information please visit www.accsp.org.

Deke Tompkins & Cecilia Butler Named Employees of the Quarter



Each quarter, the Commission honors an individual who has made notable contributions to the Commission's mission, vision, programs and activities. Deke Tompkins, Legislative Executive Assistant, and Cecilia Butler, Human Resources Coordinator, were named Employees of the Quarter for the first and second quarters of 2018, respectively.

Since joining the Commission staff in March 2013, Deke Tompkins has proven to be a valuable addition. His outstanding efforts to support the Commission's legislative activities have resulted in an increased and effective presence on Capitol Hill. Deke's prior experience as a legislative staffer has enabled the Commission to develop and foster relationships with many congressional offices and appropriations staff that are important to Atlantic states. In turn, these relationships have helped to build strong support for the work of the Commission and the states to sustainably manage Atlantic coast fisheries. For the past five years, Deke has worked closely with the Legislative and Governor-appointed Commissioners to ensure they have opportunities to engage with legislators on Capitol Hill, as well as maintain their important role in the Commission. Further, his relaxed attitude and willingness to work with others makes him a great member of the Commission staff. Always willing to pitch in on other projects, Deke is a constant contributor to newsletter articles, speeches, correspondence, and outreach materials, including oversight of the Commission's social media presence.

With the birth of his baby boy Peter "Striper" Tompkins in April, Deke moves into the new role of father, a role at which we know he will excel.

Cecilia Butler, a 15-year veteran of the Commission, first joined the staff as an Administrative Assistant, providing support to the ISFMP. In 2006, Cecilia was promoted to Human Resources (HR) Coordinator to address the needs of a growing staff under expanding Atlantic Coastal Fisheries Cooperative Act responsibilities. In 2016, to address the increasing demand by the states to hire part-time seasonal employees to conduct the Access Point Angler Intercept Survey portion of the Marine Recreational Information Program, Cecilia was joined by an HR Specialist. With the HR Specialist's recent departure, Cecilia fully and gracefully assumed the responsibilities of two full-time employees without missing a beat. Over the past few months and throughout her entire tenure at the Commission, Cecilia has enthusiastically and untiringly contributed to the success of the Commission and the well-being of its staff. She is a great team player, seeking assistance from co-workers where responsibilities overlap. She shows great initiative, anticipating needs and acting without direction. Lastly, she consistently demonstrates her keen attention to detail, her commitment to completing work ahead of schedule, and her dedication, concern, and commitment to providing the best support to the staff.

Both Deke and Cecilia epitomize the qualities for which the Employee of the Quarter was established: teamwork, initiative, responsibility, quality of work, and positive attitude. As Employee of the Quarter, they both received a cash award and a letter of appreciation to be placed in their personal record. In addition, their names are on the Employee of the Quarter plaque displayed in the Commission's lobby. Congratulations, Deke and Cecilia!



ROY COOPER

MICHAEL S. REGAN

STEPHEN W. MURPHEY

August 1, 2018

MEMORANDUM

TO: Marine Fisheries Commission

FROM: Chris Batsavage, Protected Resources Section Chief/Special Assistant for

Councils

SUBJECT: Mid-Atlantic Fishery Management Council Meeting Summary—June 5-7, 2018

The Mid-Atlantic Fishery Management Council met on Jun. 5-7 in Philadelphia, PA. Highlights of the management actions taken by the council are discussed below:

Summer Flounder Commercial Issues Amendment

The council approved a Draft Environmental Impact Statement for the Summer Flounder Commercial Issues Amendment. The management issues addressed in this amendment are permit requalifying criteria, state commercial quota allocations, and framework provisions for commercial landings flexibility. Public hearings on the draft amendment are tentatively scheduled to begin in September, with the North Carolina hearing being held in Washington, NC.

Estimating and Reducing Black Sea Bass Discard Mortality

Dr. Douglas Zemekis from Rutgers University presented results from a research on recreational black sea bass release mortality. The research focused on the deep water (45-80 meters) fishery during the fall and winter to determine factors leading to release mortality. Deflating the distended swim bladders and the time it took to land a fish were among the most significant factors for predicting mortality, and the discard mortality estimates from the study suggest a higher mortality rate from the deep water recreational fishery than what is assumed for the overall recreational fishery (15 percent) in the black sea bass stock assessment.

Aquaculture in the Northeast

Kevin Madley, Aquaculture Coordinator for NOAA Fisheries Greater Atlantic Regional Fisheries Office, presented an overview on current trends in global aquaculture production, aquaculture operations in the Atlantic Ocean federal waters, and U.S. research and innovation in aquaculture. The development of aquaculture in federal waters is an important topic among many of the federal fishery management councils, and the Mid-Atlantic Council is expected to have more presentations and discussions to determine the appropriate management response.

Upcoming Meeting

The next regularly scheduled meeting of the Mid-Atlantic Fishery Management Council will be August 13-16, 2018 at the Hilton Virginia Beach Oceanfront in Virginia Beach, VA.





June 2018 Council Meeting Summary

June 5 - 7, 2018

Philadelphia, PA

The following summary highlights actions taken and issues considered at the Mid-Atlantic Fishery Management Council's June 2018 meeting in Philadelphia, PA. Presentations, briefing materials, and webinar recordings are available on the Council website at www.mafmc.org/briefing/june-2018.

Surfclams and Ocean Quahogs

Excessive Shares Amendment

The Surfclam and Ocean Quahog Committee met to review the draft recommendations on alternatives for the Excessive Shares Amendment developed by the Fishery Management Action Team (FMAT) (available here). The Committee recommended an additional alternative to be added to the set of alternatives developed by the FMAT and instructed the FMAT to continue development of the alternatives for inclusion in the Public Hearing Draft. The Surfclam and Ocean Quahog Advisory Panel (AP) members will have an opportunity to comment on the Public Hearing Draft before the Council meets again to approve this document for public hearings.

2019 Specification Review

Next year the surfclam and ocean quahog fisheries will be in the second year of multi-year specifications previously set for the 2018-2020 fishing years. The Council reviewed updated catch and landings information for both stocks, as well as recommendations from staff, the surfclam and ocean quahog AP, and the SSC, and determined that no changes are warranted. The Council also voted to recommend suspending the minimum shell length for surfclams in 2019. These specifications are described in detail in the final rule published February 6, 2018:

https://www.federalregister.gov/documents/2018/02/06/2018-02321/fisheries-of-the-northeastern-united-states-atlantic-surfclam-and-ocean-quahog-fishery-2018-2020

Atlantic Mackerel Closure Framework

The Council met for a second meeting to discuss and take final action on the <u>Atlantic Mackerel Closure Framework</u>. This framework was initiated in April 2018 in response to concerns about the possible effects of an Atlantic mackerel closure on the herring fishery. Currently, the Atlantic mackerel fishery is projected to reach 100% of its quota at some point in late 2018. Under current regulations, a zero-possession limit will take effect once the quota is reached. During this meeting, the Council voted to recommend that NOAA Fisheries implement a 5,000 pound trip limit when 100% of the commercial quota is reached. This limit appears likely to minimize negative impacts from a zero-possession limit on the Atlantic herring fishery while likely avoiding an ACL overage for the Atlantic mackerel fishery.

Chub Mackerel Amendment

The Council received an update on the <u>Chub Mackerel Amendment</u> and reviewed a fishery performance report developed by the Mackerel, Squid, Butterfish (MSB) Advisory Panel. The Council also reviewed recommendations from the FMAT, the MSB Advisory Panel, and the MSB Committee regarding amendment goals and objectives and other issues being considered as part of this action. The Council approved two modifications to the draft goals and objectives recommended by the Committee. These goals and objectives will be included in a public hearing document.

Summer Flounder Commercial Issues Amendment

The Council approved a Draft Environmental Impact Statement (DEIS) for the <u>Summer Flounder Commercial Issues Amendment</u>. The Council and Atlantic States Marine Fisheries Commission had previously approved a public hearing document at their <u>joint meeting in April 2018</u>. The amendment DEIS will be submitted to NMFS for review, followed by public hearings tentatively scheduled to begin in September 2018.

Atlantic Herring Amendment 8

The New England Fishery Management Council (NEFMC) hosted a public hearing on Amendment 8 to the Atlantic Herring FMP. Amendment 8 addresses several goals: (1) To account for the role of Atlantic herring within the ecosystem, including its role as forage; (2) To stabilize the fishery at a level designed to achieve optimum yield; and (3) To address localized depletion in inshore waters. NEFMC staff presented an overview of the amendment and the alternatives being considered, followed by an opportunity for Council members and members of the public to provide oral comments. Additional information about this amendment is available on the NEFMC website at https://www.nefmc.org/library/amendment-8-2.

Regulatory Review

On July 7, 2017, NOAA published a notice on "Streamlining Regulatory Processes and Reducing Regulatory Burden," which solicited public input on identifying existing regulations and processes that can be further streamlined consistent with law. During the meeting, the Council reviewed a list of regulations identified by staff that may be appropriate for streamlining. These include both general recommendations as well as FMP-specific regulations that appear outdated, unnecessary, and/or ineffective. After a brief discussion the Council approved the list of regulations recommended by staff for streamlining.

Presentations

Estimating and Reducing Black Sea Bass Discard Mortality

Douglas Zemeckis (Rutgers University) presented the results of a research project on black sea bass discard mortality. Funded by the Council's 2016-2017 Collaborative Fisheries Research Program, this project aimed to estimate the discard mortality rate of black sea bass following capture with rod-and-reel fishing gear at a deepwater offshore shipwreck in the Mid-Atlantic and identify the capture-related factors that influence discard mortality.

Northeast Observer Program

The Council received an update on the Northeast Fisheries Observer Program from Amy Martins, Branch Chief of the Fisheries Sampling Branch with NOAA Fisheries Northeast Fisheries Science Center. The presentation included an overview of observer activities and accomplishments from the past year and upcoming activities in the current year.

NMFS Climate Strategy

Vincent Saba (NOAA Fisheries Northeast Fisheries Science Center) presented an overview of climate change research within NOAA's Northeast Fisheries Science Center. Much of this work falls under the umbrella of the NOAA Fisheries Climate Science Strategy. Current research indicates that the Northeast shelf has warmed faster than most other coastal waters globally and that continued distribution shifts of valuable commercial species are highly likely. Future research will focus on incorporating climate variables into ecosystem models and evaluating the impacts of climate change to inform stock assessments and management. For additional information, visit:

https://www.st.nmfs.noaa.gov/ecosystems/climate/national-climate-strategy.

Mid-Atlantic Coastal Acidification Network Monitoring Plan

Sherilyn Lau (U.S. Environmental Protection Agency) presented on the Mid-Atlantic Coastal Acidification Network's (MACAN) Draft Monitoring Plan. The plan highlights existing monitoring of ocean acidification, best available technology, and optimization to improve understanding of carbonate chemistry variability while monitoring in an efficient way. Following the presentation, Council members had an opportunity to ask questions and provide feedback on the draft plan.

Aquaculture in the Northeast

The Council received a presentation on aquaculture in federal waters from Kevin Madley, Aquaculture Coordinator for NOAA Fisheries Greater Atlantic Regional Fisheries Office. Mr. Madley provided an overview of current trends in global aquaculture production, aquaculture operations in the Atlantic exclusive economic zone (EEZ), and U.S. research and innovation in aquaculture. The presentation also covered different regional approaches to aquaculture management in the EEZ.

Next Council Meeting

Monday, August 13, 2018 - Thursday, August 16, 2018

Hilton Virginia Beach Oceanfront 3001 Atlantic Ave. Virginia Beach, VA 23451 757-213-3000



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

STEPHEN W. MURPHEY

August 16, 2018

MEMORANDUM

TO: Marine Fisheries Commission

FROM: Captain Carter Witten, Marine Patrol, Eligibility Board Chair

SUBJECT: Standard Commercial Fishing License Eligibility Pool Determination

An individual who does not hold a Standard Commercial Fishing License, but wants to purchase a license through the Division of Marine Fisheries, can apply to receive the license through the Eligibility Pool process. The application goes before a board which determines if the applicant is qualified based on criteria set out in rule. The number of licenses available in this pool is set annually by the commission.

Session Law 1998-225, Section 4.24(f) states that "the number of SCFLs in the pool of available SCFLs in license years beginning with the 2000-01 license year is the temporary cap less the number of SCFLs that were issued and renewed during the previous license year." The temporary cap was set at the number of valid Endorsements to Sell as of June 30, 1999 (8,396 licenses), plus an extra 500 licenses to be included in the Eligibility Pool (8,896 total licenses).

In the 2016-2017 license year, the division modified the calculation used to determine the number of licenses available in the Eligibility Pool. This correction was made to prevent licenses already existing in the cap from being double counted and removed from the number of licenses remaining.

For the 2018-2019 license year, the number of licenses available through the Eligibility Board is 2,723. This number accounts for licenses issued in the 2017-2018 license year and the number of approvals from the Eligibility Board from 2017-2018 that still have the option to purchase a license before June 30, 2019. Individuals approved in the fall (September/October) must purchase their license by June 30 of the same license year, but those approved in the spring (March) have until June 30 of the following license year to purchase their license.

Session Law 1998-225, Section 4.24(f) also states "the Commission may increase or decrease the number of SCFLs that are issued from the pool of available SCFLs. The



Commission may increase the number of SCFLs that are issued from the pool of available SCFLs up to the temporary cap. The Commission may decrease the number of SCFLs that are issued from the pool of available SCFLs but may not refuse to renew a SCFL that is issued during the previous license year and that has not been suspended or revoked. The Commission shall increase or decrease the number of SCFLs that are issued to reflect its determination as to the effort that the fishery can support, based on the best available scientific evidence."

In February 2016, as part of Amendment 4 to the Oyster Fishery Management Plan, the commission adopted a management strategy to pursue elimination of the Shellfish License for oysters only and require all oyster harvesters to have a Standard Commercial Fishing License or a Retired Standard Commercial Fishing License with a shellfish endorsement to harvest oysters commercially. Legislative action would be required to enact this recommendation; therefore, in October 2017, the harvest limits of oysters were modified by proclamation to establish specific harvest limits based on license type to satisfy management recommendations from Amendment 4 (SF-4-2017). Many Shellfish License holders, wanting higher harvest limits, have applied through the Eligibility Pool to obtain a Standard Commercial Fishing License, increasing the number of applications submitted to the Board. The number of applications received in the 2017–2018 license year increased by 135 percent from the 2016–2017 license year. From July 1, 2017 to June 30, 2018, the Eligibility Board received 97 applications and approved 84. So far, there are 6 pending applications for review at the fall Eligibility Board meeting. Calls to the division inquiring about applying through the Eligibility Pool are currently being received from shellfish fishermen on a daily basis.

In summary, there are 2,723 licenses available to the Eligibility Pool for the 2018–2019 license year. The commission needs to determine the number of licenses it wants to place in the pool for the upcoming year. Considerations the commission should keep in mind include:

- Statutory guidance that increasing or decreasing the number of licenses should reflect the commission's determination as to the effort that the fishery can support, based on the best available scientific evidence;
- The average number of licenses issued by the Eligibility Board; and
- Number of fishermen displaying interest to the Division of Marine Fisheries in making the change from holding the Shellfish License to the Standard Commercial Fishing License with a shellfish endorsement to harvest higher limits of oysters in the upcoming oyster season.

Eligibility Pool Commission Report for 2018–2019 August 15–16, 2018

How the Pool Number is Determined:

Session Law 1998-225, Section 4.24(f).

(f) Adjustment of Number of SCFLs. The number of SCFLs in the pool of available SCFLs in license years beginning with the 2000–01 license year is the temporary cap less the number of SCFLs that were issued and renewed during the previous license year. . .

Role of the Marine Fisheries Commission:

Session Law 1998-225, Section 4.24(f).

(f). . . The Commission may increase or decrease the number of SCFLs that are issued from the pool of available SCFLs. The Commission may increase the number of SCFLs that are issued from the pool of available SCFLs up to the temporary cap. The Commission may decrease the number of SCFLs that are issued from the pool of available SCFLs but may not refuse to renew a SCFL that is issued during the previous license year and that has not been suspended or revoked. The Commission shall increase or decrease the number of SCFLs that are issued to reflect its determination as to the effort that the fishery can support, based on the best available scientific evidence.

Temporary Cap:

The maximum number of SCFLs that can be issued is the number of valid Endorsements to Sell as of June 30, 1999 plus 500 for the first eligibility pool, for a total of 8,896.

Eligibility Board Pool Determination 2018–2019:

There are 2,723 SCFLs available through the Eligibility Board for the 2018–2019 license year.

Attachments:

2018–2019 Eligibility Pool Determination Calculations

FY2017 License Sales Report

Licenses Available and Approved Summaries

Eligibility Board Meeting Summary

Eligibility Board Open Files

Eligibility Pool Determination Calculations For 2018–2019 License Year

Below is the current calculation used to determine the number of licenses available in the Eligibility Pool. Corrections were made to this calculation in August 2016 to prevent licenses already existing in the cap from being double counted and removed from the number of licenses remaining.

Licenses removed from the cap in this calculation include the number of SCFLs and RSCFLs issued and renewed in the 2017–2018 license year as well as any Eligibility Board approvals from the spring meeting. Those approved by the Eligibility Board in the spring have until the following license year to purchase their SCFL. These licenses are subtracted from the pool because they represent potential licenses available for purchase.

Current calculation:

Total Number of SCFLs Available in 2018–2019 License Year (Data run date: 7/11/2017)

1)	Total original SCFLs available (Cap)	8,896
2)	Less total number of SCFLs issued and renewed in 2017–2018	- 6,162
3)	Total number of SCFLs available in the pool for 2018–2019	2,734
4)	Less total number of 2017–2018 approvals through Eligibility Pool not yet issued ^{1,2}	-11
5)	Total SCFLs available for the 2018–2019 license year	2,723

¹ Individuals approved in the spring (March) have until June 30 of the following license year (2019) to purchase their SCFL.

² Numerical value includes one SCFL reinstated by the NCDMF Director's approval

North Carolina Division of Marine Fisheries Commercial Licenses Sold by License Type FY2018 License Year

Data Run Date: 7/11/2018

Blanket For-Hire Captain's Coastal Recreational Fishing License:	115
Blanket For-Hire Vessel Coastal Recreational Fishing License:	566
Commercial Fishing Vessel Registration:	7,016
Fish Dealer License:	664
Land or Sell License:	131
License to Land Flounder from Atlantic Ocean:	156
NC Resident Shellfish License without SCFL:	775
Non-Blanket For-Hire Vessel License:	106
Ocean Pier License:	19
Recreational Fishing Tournament License:	27
Retired Standard Commercial Fishing License:	1,340
Standard Commercial Fishing License:	4,822
TOTAL LICENSES FOR ALL LICENSE TYPES:	15.737

4,822	SCFL
+ 1,340	RSCFL
6,162	Total Number of SCFL's issued for FY2018

Licenses Available from the Eligibility Pool Annual Summary

License Year	Number of Licenses Available
1999–2000	500
2000–2001	1,314
2001–2002	1,423
2002–2003	1,458
2003–2004	1,421
2004–2005	1,423
2005–2006	1,536
2006–2007	1,596
2007–2008	1,562
2008–2009	1,557
2009–2010	1,507
2010–2011	1,420
2011–2012	1,375
2012–2013	1,358
2013–2014	1,368
2014–2015	1,257
2015–2016	1,238
2016–2017	2,417
2017–2018	2,592
2018–2019	2,723

Licenses Approved and Denied by the Eligibility Pool Board Annual Summary

License Year	Approved	Denied
1999–2000	166	133
2000–2001	110	75
2001–2002	46	37
2002–2003	38	23
2003–2004	56	11
2004–2005	35	13
2005–2006	31	9
2006–2007	32	4
2007–2008	49	7
2008–2009	83	5
2009–2010	109	11
2010–2011	63	2
2011–2012	68	17
2012–2013	99	9
2013–2014	96	14
2014–2015	61	13
2015–2016	45	6
2016–2017	32	6
2017–2018	84	13
Totals	1,303	408

Eligibility Pool Board Meeting Summary

UEADING	APPRVLS	DENIALS	TABLED	TOTAL	INCOMP.	P. NON-RESIDENTS		TS
HEARING DATE	ATTROLO	DENIALO	**	REVIEWED	***	TABLED	APPRV'D	DENIED
5/5/1999	2	0	2	4		0	0	0
5/19/1999	5	0	1	6		0	1	0
6/17/1999	2	5	3	10		0	0	0
7/1/98–6/30/99	9	5	6	20		0	1	0
7/7/1999	12	10	0	22		0	3	0
7/8/1999	23	25	0	48		0	7	0
	N/A	N/A						
07/15/1999 MFC			N/A	N/A		N/A	N/A	N/A
8/11/1999	18	20	0	42		0	3	0
8/27/1999	17	33	-	50	N1/A	0		1
09/09/1999 MFC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9/29/1999	18	11	1	30		0	0	0
11/3/1999	13	12	4	29		1	2	0
11/08/1999 MFC	N/A	N/A	N/A	N/A		N/A	N/A	N/A
1/26/2000	9	5	5	19		1	1	0
02/18/2000 MFC	N/A	N/A	N/A	N/A		N/A	N/A	N/A
4/19/2000	19	6	8	33		2	1	0
5/18/2000	18	3	9	30		2	0	1
6/7/2000	10	3	2	15		1	0	0
7/1/99–6/30/00	157	128	33	318		7	17	2
7/12/2000	11	1	4	16		0	2	0
7/21/2000 MFC	N/A	N/A	N/A	N/A		N/A	N/A	N/A
9/20/2000	24	15	7	46		0	1	0
10/27/2000	16	8	3	27		0	1	0
12/1/2000	5	16	2	23		0	0	0
1/24/2001	10	14	3	27		0	0	2
3/9/2001	12	12	8	32		0	0	0
4/4/2001	32	9	1	42		0	0	1
7/1/00-6/30/01	110	75	28	213		0	4	3
7/26/2001	18	10	2	30		1	3	0
08/21/2002 MFC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11/14/2002	12	15	3	30		0	2	1
2/21/2002	16	12	2	30		0	1	0
7/1/01–6/30/02	46	37	7	90		1	6	1
9/11/2002	28	14	6	48		1	2	0
08/19/2003 MFC	N/A	N/A	N/A	N/A		N/A	N/A	N/A
3/5/2003	10	9	1	20		0	2	0
7/1/02–6/30/03	38	23	7	68		1	4	0
08/19/2003 MFC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/9/2003	16	3	1	20	IN/A	0	2	0
11/4/2003	17	2	0	19		0	3	0
3/19/2004	22	6	0	28		0	2	0
6/22/2004	1	0	0	1		0	0	0
7/1/03–6/30/04	56	11	1	68		0	7	0
11/1/2004	22	4	1	27		0	0	0
2/28/2005	11	2	0	13		0	0	1
4/18/2005	2	7	0	9		0	0	0
7/1/04–6/30/05	35	13	1	49		0	0	1
9/27/2005	17	7	1	25		0	1	0
3/15/2006	14	2	2	18		0	1	0
7/1/05–6/30/06	31	9	3	43		0	2	0

HEARING	APPRVLS	DENIALS	TABLED	TOTAL	INCOMP.	NO	N-RESIDEN	TS
DATE			**	REVIEWED	***	TABLED	APPRV'D	DENIED
10/4/2006	16	3	2	21		0	1	0
3/14/2007	16	1	2	19		0	1	0
7/1/06-6/30/07	32	4	4	40		0	2	0
9/10/2007	26	2	4	32		0	0	0
3/19/2008	23	5	3	31		0	0	0
7/1/07-6/30/08	49	7	7	63		0	0	0
9/30/2008	39	0	3	42		0	4	0
3/24/2009	44	5	1	50		0	3	0
7/1/08-6/30/09	83	5	4	92		0	7	0
10/6/2009	52	6	1	59		0	2	1
3/10/2010	36	2	1	39		0	1	0
6/2/2010	21	3	0	24		0	0	0
7/1/09–6/30/10	109	11	2	122		0	3	1
9/21/2010	40	2	1	43		0	2	0
3/24/2011	23	0	0	23		0	4	0
7/1/10–6/30/11	63	2	1	66		0	6	0
10/4/2011	39	7	0	46		0	2	0
3/15/2012	28	10	0	38		0	2	0
1/13/2012	1	0	0	1		0	0	0
7/1/11–6/30/12	68	17	0	85		0	4	0
9/12/2012	53	7	3	63		0	1	1
3/19/2013	46	2	4	52		0	2	0
7/1/12–6/30/13	99	9	7	115		0	3	1
9/18/2013	56	7	0	63		0	2	0
3/19/2014	40	7	1	48		0	0	0
7/1/13-6/30/14	96	14	1	111		0	2	0
09/17/2014	32	9	0	41		0	1	0
03/18/2015	25	3	5	33		1	0	0
05/12/2015	4	1	0	5		0	1	0
7/1/14–6/30/15	61	13	5	79		1	1	0
10/21/2015	16	4	1	21		0	3	0
03/23/2016	29	2	2	33		0	0	0
7/1/15–6/30/16	45	6	3	54		0	3	0
9/28/2016	17	3	2	22		0	0	0
3/16/2017	15	3	0	18		0	0	0
7/1/16–6/30/17	32	6	2	40		0	0	0
9/28/2017	44	9	0	53		0	1	0
11/1/2017	11	3	0	14		0	1	0
03/28/2018	29	1	0	30		0	3	0
7/1/17–6/30/18	84	13	0	97		0	5	0
TOTALS ALL	1,303	408	122	1,833		10	75	9

^{**}TABLED files are presented again at the next Board meeting for a final decision of approval or denial and are then accounted for in the Approved or Denied categories. TOTAL REVIEWED does not equal total approved or denied because some files are reviewed in multiple meetings (tabled, etc.).

Standard Commercial Fishing License Eligibility Pool Office Summary of Open Files beginning July 1, 2018

File Description	Total Number of Files
To be researched/ready for the next board meeting	6
New/being processed	0
Pending responses to letters mailed requesting more information	0
Incomplete – no response to letters	0
Total Open/Pending Applications	6



ROY COOPER

MICHAEL S. REGAN

STEPHEN W. MURPHEY

Director

Aug. 1, 2018

MEMORANDUM

TO: Marine Fisheries Commission

FROM: Catherine Blum, Fishery Management Plan and Rulemaking Coordinator

Fisheries Management Section

SUBJECT: Fishery Management Plan Update

This memo describes the materials about fishery management plans for the August 2018 commission meeting. There are four items in this section; the first three are for information and the fourth is scheduled for the commission to take action. Each item is summarized below.

Status of Ongoing Plans

The first item is a three-page summary of the status of the fishery management plans. This is a document staff presents to the commission at each business meeting. The document provides background information on the authority and process for fishery management plans, as well as the status of each individual plan. Additionally, staff leads for plans currently under review or development will provide updates to the commission at the meeting.

Fishery Management Plan Review

The second item is a separate publication entitled "2017 Fishery Management Plan Review." It is a compilation of annual updates about state-managed, federally-managed, and Atlantic States Marine Fisheries Commission-managed species for which there are fishery management plans for North Carolina. The updates are based on data through the previous calendar year. Staff provides the document to the commission annually at its August business meeting. It is a useful resource document, especially as a means of providing fishery management plan schedule recommendations based on the latest data. The document also provides a comprehensive list of research recommendations for all fishery management plans.

The Fishery Management Plan Review is an invaluable reference document for information about the latest status of fisheries occurring in North Carolina. The document is organized into two primary sections: state-managed species and interstate-managed species, including species managed by the Atlantic States Marine Fisheries Commission and federal fishery management councils. The latter section is further divided into species with and without North Carolina indices. If a species has a North Carolina index, it means that North Carolina data were used by the federal management councils or the Atlantic States Marine Fisheries Commission in their respective plans.

Each update in the Fishery Management Plan Review contains information about the:

- History of the plan;
- Management unit;
- Goal and objectives;
- Status of the stock;
- Status of the fishery, including current regulations and commercial and recreational landings;
- Monitoring program data, including dependent and independent monitoring;
- Management strategy;
- Research needs: and
- Recommendation on the timing for the next state plan review.

Streamlining Fishery Management Plan Documents

The third item will be a presentation on the division's efforts to streamline fishery management plan documents. It is important to note the efforts focus on changing the documents themselves, not the requirements of the process. Those requirements are set forth in state law and must continue to be met. The presentation provides an overview of the requirements for fishery management plans, roles and responsibilities of those involved in the process, the different forms the documents can take, what the plans must achieve, what the documents contain now, and why we are changing the documents.

Primarily, the division is focused on addressing stakeholder complaints about the process not being easy to follow and being perceived as delaying management actions, as well as the documents themselves being lengthy. The division is striving to have a more efficient fishery management plan, with improved understanding of the plan. A key objective to achieving this goal is to pinpoint management issues that are based on sustainability of the resource. Other issues, such as rule clarifications, user conflicts and outreach initiatives can be addressed outside of the fishery management plan process. Overall, the division wants fishery management plans to be more interesting, relevant and readable. The new streamlined fishery management plan document format more effectively disseminates to the public the rationale for the science-based management strategies.

Five-year Schedule

The final item in this section is the draft "Fishery Management Plan Review Schedule" presented for the commission's consideration and approval. This is an action item because it requires the commission's approval each year in accordance with General Statutes 113-182.1 and 143B-289.52. Upon the commission's approval, the final schedule will be forwarded to the secretary of the Department of Environmental Quality, also per statutory requirements, to assist the secretary in monitoring the progress in the development and adoption of fishery management plans.

Annual Fishery Management Plan Update North Carolina Division of Marine Fisheries and Marine Fisheries Commission Aug. 1, 2018

Authority and Process

The Fisheries Reform Act of 1997 and its subsequent amendments established the requirement to create fishery management plans for all of North Carolina's commercially and recreationally significant species or fisheries. The contents of the plans are specified, advisory committees are required, and reviews by the Department of Environmental Quality secretary, Joint Legislative Committee on Agriculture and Natural and Economic Resources, and legislative Fiscal Research Division are mandated.

The original 1997 legislation mandated the Blue Crab Fishery Management Plan be completed first. The Marine Fisheries Commission used the Division of Marine Fisheries' annual stock status review to prioritize the order of species that would be addressed in subsequent plans. All initial fishery management plans identified on the priority list have been developed. Fishery management plans normally take about two years to complete and are required to be reviewed at least once every five years. Upon review, amendment of a plan is required when changes to management strategies are necessary. An information update for a plan, which includes changes in factual and background data only, is completed if there are no management changes. The division and the Marine Fisheries Commission adopted an annual rule making cycle in 2009 to coincide with rulebook production, increase efficiency in rule making processes, and consolidate efforts in the development of fishery management plans and the associated implementing rules.

Status of State Fishery Management Plans

Three of 13 state plans are currently underway. These are reviews of the Blue Crab, Estuarine Striped Bass and Southern Flounder fishery management plans. A table indicating the 2018 schedule for the plan reviews is included at the end of the report. The Marine Fisheries Commission will vote on approval of the schedule at its August 2018 business meeting.

The next review of the **Blue Crab Fishery Management Plan** was scheduled to begin in 2018. In June 2016, management measures were implemented under the adaptive management framework adopted as part of Amendment 2. Due to continued stock status concerns, the Marine Fisheries Commission adjusted the schedule for the review of this plan at its August 2016 business meeting to begin immediately. A stock assessment was completed and determined the North Carolina blue crab stock is overfished (stock size is too small) and overfishing (excessive fishing mortality) is occurring. An advisory committee was formed and has been meeting to assist the division with development of Amendment 3 to the plan. Adaptive management measures will remain in place until the next amendment is adopted.

At its Aug. 18, 2016 business meeting, the Marine Fisheries Commission approved a motion to begin the review of the **Southern Flounder Fishery Management Plan** as soon as a valid stock assessment was available. Although data inputs used in the 2014 stock assessment of southern flounder in North Carolina waters were determined to be valid, the stock assessment could not be used to determine stock status because the southern flounder stock mixes throughout the South Atlantic (North Carolina to Florida.) As a result, a coastwide stock assessment for southern flounder was conducted and determined the stock is overfished (stock size is too small) and overfishing (excessive fishing mortality) is occurring. An advisory committee was formed and

has been meeting to assist the division with development of Amendment 2 to the plan. Supplement A to the Southern Flounder Fishery Management Plan Amendment 1 was approved in August 2017 to adopt temporary management measures to reduce the catch of southern flounder up to 60 percent. This was due to concerns about the sustainability of current harvest levels because of a coast-wide decline in the number of young fish entering into the stock since the 1990s. Per statute, the temporary management measures will be in place until the adoption of the next amendment.

The next review of the **Division of Marine Fisheries-Wildlife Resources Commission Joint Estuarine Striped Bass Fishery Management Plan** was scheduled to begin in 2018; however, staff from both state agencies recommended initiating the review in 2017 to address problems with striped bass reproduction in the Central Southern Management Area. The Marine Fisheries Commission approved this schedule change at its August 2016 meeting. At its August 2017 meeting, the Marine Fisheries Commission passed a motion to begin the review of the plan no earlier than 2019, contingent on a supplement being approved and implemented to adjust the recreational and commercial takes of the Central Southern Striped Bass, with the exception of the Cape Fear River system, by reducing the commercial takes from 25,000 pounds to 2,500 pounds and the recreational limit to 1 fish between 24 inches and 26 inches. The secretary did not grant the request and concluded "there is insufficient data and analysis currently in existence to change course" from the FMP process already underway. Stock assessments for the Central Southern Management Area stock and the Roanoke River Management Area stock that began in 2017 are continuing.

The Striped Mullet Fishery Management Plan Amendment 1 was approved in November 2015 and implementing rules became effective April 1, 2016. The next review of this plan is scheduled to begin in 2020. Completion of the annual fishery management plan update in July 2017 for striped mullet showed 2016 commercial landings fell below the minimum landings trigger established in Amendment 1. There was also low abundance in division sampling programs. In accordance with the plan, the division reviewed striped mullet data in more detail to determine what factors are responsible for this decline. The review of the data included updating the 2013 stock assessment model with data through 2017 for better assessment of trends in the striped mullet fishery and striped mullet stock abundance. As an assessment update, there were no changes to model parameters and peer review was not required, as the configuration of the model that previously passed peer review was maintained. Results of the stock assessment update indicate overfishing is not occurring through 2017. Per the plan, management options were brought to the advisory committees and their input will be provided to the Marine Fisheries Commission at its August 2018 business meeting. At that meeting, the commission will be asked to decide on management options to be implemented via authority of adaptive management in the Striped Mullet Fishery Management Plan and proclamation authority of the Fisheries Director. Any changes to striped mullet management would be made as a revision to the existing plan.

The **Spotted Seatrout Fishery Management Plan** was adopted in February 2012 and scheduled for review in 2017. At the August 2017 Marine Fisheries Commission meeting, the Division of Marine Fisheries recommended the next review of the Spotted Seatrout Fishery Management Plan begin in 2018, one year later than originally planned. This was due to staff workload from the unscheduled review of the Blue Crab Fishery Management Plan, the early review of the Estuarine Striped Bass Fishery Management Plan and the review of the Southern Flounder

Fishery Management Plan. The 2014 stock assessment indicated that the spotted seatrout stock in North Carolina and Virginia was not overfished (stock size is adequate) and that overfishing (excessive fishing mortality) was not occurring in the terminal year (2012) of the assessment. Recreational and commercial landings for 2017 were at average levels compared to the past 10 years and there is no indication that the stock is at risk. At its August 2017 meeting, the Marine Fisheries Commission passed a motion to begin the review of the Spotted Seatrout Fishery Management Plan in 2019, resulting in a two-year delay in the start of the next review.

The Marine Fisheries Commission gave its final approval of the **Shrimp Fishery Management Plan Amendment 1** in February 2015 and the implementing rules became effective May 1, 2015. The next review is scheduled to begin in 2020, although the timing could be impacted by the North Carolina Wildlife Federation's petitioned rules.

The Marine Fisheries Commission gave its final approval of the **Bay Scallop Fishery Management Plan Amendment 2, and Division of Marine Fisheries-Wildlife Resources Commission Joint River Herring Fishery Management Plan Amendment 2** in February 2015 and the implementing rules became effective May 1, 2015 and June 13, 2016. The next reviews are scheduled to begin in 2020.

The Fishery Management Plan for Interjurisdictional Fisheries Information Update and the Kingfishes Fishery Management Plan Information Update were approved in November 2015. No change in management strategies was necessary, so the plans were updated with the most current factual and background data. The next review of these plans will begin in 2020.

The Hard Clam Fishery Management Plan Amendment 2 and the Oyster Fishery Management Plan Amendment 4 were approved in February 2017 and the implementing rules became effective May 1, 2017. The next reviews are scheduled to begin in 2022.

At its August 2017 business meeting, the Marine Fisheries Commission approved the Division of Marine Fisheries recommendation for the annual fishery management plan update to satisfy the review of Amendment 1 to the North Carolina **Red Drum Fishery Management Plan**. The Atlantic States Marine Fisheries Commission benchmark stock assessment for red drum was approved for management use in February 2017 and showed that management targets set forth by Amendment 2 to the Atlantic States Marine Fisheries Commission Red Drum Fishery Management Plan continue to be met. Thus, the Atlantic States Marine Fisheries Commission opted to keep all management and compliance requirements under Amendment 2 in place with no further action taken. The management targets of the state fishery management plan are consistent with Amendment 2 to the Atlantic States Marine Fisheries Commission plan, which requires that states not adopt a less protective management program than currently in effect. Stock conditions will be monitored and reported through each annual fishery management plan update. The next review of the plan will begin in 2022.

FISHERY MANAGEMENT PLAN REVIEW SCHEDULE (July 2018 – June 2023) Revised August 2018						
SPECIES (Date of Last Action)	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	
BLUE CRAB (11/13)						
SOUTHERN FLOUNDER (2/13)						
ESTUARINE STRIPED BASS (5/13)*						
SPOTTED SEATROUT (2/12) **						
BAY SCALLOP (2/15)						
RIVER HERRING (2/15)						
SHRIMP (2/15)						
INTERJURISDICTIONAL (11/15)						
KINGFISHES (11/15)						
STRIPED MULLET (11/15)						
HARD CLAM (2/17)						
OYSTER (2/17)						
RED DRUM (8/17)						

- * In preparation for the next review of the Estuarine Striped Bass Fishery Management Plan, stock assessments that began in 2017 for the Central Southern Management Area stocks and the Roanoke River Management Area stock are continuing.
- ** As part of its approval of the fishery management plan schedule at its August 2017 business meeting, the Marine Fisheries Commission directed the next review of the spotted seatrout plan will begin in 2019. The 2014 stock assessment indicated that the spotted seatrout stock in North Carolina and Virginia was not overfished (stock size is adequate) and that overfishing (excessive fishing mortality) was not occurring in the terminal year (2012). Recreational and commercial landings for 2017 were at average levels compared to the past 10 years and there is no indication that the stock is at risk.



ROY COOPER

MICHAEL S. REGAN

STEPHEN W. MURPHEY

August 1, 2018

MEMORANDUM

TO: Marine Fisheries Commission

FROM: Jason Rock, Blue Crab Species Lead

Corrin Flora, Blue Crab FMP Co-lead

Fisheries Management Section

SUBJECT: Blue Crab Traffic Light Update

Amendment 2 to the N.C. Blue Crab Fishery Management Plan adopted by the Marine Fisheries Commission in November 2013 incorporated the use of the traffic light stock assessment method and adaptive measures for management of the blue crab stock*. The current plan requires annual updates to the traffic light be presented to the commission as part of the Division of Marine Fisheries' annual Stock Overview.

The Blue Crab Traffic Light is divided into three separate characteristics: 1) adult abundance, 2) recruit* abundance, and 3) production. Each characteristic uses data from several division biological surveys and sampling programs to determine the relative abundance of adult and recruit blue crabs in the population and various production indicators for the stock each year. Under the plan, management measures will be implemented in the blue crab fishery if certain biological triggers are met. To trigger management actions, either the adult abundance or production characteristic of the Blue Crab Traffic Light must be at or above the 50 percent red threshold for three consecutive years to trigger moderate management action and must be at or above the 75 percent red threshold for two of three consecutive years to trigger elevated management action as established in the plan (Table 1). The recruit abundance indicator, while not used to trigger initial management action, may be used to supplement any management action taken if an adult abundance or production trigger is activated. The three-year period was chosen to prevent taking management action due to annual variability in the blue crab stock and instead base any management response on the observation of a short, but continued declining trend in the population.

The update in 2014, which incorporated data through 2013, showed both the adult abundance and production characteristics had met or exceeded the moderate threshold of 50 percent red for the first year. The update in 2015, which incorporated data through 2014, showed both the adult abundance and production characteristics exceeded the moderate threshold of 50 percent red for 2014. The Blue Crab Traffic Light was updated in early 2016 with 2015 data due to the high

probability that management action might be needed. As a result of that update, a revision to the Blue Crab Fishery Management Plan was adopted in May 2016 to improve the condition of the blue crab stock. Since management measures were implemented in June 2016, it is too early to tell what effect, if any, these measures have had on the condition of the blue crab stock.

The current traffic light update, including data through 2017, indicates the adult abundance characteristic continues to exceed the moderate threshold of 50 percent red (2017=67 percent red; Figure 1). This serves as the fifth consecutive year at or above the 50 percent red threshold for the adult abundance characteristic. The recruit abundance characteristic has exceeded the 75 percent red threshold for the fifth consecutive year (2017=80 percent red). The production characteristic fell below the 50 percent red threshold (2017=46 percent red) after meeting it in 2016. Under the adaptive management plan adopted by the commission as part of Amendment 2 to the Blue Crab Fishery Management Plan, management measures adopted in May 2016 should continue (Table 2).

The blue crab stock status is currently overfished* and overfishing* is occurring based on the 2018 blue crab stock assessment. The stock assessment was completed, passed peer review, and accepted for management use earlier this year. The traffic light will continue to be updated annually under the adaptive management framework in Amendment 2, which is still in effect until Amendment 3 is adopted. The division is in the process of drafting Amendment 3 in conjunction with an FMP advisory committee and expects the amendment and associated rule adoption to be completed in November 2020.

*Definitions

Stock – A group of fish of the same species in a given area. Unlike a fish population, a stock is defined as much by management concerns (jurisdictional boundaries or harvesting locations) as by biology.

Recruit – Blue crabs that survive to the juvenile stage.

Overfished – Occurs when the number of mature female blue crabs drops below a specific threshold.

Overfishing – Occurs when the rate blue crabs are harvested or killed exceeds a specific threshold.

Table 1. Moderate and elevated management measures under the adaptive management framework for the Blue Crab Traffic Light in Amendment 2 to the Blue Crab Fishery Management Plan.

Characteristic	Moderate management level	Elevated management level
Adult abundance	A1. Increase in minimum size limit for male and immature female crabs	A4. Closure of the fishery (season and/or gear)
	A2. Reduction in tolerance of sub- legal size blue crabs (to a minimum of 5%) and/or implement gear modifications to reduce sublegal catch	A5. Reduction in tolerance of sub- legal size blue crabs (to a minimum of 1%) and/or implement gear modifications to reduce sublegal catch
	A3. Eliminate harvest of v-apron immature hard crab females	A6. Time restrictions
Recruit abundance	R1. Establish a seasonal size limit on peeler crabs	R4. Prohibit harvest of sponge crabs (all) and/or require sponge crab excluders in pots in specific areas
	R2. Restrict trip level harvest of sponge crabs (tolerance, quantity, sponge color)	R5. Expand existing and/or designate new crab spawning sanctuaries
	R3. Close the crab spawning sanctuaries from September 1 to February 28 and may impose further restrictions	R6. Closure of the fishery (season and/or gear)
		R7. Gear modifications in the crab trawl fishery
Production	P1. Restrict trip level harvest of sponge crabs (tolerance, quantity, sponge color)	P4. Prohibit harvest of sponge crabs (all) and/or require sponge crab excluders in pots for specific areas
	P2. Minimum and/or maximum size limit for mature female crabs	P5. Reduce peeler harvest (no white line peelers and/or peeler size limit)
	P3. Close the crab spawning sanctuaries from September 1 to February 28 and may impose further restrictions	P6. Expand existing and/or designate new crab spawning sanctuaries
		P7. Closure of the fishery (season and/or gear)

Table 2. Management measures implemented under the May 2016 Revision to Amendment 2 to the Blue Crab Fishery Management Plan (<u>Proclamation M-11-2016</u>).

Traffic Light	Management		
Characteristic	Level	Management Action	Effective Date
Adult Abundance	Moderate	Add one additional cull ring to crab pots, which must be located within one full mesh of the corner of the pot and within one full mesh of the bottom of the apron/stairs (divider)	January 15, 2017
Adult Abundance	Moderate	of the upper chamber of the pot Eliminate the harvest of v-apron	June 6, 2017
		immature female hard crabs (excluding peeler crabs) and that v- apron immature hard crab females be included in the culling tolerance (currently only includes sublegal male and immature female hard crabs)	
Adult Abundance	Moderate	Lower the cull tolerance to 5 percent for all crabs, except mature females	June 6, 2017
Adult and Recruit Abundance	Elevated	Prohibit crab harvest with dredges except incidental to lawful oyster dredging as outlined in North Carolina Marine Fisheries Commission Rule 15A NCAC 03L .0203(a)(2)	June 6, 2017
Recruit Abundance	Moderate	Prohibit harvest of dark sponge crabs (brown and black) from April 1-April 30. Include dark sponge crabs in the cull tolerance	June 6, 2017

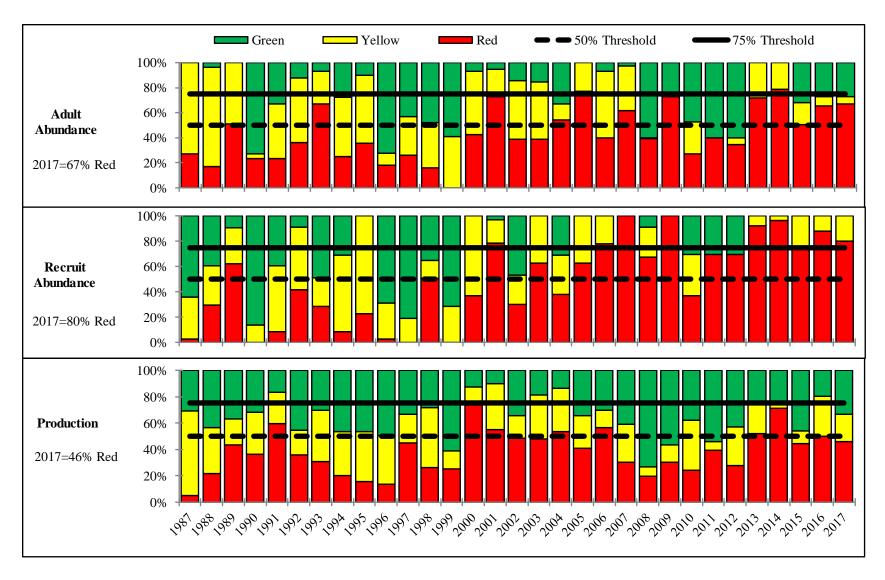


Figure 1. Adult abundance, recruit abundance, and production characteristics for the 2017 Blue Crab Traffic Light update.



MICHAEL S. REGAN

STEPHEN W. MURPHEY

Director

Aug. 1, 2018

MEMORANDUM

TO: Marine Fisheries Commission

FROM: Jason Rock, Blue Crab Species Lead

Corrin Flora, Blue Crab FMP Co-Lead

Fisheries Management Section

SUBJECT: North Carolina Blue Crab Fishery Management Plan Amendment 3

Now that the stock assessment has been finalized, the division is moving into the development phase of Amendment 3 to the North Carolina Blue Crab Fishery Management Plan (FMP). The first step in that process is presenting the FMP timeline to the Marine Fisheries Commission (Table 1). We are currently on step three in the timeline (highlighted below).

Table 1. Development timeline for Amendment 3 to the North Carolina Blue Crab Fishery Management Plan.

TIMELINE FOR BLUE CRAB FISHERY MANAGEMENT PLAN AMENDMENT 3					
(May 1, 2018)					
MILESTONES PROJECTED COMPLETION DATE					
1. Orient AC and Discuss Issues, Goal and	September 2017-June 2018				
Objectives					
2. Draft/Revise and Review Informational	June 2018-				
Sections and Issue Papers in the FMP and	June 2019				
Establish DMF/AC Positions					
3. Present Timeline and Goal and Objectives to	August 2018				
MFC; Solicit MFC Input on Issues					
4. Obtain MFC Approval for Review of FMP	August 2019				
5. Public and Committee Review of FMP	September 2019				
6. Present Revised FMP to MFC for Selection of	November 2019				
Preferred Management Options					
7. Review of FMP by Department and Legislative	January 2020				
Committee	·				
8. Procedural Approval of FMP and Approval of	May 2020				
Notice of Text for Rulemaking by MFC	·				
9. Direct Rules through APA Process	August-October 2020				
10. Final FMP and Rule Approval by MFC	November 2020				
11. Selected Management Measures Effective	48 Hours if proclamation;				
Date	April 1, 2021 if rule				

Part of this step is also presenting to the commission for approval the draft Goal and Objectives for the plan which were reviewed and agreed to by the Blue Crab FMP Advisory Committee. The division's proposed Goal and Objectives are:

Goal: Manage the blue crab fishery to achieve a self-sustaining population that provides sustainable harvest using science based decision making processes. The following objectives will be used to achieve this goal.

Objectives:

- 1. Implement management strategies that maintain/restore the blue crab spawning stock with multiple cohorts and adequate abundance to prevent recruitment overfishing.
- 2. Restore, enhance, and protect habitat and environmental quality necessary to maintain or increase growth, survival, and reproduction of the blue crab population.
- 3. Use biological, environmental, habitat, fishery, social, and economic data needed to effectively monitor and manage the blue crab fishery and its ecosystem impacts.
- 4. Promote stewardship of the resource through increased public awareness regarding the status and management of the blue crab fishery, including practices that minimize bycatch and discard mortality.

The final phase in step three is to solicit input from the MFC on potential issues to explore in the upcoming amendment. Under the division's new streamlined FMP strategy, these issues should not include things like simple rule clarifications or corrections, user conflicts, resource neutral tweaks, or outreach initiatives that can be handled outside the FMP process, instead they should be substantive issues affecting the fishery. Issues identified to date by the division include:

- Issue 1: Restoring the blue crab spawning stock
- Issue 2: Minimizing ecosystem impacts
 - o Terrapin excluder devices (holdover from Amendment 2)
 - o Eliminating crab harvest with dredges
 - Reducing crab trawl areas
- Issue 3: Protect and enhance habitat conditions for blue crab
 - Expand and/or designate new crab spawning sanctuaries
 - o Effects of agricultural runoff on the blue crab population

(May 1, 2018)	018)
MILESTONES	PROJECTED COMPLETION DATE
1. Orient AC and Discuss Issues, Goal and Objectives	September 2017-June 2018
2. Draft/Revise and Review Informational Sections and Issue	June 2018-
Papers in the FMP and Establish DMF/AC Positions	June 2019
3. Present Timeline and Goal and Objectives to MFC; Solicit	August 2018
MFC Input on Issues	
4. Obtain MFC Approval for Review of FMP	August 2019
5. Public and Committee Review of FMP	September 2019
6. Present Revised FMP to MFC for Selection of Preferred	November 2019
Management Options	
7. Review of FMP by Department and Legislative Committee	January 2020
8. Procedural Approval of FMP and Approval of Notice of Text	May 2020
for Rulemaking by MFC	
9. Direct Rules through APA Process	August-October 2020
10. Final FMP and Rule Approval by MFC	November 2020
11. Selected Management Measures Effective Date	48 Hours if proclamation;
	April 1, 2021 if rule
	H11 7 18
Annroved by DMF Director: Date: 7/2,5 //8	Signature.

Date:

Revision(s) and reason(s):

Presented to MFC:



ROY COOPER

MICHAEL S. REGAN

STEPHEN W. MURPHEY

Aug. 1, 2018

MEMORANDUM

TO: N.C. Marine Fisheries Commission

FROM: Daniel Zapf, Striped Mullet Species Lead

Tracey Bauer, Striped Mullet Fishery Management Plan Co-Lead

Fisheries Management Section

SUBJECT: Recommendations for Adaptive Management of the Striped Mullet Stock

Striped mullet commercial landings in 2016 were 965,198 pounds, which is below the minimum commercial landings trigger (1.13 million pounds) established in Amendment 1 of the Striped Mullet Fishery Management Plan. Following the management strategy in Amendment 1, the division initiated further analysis of all striped mullet data to determine if the decrease in striped mullet commercial landings is attributed to a stock* decline, decreased fishing effort, or both. The adaptive management framework established in Amendment 1 allows for implementation of management measures using existing proclamation authority of the Fisheries Director if they are recommended following completion of data analysis.

Completed data analysis was presented to the commission at its February 2018 business meeting. From the data analysis, the division concluded at this point that the striped mullet stock had likely declined since completion of the 2013 stock assessment (terminal year* 2011) and recommended updating the 2013 stock assessment model to include data through 2017 prior to taking any management action. Following completion of the stock assessment update, any potential management measures would be developed by the division's Striped Mullet Plan Development Team in conjunction with the Finfish, Northern and Southern advisory committees, the commission would decide on a preferred management strategy at its August 2018 business meeting.

The stock assessment update (terminal year 2017) indicates overfishing* is not occurring in the striped mullet fishery and has never occurred in the 24-year time series (1994-2017). However, the assessment update indicated declining spawning stock biomass* and increased fishing mortality* in the last year of the time series. Recruitment* was also declining in the latter part of the time series with a small increase in 2017. In addition, technical issues with the stock assessment model increased uncertainty with the results. Regardless of the stock assessment results, there have been declining trends in fishery independent* indices (declines across three surveys for multiple years) that closely mirror declining trends in commercial landings.

Given the stock assessment update indicates overfishing is not occurring in the striped mullet fishery, the commission may choose to take no action since no additional management measures are needed to end overfishing. No new management measures would result in the fishery continuing "as is."

Declining spawning stock biomass, declining recruitment, increasing fishing mortality, negative trends in fishery independent and fishery dependent* data, and the fact the striped mullet commercial fishery primarily targets mature female (roe mullet) striped mullet on their way to the ocean to spawn may merit implementation of new management measures. Although overfishing is not occurring, the commission may implement additional management measures with the goal of increasing escapement of mature females to the ocean to spawn enhancing protection for the population from poor recruitment events. Given the intended goal, a season closure during a portion of the fall striped mullet fishery would be most effective in reducing harvest of mature females. However, a season closure may adversely affect some fisheries more than others and would create regulatory discards during the closed season.

An issue paper providing background information and detailing the positives and negatives of no additional management action and implementation of additional management measures is provided in the commission's briefing book. The updated stock assessment and the issue paper were also presented to the commission's advisory committees (Table 1).

Because overfishing is not occurring the division recommends retaining the FMP scheduled review for 2020 and no additional management action at this time. The division will also continue to monitor the commercial landings trigger and trends in the striped mullet commercial fishery and fishery independent indices.

Table 1. Recommended adaptive management framework responses for striped mullet.

	Recommendation	
Division	No additional management action, Continue monitoring,	
	Retain FMP schedule	
Finfish Advisory Committee (7/10/2018)	Same as NCDMF recommendation	
Southern Advisory Committee (7/11/2018)	Same as NCDMF recommendation	
Northern Advisory Committee (7/12/2018)	Same as NCDMF recommendation	

*Definitions

Stock – A group of fish of the same species in a given area. Unlike a fish population, a stock is defined as much by management concerns (jurisdictional boundaries or harvesting locations) as by biology.

Fishery Dependent – Data derived from the commercial and recreational fisheries and dealers; including catch, landings, and effort information.

Fishery Independent – Data derived from activities such as research and surveys that does not involve the commercial or recreational harvest of fish.

Terminal Year – The final year of estimates being used in an analysis.

Overfishing – Occurs when the rate that fish that are harvested or killed exceeds a specific threshold.

Spawning Stock Biomass – Total weight of mature females in the stock.

Recruitment – The number of striped mullet that survive to the juvenile stage.

Fishing Mortality – Rate at which striped mullet are removed from the population.





ADAPTIVE MANAGEMENT OF THE NORTH CAROLINA STRIPED MULLET STOCK

July 27, 2018

I. ISSUE

Recommendations for how to proceed with adaptive management in the North Carolina striped mullet fishery.

II. ORIGINATION

Amendment 1 to the Striped Mullet Fishery Management Plan.

III. BACKGROUND

The North Carolina commercial fishery for striped mullet (*Mugil cephalus*) is one of the largest along the U.S. Atlantic seaboard and is a predominately fall, roe-targeting, gill net fishery. Strong demand from Asia for striped mullet roe and competing roe exporting companies combined to create a highly profitable roe fishery in North Carolina. Rapid surges in roe values in the late 1980s, followed by rising commercial fishing effort and landings through the mid-1990s, caused concern for the North Carolina striped mullet stock.

The most recent benchmark stock assessment of the North Carolina striped mullet stock was completed in 2013 and used data from 1994-2011 (see NCDMF 2013). The results of the stock assessment indicated spawning stock biomass increased from 2003 through 2007 but declined through 2011. Recruitment also declined in the latter portion of the time series, though a slight increase was observed in 2011. Numbers-weighted fishing mortality (F) for ages 2-5 increased toward the end of the time series, but F in the terminal year ($F_{2011} = 0.437$) was below both the fishing mortality target ($F_{35\%} = 0.566$) and threshold ($F_{25\%} = 0.932$). Based on the assessment results, the stock was not undergoing overfishing in 2011. A poor stock-recruit relationship resulting in unreliable biomass based reference points prevented determining if the stock was overfished.

Amendment 1 to the NC Striped Mullet FMP was adopted in November 2015 (NCDMF 2015). Although overfishing was not occurring in 2011, fishing mortality had been increasing and recruitment had been declining. If this trend were to continue, a series of poor recruitment events and/or shifts in market demand could make management measures necessary to reduce harvest and maintain fishing mortality below a threshold of F_{25%} spawning potential ratio. The 2015 FMP updated the minimum and maximum commercial landings triggers using 1994-2011 commercial landings. The updated minimum and maximum commercial landings triggers were set at 1.13 and 2.76 million pounds, respectively. If commercial landings fall below the minimum trigger the division would initiate further analysis of the data to determine if the decrease in commercial landings is attributed to stock decline or decreased fishing effort or both. If commercial landings exceed the maximum trigger the division would initiate analysis to determine if commercial harvest is sustainable and assess factors that may be driving the increase

in harvest. Amendment 1 also instituted an adaptive management framework for striped mullet. This allows management measures, if needed to maintain sustainable harvest, to be implemented using existing proclamation authority of the Fisheries Director. Any potential management measures will be developed by the division's Striped Mullet Plan Development Team (PDT) in conjunction with the regional and finfish advisory committees and approved by the North Carolina Marine Fisheries Commission (NCMFC) prior to implementation.

In 2016, striped mullet commercial landings were 964,348 pounds which is 15% less than the minimum trigger established by Amendment 1. Therefore, the division initiated further analysis of fishery-dependent and fishery-independent striped mullet data to determine if the decline in commercial landings is the result of decreased fishing effort, stock decline or both. The division presented preliminary data analysis and recommendations to the commission at its November 2017 business meeting, followed by additional information at their February 2018 business meeting. Based on results of the completed data analysis the division concluded the striped mullet stock had likely declined since completion of the 2013 stock assessment (terminal year 2011) and management action was likely warranted. At that time the division recommended updating the 2013 stock assessment model to include an additional six years of data from 2012 through 2017 prior to considering any management action. Peer review was not required for this update because the stock assessment model configuration that previously passed peer review (NCDMF 2013) was maintained.

Results of the stock assessment update indicate overfishing is not occurring in the striped mullet fishery (terminal year of 2017) and has never occurred at any point in the 24-year time series (1994-2017; NCDMF 2018). However, the assessment update indicated declining spawning stock biomass (Figure 1), declining recruitment (Figure 2), and increased fishing mortality (numbers-weighted) for ages 1-5 in the last year of the time series (Figure 3). Note the benchmark stock assessment for striped mullet (NCDMF 2013) reported F values as numbers-weighted for ages 2-5 and so are not comparable to the results of this assessment update.

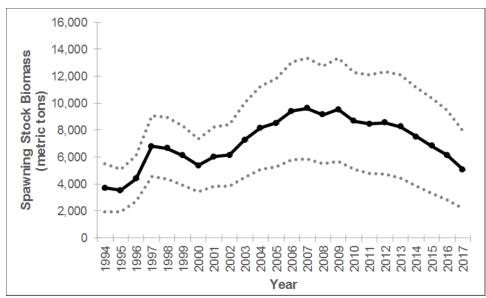


Figure 1. Annual predicted female spawning stock biomass from the base run of the stock assessment model, 1994-2017. The dotted lines denote \pm two standard deviations.

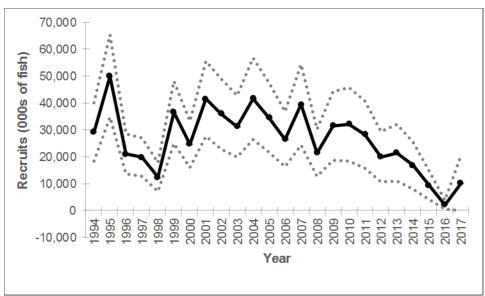


Figure 2. Annual predicted recruitment from the base run of the stock assessment model, 1994-2017. The dotted lines denote \pm two standard deviations.

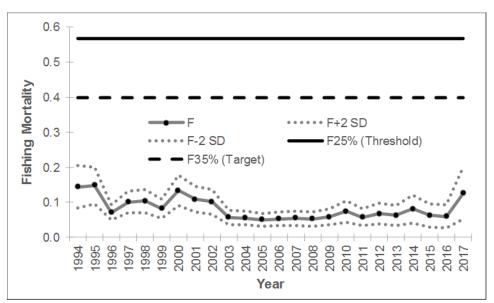


Figure 3. Comparison of annual estimates of fishing mortality (number-weighted, ages 1-5) from the base run to estimates of the fishing mortality target $(F_{35\%})$ and threshold $(F_{25\%})$. The dotted lines denote \pm two standard deviations.

As this was a stock assessment update, very limited adjustments could be made to model parameters or inputs that might otherwise be made to improve the model. A major concern with the assessment update is the lack of contrast in commercial landings data and lack of contrast and high variability associated with fishery-independent indices leading to uncertainty in parameter estimates. Lack of contrast in input data was noted as a concern during the 2013 benchmark stock assessment. Also of concern are the poor fits to survey data produced by the model, which may be caused by issues with temporal patterns and non-normality. The model also had poor fits to the length composition data suggesting predicted trends in recruitment may not be reliable.

While the two models are not directly comparable, the fishing mortality estimates in relation to the target ($F_{35\%}$) and threshold ($F_{25\%}$) reference points from the assessment update are much lower compared to the 2011 assessment (Figure 4). These conclusions seem to be inconsistent with observed trends in the commercial fishery and fishery-independent data. Further information on the stock assessment update, including strengths and weaknesses, adjustments that were made, and recommendations to improve the model can be found in the stock assessment report (NCDMF 2018).

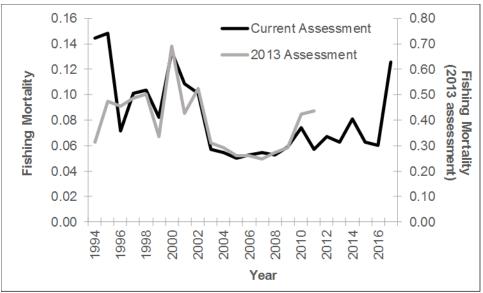


Figure 4. Comparison of estimates of fishing mortality from the current (numbers-weighted, ages 1-5) and previous (numbers weighted, ages 2-5) NCDMF stock assessments.

Because of the seasonal timing of the Striped Mullet Electrofishing Survey (P146) sampling, results are available for January-April 2018. Data analysis for 2018 indicated the nominal index of striped mullet relative abundance increased during the January-April period to near the time series average (Figure 5). Standardizing the index to account for the impact of environmental factors had little impact on the overall trend, also indicating striped mullet abundance increased to near the time series average (Figure 6). Previous models of P146 data had included area as a significant covariate, which based on the sampling area covered by the survey should account for differences in salinity. Standardization was performed excluding area as a possible covariate to test this hypothesis. Results indicated year, salinity, and dissolved oxygen were significant covariates but there were no differences in trends in striped mullet abundance from previous models (Figure 7). However, just as one year of low abundance data does not establish a negative trend, one year of increased abundance data does not establish a positive trend and should be interpreted with caution.

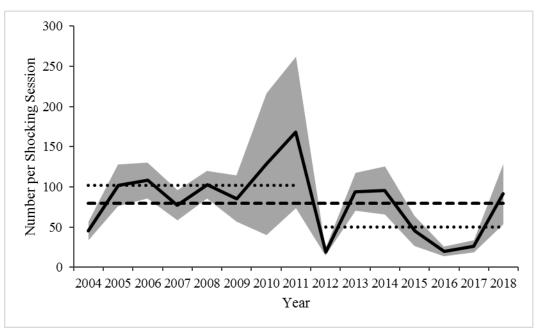


Figure 5. Annual relative abundance of adult striped mullet (number per shocking session) from P146 for January-April, 2004-2018. Center dashed line represents the 2004-2017 average, upper dotted line represents the 2004-2011 average, lower dashed line represents the 2012-2017 average, and the shaded area is standard error.

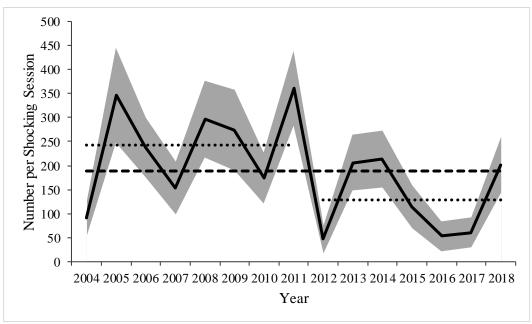


Figure 6. GLM-standardized index of relative abundance for adult striped mullet collected from P146 during January-April, 2004-2018. Relative abundance was modeled with a quasi-Poisson model. Significant covariates included year, area, depth and dissolved oxygen. Center dashed line represents the 2004-2017 average, upper dotted line represents the 2004-2011 average, lower dashed line represents the 2012-2017 average, and the shaded area is standard error.

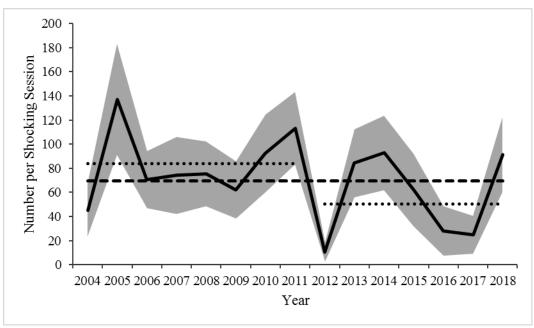


Figure 7. GLM-standardized index of relative abundance for adult striped mullet collected from P146 during January-April 2004-2018. Relative abundance was modeled with a quasi-Poisson model excluding area as a possible covariate. Significant covariates included year, salinity, and dissolved oxygen. Center dashed line represents the 2004-2017 average, upper dotted line represents the 2004-2011 average, lower dashed line represents the 2012-2017 average, and the shaded area is standard error.

Although the stock assessment update indicated overfishing is not occurring, fishing mortality has increased and recruitment and spawning stock biomass have declined in recent years. These same concerns were also considered in the development of Amendment 1 and were addressed by implementing the current adaptive management framework. Amendment 1 notes that although overfishing was not occurring (through 2011), fishing mortality had been increasing and recruitment had declined at the end of the time series. If that trend were to continue, a series of poor recruitment events occurred, and/or shifts in market demand occurred, management measures would be necessary to reduce harvest to prevent overfishing. Because the striped mullet commercial fishery is a roe fishery primarily targeting mature females during the spawning season, and there are no direct regulations impacting the amount of striped mullet harvested, concerns about recruitment and fishing effort will continue as long as the striped mullet fishery continues as is. In addition, the noted shortcomings with the stock assessment update (NCDMF 2018) increase uncertainty in model results. Regardless of the stock assessment results, there have been declining trends in fishery-independent indices (declines across three surveys for three consecutive years) that closely mirror declining trends in commercial landings. Because of these concerns, some type of additional management action could be implemented as a precautionary strategy to increase the escapement of mature females to the ocean to spawn and protect the stock should these negative trends continue.

IV. AUTHORITY

G.S. 113-134 RULES

G.S. 113-182 REGULATION OF FISHING AND FISHERIES

G.S. 143B-289.52 MARINE FISHERIES COMMISSION-POWERS AND DUTIES

15A NCAC 03M .0502 MULLET

15A NCAC 03H .0103 PROCLAMATIONS, GENERAL

V. OPTIONS

At this time, it is not necessary to move up or delay the scheduled review of the striped mullet FMP in 2020. Under the adaptive management framework established in Amendment 1 the commission could choose either of the following strategies after considering the information provided by the division and public input.

Given overfishing is not occurring in the striped mullet fishery based on results of the stock assessment update, strengths and weaknesses of taking no additional management action are presented. However, noted shortcomings in the stock assessment model, increasing fishing mortality, declining spawning stock biomass, declining recruitment, and declining trends in fishery-independent indices are causes for concern and may warrant implementation of additional management measures. Positives and negatives of implementing additional management measures are also discussed.

No Additional Management Action

The stock assessment update indicated overfishing was not occurring and therefore no additional management action is needed to end overfishing. No new management measures would result in fishing continuing to occur "as is" and would not increase the regulatory burden on the commercial fishing industry or the enforcement burden on Marine Patrol. However, if negative trends continue, not enacting management measures, may result in future overfishing and implementation of more restrictive harvest reduction strategies.

Additional Management Measures

Technical issues with the stock assessment inputs and model increase uncertainty with model results. Results of the stock assessment model indicate increasing fishing mortality, decreasing recruitment, and decreasing spawning stock biomass. These considerations in conjunction with observed negative trends in striped mullet fishery-independent data, negative trends in the striped mullet commercial fishery, and that the striped mullet fishery primarily targets mature females (roe mullet) on their way to the ocean to spawn may merit implementation of new management measures. Because the striped mullet commercial fishery is primarily a roe fishery with no direct regulations there will always be concern that any increase in harvest could lead to poor recruitment and overfishing or be of further detriment to a stock already experiencing poor recruitment and declining spawning stock biomass.

With results of the stock assessment update indicating overfishing is not occurring, there is no harvest reduction goal for any proposed management option. The goal of any management measure would be to increase escapement of mature female striped mullet to the ocean to spawn. This means proposed management measures will focus on the fall fishery (September-December), when striped mullet are migrating to the ocean to spawn and the majority of the striped mullet commercial fishery occurs (Figure 8). It should be noted that if management options are implemented to reduce harvest, the commercial landings trigger could no longer be used to monitor the stock. A new trigger will need to be developed during the next review of the striped mullet FMP and a subsequent amendment developed if an adaptive management strategy incorporating a trigger is to continue.

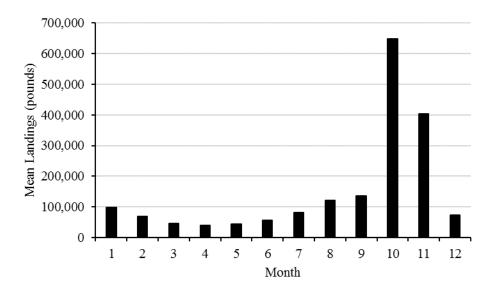


Figure 8. Mean commercial landings of striped mullet by month, 1994-2017.

Implementation of quotas, size limits, area closures, and/or trip/creel harvest limits were discussed in development of Amendment 1 (NCDMF 2015). However, given the intended management goal of increasing escapement of mature female striped mullet to the ocean these are not considered strong options. Each of these options would increase the regulatory burden on the fishery, increase the regulatory burden on Marine Patrol, create regulatory discards, and ultimately, may not accomplish the goal of increasing escapement of mature female striped mullet to the ocean.

Increasing mesh size restrictions could result in excluding smaller striped mullet from the gill net catch and large enough mesh sizes would result in excluding the majority of striped mullet from the gill net catch. However, mesh size increases may not accomplish the goal of increased escapement of female striped mullet but may shift harvest to larger, more fecund fish. In addition, mesh size increases may shift harvest from one sector of the fishery to another as the large mesh gill net (Figure 9), cast net, and stop net fisheries would not be impacted by minimum mesh size increases.

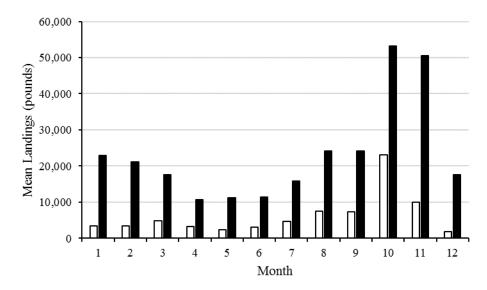


Figure 9. Mean commercial landings of striped mullet from gill nets with mesh size greater than or equal to five inches (white) and mesh size less than five inches (black) by month, 2004-2017.

Closing a portion of the fall season to possession of striped mullet would reduce the targeted striped mullet roe fishery (i.e., runaround gill nets; Figure 10), where most effort and landings occur, and allow for increased escapement of mature females to spawn.

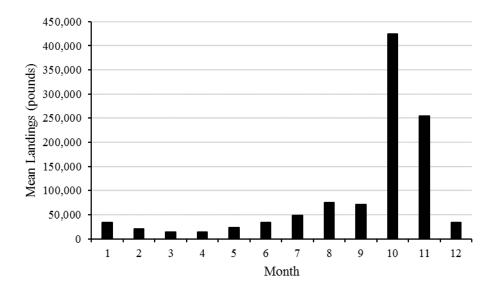


Figure 10. Mean commercial landings of striped mullet from the runaround gill net fishery by month, 2004-2017.

Historically, peak roe landings have occurred in October-November, with the majority of striped mullet roe landings occurring from approximately October 15-November 15. However, recently roe landings have shifted later in the year to include December as a month with a significant percentage of roe landings due to market forces (Figure 11), although landings from this month

are still generally low (Figure 12). For example, if a season closure was implemented to include only the month of December, it would minimally impact landings while resulting in increased escapement of mature female striped mullet to spawn. Extending the closure to include portions of October or November would result in a higher portion of mature female striped mullet escaping to the ocean to spawn but would also result in greater declines in commercial landings. Because the fall striped mullet fishery is primarily a targeted fishery, gear closures would not need to be implemented unless adjustments were made to the stop net/beach seine fishery. With a seasonal closure, gear would not be removed from the water completely, which may cause increased regulatory discards of striped mullet. In addition, fishing effort may increase in the part of the fishing season that remains open, and adverse weather conditions may prevent fishing during portions of the open season.

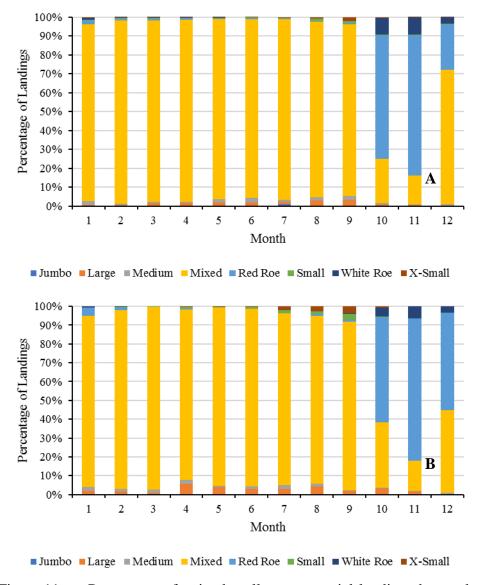


Figure 11. Percentage of striped mullet commercial landings by market grade using a 2003-2017 reference period (A) and a 2015-2017 reference period (B).

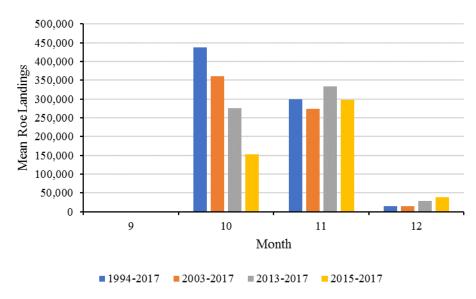


Figure 12. Mean commercial landings of striped mullet graded as "red roe" using 1994-2017, 2003-2017, 2013-2017, and 2015-2017 reference periods.

If management action is recommended, the preferred management strategy is implementation of a season closure. Different options for season closures were explored with the objective of increasing the escapement of mature females to the ocean to spawn while minimizing impacts to the commercial fishery (Table 1). The approximate increase in percent escapement for different closure periods was calculated using average daily striped mullet landings from three reference periods; 1994-2017, 2003-2017 and 2015-2017. Closure periods ranging from about four weeks to a month and a half with approximate increase in percent escapement from approximately four to 50 percent are shown. It should be noted that if early season closures (prior to the spawning season) are implemented there is a greater chance of recoupment by the fishery and the actual escapement of mature females would likely be less than predicted.

Table 1. Examples of options for closure periods in the striped mullet commercial fishery and the associated approximate percent escapement of striped mullet that would result based on average daily striped mullet landings for 1994-2017, 2003-2017 and 2015-2017 reference periods.

	Approximate Increase in Percent Escapeme		
Closure Period	1994-2017	2003-2017	2015-2017
September	7.5	8.3	8.7
October	35.5	34.1	23.0
November	22.1	22.9	33.1
December	4.1	3.9	6.1
October 15-November 15	45.0	44.8	39.4
October 1-October 15 AND November 15-November 30	14.1	15.0	18.1
November 15-December 31	9.9	10.5	20.8

A. No Action

- + No additional restrictions on fishing practices
- + No additional enforcement responsibilities for Marine Patrol
- Continue fishery at a level that may result in more restrictive harvest reductions in the future
- Continue unregulated harvest of mature female striped mullet which may lead to recruitment overfishing

B. Implement Management

- + Could prevent future overfishing
- + Proactive response to negative trends
- Additional restrictions on fishing practices
- Additional enforcement responsibilities for Marine Patrol

i. Season Closure

- + Framework and resources for implementation already exist
- + No additional reporting burden on fishermen or dealers
- + Could reduce effort from current level
- + Reduces harvest on mature females; enhancing protection for the population from poor recruitment events
- Effort may increase during open season reducing the effectiveness of the closure
- May adversely affect some fisheries more than others
- Weather may prevent fishing during open periods
- Increase enforcement responsibilities for Marine Patrol
- Create regulatory discards during the closed season

ii. Other management options from Amendment 1 (i.e., quotas, size limits, area closures, trip/creel harvest limits and/or mesh size restrictions)

- + May reduce fishing mortality
- May not increase escapement of mature female striped mullet to the ocean to spawn
- Increase regulatory burden on fishery
- Increase enforcement responsibilities for marine patrol
- Create regulatory discards
- May shift harvest to larger or smaller fish
- May shift harvest from one sector of the fishery to another

VI. PROPOSED RULE(S)

No rule changes are needed as any restrictions to the striped mullet fishery may be implemented via proclamation authority of the Fisheries Director.

VII. RECOMMENDATION

Division Recommendation and Rationale:

Given the results of the stock assessment update indicate overfishing is not occurring, the division recommends option A – no additional management action. However, the division will continue to monitor trends in the striped mullet commercial fishery and trends in fishery-independent indices.

Finfish Advisory Committee:

Same as NCDMF recommendation.

Northern Advisory Committee:

Same as NCDMF recommendation.

Southern Advisory Committee:

Same as NCDMF recommendation.

MFC Selected Action:

Prepared by Daniel Zapf

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252-948-3875

July 27, 2018

Tracey Bauer

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252-948-3871

References

NCDMF (North Carolina Division of Marine Fisheries). 2015. North Carolina Striped Mullet Fishery Management Plan Amendment 1. NCDMF, Morehead City, North Carolina. 388 pp.

NCDMF. 2013. Stock assessment of striped mullet (*Mugil cephalus*) in North Carolina waters. NCDMF, Morehead City, North Carolina. 161 pp.

NCDMF. 2018. Stock assessment of striped mullet (*Mugil cephalus*) in North Carolina waters. NCDMF, Morehead City, North Carolina. 120 pp.



MICHAEL S. REGAN

STEPHEN W. MURPHEY

Aug. 1, 2018

MEMORANDUM

TO: Marine Fisheries Commission

FROM: Catherine Blum, Fishery Management Plan and Rulemaking Coordinator

Fisheries Management Section

SUBJECT: Rulemaking Update

This memo describes the materials about the rulemaking update for the August 2018 commission meeting. In accordance with requirements of G.S. 150B-21.3A, Periodic Review and Expiration of Existing Rules, there are three items in this section; the first two are for information and the third is scheduled for the commission to take action. Background information is provided here, including recent actions that have occurred and a summary of the materials for this meeting.

Background on the Periodic Review and Expiration of Existing Rules

Session Law 2013-413, the Regulatory Reform Act of 2013, implemented requirements known as the "Periodic Review and Expiration of Existing Rules." These requirements are codified in a new section of Article 2A of Chapter 150B of the General Statutes in G.S. 150B-21.3A. Under the requirements, each agency is responsible for conducting a review of all its rules at least once every 10 years in accordance with a prescribed process.

The review has two parts. The first is a report phase, followed by the readoption of rules. An evaluation of the rules under the authority of the Marine Fisheries Commission is being undertaken in two lots (see Figure 1.) A report on the rules in Title 15A, Environmental Quality, Chapter 03, Marine Fisheries was due to the Rules Review Commission in December 2017. A report on the rules in Chapter 18, Environmental Health, for portions of Subchapter A that govern shellfish sanitation and recreational water quality is due January 2019. The Marine Fisheries Commission has 211 rules in Chapter 03 and 164 rules in Chapter 18A. The Marine Fisheries Commission is the body with the authority for the approval steps prescribed in the process for these rules.

Figure 1. Marine Fisheries Commission schedule to comply with G.S. 150B-21.3A, Periodic Review and Expiration of Existing Rules.

Rules	2017	2018	2019	2020	2021	2022					
Chapter 03 (211 rules)	Report		Rule Readoption								
Chapter 18A (164 rules)		Report	Report Rule Readoption								

The process began for the Marine Fisheries Commission at its February 2017 meeting with approval of the draft report on the rules in Title 15A, Environmental Quality, Chapter 03, Marine Fisheries. This report contained 211 rules and was reviewed by the Rules Review Commission in December 2017.

Nine of these 211 rules are jointly adopted by the Marine Fisheries Commission and the Wildlife Resources Commission. The rules are subtitled "Jurisdiction of Agencies: Classification of Waters" and are found in 15A NCAC 03Q .0100. Similarly, the Wildlife Resources Commission has 11 rules that are jointly adopted and have the same subtitle; they are found in 15A NCAC 10C .0100. For the required steps in the periodic review process, both agencies must approve both sets of rules, since the rules were all jointly adopted. The approvals for the draft report on these rules occurred at the Marine Fisheries Commission's February and May 2017 meetings and the Wildlife Resources Commission's April 2017 meeting.

For the reports, the first step is for each agency to make a determination as to whether each rule is necessary with substantive public interest, necessary without substantive public interest, or unnecessary. After the draft reports are approved, they are posted on the Division of Marine Fisheries website for public comment for a minimum of 60 days. It is important to note, for the purposes of these requirements, "public comment" means written comments from the public objecting to the rule. The agency must review the public comments and prepare a brief response addressing the merits of each comment. This information becomes the final report.

The final report for rules in 15A NCAC 03Q .0100 and the final report for all other rules in 15A NCAC 03 were reviewed and approved by the Rules Review Commission at its December 2017 meeting. The reports were forwarded to the Joint Legislative Administrative Procedure Oversight Committee for final determination. The committee met Jan. 9, 2018 and the review process was completed for these rules.

The second part of the periodic review process is the readoption of rules; this began for the Marine Fisheries Commission at its May 2018 meeting. The final report determines the process for readoption. Rules determined to be necessary and without substantive public interest and for which no public comment was received remain in effect without further action. Rules determined to be unnecessary and for which no public comment was received expire on the first day of the month following the date the report becomes effective. Rules determined to be necessary with substantive public interest must be readopted as though the rules were new rules. The Rules Review Commission works with each agency to consider the agency's rulemaking priorities in establishing a deadline for the readoption of rules.

The final determinations for the rules in 15A NCAC 03Q .0100 and all other rules in 15A NCAC 03 were unchanged from how they were submitted. As a result, three rules were determined to be unnecessary and expired, 36 rules were determined to be necessary without substantive public interest and remained in effect without further action, and 172 rules were determined to be necessary with substantive public interest and must be readopted as though they were new rules. The next step in the process is to set a readoption schedule.

Recent Actions for the Periodic Review and Expiration of Existing Rules

Readoption Schedule for 15A NCAC 03 Rules

The process of rule readoption began at the Marine Fisheries Commission's May 2018 meeting. Given the large number of rules subject to readoption, this was the first of several years proposed to readopt rules. At its February 2018 meeting, the Marine Fisheries Commission approved the schedule for readoption of these rules to be completed by June 30, 2022. The proposed readoption schedule, as approved by the Marine Fisheries Commission, was approved by the Rules Review Commission at its June 2018 meeting. Due to the nature of the jointly-adopted rules of the Marine Fisheries Commission and the Wildlife Resources Commission, the Wildlife Resources Commission also approved the readoption schedule, at its April 2018 meeting.

To achieve readoption of the 15A NCAC 03 rules within the deadline, staff will prepare approximately 40 to 45 rules for readoption in each of four years. For the 2018-2019 rule package, the Marine Fisheries Commission approved notice of text at its May 2018 meeting, which began the rulemaking process. The proposed rules in this package have been recently amended and/or need only technical changes. The rules have no anticipated costs associated with them and will benefit stakeholders with increased clarity and consistency across rules. The rules are intended to become effective April 1, 2019. A handout is provided showing the steps in the Marine Fisheries Commission's 2018-2019 annual rulemaking cycle.

Staff is already preparing the next package of 40 to 45 rules in 15A NCAC 03 for readoption, which will occur in the second of four years. For the 2019-2020 rule package, rules proposed for readoption will include 15A NCAC 03M .0509, Tarpon. At its February 2018 meeting, the Marine Fisheries Commission voted to have the division begin the process of drafting a rule to make tarpon a no spear, no gaff and no possession fish. The rules in the 2019-2020 package will be provided to the Marine Fisheries Commission at its May 2019 meeting to begin the rulemaking process. These rules are intended to become effective April 1, 2020.

Final Report on 15A NCAC 18A Rules

At its February 2018 meeting, the Marine Fisheries Commission gave approval to begin the report process for the 164 rules in 15A NCAC 18A .0100, .0300-.0900, and .3400, regarding shellfish sanitation and recreational water quality requirements. All rules were classified as necessary with substantive public interest and are subject to readoption. The process is following the same timing that occurred in 2017 for the previous rule reports. A public comment period was held for these rules from Feb. 26-May 7, 2018; no public comments were received. As a result, the final report is unchanged from the draft version. The final report will be presented to the Marine Fisheries Commission at its August 2018 meeting for final approval and is due to the Rules Review Commission by January 2019. Staff recommends the Marine Fisheries Commission approve the final report on the 15A NCAC 18A rules.

N.C. Marine Fisheries Commission 2018-2019 Annual Rulemaking Cycle

August 2018

Time of Year	Action August 2018
January 2018	Last opportunity for a new issue to be presented to DMF
bulldary 2010	Rules Advisory Team
February 2018	Second review by DMF Rules Advisory Team
February-April 2018	Fiscal analysis of rules prepared by DMF staff and
J 1	approved by Office of State Budget and Management
May 2018	MFC considers approval of Notice of Text for
	Rulemaking
Aug. 1, 2018	Publication of proposed rules in the North Carolina
	Register
Aug. 1-Oct. 1, 2018	Public comment period
Aug. 22, 2018	Public hearing held: 6 p.m., Division of Marine
	Fisheries, 5285 Highway 70 West, Morehead City, NC
	28557
November 2018	MFC considers approval of permanent rules
January 2019	Rules reviewed by Office of Administrative Hearings
	Rules Review Commission
(January)	(Last opportunity for a new issue to be presented to DMF
	Rules Advisory Team)
(February)	(Second review by DMF Rules Advisory Team)
Feb. 1, 2019	Earliest possible effective date of rules
February/March 2019	Rulebook prepared
April 1, 2019	Actual effective date of new rules
April 1, 2019	Rulebook available online
April 15, 2019	Commercial license sales begin

Agency - Marine Fisheries Commission

Comment Period - Filled in by Agency

Comment Period -	Filled in by Agency	Catalf										
Subchapter	APO - Filled in by RR Rule Section	Rule Citation	Rule Name	Date and Last Agency Action on the Rule	Agency Determination [150B- 21.3A(c)(1)a]	Implements or Conforms to Federal Regulation [1508-21.3A(e)]	eral Regulation Citation	Public Comment Received [150B- 21.3A(c)(1)]	Agency Determination Following Public Comment [150B-21.3A(c)(1)]	RRC Determination of Public Comments [150B-21.3A(c)(2)	RRC Final Determination of Status of Rule for Report to APO [150B- 21.3A(c)(2)]	OAH Next Steps
SUBCHAPTER 18A - SANITATION7:20A27 :247:64	HANDLING: PACKING: AND SHIPPING OF	15A NCAC 18A .0134	DEFINITIONS	Amended Eff. August 1, 2000	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
	CRUSTACEA MEAT	15A NCAC 18A .0135	PERMITS	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0136	APPLICABILITY OF RULES	Amended Eff. April 1, 1997	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0137	GENERAL REQUIREMENTS FOR OPERATION	Amended Eff. April 1, 1997	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0138	SUPERVISION	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0139	FACILITY FLOODING	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0140	FLOORS	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0141	WALLS AND CEILINGS	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0142	LIGHTING	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0143	VENTILATION	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0144	INSECT CONTROL	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0145	RODENT AND ANIMAL CONTROL	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0146	PREMISES	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0147	WATER SUPPLY	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0148	ICE	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0149	PLUMBING	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0150	SEWAGE DISPOSAL	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0151	TOILETS	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0152	SOLID WASTE	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0153	PERSONAL HYGIENE	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0154	EMPLOYEES' PERSONAL ARTICLES	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0155	SUPPLY STORAGE	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0156	EQUIPMENT AND UTENSIL CONSTRUCTION	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0157	FACILITY AND EQUIPMENT SANITATION	Eff. October 1, 1992	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	178.1010 (March 16, 1977)	No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0158	EQUIPMENT STORAGE	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0159	SEPARATION OF OPERATIONS	Amended Eff. April 1, 1997	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0160	RAW CRUSTACEA RECEIVING AND REFRIGERATION	·	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0161	CRUSTACEA COOKING	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0162	COOKED CRUSTACEA AIR-COOL	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0163	COOKED CRUSTACEA REFRIGERATION	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0164	COOKED CRUSTACEA PICKING	Amended Eff. August 1, 2002	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One

Agency - Marine Fisheries Commission

omment Period - Filled in by Agency

Comment Period -	Filled in by Agency APO - Filled in by R	PC etaff										
Subchapter	Rule Section	Rule Citation	Rule Name	Date and Last Agency Action on the Rule	Agency Determination [150B- 21.3A(c)(1)a]	Implements or Conforms to Federal Regulation [150B-21.3A(e)]	Federal Regulation Citation	Public Comment Received [150B- 21.3A(c)(1)]	Agency Determination Following Public Comment [150B-21.3A(c)(1)]	RRC Determination of Public Comments [150B-21.3A(c)(2)	RRC Final Determination of Status of Rule for Report to APO [150B- 21.3A(c)(2)]	OAH Next Steps
		15A NCAC 18A .0165	PACKING	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0166	PICKED CRUSTACEA MEAT REFRIGERATION	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0167	DELIVERY WINDOW OR SHELF	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0168	SINGLE-SERVICE CONTAINERS	Amended Eff. August 1, 1998	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0169	FREEZING	Amended Eff. August 1, 2002	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0170	SHIPPING	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0171	WHOLE CRUSTACEA OR CRUSTACEA PRODUCTS	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0172	COOKED CLAW SHIPPING CONDITIONS	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0173	REPACKING	Amended Eff. August 1, 2002	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0174	PASTEURIZATION PROCESS CONTROLS - THERMOMETERS		Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0175	PREPARATION OF CRUSTACEA MEAT FOR PASTEURIZATION	Amended Eff. April 1, 1997	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0176	PASTEURIZATION OF CRUSTACEA MEAT	Amended Eff. August 1, 1998	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0177	LABELING OF PASTEURIZED CRUSTACEA MEAT	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0178	INTERFACILITY PASTEURIZATION PROCEDURES	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0179	RECALL PROCEDURE	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0180	SAMPLING AND TESTING	Eff. October 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0181	EMBARGO OR DISPOSAL OF COOKED CRUSTACEA OR CRUSTACEA MEAT		Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0182	BACTERIOLOGICAL AND CONTAMINATION STANDARDS	Amended Eff. August 1, 1998	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0183	ALTERNATIVE LABELING	Eff. August 1, 1998	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0184	THERMAL PROCESSING CONTROLS - THERMOMETERS	Eff. April 1, 1997	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0185	THERMAL PROCESSING OF CRUSTACEA AND CRUSTACEA MEAT		Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0186	PROCESSED CRUSTACEA OR CRUSTACEA MEAT		Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0187	INTERFACILITY THERMAL PROCESSING PROCEDURES	Eff. August 1, 1998	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0188	HAZARD ANALYSIS	Eff. August 1, 2000	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0189	HACCP PLAN	Eff. August 1, 2000	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0190	SANITATION MONITORING REQUIREMENTS	Eff. August 1, 2000	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0191	MONITORING RECORDS	Eff. August 1, 2000	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
	SECTION .0300 – SANITATION OF SHELLFISH -	15A NCAC 18A .0301	DEFINITIONS	Amended Eff. August 1, 2000	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
	GENERAL	15A NCAC 18A .0302	PERMITS	Amended Eff. April 1, 1997	Necessary with substantive public interest	No		No	Necessary with substantive public	Select One	Select One	Select One
		15A NCAC 18A .0303	RELAYING PERMITS	Amended Eff. September 1, 1990	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One

Agency - Marine Fisheries Commission

	Filled in by Agency	DC stoff										
Subchapter	APO - Filled in by R	RC Staff Rule Citation	Rule Name	Date and Last Agency Action on the Rule	Agency Determination [150B- 21.3A(c)(1)a]	Implements or Conforms to Federal Regulation [150B-21.3A(e)]	Federal Regulation Citation	Public Comment Received [150B- 21.3A(c)(1)]	Agency Determination Following Public Comment [150B-21.3A(c)(1)]	RRC Determination of Public Comments [150B-21.3A(c)(2)	RRC Final Determination of Status of Rule for Report to APO [150B- 21.3A(c)(2)]	OAH Next Steps
		15A NCAC 18A .0304	DEPURATION HARVESTING PERMITS	Amended Eff. September 1, 1990	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0305	APPEALS PROCEDURE	Amended Eff. September 1, 1990	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
	SECTION .0400 - SANITATION OF SHELLFISH - GENERAL OPERATION STANDARDS	15A NCAC 18A .0401	APPLICABILITY OF RULES	Amended Eff. April 1, 1997	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
	CIAMITABLE	15A NCAC 18A .0402	GENERAL REQUIREMENTS FOR OPERATION	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0403	SUPERVISION	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0404	CONSTRUCTION	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0405	PLANT LOCATION	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0406	FLOORS	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0407	WALLS AND CEILINGS	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public	Select One	Select One	Select One
		15A NCAC 18A .0408	LIGHTING	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0409	VENTILATION	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public	Select One	Select One	Select One
		15A NCAC 18A .0410	FLY CONTROL	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0411	RODENT AND ANIMAL CONTROL	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public	Select One	Select One	Select One
		15A NCAC 18A .0412	PLUMBING	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0413	WATER SUPPLY	Amended Eff. September 1, 1990	Necessary with substantive public interest	No		No	Necessary with substantive public	Select One	Select One	Select One
		15A NCAC 18A .0414	TOILET FACILITIES	Amended Eff. September 1, 1990	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0415	WASTE DISPOSAL	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public	Select One	Select One	Select One
		15A NCAC 18A .0416	PERSONAL HYGIENE	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0417	LOCKERS	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public	Select One	Select One	Select One
		15A NCAC 18A .0418	SUPPLY STORAGE	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0419	HARVEST BOATS	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public	Select One	Select One	Select One
		15A NCAC 18A .0420	TRANSPORTING SHELLSTOC	K Amended Eff. May 1, 1994	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0421	DAILY RECORD	Amended Eff. August 1, 1998	Necessary with substantive public interest	No		No	Necessary with substantive public	Select One	Select One	Select One
		15A NCAC 18A .0421	SHELLSTOCK CLEANING	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0423	SALE OF LIVE SHELLSTOCK	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public	Select One	Select One	Select One
		15A NCAC 18A .0424	SHELLFISH RECEIVING	Amended Eff. April 1, 1997	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0425	TAGGING	Amended Eff. April 1, 1999	Necessary with substantive public interest	No		No	Necessary with substantive public	Select One	Select One	Select One
		15A NCAC 18A .0426	BULK SHIPMENTS	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0427	SHELLSTOCK STORAGE	Amended Eff. May 1, 1994	Necessary with substantive public	No		No	Necessary with substantive public	Select One	Select One	Select One
		15A NCAC 18A .0428	SAMPLING AND TESTING	Eff. February 1, 1987	interest Necessary with substantive public	No		No	interest Necessary with substantive public	Select One	Select One	Select One
		15A NCAC 18A .0429	STOPSALE OR DISPOSAL OF SHELLFISH	Eff. February 1, 1987	interest Necessary with substantive public	No		No	interest Necessary with substantive public	Select One	Select One	Select One
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Agency - Marine Fisheries Commission

Comment Period - Filled in by Agency

Date Submitted to A	illed in by Agency	C shaff										
Subchapter	Rule Section	Rule Citation	Rule Name	Date and Last Agency Action on the Rule	Agency Determination [150B- 21.3A(c)(1)a]	Implements or Conforms to Federal Regulation [150B-21.3A(e)]	Federal Regulation Citation	Public Comment Received [150B- 21.3A(c)(1)]	Agency Determination Following Public Comment [1508-21.3A(c)(1)]	RRC Determination of Public Comments [150B-21.3A(c)(2)	RRC Final Determination of Status of Rule for Report to APO [150B- 21.3A(c)(2)]	OAH Next Steps
		15A NCAC 18A .0430	BACTERIOLOGICAL STANDARDS	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0431	STANDARDS FOR AN APPROVED SHELLFISH GROWING AREA	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0432	PUBLIC DISPLAY OF CONSUMER ADVISORY	Eff. April 1, 1999	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0433	HAZARD ANALYSIS	Eff. August 1, 2000	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0434	HACCP PLAN	Eff. August 1, 2000	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0435	SANITATION MONITORING REQUIREMENTS	Eff. August 1, 2000	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0436	MONITORING RECORDS	Eff. August 1, 2002	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
	SECTION .0500 - OPERATION OF SHELLSTOCK PLANTS AND RESHIPPERS	15A NCAC 18A .0501	GENERAL REQUIREMENTS	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0502	GRADING SHELLSTOCK	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0503	GRADER	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0504	RESHIPPERS	Amended Eff. September 1, 1990	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
	SECTION .0600 - OPERATION OF SHELLFISH SHUCKING AND PACKING PLANTS AND REPACKING	15A NCAC 18A .0601	GENERAL REQUIREMENTS	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0602	SEPARATION OF OPERATIONS	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0603	HOT WATER SYSTEM	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0604	HANDWASHING FACILITIES	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0605	DELIVERY WINDOW OR SHELF	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0606	NON-FOOD CONTACT SURFACES	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0607	SHUCKING BENCHES	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0608		Amended Eff. September 1, 1990	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0609	SANITIZING EQUIPMENT	Amended Eff. December 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0610	EQUIPMENT SANITATION	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0611	EQUIPMENT STORAGE	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0612	ICE	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0613	SHELLFISH SHUCKING	Amended Eff. September 1, 1990	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0614	CONTAINERS	Amended Eff. August 1, 1998	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0615	SHELLFISH COOLING	Amended Eff. April 1, 1997	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0616	SHELLFISH FREEZING	Amended Eff. April 1, 1997	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0617	SHIPPING	Amended Eff. April 1, 1997	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0618	HEAT SHOCK METHOD OF PREPARATION OF SHELLFISH	Amended Eff. August 1, 2002	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One

Agency - Marine Fisheries Commission

Comment Period - Filled in by Agency

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Subchapter	Rule Section	Rule Citation	Rule Name	Date and Last Agency Action on the Rule	Agency Determination [150B- 21.3A(c)(1)a]	Implements or Conforms to Federal Regulation [150B-21.3A(e)]	Federal Regulation Citation	Public Comment Received [150B- 21.3A(c)(1)]	Agency Determination Following Public Comment [150B-21.3A(c)(1)]	RRC Determination of Public Comments [150B-21.3A(c)(2)	RRC Final Determination of Status of Rule for Report to APO [150B- 21.3A(c)(2)]	OAH Next Steps
		15A NCAC 18A .0619	REPACKING OF SHELLFISH	Amended Eff. December 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0620	SHELLFISH THAWING AND REPACKING	Eff. April 1, 1997	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0621	RECALL PROCEDURE	Eff. August 1, 1998	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
	SECTION .0700 - OPERATION OF DEPURATION (MECHANICAL PURIFICATION) EACHUTIES	15A NCAC 18A .0701	GENERAL REQUIREMENTS	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0702	FACILITY SUPERVISION	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0703	FACILITY DESIGN AND SANITATION	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0704	LABORATORY PROCEDURES	Amended Eff. September 1, 1991	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0705	FACILITY OPERATIONS	Amended Eff. September 1, 1990	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0706	SHELLFISH SAMPLING PROCEDURES	Amended Eff. September 1, 1990	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0707	DEPURATION PROCESS WATER CONTROL - SAMPLING PROCEDURES	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0708	DEPURATION TREATMENT PROCESS WATER - STANDARDS	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0709	DEPURATION - SHELLFISH MEAT STANDARDS	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0710	ULTRAVIOLET UNIT	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0711	SHELLSTOCK STORAGE	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0712	DEPURATION - TAGGING AND RELEASE OF SHELLFISH	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0713	DEPURATION - RECORDS	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
	SECTION .0800 - WET STORAGE OF SHELLSTOCK	15A NCAC 18A .0801	GENERAL REQUIREMENTS	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0802	PLANT DESIGN: SANITATION: AND WET STORAGE	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0803	WET STORAGE WATER	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0804	SHELLSTOCK CLEANING	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0805	WET STORAGE TANKS	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0806	SHELLSTOCK CONTAINERS	Eff. February 1, 1987	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
	CLASSIFICATION OF SHELLFISH	15A NCAC 18A .0901	DEFINITIONS	Amended Eff. August 1, 1998	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
	GROWING WATERS	15A NCAC 18A .0902	CLASSIFICATION OF SHELLFISH GROWING WATERS	Eff. June 1, 1989	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0903	SANITARY SURVEY	Eff. June 1, 1989	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0904	APPROVED AREAS	Eff. June 1, 1989	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0905	CONDITIONALLY APPROVED AREAS	Eff. June 1, 1989	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0906	RESTRICTED AREAS	Eff. June 1, 1989	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0907	PROHIBITED AREAS	Eff. June 1, 1989	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One

Agency - Marine Fisheries Commission
Comment Period - Filled in by Agency

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		15A NCAC 18A .0908	UNSURVEYED AREAS	Eff. June 1, 1989	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0909	BUFFER ZONE	Eff. June 1, 1989	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0910	RECLASSIFICATION	Eff. June 1, 1989	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0911	MARINAS: DOCKING FACILITIES: OTHER MOORING AREAS	Amended Eff. July 1, 1993	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0912	SHELLFISH MANAGEMENT AREAS	Eff. June 1, 1989	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0913	PUBLIC HEALTH EMERGENC	Y Eff. June 1, 1989	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .0914	LABORATORY PROCEDURES	Amended Eff. September 1, 1991	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
	SECTION .3400 - COASTAL RECREATIONAL WATERS MONITORING, EVALUATION, AND	15A NCAC 18A .3401	DEFINITIONS	Eff. February 1, 2004	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .3402	BACTERIOLOGICAL LIMITS FOR SWIMMING AREAS	Eff. February 1, 2004	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .3403	PUBLIC NOTICE OF INCREASED HEALTH RISKS IN SWIMMING AREAS	Eff. February 1, 2004	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .3404	SWIMMING ADVISORIES FO POINT SOURCE DISCHARGES INTO SWIMMING AREAS		Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .3405	RESCINDING A SWIMMING ADVISORY OR SWIMMING ALERT	Eff. January 1, 2004	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .3406	DESTRUCTION OF SIGNS	Eff. January 1, 2004	Necessary with substantive public interest	No		No	Necessary with substantive public interest	Select One	Select One	Select One
		15A NCAC 18A .3407	APPLICABILITY OF RULES	Eff. January 1, 2004	Necessary with substantive public	No		No	Necessary with substantive public	Select One	Select One	Select One



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

STEPHEN W. MURPHEY

August 1, 2018

MEMORANDUM

TO: Marine Fisheries Commission

FROM: Kathy Rawls, Fisheries Management Section Chief

SUBJECT: Rule Suspensions

Attached is the temporary rule suspension information for the August 2018 meeting. In accordance with the North Carolina Division of Marine Fisheries Resource Management Policy Number 2014-2, the North Carolina Marine Fisheries Commission will vote on any new rule suspensions that have occurred since the last meeting of the commission. The following rule suspension occurred since the May 2018 meeting, is subject to approval and noted as an action item on the agenda:

 Suspension of portions of North Carolina Marine Fisheries Commission Rule 15A NCAC 03M .0301 Spanish and King Mackerel, to a date certain. Suspension of this rule allows the division to reduce the minimum size limit for Spanish mackerel in the commercial pound net fishery to reduce seasonal dead discards in this fishery. These restrictions were implemented in FF-25-2018, effective July 1, 2018 until midnight September 30, 2018.

In accordance with the policy, the division will report current rule suspensions previously approved by the commission as non-action, items. The current rule suspensions are as follows:

- Continued suspension of North Carolina Marine Fisheries Commission Rule 15A NCAC 03M .0516 Cobia, for an indefinite period of time. This continued suspension allows the division to manage the commercial and recreational cobia fisheries in accordance with management actions taken by the commission and in accordance with Framework Amendment 4 to the federal Coastal Migratory Pelagics Fishery Management Plan. This suspension was continued in Proclamation FF-10-2018.
- Continued suspension of portions of North Carolina Marine Fisheries Commission Rule 15A NCAC 03J .0301 Pots, for an indefinite period of time. This continued suspension allows the division to implement the crab pot escape ring requirements adopted by the

commission in the May 2016 Revision to Amendment 2 of the North Carolina Blue Crab Fishery Management Plan. This suspension was effective January 15, 2017, implemented in Proclamation M-11-2016.

- Continued suspension of portions of North Carolina Marine Fisheries Commission Rule 15A NCAC 03L .0201 Crab Harvest Restrictions, and portions of 03L .203 Crab Dredging, for an indefinite period of time. This continued suspension allows the division to implement the blue crab harvest restrictions adopted by the commission in the May 2016 Revision to Amendment 2 of the North Carolina Blue Crab Fishery Management Plan. These suspensions were implemented in Proclamation M-11-2016.
- Continued suspension of portions of North Carolina Marine Fisheries Commission Rule 15A NCAC 03J .0501 Definitions and Standards for Pound Nets and Pound Net Sets, for an indefinite period of time. Continued suspension of portions of this rule allows the division to increase the minimum mesh size of escape panels for flounder pound nets in accordance with Supplement A to Amendment 1 of the North Carolina Southern Flounder Fishery Management Plan. This suspension was implemented in Proclamation M-34-2015.
- Continued suspension of portions of North Carolina Marine Fisheries Commission Rule 15A NCAC 03M .0519 Shad and 03Q .0107 Special Regulations: Joint Waters, for an indefinite period of time. Continued suspension of portions of these rules allows the division to change the season and creel limit for American shad under the management framework of the North Carolina American Shad Sustainable Fishery Plan. These suspensions were continued in Proclamation FF-15-2018.