

Atlantic States Marine Fisheries Commission

South Atlantic State/Federal Fisheries Management Board

*August 3, 2020
1:30 – 3:45 p.m.
Webinar*

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary.

1. Welcome/Call to Order (*L. Fegley*) 1:30 p.m.
2. Board Consent 1:30 p.m.
 - Approval of Agenda
 - Approval of Meeting Summary from February 2020
3. Public Comment 1:35 p.m.
4. Consider Draft Addendum I to Amendment 1 for Atlantic Cobia for Public Comment (*M. Schmidtke*) **Action** 1:45 p.m.
5. Consider Approval of Atlantic Cobia Commercial Trigger Level (*A. Giuliano*) **Action** 2:50 p.m.
6. Discuss Timeline for Submitting Atlantic Cobia Amendment 1 Implementation Plans (*M. Schmidtke*) 3:00 p.m.
7. Review Terms of Reference for Red Drum Simulation Assessment (*J. Kipp*) **Action** 3:20 p.m.
8. Elect Vice Chair (*L. Fegley*) **Action** 3:40 p.m.
9. Other Business/Adjourn 3:45 p.m.

MEETING OVERVIEW

South Atlantic State/Federal Fisheries Management Board Meeting

Monday, August 3, 2020

1:30 – 3:45 p.m.

Webinar

Chair: Lynn Fegley (MD) Assumed Chairmanship: 02/20	Technical Committee (TC) Chairs: Black Drum: Harry Rickabaugh (MD) Cobia: Angela Giuliano (MD) Atlantic Croaker: Dawn Franco (GA) Red Drum: Lee Paramore (NC)	Law Enforcement Committee Representative: Capt. Chris Hodge (GA)
Vice Chair: Vacant	Advisory Panel Chair: Craig Freeman (VA)	Previous Board Meeting: February 5, 2020
Voting Members: NJ, DE, MD, PRFC, VA, NC, SC, GA, FL, NMFS, USFWS, SAFMC (12 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Meeting Summary from February 5, 2020

3. Public Comment – At the beginning of the meeting public comment will be taken on items not on the agenda. Individuals that wish to speak at this time must sign-in at the beginning of the meeting. For agenda items that have already gone out for public hearing and/or have had a public comment period that has closed, the Board Chair may determine that additional public comment will not provide additional information. In this circumstance the Chair will not allow additional public comment on an issue. For agenda items that the public has not had a chance to provide input, the Board Chair may allow limited opportunity for comment. The Board Chair has the discretion to limit the number of speakers and/or the length of each comment.

4. Consider Draft Addendum I to Amendment 1 for Atlantic Cobia for Public Comment (1:45-2:50 p.m.) Action

Background

- In February 2020, the Board specified Atlantic cobia harvest quotas for 2020-2022. These quotas, based on model projections from the Southeast Data, Assessment, and Review (SEDAR) 58 benchmark stock assessment, were greater than those used prior to the assessment and incorporation of updated recreational catch estimates from the Marine Recreational Information Program (MRIP). The current allocation percentages for the commercial and recreational fisheries were developed based on the previous recreational catch estimates.
- The Board initiated Draft Addendum I to Amendment 1 to consider reflecting the updated MRIP data (used in SEDAR 58) in allocation percentages, reconsider *de minimis* measures, and update the method for calculating the commercial trigger so that it can be calculated in scenarios when commercial harvest has not approached the quota. The Cobia Plan Development Team has developed Draft Addendum I with management options for each of these issues (**Briefing Materials**).

Presentations

- Cobia Draft Addendum I to Amendment 1 by M. Schmidtke.

Board actions for consideration at this meeting

- Review and consider approval of Draft Addendum I for public comment.

5. Consider Approval of Atlantic Cobia Commercial Trigger Level (2:50-3:00 p.m.) Action**Background**

- As part of the harvest specification process, the Cobia TC attempted to calculate the trigger level for commercial harvest. If commercial harvest meets or exceeds the trigger, a coastwide commercial closure will occur at least 30 days later. Trigger calculation methods described in Amendment 1 are dependent on commercial harvests reaching their quota in recent years. The quotas specified by the Board in February 2020 significantly increased the commercial quota beyond the level of recent commercial harvests, thus the trigger could not be calculated.
- The TC developed an alternative method that is more flexible and sent it for Board consideration via email (**Briefing Materials**). This method calculates a daily average harvest from commercial harvests in commercial non-*de minimis* states during the most recent 5 years. The trigger level is the non-*de minimis* portion of the commercial quota minus 30 times the daily average harvest. The Board approved use of the alternative method for 2020 and incorporation of this method into Draft Addendum I.

Presentations

- Cobia TC Commercial Recommendation by A. Giuliano

Board actions for consideration at this meeting

- Set commercial trigger level for 2020.

6. Discuss Timeline for Submitting Atlantic Cobia Amendment 1 Implementation Plans (3:00-3:20 p.m.)**Background**

- In August 2019, the Board approved Atlantic Cobia Amendment 1, with an implementation date of July 1, 2020. In February 2020, the Board specified harvest quotas for 2020-2022 and decided to maintain state recreational regulations in 2020 to allow time for states to develop management strategies to implement the new quota. The Board also initiated Draft Addendum I to Amendment 1, which considers reallocation of commercial and recreational quotas.
- Staff will develop and distribute a memo describing a potential schedule for submission and review of implementation plans prior to the 2021 fishing season (**Supplemental Materials**).

Presentations

- Considerations for Scheduling Implementation of Amendment 1 and New Quotas by M. Schmidtke.

Board actions for consideration at this meeting

- Consider timeline for Amendment 1 implementation in 2021.

7. Review Terms of Reference for Red Drum Simulation Assessment (3:20 – 3:40 p.m.) Action

Background

- In February 2020, the Board directed the Red Drum Stock Assessment Subcommittee (SAS) to begin a project of conducting simulations of stock assessment models potentially applicable to red drum. This Simulation Assessment will be peer reviewed by the Commission's External Peer Review process prior to the next benchmark assessment.
- The SAS and advising members of the Assessment Science Committee met to develop Draft Terms of Reference and a preliminary timeline for the Simulation Assessment and peer review (**Briefing Materials**).

Presentations

- Red Drum Simulation Assessment Draft Terms of Reference by J. Kipp.

Board actions for consideration at this meeting

- Review and consider approval of Draft Terms of Reference for the Red Drum Simulation Assessment.

8. Elect Vice Chair**9. Other Business/Adjourn**

South Atlantic Board

Activity level: High

Committee Overlap Score: Moderate (American Eel TC, Bluefish TC, Menhaden TC, Weakfish TC)

Committee Task List

- Red Drum SAS – Conduct Red Drum Simulation Assessment
- Cobia TC – Evaluate state implementation plans for Board approval prior to 2021 fishing season
- Atlantic Croaker TC – July 1: Compliance Reports Due
- Red Drum TC – July 1: Compliance Reports Due
- Cobia TC – July 1: Compliance Reports Due
- Atlantic Croaker TC – Conduct 2020 Traffic Light Approach analysis for Annual Meeting
- Spot TC – Conduct 2020 Traffic Light Approach analysis for Annual Meeting
- Black Drum TC – August 1: Compliance Reports Due
- Spotted Seatrout PRT – September 1: Compliance Reports Due
- Spanish Mackerel PRT – October 1: Compliance Reports Due
- Spot PRT – November 1: Compliance Reports Due

TC Members:

Atlantic Croaker: Dawn Franco (GA, Chair), Kristen Anstead (ASMFC), Michael Schmidtke (ASMFC), Stacy VanMorter (NJ), Michael Greco (DE), Harry Rickabaugh (MD), Shanna Madsen (VA, Vice Chair), Somers Smott (VA), Jason Rock (NC), Dan Zapf (NC), Chris McDonough (SC), Joseph Munyandorero (FL)

Black Drum: Harry Rickabaugh (MD, Chair), Jeff Kipp (ASMFC), Michael Schmidtke (ASMFC), Craig Tomlin (NJ), Jordan Zimmerman (DE), Ethan Simpson (VA), Chris Stewart (NC), Chris McDonough (SC), Ryan Harrell (GA), Liz Herdter Smith (FL)

Cobia: Angela Giuliano (MD, Chair), Michael Schmidtke (ASMFC), Olivia Phillips (VA), Somers Smott (VA), Anne Markwith (NC), Mike Denson (SC, Vice Chair), Chris Kalinowsky (GA), Christina Wiegand (SAMFC), Michael Larkin (SERO)

Red Drum: Lee Paramore (NC, Chair), Jeff Kipp (ASMFC), Michael Schmidtke (ASMFC), Alissa Wilson (NJ), Michael Greco (DE), Robert Bourdon (MD), Ethan Simpson (VA, Vice Chair), Joey Ballenger (SC), Chris Kalinowsky (GA), Roger Pugliese (SAFMC)

Spanish Mackerel (PRT): Michael Schmidtke (ASMFC), Randy Gregory (NC), BJ Hilton (GA), Dustin Addis (FL), Christina Wiegand (SAFMC), John Hadley (SAFMC)

Spot: Jeff Kipp (ASMFC), Michael Schmidtke (ASMFC), Stacy VanMorter (NJ), Michael Greco (DE), Harry Rickabaugh (MD), Somers Smott (VA), Dan Zapf (NC), Chris McDonough (SC), BJ Hilton (GA)

Spotted Seatrout (PRT): Michael Schmidtke (ASMFC), Douglas Lipton (MD), Tracey Bauer (NC), Joey Ballenger (SC), Chris Kalinowsky (GA)

SAS Members:

Red Drum: Joey Ballenger (SC, Chair), Jeff Kipp (ASMFC), Michael Schmidtke (ASMFC), Angela Giuliano (MD), Lee Paramore (NC), Thom Teears (NC), Jared Flowers (GA), Chris Swanson (FL)

**DRAFT PROCEEDINGS OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
SOUTH ATLANTIC STATE/FEDERAL FISHERIES MANAGEMENT BOARD**

**The Westin Crystal City
Arlington, Virginia
February 5, 2020**

INDEX OF MOTIONS

1. **Agenda approved** by consent.
2. **Proceedings of October 2019** approved by consent.

Atlantic Cobia
3. **Move to accept the SEDAR 58 Atlantic Cobia Benchmark Stock Assessment and Peer Review Reports and the recommended F40-based biological reference points for management use.** Motion by Malcolm Rhodes; second by Lynn Fegley. Motion carried.
4. **Main Motion**
Move to recommend a 2.4 million pound annual quota for cobia for 2020-2022 with status quo recreational measures in 2020. Motion by Chris Batsavage; second by Mel Bell. Motion tabled.
5. **Move to table motion until after red drum items.** Motion by Adam Nowalsky; second by Malcolm Rhodes.

Main Motion as Modified
Move to recommend an 80,112 fish annual quota for cobia for 2020-2022 with status quo recreational measures in 2020. Motion by Chris Batsavage; second by Mel Bell. Motion carried.
6. **Move to initiate an addendum to reevaluate the recreational and commercial allocations for cobia and reconsider *de minimis* measures.** Motion by Spud Woodward; second by Joe Cimino. Motion carried.

Atlantic Croaker Addendum III
7. **Move to approve Option B, under Issue 1, for Atlantic Croaker Addendum III.** Motion by Lynn Fegley; second by Marty Gary. Motion carried.
8. **Move to approve Option B, under Issue 2, for Atlantic Croaker Addendum III.** Motion by Chris Batsavage; second by Jim Estes. Motion carried.
9. **Move to approve Option B, sub-option B1, under Issue 3, for Atlantic Croaker Addendum III.** Motion by Lynn Fegley; second by Jim Estes. Motion carried.
10. **Move to approve Option B, under Issue 4, for Atlantic Croaker Addendum III.** Motion by Roy Miller; second by Malcolm Rhodes. Motion carried.

Spot Addendum III
11. **Move to approve Option B, under Issue 1, for Spot Addendum III.** Motion by John Clark; second by Chris Batsavage. Motion carried.
12. **Move to approve Option B, under Issue 2, for Spot Addendum III.** Motion by Lynn Fegley; second by John Clark. Motion carried.

These minutes are draft and subject to approval by South Atlantic State/Federal Fisheries Management Board.

The Board will review the minutes during its next meeting.

INDEX OF MOTIONS (continued)

13. **Move to approve Option B, sub-option B2, under Issue 3, for Spot Addendum III.** Motion by Chris Batsavage; second by Mel Bell. Motion carried.
14. **Move to approve Option B, under Issue 4, for Spot Addendum III.** Motion by Roy Miller; second by Malcolm Rhodes. Motion carried.
15. **Move to approve Addendum III to the Omnibus Amendment to the Interstate Fishery Management Plans for Spanish Mackerel, Spot, and Spotted Seatrout, and Addendum III to Amendment 1 to the croaker Fishery Management Plan as modified today with an immediate implementation date.** Motion by Mel Bell; second by Ellen Bolen. Motion carried.
16. **Move to elect Lynn Fegley as Vice Chair of the South Atlantic Board.** Motion by John Clark; second by Doug Haymans. Motion carried.
17. **Motion to adjourn** by consent.

ATTENDANCE

Board Members

Jim Gilmore, NY (AA)	Bryan Plumlee, VA (GA)
Emerson Hasbrouck, NY (GA)	Pat Geer, VA, Chair
John McMurray, NY, proxy for Sen. Kaminsky (LA)	Chris Batsavage, NC, proxy for S. Murphey (AA)
Joe Cimino, NJ (AA)	Jerry Mannen, NC (GA)
Russ Allen, NJ, proxy for T. Fote (GA)	Mike Blanton, NC, proxy for Sen. Steinburg (LA)
Adam Nowalsky, NJ, proxy for Sen. Andrzejczak (LA)	Mel Bell, SC, proxy for R. Boyles (AA)
John Clark, DE, proxy for D. Saveikis (AA)	Malcolm Rhodes, SC (GA)
Roy Miller, DE (GA)	Doug Haymans, GA (AA)
Craig Pugh, DE, proxy for Rep. Carson (LA)	Spud Woodward, GA (GA)
Lynn Fegley, MD, proxy for B. Anderson (AA)	Jim Estes, FL, proxy for J. McCawley (AA)
Russell Dize, MD (GA)	Marty Gary, PRFC
Phil Langley, MD, proxy for Del. Stein (LA)	Roy Crabtree, NMFS
Ellen Bolen, VA, proxy for S. Bowman (AA)	Mike Millard, USFWS

(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)

Ex-Officio Members

Angela Giuliano, Cobia Technical Committee Chair

Staff

Robert Beal	Maya Drzewicki
Toni Kerns	Jeff Kipp
Mike Schmidtke	Caitlin Starks

Guests

Jeff Buckel, NC State Univ.	Katie Siegfried, NOAA (virtual)
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NOTE: This is a substitute document for the draft proceedings from February 5, 2020 as the meeting was not recorded and transcribed

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PR20-06

ASMFC South Atlantic Board Approves Atlantic Croaker and Spot Addenda

Arlington, VA – The Commission’s South Atlantic State/Federal Fisheries Management Board approved Addendum III to Amendment 1 to the Interstate Fishery Management Plan (FMP) for Atlantic Croaker and Addendum III to the Omnibus Amendment to the Interstate FMPs for Spanish Mackerel, Spot, and Spotted Seatrout. These Addenda adjust management of Atlantic croaker and spot through their respective Traffic Light Approaches (TLA).

Through the annual analysis of the TLA, which assigns a color (red, yellow, or green) to characterize relative levels of indicators that reflect the condition of the fish population (abundance characteristic) or fishery (harvest characteristic). If the amount of red, indicating low abundance or low harvest, in both characteristics exceeds threshold levels (30% and 60%) for too many years, management action is triggered. In 2018, the Atlantic Croaker Technical Committee and Spot Plan Review Team recommended updates to their respective TLAs that would incorporate additional fishery-independent indices, age information, use of regional characteristics, and changes to the management-triggering mechanism.

These Addenda change the management-triggering mechanisms to enact coastwide management if the amounts of red for both the harvest and abundance characteristics within a region (Mid-Atlantic and South Atlantic) exceed threshold levels for 3 of the 4 most recent years for Atlantic croaker and 2 of the 3 most recent years for spot. The Addenda also define commercial and recreational management responses to triggers at each threshold level (see table below). Finally, the Addenda define the processes for evaluating the fisheries while triggered measures are in place and determining when triggered measures may be removed.

Management Triggers & Responses for Atlantic Croaker & Spot

Species	Recreational		Commercial	
	30% Threshold	60% Threshold	30% Threshold	60% Threshold
Atlantic Croaker	Bag Limit: up to 50 fish for non- <i>de minimis</i> states	Bag Limit: up to 40 fish for all states	Measures to achieve 1% harvest reduction from previous 10-year average for non- <i>de minimis</i> states with no regulations	Measures to achieve 5% harvest reduction from previous 10-year average for all states
Spot	Bag Limit: up to 50 fish for non- <i>de minimis</i> states	Bag Limit: up to 40 fish for all states	Measures to achieve 1% harvest reduction from previous 10-year average for non- <i>de minimis</i> states with no regulations	Measures to achieve 10% harvest reduction from previous 10-year average for all states

Note: Regulations will not go into effect unless management is triggered by the TLA Analysis.

Both Addenda were approved for immediate implementation by the states of New Jersey through Florida. The next TLA analyses will be presented to the Board at the Commission's 2020 Summer Meeting.

The Addenda will be available on the Commission's website, www.asmf.org (on the Atlantic Croaker and Spot webpages) by mid-February. For more information, please contact Dr. Mike Schmidtke, FMP Coordinator, at mschmidtke@asmfc.org or 703.842.0740.

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PR20-05

Meeting Summary

The South Atlantic State/Federal Fisheries Management Board met to review and consider acceptance of the Atlantic Cobia Benchmark Stock Assessment and Peer Review (see above press release), take final action on Draft Addenda for Atlantic Croaker and Spot (see above press release), consider initiating changes to the Spanish Mackerel Fishery Management Plan (FMP) and discuss a roadmap for the next red drum stock assessment.

The Board discussed initiating management action to align state and federal management of Spanish mackerel. A federal commercial closure in 2019 prompted state, Commission, and South Atlantic Fishery Management Council (SAFMC) staff to compare Spanish mackerel management through the Commission's Omnibus Amendment to the Interstate Fishery Management Plans (FMP) for Spanish Mackerel, Spot, and Spotted Seatrout (Omnibus Amendment) with that of the SAFMC's FMP for Coastal Migratory Pelagics of the Gulf of Mexico and Atlantic Region (CMP FMP). Differences between these plans exist in terms of recreational season definition, allowable gears, commercial management zones, recreational accountability measures, and commercial trip limits. The Board was presented with a summary of the differences between the FMPs. The Board noted the next stock assessment is scheduled for completion in 2022. This assessment will incorporate re-calibrated recreational catch estimates from the Marine Recreational Information Program (MRIP), which will likely impact harvest quotas and other management measures. The Board decided action on the current differences between the FMPs can be postponed until after the stock assessment.

The Board also reviewed a proposal from the Red Drum Stock Assessment Subcommittee (SAS) concerning the next red drum stock assessment. Previous assessments have had difficulty modeling red drum due to limited data on fish larger than the current slot limit, which can disproportionately contribute reproductively to the stock. It was recommended population simulation models be developed that would simulate the full red drum population, then test a variety of assessment modeling techniques to determine which would be most useful with a peer review in 2022. The SAS noted this project will require a substantial work and modeling expertise and would change the timeline for delivery of the next red drum assessment. The Southeast Data, Assessment, and Review of red drum, currently scheduled for 2022, would be postponed until 2024. The Board agreed with the SAS's proposal, tasked the SAS with conducting the simulation project, and recommended that the Interstate Fishery Management Program Policy Board adjust the stock assessment schedule accordingly.

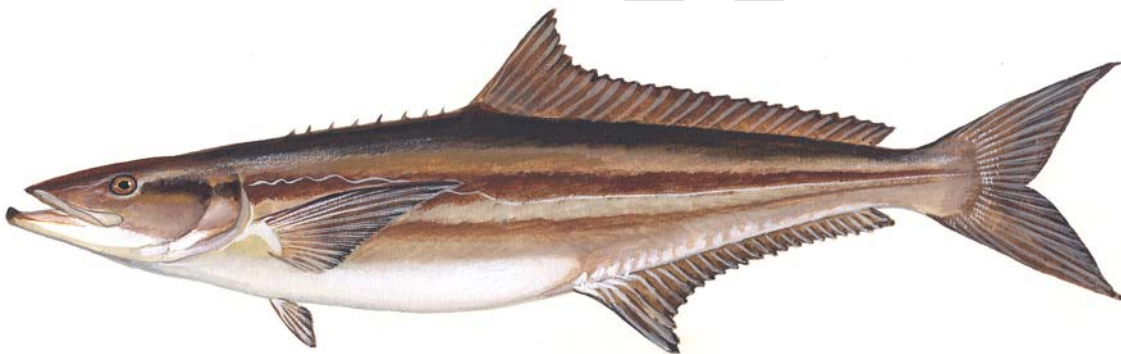
For more information, please contact Dr. Michael Schmidtke, Fishery Management Plan Coordinator, at mschmidtke@asmfc.org or 703.842.0740.

Draft Document for Board Review. Not for Public comment.

Atlantic States Marine Fisheries Commission

DRAFT ADDENDUM I TO AMENDMENT 1 TO THE INTERSTATE FISHERY MANAGEMENT PLAN FOR ATLANTIC MIGRATORY GROUP COBIA

***Modifications to Recreational and Commercial Allocations, Commercial Trigger, and
De Minimis Measures***



This draft document was developed for Management Board review and discussion. This document is not intended to solicit public comment as part of the Commission/State formal public input process. Comments on this draft document may be given at the appropriate time on the agenda during the scheduled meeting. If approved, a public comment period will be established to solicit input on the issues contained in the document.

August 2020



Sustainable and Cooperative Management of Atlantic Coastal Fisheries

Draft Document for Board Review. Not for Public comment.

Draft Document for Board Review. Not for Public comment.

Public Comment Process and Proposed Timeline

In February 2020, the South Atlantic State/Federal Fisheries Management Board initiated the development of an addendum to the Interstate Fishery Management Plan (FMP) for Atlantic Migratory Group Cobia (Atlantic cobia) to reevaluate recreational and commercial allocations, modify calculation of the commercial trigger, and reconsider *de minimis* measures. This Draft Addendum presents background on the Atlantic States Marine Fisheries Commission's (Commission) management of Atlantic cobia, the addendum process and timeline, and a statement of the problem. This document also provides management options for public consideration and comment.

The public is encouraged to submit comments regarding this document at any time during the public comment period. The final date comments will be accepted is **September XX, 2020 at 5:00 p.m.** Comments may be submitted at state public hearings or by mail, email, or fax. If you have any questions or would like to submit comment, please use the contact information below.

Mail: Toni Kerns

Atlantic States Marine Fisheries Commission
1050 North Highland Street, Suite 200A-N
Arlington, VA 22201

Email: comments@asmfc.org

(Subject: Cobia Draft Addendum I)

Phone: (703) 842-0740

Fax: (703) 842-0741

Commission's Process and Timeline

February 2020	South Atlantic Board Tasks PDT to Develop Draft Addendum I
February – August 2020	PDT Develops Draft Addendum I for Public Comment
August 2020	South Atlantic Board Reviews Draft Addendum I and Considers Its Approval for Public Comment
August – October 2020	Board Solicits Public Comment and States Conduct Public Hearings
October 2020	Board Reviews Public Comment, Selects Management Options and Considers Final Approval of Addendum I
TBD	Provisions of Addendum I are Implemented

1.0 INTRODUCTION

The Atlantic States Marine Fisheries Commission (Commission) is responsible for managing cobia (*Rachycentron canadum*) from New York through Georgia (Atlantic cobia) in state waters (0-3 miles from shore) under the authority of the Atlantic Coastal Fisheries Cooperative Management Act, and has done so through the Interstate Fishery Management Plan for Atlantic Migratory Group Cobia (FMP) since 2017. Atlantic cobia are currently managed under Amendment 1 (2019) to the FMP. The states of New Jersey through Florida have a declared interest in the fishery and are responsible for implementing management measures consistent with the interstate FMP as members of the South Atlantic State/Federal Fisheries Management Board (Board).

In 2018, recreational catch estimates were updated by the Marine Recreational Information Program (MRIP), and historical estimates, based on the Coastal Household Telephone Survey (CHTS), were recalibrated to the newer, mail-based Fishing Effort Survey (FES). The recalibration resulted in Atlantic cobia recreational catch estimates that were, on average, about two times higher than those previously estimated using the CHTS. The updated FES estimates were incorporated into the 2020 Southeast Data, Assessment, and Review (SEDAR) 58 Atlantic Cobia Benchmark Stock Assessment. This addendum further incorporates the FES data into management by considering it in the allocation strategy.

The commercial fishery's harvest is evaluated against its quota through in-season monitoring. A commercial trigger percentage is used to determine the harvest level at which a coastwide commercial closure would be initiated at least 30 days later. The significant increase in the 2020-2022 quota made it well beyond what the commercial fishery has harvested in previous years, making the trigger percentage unable to be calculated using methods from Amendment 1. This addendum considers a more flexible, alternative method for calculating the commercial trigger.

Amendment 1 also defines commercial and recreational criteria and measures for *de minimis* states, or those states with minimal commercial or recreational Atlantic cobia fisheries, such that not enforcing full FMP requirements would not significantly impact the coastwide management program. Commercial *de minimis* states are not required to monitor landings within the fishing season. To account for harvest in these states, 3% of the commercial quota is set aside and not available for harvest in non-*de minimis* states. This addendum considers maximum amounts for *de minimis* set asides that can allow greater utilization of the commercial quota.

Recreational *de minimis* states are able to choose to manage according to the regulations of a neighboring or the nearest non-*de minimis* state or adopt alternative measures that allow a reduced minimum size limit (29 inches fork length rather than 36 inches) and 1 fish per vessel with no recreational season restrictions. This addendum considers increased alternative minimum size limits that would increase probability of female maturity before harvest and be more consistent with other management measures.

2.0 OVERVIEW

2.1 Statement of the Problem

Amendment 1 established recreational and commercial allocations of the total harvest quota, originally derived in 2011 as part of previous Atlantic cobia management through the South Atlantic and Gulf of Mexico Fishery Management Councils' (SAFMC and GMFMC, respectively) Fishery Management Plan for Coastal Migratory Pelagic Resources in the Gulf of Mexico and Atlantic Region (CMP FMP). Allocations to each fishery were based on weighted averages of landings by each sector during 2000-2008, and CHTS estimates were used to determine recreational landings. Following review of the SEDAR 58 assessment and peer review reports, the Board specified a new total annual harvest quota for 2020-2022. Per Amendment 1, this quota is allocated to the recreational (92%) and commercial (8%) fisheries.

With the increase to Atlantic cobia recreational landings and population estimates through incorporation of the FES data, the total, recreational, and commercial quotas all increased substantially. However, while the increase to the commercial quota results in an increase to the amount of Atlantic cobia allowed for commercial harvest, the increase to the recreational quota is largely attributable to the change in the recreational catch estimates and not reflective of a similar effective increase in the number of fish allowed for recreational harvest. Draft Addendum I proposes alternative allocation strategies that will allow for more proportional changes to the commercial and recreational quotas specified in February 2020 and future management based on the new FES recreational data.

Approval of an increased commercial quota also raised an issue in the calculation of the commercial trigger percentage. The calculation method defined in Amendment 1 counts back from the date of harvest reaching the quota to an approximate percentage of the quota that would allow at least 30 days of notice before a closure. Thus, this method is dependent on recent harvests meeting the quota that will be in effect for future years. However, if the quota is increased (as is the case for the 2020-2022 quota) or if harvest decreases, the commercial trigger cannot be calculated. Draft Addendum I proposes a modification of the Amendment 1 method, recommended by the Cobia Technical Committee (TC), which will allow the trigger to be calculated for time periods when the quota increases or harvest decreases.

The SEDAR 58 assessment and increased quotas also illuminate the need for potential changes to the management of commercial and recreational *de minimis* states. An increase to the commercial quota makes the portion set aside (3%) to account for harvest in commercial *de minimis* states also increase, despite minimal commercial cobia fisheries in these states. This could lead to a set aside much greater than *de minimis* states harvest and an increased portion of the quota that is unlikely to be caught because it is inaccessible to non-*de minimis* states.

While the coastwide non-*de minimis* minimum size limit is 36 inches fork length, *de minimis* states may choose to harvest 1 fish per vessel with a minimum size limit of 29 inches and no

seasonal restriction. The 29 inch limit was based on an estimate of 50% female maturity from the SEDAR 28 stock assessment. Reproductive data from SEDAR 58 indicate there is potential reproductive benefit from using minimum size limits greater than 29 inches fork length, as more female Atlantic cobia would be able to reach maturity before being susceptible to harvest. Additionally, a recreational *de minimis* state choosing to manage using the 29 inch minimum size limit can create regulatory inconsistency among states, which could lead to confusion for stakeholders as well as management and enforcement difficulties.

2.2 Background

2.2.1 Recreational/Commercial Allocation

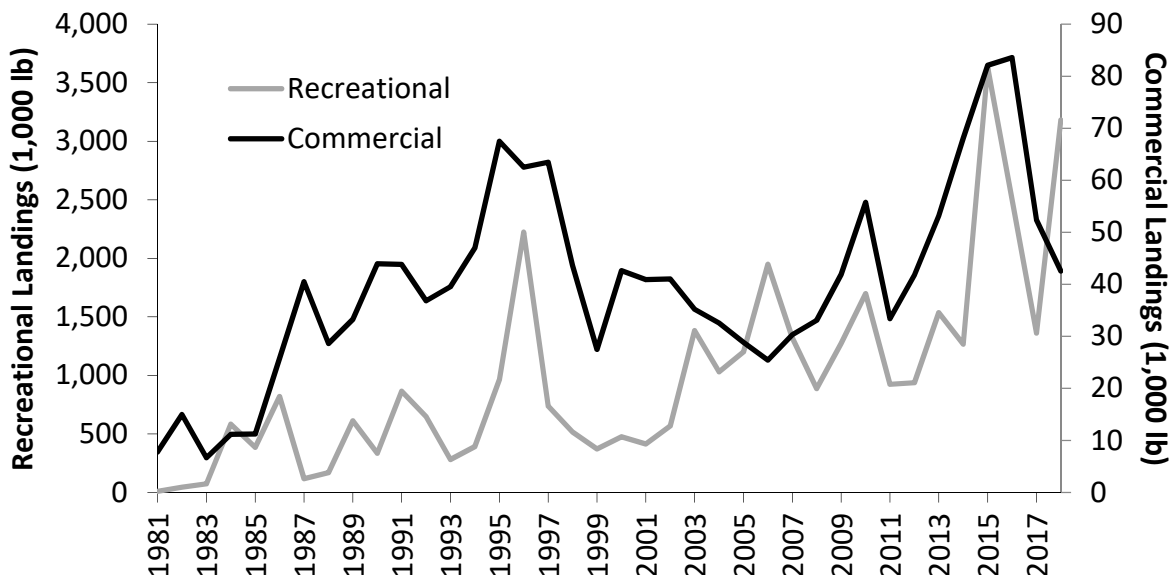
The recreational and commercial quotas are 92% and 8%, respectively, of the coastwide total harvest quota set through Board specification. These allocation percentages were derived from those previously in place through Amendment 18 to the CMP FMP. Allocations were based on harvests from 2000-2008, and calculated using the following equations:

$$\text{Com \%} = \frac{(50\% * \text{Average Com 2000} - 2008) + (50\% * \text{Average Com 2006} - 2008)}{(50\% * \text{Avg Com 2000} - 2008 + 50\% * \text{Avg Com 2006} - 2008) + (50\% * \text{Avg Rec 2000} - 2008 + 50\% * \text{Avg Rec 2006} - 2008)}$$

$$\text{Rec \%} = \frac{(50\% * \text{Average Rec 2000} - 2008) + (50\% * \text{Average Rec 2006} - 2008)}{(50\% * \text{Avg Com 2000} - 2008 + 50\% * \text{Avg Com 2006} - 2008) + (50\% * \text{Avg Rec 2000} - 2008 + 50\% * \text{Avg Rec 2006} - 2008)}$$

When originally calculated, the recreational harvests used in these equations were estimated using the CHTS. When the annual catch limit was set for Atlantic cobia through Amendment 20B to the CMP FMP (SAFMC, 2014), this resulted in allocations of 620,000 pounds for the recreational fishery and 50,000 pounds for the commercial fishery. These quotas remained in place under the CMP FMP and, later, under Commission management until 2020, when a new quota was specified in response to the SEDAR 58 assessment.

Figure 1. Atlantic cobia landings (GA-MA; in thousands of pounds) from 1981-2018. Recreational landings are shown in gray and correspond to the left vertical axis; commercial landings are shown in black and correspond to the right vertical axis.



2.2.2 Commercial Trigger Calculation

Along with defining parameters for managing the commercial fishery based on an annual quota, monitored throughout the season, Amendment 1 defines a commercial trigger mechanism, which is set as part of the harvest specification process. The commercial trigger is defined using the following language from Amendment 1:

The trigger percentage and number of following days until a closure occurs will be specified as part of the harvest specification process defined in Section 4.1. The number of days past the trigger percentage until a closure occurs will be calculated as the average number of days from the previous three years for commercial landings to go from the trigger percentage to the full commercial quota, less any *de minimis* set aside. The trigger shall be updated as part of the specification process, using similar methodology, to allow the states at least 30 days' notice of an impending commercial closure.

In calculating the commercial trigger percentage and harvest level with respect to the increased commercial quota specified in 2020, the TC recognized that recent commercial harvests had not met the commercial quota. Therefore, the percentages of the quota harvested at least 30 days prior to meeting the quota could not be determined.

Therefore, the TC recommends the following methodology for calculating the commercial trigger:

1. Calculation of daily commercial harvest rates for non-*de minimis* states based on harvests from the previous 5 years. Daily harvest rates for each year would be estimated

Draft Document for Board Review. Not for Public comment.

as the annual commercial harvest divided by the number of days from the first date of harvest to the last date of harvest in that year.

2. Average the 5 annual harvest rates to estimate the daily harvest rate for the entire time period.
3. Subtract 30 days' worth of harvest (30 times the average daily harvest rate) from the *non-de minimis* portion of the commercial quota.

These methods would provide a level of harvest in pounds or a percentage of the quota that could be used to provide the 30 days' notice prior to a closure required by Amendment 1. Additionally, the use of 5 years of harvest data could better account for variability in year-to-year harvest rates than a narrower three-year harvest window.

2.2.3 SEDAR 58 Benchmark Stock Assessment and 2020 Harvest Specification

A benchmark stock assessment, SEDAR 58, was completed in 2020 for Atlantic cobia and this assessment, following peer review, was accepted for management use by the Board at its February 2020 meeting. This assessment used the Beaufort Assessment Model (BAM), the same forward-projecting age structured model as used previously to assess the species. The stock assessment primarily used fishery-dependent data (i.e. data from the recreational and commercial fisheries) as well as information on Atlantic cobia biology, life history, and movement to determine current stock condition. Main changes since the previous assessment included updating data sources with new years of data, updating the natural mortality information, and using newly recalibrated recreational catch and effort data from MRIP.

Changes in recreational landings data represent the most significant change in this assessment. MRIP data have recently been recalibrated following changes to the Access Point Angler Intercept Survey and the implementation of the mail-based FES. On the Atlantic Coast, recalibrated harvest and live release estimates for cobia from 1981-2017, on average, were about 2 times higher, with individual years ranging up to 4 times higher, than previous estimates. This is largely due to increased effort estimates from the FES. In the assessment model, these changes resulted in higher estimates of biomass and spawning stock biomass (SSB) compared to the previous assessment. However, trends in landings, biomass, and spawning stock biomass were similar between the two assessments (SEDAR, 2013; SEDAR, 2020).

The Assessment Panel recommended a fishing mortality rate of F40% and SSB at F40% as reference points for Atlantic cobia (SEDAR, 2020). These reference points are calculated to be the fishing rate and SSB level that allows the population to achieve 40% of the maximum spawning potential it would have obtained in the absence of fishing. This type of reference point is often used as a proxy for maximum sustainable yield-derived reference points when data do not allow sufficient modeling of a stock-recruit relationship. The reference points indicated the Atlantic cobia stock is not overfished nor experiencing overfishing.

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The assessment estimated the last strong year class was in 2010 (age 1 in 2011) with the four most recent year classes at low levels of recruitment (SEDAR, 2020). While the SSB remains above the overfished threshold, below-average recruitment has led to a decreasing trend in SSB since 2014. The fishing mortality rate has increased since the late 2000s but has not exceeded the overfishing threshold.

Following completion of the stock assessment, the Board moved forward with harvest specification. The harvest specification process allows managers to specify regulations controlling future harvest through a Board vote, allowing managers to respond quickly to changes in the fishery or react following a stock assessment. Through the harvest specification process, the Board may set coastwide total harvest quota, vessel limits, possession or bag limits, minimum size limits, and the commercial closure triggering mechanism for up to three years. Following the completion of the assessment, the TC reviewed projections of SSB, fishing mortality, and removals through 2024 in order to recommend total harvest quota options to the Board.

At its February 2020 meeting, the Board set the coastwide total harvest quota at 80,112 fish for 2020-2022. This results in a recreational quota of 73,703 fish (92%) and a commercial quota of 6,409 fish (8%), equivalent to 146,232 pounds using the 2015-2017 coastwide commercial average weight. This total quota, based on projections from the SEDAR 58 assessment, is much higher than the previous quota. The recreational quota, in numbers of fish, increased from 22,142 fish to 73,703 fish and the commercial quota increased from 50,000 pounds to 146,232 pounds.

The Amendment 1 quota allocation is based on a weighted average of harvest from each sector between 2000 and 2008 (see *Section 2.2.1*). While the commercial harvest numbers have remained unchanged, the recalibration of the recreational harvest, as estimated by MRIP, has resulted in much larger estimates of historical recreational harvest. This increase in recreational harvest is largely due to previously underestimated effort from the private boat and shore modes and is believed to be a better estimate of previous levels of recreational fishery removals. With Amendment 1 allocation based on previous harvest estimates now being applied to new estimates, the Board requested the harvest allocation be reevaluated through this addendum.

2.2.4 De Minimis Measures

The Commission's Interstate Fisheries Management Program Charter (ISFMP Charter) defines *de minimis* as "a situation in which, under the existing condition of the stock and scope of the fishery, the conservation and enforcement actions taken by an individual state would be expected to contribute insignificantly to a coastwide conservation program required by a Fishery Management Plan or amendment," (ASMFC, 2016). Under Amendment 1, a state may apply annually for *de minimis* status for either or both of its commercial and recreational fisheries. Requests for *de minimis* status are evaluated according to criteria defined in Amendment 1 and considered for approval by the Board.

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Commercial *de minimis* states are subject to all coastwide commercial regulations, including minimum size, possession, and vessel limits, as well as closures of the commercial fishery resulting from the coastwide commercial quota being reached. A state with *de minimis* status for its commercial fishery is not required to monitor commercial cobia landings within the fishing year. The state is still required to report annual landings through its annual state compliance report. To account for potential, unmonitored landings in these states, 3% percent of the commercial quota is set aside and not accessible to non-*de minimis* states.

Recreational *de minimis* states may choose to match the recreational management measures implemented by an adjacent non-*de minimis* state (or the nearest non-*de minimis* state if none are adjacent) or to limit its recreational fishery to 1 fish per vessel per trip with a minimum size of 29 inches fork length (or the total length equivalent, 33 inches). If a *de minimis* state chooses to match an adjacent (or the nearest) non-*de minimis* state, the *de minimis* state is subject to all recreational regulations required by Amendment 1, including bag, size, vessel, and season restrictions, of the adjacent (or nearest) non-*de minimis* state. A *de minimis* state that chooses to limit its recreational fishery to 1 fish per vessel per trip is not subject to seasonal restrictions for its recreational fishery. One percent (1%) of the recreational quota is set aside to account for harvests in recreational *de minimis* states.

Current recreational *de minimis* measures that do not match those of a neighboring non-*de minimis* state were developed to allow opportunistic harvest of cobia in areas where catches are uncommon. As such, these regulations include a 1 fish per vessel limit with a year-round open season and a reduced minimum size limit of 29 inches FL. This reduced size limit was set to approximately correspond to the female size at 50% maturity, based on the SEDAR 28 stock assessment (SEDAR, 2013). The SEDAR 58 stock assessment indicates similar maturity characteristics, although both assessments had few samples of cobia below the 33-inch FL commercial minimum size limit. SEDAR 58 estimated that 33% of female cobia between 601 and 750 mm (23.7 – 29.5 inches; 9 samples) and 60% of female cobia between 751 and 800 mm (29.6 – 31.5 inches; 5 samples) were mature. All fish larger than 800 mm (31.5 inches) were mature.

3.0 PROPOSED MANAGEMENT PROGRAM

Changes to the management program would replace language in Sections 4.2 and 4.5 of Amendment 1 to the Atlantic Cobia FMP.

3.1 Issue 1: Recreational and Commercial Allocations

Options B-D were developed as alternative allocations that would offset the disproportional increase to the commercial quota that resulted from the 2020 harvest specification, based on the SEDAR 58 assessment results. Option B was developed as the whole percentage allocation that resulted in a commercial quota closest to the previous value (50,000 pounds) without reducing it. Options C and D are the next-highest whole percentages. These options allow some

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additional increase from the previous commercial quota, but do not double it. All options are within the ranges of recreational (91% – 99%) and commercial (1% – 9%) harvest percentages since 2000.

Option A. (Status Quo) The recreational quota will be 92% of the coastwide total harvest quota set through Board specification. The commercial quota will be 8% of the coastwide total harvest quota set through Board specification. Under the 2020-2022 total quota, the recreational quota would be 73,703 fish and the commercial quota would be 146,232 pounds.

Option B. The recreational quota will be 97% of the coastwide total harvest quota set through Board specification. The commercial quota will be 3% of the coastwide total harvest quota set through Board specification. Under the 2020-2022 total quota, the recreational quota would be 77,917 fish and the commercial quota would be 54,837 pounds.

Option C. The recreational quota will be 96% of the coastwide total harvest quota set through Board specification. The commercial quota will be 4% of the coastwide total harvest quota set through Board specification. Under the 2020-2022 total quota, the recreational quota would be 76,908 fish and the commercial quota would be 73,116 pounds.

Option D. The recreational quota will be 95% of the coastwide total harvest quota set through Board specification. The commercial quota will be 5% of the coastwide total harvest quota set through Board specification. Under the 2020-2022 total quota, the recreational quota would be 76,106 fish and the commercial quota would be 91,394 pounds.

Table 1. Atlantic cobia (Georgia – Massachusetts) total landings in pounds and percentages of total pounds caught by the recreational fishery from 2000-2018.

Atlantic Cobia Landings (lb)					
Year	Total	% Recreational	Year	Total	% Recreational
2000	518,092	91.78%	2010	1,754,547	96.82%
2001	454,261	91.00%	2011	957,136	96.51%
2002	609,890	93.28%	2012	978,889	95.73%
2003	1,418,227	97.52%	2013	1,589,819	96.66%
2004	1,062,367	96.93%	2014	1,334,373	94.90%
2005	1,229,884	97.66%	2015	3,711,695	97.79%
2006	1,974,824	98.71%	2016	2,587,126	96.77%
2007	1,350,144	97.75%	2017	1,413,915	96.30%
2008	919,332	96.40%	2018	3,231,501	98.44%
2009	1,314,431	96.81%			

3.2 Issue 2: Commercial Trigger Calculation

The commercial trigger is used to determine when to close the commercial fishery in order to fully utilize but not exceed the quota.

Option A. (Status Quo) The number of days past the trigger percentage until a closure occurs will be calculated as the average number of days from the previous three years for commercial landings to go from the trigger percentage to the full commercial quota, less any *de minimis* set aside.

Option B. Calculate the commercial trigger using the following method (recommended by the TC):

1. Calculation of daily commercial harvest rates for non-*de minimis* states based on harvests from the previous 5 years. Daily harvest rates for each year would be estimated as the annual commercial harvest divided by the number of days from the first date of harvest to the last date of harvest in that year.
2. Average the 5 annual rates to estimate the daily rate for the entire time period.
3. Subtract 30 days' worth of harvest (30 times the average daily harvest rate) from the non-*de minimis* portion of the commercial quota.

3.3 De Minimis Measures

3.3.1 Issue 3: Commercial De Minimis Set Aside

Virginia, North Carolina, and South Carolina are the only states that currently do not qualify for commercial *de minimis* status. Commercial harvests that have occurred within and outside of these states from 2000-2018 are shown in Table 2. These numbers include harvests within the Atlantic cobia stock (defined by SEDAR 58 as including cobia from the US Atlantic coast north of the Georgia-Florida state border as far as landings persist) that occur outside of the management unit (north of New York).

Option A. (Status Quo) To account for potential, unmonitored landings in *de minimis* states, 3% of the commercial quota would be set aside and not accessible to non-*de minimis* states.

Option B. To account for potential, unmonitored landings in *de minimis* states, 3% of the commercial quota or 3,000 pounds, whichever is less, would be set aside and not accessible to non-*de minimis* states.

Option C. To account for potential, unmonitored landings in *de minimis* states, 3% of the commercial quota or 5,000 pounds, whichever is less, would be set aside and not accessible to non-*de minimis* states.

Table 2. Commercial Atlantic cobia (MA-GA) landings for states that do (Massachusetts – Maryland and Georgia) and do not (Virginia – South Carolina) qualify for commercial *de minimis* status in 2020, 2000 – 2018.

Year	VA-SC	MA-MD, GA (<i>De Minimis</i>)	Year	VA-SC	MA-MD, GA (<i>De Minimis</i>)
2000	39,253	3,352	2010	54,718	1,037
2001	24,718	1,633*	2011	32,444	950
2002	37,510	3,502	2012	40,712	1,438*
2003	33,446	1,746	2013	50,185	2,992
2004	30,319	3,008*	2014	66,545	1,531
2005	27,743	1,086	2015	80,523	1,594
2006	25,380	48*	2016	81,766	1,817
2007	28,341	2,108*	2017	47,899	4,477
2008	31,818	1,279	2018	40,656	1,903
2009	39,956	1,944			

*Landings exclude confidential data

Table 3. *De minimis* set-aside portions of the commercial quota for each of the commercial quota options listed for Issue 1.

Issue 1 Commercial Quota Options (lb)	<i>De Minimis</i> Set-Aside (lb)
A. 146,231	4,387*
B. 54,837	1,645
C. 73,116	2,193

*Would be reduced to 3,000 pounds if Issue 2: Option B approved.

3.3.2 Issue 4: Recreational *De Minimis* Minimum Size Limit

Option A (status quo) was originally proposed to allow harvest at a minimum size where approximately 50% of female cobia were mature. SEDAR 58 provided more recent data that informed percent maturity estimates listed below. SEDAR 58 does note uncertainty in the percentages due to limited data for fish smaller than 33 inches fork length. Alternative recreational *de minimis* minimum size options were developed with two objectives. Option B would increase the estimated percent mature for harvest to be closer to 100%, allowing more female cobia the opportunity to spawn before being susceptible to harvest. Option C would further increase the percent mature, but would also equal the commercial minimum size limit, allowing more consistent regulations based on those used elsewhere in cobia management, rather than a completely different, separate limit.

Option A. (Status Quo) A recreational *de minimis* state may choose to match the recreational management measures implemented by an adjacent non-*de minimis* state (or the nearest non-*de minimis* state if none are adjacent) or limit its recreational fishery to 1 fish per vessel per trip with a minimum size of 29 inches fork length (or the total length equivalent, 33 inches). SEDAR 58 estimated 33% female maturity between 27.6 and 29.5 inches.

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Option B. A recreational *de minimis* state may choose to match the recreational management measures implemented by an adjacent non-*de minimis* state (or the nearest non-*de minimis* state if none are adjacent) or limit its recreational fishery to 1 fish per vessel per trip with a minimum size of 31 inches fork length (or the total length equivalent, 35 inches). SEDAR 58 estimated 60% female maturity between 29.6 and 31.5 inches.

Option C. A recreational *de minimis* state may choose to match the recreational management measures implemented by an adjacent non-*de minimis* state (or the nearest non-*de minimis* state if none are adjacent) or limit its recreational fishery to 1 fish per vessel per trip with a minimum size of 33 inches fork length (or the total length equivalent, 37 inches). SEDAR 58 estimated 100% female maturity above 31.5 inches.

4.0 COMPLIANCE

The management framework contained in *Section 3* of Addendum I to Amendment 1 is effective XX.

5.0 REFERENCES

- ASMFC. 2016. Interstate Fisheries Management Program Charter. ASMFC, Arlington, VA. 29 p.
- ASMFC. 2019. Amendment 1 to the Interstate Fishery Management Plan for Atlantic Migratory Group Cobia. ASMFC, Arlington, VA. 82 p.
- SAFMC. 2011. Amendment 18 to the Fishery Management Plan for Coastal Migratory Pelagics Resources in the Gulf of Mexico and Atlantic Region. NOAA Award # FNA05NMF4410004. Charleston, SC. 399 p.
- SAFMC. 2014. Amendment 20B to the Fishery Management Plan for Coastal Migratory Pelagics Resources in the Gulf of Mexico and Atlantic Region. NOAA Award # NA10NMF4410011. Charleston, SC. 239 p.
- SEDAR. 2013. SEDAR 28 – South Atlantic Cobia Stock Assessment Report. SEDAR, North Charleston, SC. 420 p. Available at: <https://sedarweb.org/sedar-28>.
- SEDAR. 2020. SEDAR 58 – Atlantic Cobia Stock Assessment Report. SEDAR, North Charleston, SC. 500 p. Available at: <https://sedarweb.org/sedar-58>.



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MEMORANDUM

May 20, 2020

To: South Atlantic State/Federal Fisheries Management Board
From: Cobia Technical Committee
RE: Recommendations for Atlantic Cobia Commercial Trigger

At the February 2020 ASMFC meeting, the South Atlantic State/Federal Fisheries Management Board (Board) approved the Atlantic cobia 2020-2022 total harvest quota of 80,112 fish, resulting in a commercial quota of 146,232 pounds. The Cobia Technical Committee (TC) attempted to calculate a recommended commercial trigger percentage, as specified in Amendment 1 to the Interstate Fishery Management Plan for Atlantic Migratory Group Cobia (Amendment 1) but encountered an issue. Amendment 1 states:

The number of days past the trigger percentage until a closure occurs will be calculated as the average number of days from the previous three years for commercial landings to go from the trigger percentage to the full commercial quota, less any *de minimis* set aside. The trigger shall be updated as part of the specification process, using similar methodology, to allow the states at least 30 days' notice of an impending commercial closure.

From this language, the calculation of a trigger percentage is dependent on recent commercial harvests reaching the commercial quota. However, if recent harvests are low or the quota is significantly increased (as happened in February), the trigger percentage is not able to be calculated.

The TC discussed this issue and recommends calculation of the 2020 commercial trigger level and future commercial triggers in the following way:

1. Calculation of daily commercial harvest rates for non-*de minimis* states based on harvests from the previous 5 years. Daily harvest rates for each year would be estimated as the annual commercial harvest divided by the number of days from the first date of harvest to the last date of harvest in that year.
2. Average the 5 annual rates to estimate the daily rate for the entire time period.
3. Subtract 30 days' worth of harvest (30 times the average daily harvest rate) from the non-*de minimis* portion of the commercial quota.

These methods would provide a level of harvest by pounds or a percentage of the quota that could be used to provide the 30 days' notice prior to a closure required by Amendment 1. Additionally, the use of 5 years of harvest data could better account for variability in year-to-year harvest rates than a narrower three-year harvest window.

M20-055

As Draft Addendum I to Amendment 1 is currently in development and has not yet been considered for public comment, the TC recommends the described changes to the commercial trigger calculation be included in the Draft Addendum prior to its review for public comment at the next Board meeting in August.

To: South Atlantic Management Board

From: Red Drum Technical Committee and Stock Assessment Subcommittee

RE: Draft Terms of Reference and Schedule for the 2022 Red Drum Simulation Assessment

The next red drum stock assessment is scheduled to be completed in 2022. This simulation assessment will be the first peer-reviewed assessment in a two assessment process that was approved by the Board at the February 2020 ASMFC Meeting. The second peer-reviewed assessment will be a traditional benchmark stock assessment that will begin following the simulation assessment and is scheduled to be completed in 2024. Terms of reference and a schedule for the second assessment will be presented to the Board following the completion of the simulation assessment. The Red Drum Technical Committee and Stock Assessment Subcommittee has recommended the Board consider the following terms of reference for the simulation assessment and peer review panel:

Terms of Reference for the Simulation Assessment Process

1. Describe fishery-dependent and fishery-independent monitoring programs for red drum and the data sets produced from these monitoring programs for stock assessment. Characterize precision and accuracy of data sets.
 - a. Provide descriptions of each monitoring program and data collected (e.g., geographic location, sampling methodology and changes through time).
 - b. Describe calculation of data sets produced from these monitoring programs for stock assessment.
 - c. Discuss trends in data sets and associated estimates of uncertainty (e.g., standard errors). Discuss potential explanation for outlying or anomalous data.
2. Describe available information for parameterizing simulation models (e.g., historical stock assessment estimates, life history and fishery characteristic studies, regulation changes). Characterize uncertainty of parameters.
3. Develop methods to project a simulated population through time. Implement sampling procedures in simulation models to generate data sets mirroring data sets available from existing monitoring programs.
4. Develop simulated populations that incorporates uncertainty in information used to parameterize the simulation models. Characterize uncertainty and limitations in simulation models and potential impacts on perceived understanding of in situ population dynamics and stock status.
5. Develop candidate assessment methods and apply assessment methods to data sets sampled from simulated populations.
6. Define reference points for characterizing stock status of simulated populations.

7. Identify performance metrics and evaluate performance of each candidate assessment method for estimating the population dynamics and stock status of simulated populations. Describe strengths and weaknesses of each assessment method.
8. Recommend the preferred assessment method(s) for characterizing stock status.
9. Provide prioritized recommendations on future monitoring to improve assessment.

Terms of Reference for the External Peer Review

1. Evaluate thoroughness of data collection, data treatment, data presentation, and characterization of data uncertainty.
2. Evaluate thoroughness and appropriateness of information used to parameterize simulation models.
3. Evaluate the appropriateness of simulation models for simulating red drum populations and generating data sets sampled from these simulated populations.
4. Evaluate the incorporation and treatment of uncertainty in simulated populations.
5. Evaluate candidate assessment methods and application of assessment methods to data sets sampled from simulated populations.
6. Evaluate choice of reference points for characterizing stock status of simulated populations. Recommend alternatives if necessary.
7. Evaluate choice of performance metrics used to evaluate performance of each candidate assessment method for estimating the population dynamics and stock status of simulated populations. Recommend alternatives if necessary.
8. Evaluate the choice of the preferred assessment method(s) for characterizing stock status. Recommend alternatives if necessary.
9. Review recommendations on future monitoring provided by the Technical Committee and comment on the appropriateness and prioritization of each recommendation. Provide any additional recommendations warranted.
10. Prepare a peer review panel terms of reference and advisory report summarizing the panel's evaluation of the simulation assessment and addressing each peer review term of reference. Develop a list of tasks to be completed following the workshop. Complete and submit the report within 4 weeks of workshop conclusion.

Red Drum Stock Assessment Simulation Preliminary Timeline

Item	People	Purpose	Date(s)
Draft ToRs and Timeline	Staff		
Webinar	TC, SAS	Discuss Draft ToRs and Timeline	July 10, 2020
ASMFC Summer Meeting	Staff	Board approval of ToRs	Aug 3-6, 2020
Webinar	SAS	Discuss data needs Preliminary discussions on methods	Mid Aug, 2020
Data Submission Deadline	SAS, TC		Early Oct, 2020
ASMFC Annual Meeting	Staff	Board update (if necessary)	Oct 18-22, 2020
Pre-Workshop Call (if necessary)	SAS		Late Oct, 2020
Data/Methods Workshop	SAS, TC	Review data, define methods	3 days, Early Nov, 2020
<i>Check-in Call(s) (if/as necessary)</i>	SAS		<i>Through Report Completion</i>
Prelim Report Deadline	SAS	First drafts of topics discussed at Data/Methods Workshop	Dec, 2020
ASMFC Winter Meeting	Staff	Board update (if necessary)	Feb 1-4, 2020
Modeling Workshop	SAS	Modeling work, request reviewers	3 days, Mid-Late Feb, 2021
Figure out Peer Reviewers	Staff (incl. Pat C)		
ASMFC Spring Meeting	Staff	Board update (if necessary)	May 3-6, 2021
Modeling Workshop 2 (if necessary)	SAS	Continue/Finish work from 1 st workshop	3 days, June/July, 2021
ASMFC Summer Meeting	Staff	Board update (if necessary)	Aug 3-5, 2021
Preliminary Report Deadline	Subgroup	Preliminary sections capturing decisions/discussions/results of Modeling Workshop	Sept, 2021
ASMFC Annual Meeting	Staff	Board update (if necessary)	Mid-Oct, 2021
Draft Report for Review	Staff	Compile and format sections into report. Distribute for SAS Review.	Oct, 2021
SAS Report Review	SAS	Review/Edit Report	Nov, 2021

Report Deadline	SAS	Edits Due, Report sent to TC	Dec, 2021
TC Review Webinar	SAS, TC	TC Review	Jan, 2022
ASMFC Winter Meeting	SAS Chair, PR Chair	Board update (if necessary)	Early Feb, 2022
Peer Review Prep			Feb, 2022
Peer Review Workshop	SAS Subgroup, Peer Reviewers		3 days, Mar, 2022
Post-Review	Peer Reviewers	Develop PR report and presentations	April, 2022
ASMFC Spring Meeting	SAS Chair, PR Chair	Present final reports	Early May, 2022