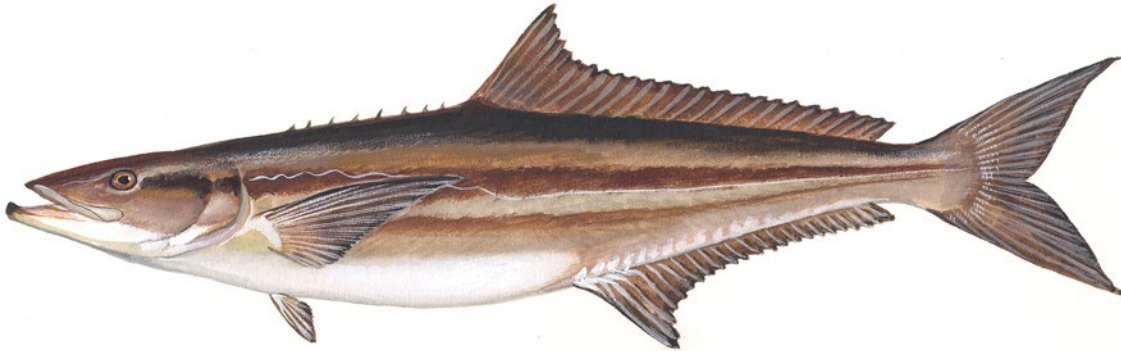


Draft Addendum for Public Comment

Atlantic States Marine Fisheries Commission

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

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



September 2020



Sustainable and Cooperative Management of Atlantic Coastal Fisheries

Draft Addendum for Public Comment

Draft Addendum I 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 **October 6, 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
September – 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

Draft Addendum for Public Comment

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.

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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. However, the 3% set aside might not fully account for the recent landing by *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

Draft Addendum I for Public Comment

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.

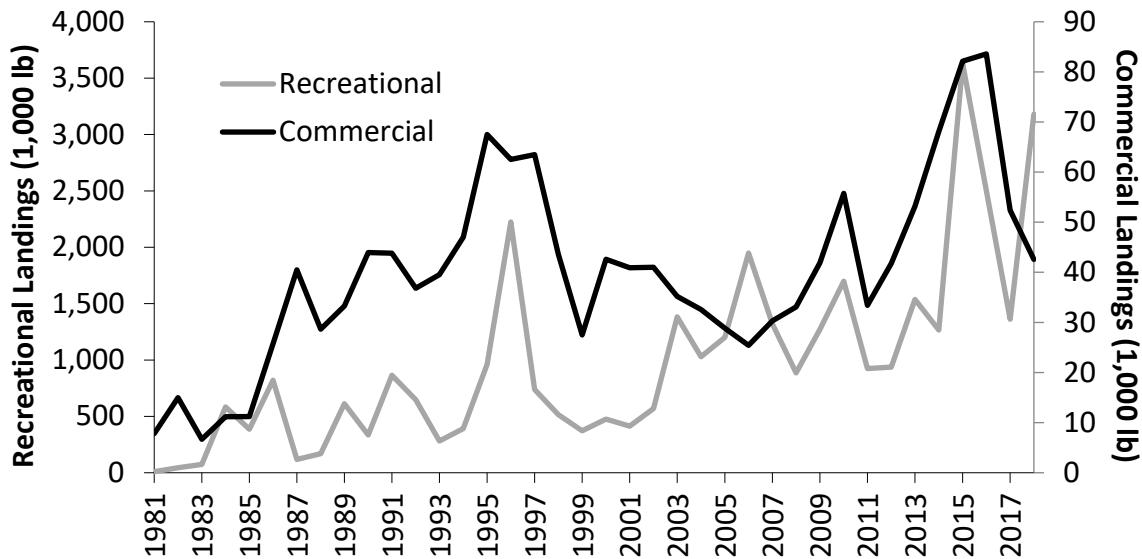


Figure 1. Atlantic cobia landings (GA-MA; in thousands of pounds) from 1981-2018. Recreational landings are shown in gray and correspond to the left vertical axis; commercial landings are shown in black and correspond to the right vertical axis.

Draft Addendum I for Public Comment

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 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

Draft Addendum I for Public Comment

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.

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

Draft Addendum I for Public Comment

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.

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 have in-season commercial harvest monitoring for Cobia. In-season harvest monitoring by non *de minimis* states is necessary to ensure the fishery can be close before exceeding the annual quota. *De minimis* states must still report annual landings through state compliance reports. To account for commercial harvest occurring in *de minimis* states and guard against a quota overage, 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

Draft Addendum I for Public Comment

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

In addition to option A which is the status quo allocation (2020 harvest specification based on SEDAR 58 assessment results) a range of alternatives were developed that do not result in a disproportionate increase in the commercial quota. Option B is an allocation that maintains the commercial quota at the Amendment 1 level of 50,000 pounds. Options C and D incrementally increase the commercial allocation within the range of observed commercial harvest percentages in the last 10 years since 2009 (2% to 5%).

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.

Draft Addendum I for Public Comment

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.

Draft Addendum I for Public Comment

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 landings in *de minimis* states not tracked in-season against the quota, 3% of the commercial quota would be set aside and not accessible to non-*de minimis* states.

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

Option D. To account for potential landings in *de minimis* states not tracked in-season against the quota, 4 % of the commercial quota would be set aside and not accessible to non-*de minimis* states.

Option E. To account for potential landings in *de minimis* states not tracked in-season against the quota, 4% of the commercial quota or 3,000 pounds, whichever is less, would be set aside and not accessible to non-*de minimis* states.

Option F. To account for potential landings in *de minimis* states not tracked in-season against the quota, 4% of the commercial quota or 5,000 pounds, whichever is less, would be set aside and not accessible to non-*de minimis* states.

Draft Addendum I for Public Comment

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) with 3%	<i>De Minimis</i> Set-Aside (lb) with 4%
A. 146,231	4,387*	5,849*^
B. 54,837	1,645	2,193
C. 73,116	2,193	2,925
D. 91,394	2,742	3,656*

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

^Would be reduced to 5,000 pounds if Issue 2 Option C or F is 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

Draft Addendum I for Public Comment

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.

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>.