

Discussion Paper on Emergency Action to Remove the Stock Boundary and ACLs for cobia implemented in CMP Amendment 20B

South Atlantic Fishery Management Council
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Introduction

Following the shortened recreational seasons for Atlantic cobia in 2016 and 2017, there have been substantial requests from the public for the Council to recommend that NMFS take emergency action to revert the stock boundary and annual catch limits (ACLs) for cobia to those established through CMP Amendment 18 (GMFMC/SAFMC 2011). At their April 2017 meeting, the Mackerel Cobia Advisory Panel (AP) and Cobia Sub-Panel had an extensive discussion with NOAA General Counsel on emergency rule criteria and rationale, and how the criteria could apply to the Atlantic cobia situation. The AP and Sub-Panel approved a motion (6 in support/5 opposed/4 abstained) to recommend that the Council request NMFS consider emergency action to change the stock boundary and ACLs for cobia to those established in Amendment 18.

At their June 2017 meeting, the South Atlantic Council reviewed the AP and Sub-Panel's recommendation along with this discussion paper. The Council's conclusion is provided at the end of this document.

Relevant Background

Amendment 18

Amendment 18 (GMFMC/SAFMC 2011) included actions to establish the boundary between Gulf of Mexico and Atlantic cobia at the GMFMC/SAFMC boundary and to establish the ACL for each stock (1,517,399 lbs ww for Atlantic cobia; 1,460,000 lbs ww for Gulf cobia). The ACL was set equal to the acceptable biological catch (ABC) value recommended by the South Atlantic Council's Scientific and Statistical Committee (SSC), which applied the Gulf SSC's ABC Control Rule. Atlantic cobia had not been through the SEDAR process, and the South Atlantic SSC recommended that the interim ABC to be the mean of the most recent ten years of landings plus 1.5 standard deviations (Level 4 of the Gulf SSC's ABC Control Rule).

Amendment 18 also included actions to specify the accountability measures (AMs) for Atlantic cobia. The commercial AM is that commercial harvest will close when commercial landings meet or are projected to meet the commercial ACL. If the commercial ACL and the total ACL are exceeded, the commercial ACL for the next fishing year will be reduced by the amount of the overage, but only if Atlantic cobia are designated as overfished. The recreational AM implemented through Amendment 18 is that if recreational landings exceed the recreational ACL, then the following recreational season length will be reduced to ensure that the recreational annual catch target (ACT) is met, but landings do not exceed the recreational ACL. Additionally, if the recreational ACL and the total ACL are exceeded, the recreational ACL for the next fishing year will be reduced by the amount of the overage, but only if Atlantic cobia are

designated as overfished. Amendment 18 also specified that overfishing would be defined as landings exceeding the ACL, because at that time there was no overfishing level (OFL) provided.

SEDAR 28

In 2013, the stock assessment for Gulf and Atlantic cobia (SEDAR 28) was completed and included data through 2012. At their April 2013 meeting, the South Atlantic SSC reviewed the stock assessment for Atlantic cobia, accepted the assessment as representing the best available scientific information on the current status of cobia in South Atlantic waters and considered it appropriate for SAFMC management decisions. The SSC report is available here:

http://cdn1.safmc.net/wp-content/uploads/2016/11/28105833/Mackerel_Att4_SSC_APR13_Report_Final.pdf

Based on genetic and tagging information along with a decision by the assessment workshop participants, SEDAR 28 designated the boundary between the Gulf and Atlantic stocks at the Georgia/Florida line. The boundary decision incorporated all data available on stock structure, but also considered management complexity, so the boundary was set at a state line. The assessment indicated that the spawning stock biomass (SSB) is greater than the minimum stock size threshold (MSST), so Atlantic cobia are designated as not overfished. SEDAR 28 also indicated that fishing mortality is less than the maximum fishing mortality threshold (MFMT), therefore overfishing was not occurring. The OFL for 2015 was specified as 792,800 lbs ww and the OFL for 2016 onwards was specified as 726,700 lbs ww.

Amendment 20B

The SSC recommendation on the stock assessment for Atlantic cobia was presented to the South Atlantic Council in June 2013 during the Mackerel Committee. The Councils included an action in CMP Amendment 20B (GMFMC/SAFMC 2014) to modify the boundary between the Atlantic and Gulf stocks (**Figure 1**), to update the annual catch limits for each stock based on the stock assessment, and to specify a portion of the Gulf ACL for the Florida east coast. The Councils selected the following alternative as the preferred alternative and option:

Preferred Alternative 3: The ACL for each jurisdictional area would be determined as follows:

- The Gulf migratory group cobia ABC (as determined by the SSCs) would be divided into a Gulf Zone ACL and a Florida East Coast Zone ACL (Florida/Georgia border to the Gulf and South Atlantic Councils jurisdictional boundary) based on the options below.

Preferred Option d: Use 1998-2012 (15 years) landings to establish the percentage split for the Gulf ABC.

- The Atlantic migratory group ACL (Florida/Georgia border through Mid-Atlantic or NY however you want to state) would be equal to the ABC for the Atlantic migratory group cobia (as determined by the SSCs).

The alternative and option selected as the preferred by the Councils resulted in the following annual catch limits or quotas:

2015	2016 and subsequent years
Atlantic (GA-NY) Stock ACL: 690,000 lbs	Atlantic (GA-NY) Stock ACL: 670,000 lbs
Recreational: 630,000 lbs	Recreational: 620,000 lbs
Commercial: 60,000 lbs	Commercial: 50,000 lbs
Gulf Stock ACL: 2.51 mp	Gulf Stock ACL: 2.59 mp
Gulf Zone ACL (minus FL East Coast): 1.61 mp	Gulf Zone ACL (minus FL East Coast): 1.66 mp
Florida east coast ACL: 900,000 lbs	Florida east coast ACL: 930,000 lbs
Recreational: 830,000 lbs	Recreational: 860,000 lbs
Commercial: 70,000 lbs	Commercial: 70,000 lbs

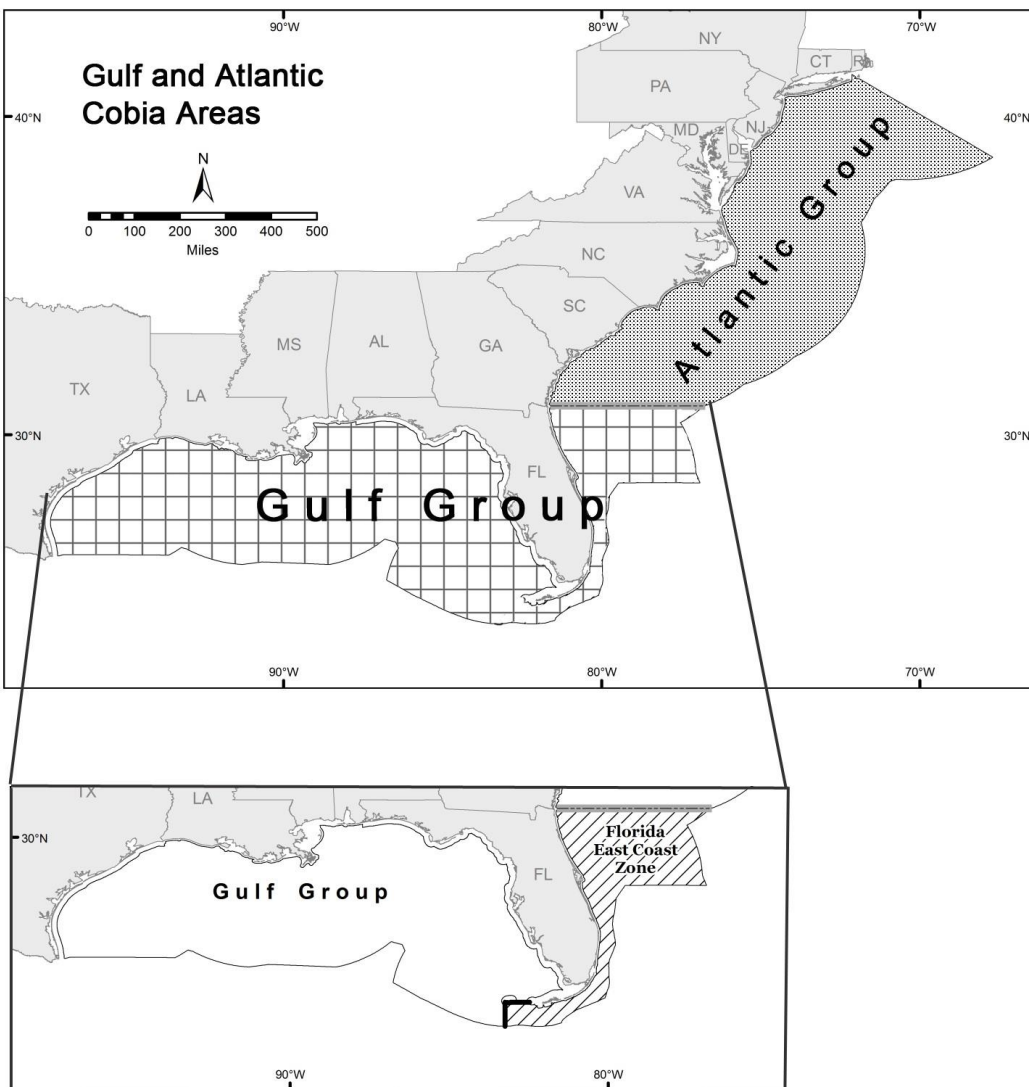


Figure 1. Boundaries for Gulf and Atlantic cobia used in SEDAR 28 and updated in CMP Amendment 20B.

Amendment 20B was approved for public hearings by the South Atlantic Council in June 2013, and hearings were held in August 2013. There were in-person hearings held in six locations in the South Atlantic region. Additionally, there was a hearing held in conjunction with the Mid-Atlantic Fishery Management Council meeting in Wilmington, DE. Council staff also held a Q&A webinar, and written comments could be submitted by mail or email. Information about the hearings and the actions under consideration were publicized by the South Atlantic and Mid-Atlantic Councils. The posted information is available at: <http://safmc.net/safmc-meetings/public-hearings-august-2013-archived/>.

The Mackerel Advisory Panel also reviewed the alternatives in April 2013 and recommended that the ACL be set equal to the ABC for Atlantic cobia, and that the Florida east coast allocation be based on the longest time period. The preferred alternatives selected by the Councils (Alternative 3 and Option D) aligned with the Mackerel AP's recommendation.

The South Atlantic Council reviewed the public comments from the hearings at their September 2013 meeting, and approved Amendment 20B for formal review.

It should be noted that Amendment 20B was included in the agenda on the next two South Atlantic Council meetings as well, due to disagreement between the Councils on an action to change the fishing year for the Gulf king mackerel western zone. Because the Councils did not have agreement on the preferred alternative for the king mackerel fishing year action, each Council reconsidered the preferred alternative at subsequent meetings and then approved the amendment again for formal review. Therefore, the South Atlantic Council approved Amendment 20B for formal review again in December 2013 and in March 2014. At each meeting, the federal register noticed specified that Amendment 20B would again be considered for formal approval and that there would be a designated opportunity for the public to speak about the amendment. It was not until the April 2014 Gulf Council meeting in which the preferred alternatives of each Council aligned.

Amendment 20B was sent to NMFS for review on May 22, 2014. The proposed rule was published on October 31, 2014, with a public comment through December 1, 2014. NMFS received eleven comments on the proposed rule, which are addressed in the final rule that published on January 27, 2015. There were no comments specifically about the cobia action in Amendment 20B. The regulations became effective on March 1, 2015.

2016 Fishing Season

In 2015, recreational landings for Atlantic cobia were 1,554,394 lbs and exceeded the 2015 recreational ACL of 630,000 lbs ww and the 2015 stock ACL of 690,000 lbs ww. The total Based on the total landings (commercial and recreational combined) of Atlantic cobia during 2015 (1,637,242 lbs) exceeded the ACL (690,000 lbs ww) and the OFL (729,800 lbs) specified for 2015.

On March 10, 2016, NMFS announced that the 2016 recreational season for Atlantic cobia in federal waters would close on June 20, 2016 (81 FR 12601). Because the June closure would likely have a negative economic and social impact on fishermen targeting cobia, the South Atlantic Council, at their March 2016 meeting, directed staff to begin work on an amendment that included actions with measures that could help slow the rate of harvest and reduce the likelihood of exceeding the recreational ACL. Additionally, the Council directed staff to send a

letter requesting the Atlantic States Marine Fisheries Commission (ASMFC) develop a complementary interstate management plan for cobia.

In 2016, Virginia, North Carolina, and South Carolina implemented management changes for cobia harvest in state waters. Effective June 1, 2016, the recreational harvest limits in Virginia state waters are 1 fish per person and 2 fish per boat; the minimum size limit is 40 inches total length (TL) and no more than one cobia over 50 inches TL is allowed per boat; no gaffing is allowed; and state waters closed for the remainder of the year on August 30, 2016.

The North Carolina Marine Fisheries Commission (North Carolina Commission) approved several measures for cobia harvest in state waters for 2016, including a recreational bag limit of 1 fish per person per day, recreational minimum size limit of 37 inches fork length (FL), and closure of recreational harvest in state waters on September 30, 2016. On for-hire trips, the harvest limit was set at 4 cobia per vessel per day or 1 cobia per person per day if fewer than four people are on board, and private recreational harvest was only allowed on Monday, Wednesday, and Saturday, with a vessel limit of 2 cobia per day and a bag limit of 1 cobia per person per day if there is only one person on board. Shore-based cobia harvest was allowed seven days a week with a recreational bag limit of 1 fish per person per day.

In April 2016, the governor of South Carolina approved legislation to establish a Southern Cobia Management Zone, which includes South Carolina state waters from Jeremy Inlet, Edisto Island, to the South Carolina/Georgia boundary. Effective May 1, 2016, cobia harvest in the Southern Cobia Management Zone is limited to catch and release only from May 1 through May 31, and is limited to 1 fish per person per day or 3 fish per vessel per day, whichever is lower, from June 1 through April 30. On June 20, 2016, South Carolina state waters also closed to recreational harvest of cobia to complement the federal closure.

Coastal Migratory Pelagics Framework Amendment 4

At their March 2016 meeting, the South Atlantic Council directed staff to begin develop of Framework Amendment 4, which would include options for management measures to slow the rate of recreational harvest of cobia and reduce the likelihood that landings would exceed the ACL. The South Atlantic Council held a combination in-person and webinar hearing in April 2016 to collect public input on potential actions, such as bag limits, boat limits, and minimum size limits. In June 2016, the Council reviewed actions in Framework Amendment 4 for recreational bag and vessel limits, reduced recreational minimum size limit, modified recreational accountability measures, and a specified commercial harvest limit. The Council approved the amendment for public hearings in August 2016, which included in-person meetings, webinar hearings, and an online form for written comments. The Council reviewed public input and approved the amendment for formal review in September 2016. The amendment was submitted for Secretarial review on October 28, 2016. The proposed rule published on February 21, 2017, with a comment period through March 23, 2017.

ASMFC Interstate Management Plan for Cobia

In August 2016, the South Atlantic State/Federal Fisheries Management Board of the ASMFC reviewed options for cobia management and recommended that the ASMFC start work on an interstate cobia management plan. Public meetings to collect input on the options for cobia management were held in December 2016, and the draft plan is being developed. After the

ASMFC plan is in place, the Council will develop the protocol for federal management to complement the interstate plan, if necessary.

2017 Fishing Season

The recreational landings for Atlantic cobia in 2016 were of 1,336,012 lbs, and the overage of total landings in 2015 and 2016 were 1,511,079 lbs. This value exceeded the 2016 recreational ACL of 620,000 pounds ww and the 2016 stock ACL of 670,000 lbs ww. CMP Amendment 18 specified that overfishing is occurring when landings exceed the total ACL. Based on the total landings of Atlantic cobia during 2016 (1,384,916 lbs), landings exceeded the ACL and the OFL (766,700 lbs ww).

NMFS closed recreational harvest of Atlantic cobia in federal waters on January 24, 2017 (82 FR 8363) to prevent recreational harvest exceeding the ACL given that state waters would be open during 2017.

Virginia established a season for state waters as June 1 through September 15, 2017. The bag limit is 1 fish per person or 3 fish per vessel, and the minimum size limit is 40" TL with only one fish over 50" TL per vessel. Gaffing is prohibited and recreational reporting is required.

North Carolina also established a recreational season in state waters of May 1 to September 1, 2017, with a minimum size limit of 36" FL for recreational harvest. The recreational possession limit is 1 fish per person or 4 fish per vessel, if there are four or more people on the vessel. Recreational fishermen are requested to report cobia catch to the state.

Recreational harvest of cobia in state waters of South Carolina closed in conjunction with the federal closure in the EEZ. Georgia made no changes for harvest in state waters.

Emergency Action

The Magnuson-Stevens Act Fishery Conservation and Management Act gives the Secretary of Commerce the legal authority to take emergency action (<http://www.nmfs.noaa.gov/sfa/magact/mag3a.html#s305>). NMFS policy guidelines (<http://www.nmfs.noaa.gov/op/pds/documents/01/101/01-101-07.pdf>) specify how emergency action will be carried out if NMFS determines that there is an emergency.

In the context of the 2017 recreational season for Atlantic cobia, the circumstances under consideration for emergency action are:

- Must be due to recent, unforeseen events, or recently discovered circumstances (i.e., an emergency action cannot be based on administrative inaction to solve a long recognized problem)
- Presents serious conservation or management problems in the fishery
 - Economic - significant direct economic loss or foregone significant economic opportunity
 - Social - significant community impacts or conflict between user groups
- Can be addressed through emergency regulations for which the immediate benefits outweigh the value of advance notice, public comment, and deliberative consideration of

the impacts on participants to the same extent as would be expected under the normal rulemaking process

- Must have an administrative record justifying emergency regulatory action and demonstrating its compliance with the national standards

Recent and unforeseen events

There have been a series of events that have led to the effects of the accountability measure (shortened recreational season for the subsequent year) associated with the stock boundary and ACLs, but these do not clearly represent recent, unforeseen events, or recently discovered circumstances. The stock assessment for cobia was completed in 2012 and underwent the standard review process, including the SSC reviewing and accepting SEDAR 28 as the best available scientific information. The modified stock boundary and updated ACLs in Amendment 20B were implemented in March 2015, and there have been two consecutive years with early closures. Catches of cobia are known to fluctuate, in part because harvest is heavily recreational and the fish are migratory, so the possibility of exceeding the ACL is always present to some degree. Thus, it is not obvious how anything was necessarily unforeseen about the current situation, particularly now, after multiple ACL overages.

Upon notification of the 2015 overage and the shortened 2016 fishing season, the Council expressed concern about the negative social and economic effects on recreational fishermen due to the closure during the most popular time of year to fish for cobia. At their March 2016 meeting, the Council immediately started work on Framework Amendment 4 to revise management measures to help slow the rate of harvest and reduce the possibility of another shortened recreational season due to an overage. The amendment was approved by the Council in September 2016 (sent for formal review on 10/18/16), yet the timing still allowed several opportunities for public input on the measures. The final rule for the revised measures is currently being prepared for publication.

Additionally, in March 2016 the Council requested that ASMFC consider complementary management for cobia. At this time, ASMFC is developing the interstate management plan for cobia, and the Council will continue to work with the ASMFC on complementary regulations in state and federal waters. Through these actions, the Council is working quickly to best address the negative effects of the 2016 and 2017 closures and decrease the likelihood that the closures will continue.

It should be noted that the actions taken in 2016 by the Council, states, and NMFS did not prevent landings (calculated from MRIP estimates) from exceeding the 2016 ACL. For the 2017 season, federal waters are closed, South Carolina State waters are closed, and North Carolina and Virginia have specified new regulations in an attempt to keep landings below the recreational ACL.

Based on these facts, it seems difficult to reasonably characterize the situation as a long recognized problem that has gone unaddressed through administrative action. However, the Council has discussed the ongoing situation at multiple meetings, developed management actions to address the situation over the longer term, and even requested complementary action by the ASMFC, all without having previously requested an emergency action. These facts do not generally support a determination that the underlying circumstances are recent, unforeseen, or newly discovered.

Expected Harm or Disruption to Fishery or Community

It is unclear whether the adverse economic impacts of the accountability measure are sufficient to justify an emergency action. There is no doubt the cobia closures have had significant negative impacts to the cobia fishery and the communities in which these individuals live and work. The Council has received extensive public comments on the level of impacts to lure manufacturers, bait/tackle shops, charter vessel captains, and others. Framework Amendment 4 provided information on the negative economic and social effects on recreational fishermen due to the early closure in 2016, and the 2017 closure of federal waters and South Carolina state waters. Despite these documented negative impacts, the extent of the negative impacts in some communities is unclear due to the continued harvest allowed in state waters for Virginia and North Carolina, which are the primary areas for recreational cobia harvest. Additionally, the Council has not received the same level of input and recommendation to request emergency action from fishermen in South Carolina, who did not have access to cobia in state waters during the federal closure in 2016 or 2017. The State of Georgia, however, did document their concerns and expected negative effects of the closure, and also requested that NMFS open federal waters off Georgia.

Further, the requested emergency action of reverting to the previous stock boundary (the Gulf and South Atlantic Council boundary) has a clear potential to result in adverse economic impacts to Florida fishing communities that also depend on the harvest of cobia. Given the magnitude of the overages involved in 2015 and 2016, combining the Atlantic cobia stock with the Florida east coast portion of the Gulf cobia stock would have resulted in early cobia closures along the entire east coast, rather than early closures from Georgia through New York. The early closures would not have been as extensive temporally, but they would have impacted a much larger geographic area. Given the observed trend from 2015 and 2016, early closures could be reasonably expected to result along the entire east coast for subsequent years, if the requested action were to be implemented for future fishing seasons.

There is most often a high degree of uncertainty involved in estimating recreational harvest and the associated economic impacts. In this instance it seems particularly unclear whether the economic loss potentially prevented or the economic opportunities potentially salvaged by the AP's requested emergency rule create a sufficient justification to warrant the emergency action.

Administrative Record Considerations

The most significant concerns regarding the emergency action requested by the AP/Sub-Panel relate to the administrative record required to support its implementation. As explicitly acknowledged in the NMFS policy guidelines for implementing emergency actions, "In order to approve an emergency rule, the Secretary must have an administrative record justifying emergency regulatory action and demonstrating its compliance with the national standards." The administrative record requirement is an overarching legal standard based on the Administrative Procedure Act, and it is applicable to all rules promulgated under the MSA; thus, it is not just a NMFS policy based requirement. At this juncture, no such record exists to support reverting to the prior stock boundary, and developing such a record would require significant additional work, including reconsideration of past scientific and policy decisions.

SEDAR 28 went through a lengthy review process (Center for Independent Experts and the Council's Scientific and Statistical Committee) and was determined to be the best scientific information available by the SSC, the Council, and NOAA Fisheries. Additionally, Amendment

20B and its implementing regulations were developed, reviewed, and approved by the Council through the requisite MSA process, at which point they were determined to be fully consistent with the applicable federal mandates. To change the management measures established through Amendment 20B, including the stock boundary and the ACLs, would require that the Council build a new record demonstrating that the past decisions were wrong or there is sufficient new information available to justify a complete reversal in course.

Given that the stock boundary delineation was largely dictated by SEDAR 28 and available scientific information, reversing the associated decisions would essentially require starting the process anew, so that the scientific information could be reevaluated and the resulting decisions revisited. This would be a lengthy process that would be unlikely to be concluded in time to support any regulatory action in the immediate future. Even more problematic for the proposed change, there appears to be no reason to expect the scientific recommendations based on SEDAR 28 to be any different than they were the first time. Additional scientific information (new and information not included in SEDAR 28) need to go through the assessment/review process to determine whether any changes are necessary to the past stock boundary delineation (see discussion below).

Additionally, changing the stock boundary and the ACLs for each stock to those in place prior to Amendment 20B would affect Gulf cobia and associated fishing businesses and communities as well. Amendment 20B was a joint amendment developed through the Gulf and South Atlantic Council's joint management process, and any changes would need to be approved by the Gulf Council.

Currently, there is no record supporting emergency action, whereas the administrative record supporting the decisions made in Amendment 20B is quite strong. Assuming that it is even possible based on the available information, establishing a comparable and equally as defensible administrative record for an emergency action would likely take almost as long as development and approval of an amendment. Emergency action does not include public input opportunities and the benefits of the emergency action should be greater than the costs of foregoing public involvement. If the emergency action takes a similar length of time as an amendment would take to build the supporting administrative record, then there is little benefit from emergency action and only reduced opportunities for public input and Council deliberation.

Scientific Basis for Changing the Stock Boundary Through Emergency Action

Dr. Michael R. Denson, SC DNR, presented the current status of cobia research along the Southeast US Coast to the Mackerel Cobia AP at their April 29-20, 2017 meeting¹:

- Genetic results support the existing stock boundary. Samples are lacking from northeast Florida where it is difficult to fish due to a lack of access/inlets. The genetic results show separate stocks during spawning and mixing during non-spawning months.
- Tagging results support the existing stock boundary. Five of 274 (2%) tagged cobia moved from Georgia northwards to the Gulf while 10 of 855 (1%) moved from the Gulf around to Georgia northwards.

¹ Transcribed minutes from the April 2017 AP/Sub-Panel meeting are available online at: http://safmc.net/download/Briefing%20Book%20Jun%202017/12%20Mackerel%20Cobia/A02b_MackereCobialAPMinApr17.pdf.

Since the last stock assessment in 2012, there has been additional research conducted on migration and genetics of cobia in the Gulf of Mexico and Atlantic. All available data from these studies will be provided to the stock identification workshop and SEDAR assessment (to be completed in 2018/2019) when the boundary will be re-evaluated. As presented by Dr. Denson at the AP/Sub-Panel meeting, there are several ongoing studies with results supporting the current stock boundary. Regardless, any new information (since the last assessment or not reviewed in the last assessment) on migration and genetics of cobia in the Gulf and Atlantic would be subject to the same rigorous and thorough process as the information that was used to set the current boundary. This review process—which is necessary to justify emergency action—would take a minimum of several months, at which point the Council could have made management changes through an amendment. The presentation is available online at: http://safmc.net/download/Briefing%20Book%20Mackerel%20AP%20Apr%2017/Att5_CobiaResearch_SCDNR_Apr2017.pdf.

Council Conclusion

The Council acknowledged the concern about potential negative impacts on fishermen due to the early recreational closure for Atlantic cobia in 2016 and 2017, but most Council members did not feel there was adequate justification to request emergency action to revert the cobia stock boundary and ACLs back to those established in CMP Amendment 18, and approved the following motion:

THE COUNCIL WILL NOT CONSIDER EMERGENCY ACTION TO CHANGE THE BOUNDARY AND ACLS.

Council members did express concern about use of MRIP estimates to track recreational ACLs, particularly for species in a pulse fishery. Although this is a known problem for Atlantic cobia, there are recognized methods that have been used in the Mid-Atlantic region to address outliers in MRIP estimates for other species, and have also been presented to the South Atlantic Council's Scientific and Statistical Committee (SSC) by MRIP staff. The Council approved the following motion:

REQUEST MRIP RE-CALCULATE THE 2015 AND 2016 ATLANTIC COBIA RECREATIONAL HARVEST USING ANNUAL ESTIMATE OF CATCH AND EFFORT.

The June 2017 Mackerel Cobia Committee summary report is available at: http://safmc.net/download/Briefing%20Book%20Jun%202017/Committee%20Reports/Final/MackerelCobiaCommitteeFINALReport_June2017.pdf

On behalf of the Council, Dr. Michelle Duval sent a letter to Dr. David Van Voorhees, Division Chief for Fisheries Statistics in the NOAA Fisheries Office of Science and Technology, requesting additional MRIP estimates for Atlantic cobia landings in 2015 and 2016 using annual estimates of catch and effort. The letter specified that the results are requested to be presented to the South Atlantic Mackerel Cobia Committee at their September 2017 meeting. The letter will be included in the September 2017 briefing book, available on the South Atlantic Council's website (www.safmc.net) in late August 2017.

References

CMP Amendment 18

GMFMC (Gulf of Mexico Fishery Management Council)/SAFMC (South Atlantic Fishery Management Council). 2011. Amendment 18 to the fishery management plan for coastal migratory pelagic resources in the Gulf of Mexico and Atlantic regions including environmental assessment, regulatory impact review, and regulatory flexibility act analysis. Gulf of Mexico Fishery Management Council, Tampa, Florida, and South Atlantic Fishery Management Council, North Charleston, South Carolina. Available at: <http://cdn1.safmc.net/wp-content/uploads/2017/02/22160159/MackAmend18.pdf>.

CMP Amendment 20B

GMFMC/SAFMC. 2014. Amendment 20B to the fishery management plan for coastal migratory pelagic resources in the Gulf of Mexico and Atlantic regions including environmental assessment, regulatory impact review, and regulatory flexibility act analysis. Gulf of Mexico Fishery Management Council, Tampa, Florida, and South Atlantic Fishery Management Council, North Charleston, South Carolina. Available at: http://cdn1.safmc.net/wp-content/uploads/2016/11/28111127/CMP20Amendment2020B-20Boundaries20and20Transit20Provisions20052114_final-1.pdf.

CMP Framework Amendment 4

Currently under Secretarial review. Amendment and information on review progress is available at: <http://safmc.net/amendments-under-development/cmp-framework-amendment-4/>.

SEDAR 28

SEDAR 28. 2012, 2013. Southeast Data, Assessment, and Review Stock Assessment of South Atlantic Spanish Mackerel and Cobia. Available at: <http://www.sefsc.noaa.gov/sedar/SedarWorkshops.jsp?WorkshopNum=28>

Federal Register Notices of 2016 and 2017 Atlantic cobia recreational seasons

2016 (81 FR 12601): <https://www.gpo.gov/fdsys/pkg/FR-2016-03-10/pdf/2016-05393.pdf>

2017 (82 FR 8363): <https://www.gpo.gov/fdsys/pkg/FR-2017-01-25/pdf/2017-00785.pdf>