Amendment 49

Catch Level Adjustments and Allocations for Greater Amberjack and Snapper Grouper Recreational Annual Catch Targets

Decision Document

June 2022

Background

The most recent assessment of South Atlantic greater amberjack indicated that the stock is not overfished nor undergoing overfishing. The South Atlantic Fishery Management Council's (Council) Scientific and Statistical Committee (SSC) reviewed SEDAR 59 (2020) during their April 2020 meeting and found that the assessment represented the best scientific information available. The Council received the results of the assessment and the SSC's recommendations for the Overfishing Limit (OFL) and Acceptable Biological Catch (ABC) at their June 2020 meeting and directed staff to begin work on a plan amendment to adjust catch level adjustments based on SSC recommendations and Southeast Data, Assessment, and Review (SEDAR) 59 (2020), and address sector allocations. The Council later added actions addressing management measures to increase equitability and efficiency in the fishery.

An application providing an overview of the fishery, including management history, landings, and assessment information, has been developed and can be found here: https://data.safmc.net/SA FisheryDataGreaterAmberjack/.

In 2012, the Comprehensive Annual Catch Limit (ACL) Amendment established ACLs for many species managed through the Council's fishery management plans (FMP). This amendment also established recreational Annual Catch Targets (ACT), values lower than the ACL that establish a precautionary buffer accounting for uncertainty in the recreational catch

estimates. While ACTs were developed and established as part of the management process (thus, they must be changed through plan amendments as the ACL changes), these values were not used in developing regulations and were not included in codified regulatory text. Given their lack of regulatory use, in March 2021, the Council's Snapper Grouper Committee directed staff to include an action in Amendment 49 that would consider removal of recreational ACTs throughout the Snapper Grouper FMP.

Objectives for this meeting

- Review updated analyses.
- Select/confirm preferred alternatives as necessary.

Actions in this amendment

- **Action 1.** Revise the greater amberjack acceptable biological catch, total annual catch limit and annual optimum yield
- **Action 2.** Revise the greater amberjack sector allocations and sector annual catch limits
- **Action 3.** Increase the recreational minimum size limit for greater amberjack
- Action 4. Reduce the commercial minimum size limit for greater amberjack
- Action 5. Increase the seasonal commercial trip limits for greater amberjack
- **Action 6.** Revise the April spawning closure for greater amberjack
- **Action 7.** Remove recreational annual catch targets from the Snapper Grouper Fishery Management Plan

Amendment timing

December 2020	Review options paper and provide guidance to staff
March 2021	Review draft actions and alternatives and approve for scoping
Apr 14 & 15, 2021	Conduct scoping hearings
September 2021	Review scoping comments, review preliminary analyses, and provide guidance to staff
December 2021	Review modifications to the amendment, select preferred alternatives, and provide additional guidance
March 2022	Review modifications to the amendment, select preferred alternatives, and approve for public hearings
June 2022	Approve all actions, select preferred alternatives, and conduct public hearing
September 2022	Review final draft amendment and consider approval for formal review
Early-Mid 2023	Regulations effective

Purpose and Need

Purpose: The *purpose* of this amendment is to revise the catch limits for greater amberjack in the South Atlantic based on the results of the latest stock assessment; revise sector allocations, minimum size limits, the commercial trip limit, and the April spawning closure for greater amberjack; and remove recreational annual catch targets for the Snapper Grouper Fishery Management Plan.

Need: The *need* for this amendment is to ensure catch limits are based on the best scientific information available and to ensure overfishing does not occur in for the South Atlantic greater amberjack fishery stock, while increasing social and economic benefits through sustainable and profitable harvest of South Atlantic greater amberjack, consistent with the Magnuson Stevens Fishery Conservation and Management Act and its National Standards. This amendment is also needed to make administrative efforts more efficient by removing recreational annual catch targets, which are not actively used in management, from the Snapper Grouper Fishery Management Plan.

Committee Action:

REVIEW AND APPROVE PURPOSE AND NEED STATEMENTS.

Proposed Actions

Action 1. Revise the greater amberjack acceptable biological catch, total annual catch limit, and annual optimum yield

Purpose of Action: The latest stock assessment (SEDAR 59 2020) indicated the stock is not overfished and not experiencing overfishing. Action is needed because the SSC recommended a new ABC based on results of SEDAR 59, and the ABC, total ACL, and annual OY must be adjusted accordingly. The Council cannot set the total ACL above the SSC's recommended ABC.

Alternative 1 (No Action). The total annual catch limit and annual optimum yield for greater amberjack are equal to the **current** acceptable biological catch (1,968,001 pounds whole weight). The current acceptable biological catch is inclusive of recreational estimates from the Marine Recreational Information Program's Marine Recreational Fishery Statistics Survey.

Preferred Alternative 2. Revise the acceptable biological catch and set it equal to the most recent recommendation from the Scientific and Statistical Committee. Revise the total annual catch limit and annual optimum yield for greater amberjack and set them equal to the recommended acceptable biological catch. The recommended acceptable biological catch is inclusive of recreational estimates from the Marine Recreational Information Program's Fishing Effort Survey. The 2026/2027 total annual catch limit and annual optimum yield would remain in place until modified.

Fishing Year	ABC (lbs ww)	Annual OY (lbs ww)	Total ACL (lbs ww)
2022/2023	4,380,000	4,380,000	4,380,000
2023/2024	3,233,000	3,233,000	3,233,000
2024/2025	2,818,000	2,818,000	2,818,000
2025/2026	2,699,000	2,699,000	2,699,000
2026/2027+	2,669,000	2,669,000	2,669,000

Alternative 3. Revise the acceptable biological catch and set it equal to the most recent recommendation from the Scientific and Statistical Committee. Revise the total annual catch limit and annual optimum yield for greater amberjack and set them equal to 90% of the recommended acceptable biological catch. The recommended acceptable biological catch is inclusive of recreational estimates from the Marine Recreational Information Program's Fishing Effort Survey. The 2026/2027 total annual catch limit and annual optimum yield would remain in place until modified.

Fishing Year	ABC (lbs ww)	Annual OY (lbs ww)	Total ACL (lbs ww)
2022/2023	4,380,000	3,942,000	3,942,000
2023/2024	3,233,000	2,909,700	2,909,700
2024/2025	2,818,000	2,536,200	2,536,200

2025/2026	2,699,000	2,429,100	2,429,100
2026/2027+	2,669,000	2,402,100	2,402,100

Alternative 4. Revise the acceptable biological catch and set it equal to the most recent recommendation from the Scientific and Statistical Committee. Revise the total annual catch limit and annual optimum yield for greater amberjack and set them equal to 80% of the recommended acceptable biological catch. The recommended acceptable biological catch is inclusive of recreational estimates from the Marine Recreational Information Program's Fishing Effort Survey. The 2026/2027 total annual catch limit and annual optimum yield would remain in place until modified.

Fishing Year	ABC (lbs ww)	Annual OY (lbs ww)	Total ACL (lbs ww)
2022/2023	4,380,000	3,504,000	3,504,000
2023/2024	3,233,000	2,586,400	2,586,400
2024/2025	2,818,000	2,254,400	2,254,400
2025/2026	2,699,000	2,159,200	2,159,200
2026/2027+	2,669,000	2,135,200	2,135,200

Discussion

The SSC acceptable biological catch (ABC) recommendations are based on the results of the SEDAR 59 (2020) greater amberjack stock assessment. SEDAR 59 indicated that the greater amberjack ACL can be increased without having negative effects on the sustainability of the stock.

Per the guidance provided at 50 CFR § 600.310(f)(4)(iv), the South Atlantic Fishery Management Council (Council) has chosen to specify optimum yield (OY) for greater amberjack on an annual basis and set it equal to the ACL.

Alternative 1 (No Action) would retain the current ABC, total ACL, and annual OY implemented through Amendment 25 (Comprehensive ACL Amendment) (Snapper Grouper FMP; SAFMC 2011). Preferred Alternative 2 is based on the Council's Scientific and Statistical Committee's (SSC) ABC recommendation and would implement ABC=ACL. Alternatives 3 and 4 would add a 10% and 20% buffer, respectively, between the total ACL and the ABC. For Preferred Alternative 2 through Alternative 4, the ACL in the final year of projections recommended by the SSC (2026-2027) would remain in place until modified by a future amendment.

For **Preferred Alternative 2** through **Alternative 4**, proposed ACLs are based on recreational data from the Marine Recreational Information Program (MRIP) calibrated to the Fishing Effort Survey (FES). Future recreational catches under these limits would be monitored by MRIP using the FES.

Average annual total landings of greater amberjack from 2015-2019 calculated using MRIP FES estimates for the recreational fishery were 2.73 million lbs ww.

Alternative 1 (No Action) is not a viable alternative because it would retain the current total ACL for greater amberjack (equal to the current ABC), which was derived using recreational catch estimates from the MRFSS and is no longer based on the best scientific information available (BSIA). Therefore, Alternative 1 (No Action) is not included in effects comparisons.

Summary of Biological Effects:

- Alternative 1 (No Action) is not a viable alternative because it would retain the current total ACL for greater amberjack (equal to the current ABC), which is no longer based on the best scientific information available (BSIA).
- When totaling the annual ACL from 2022/2023 through 2026/2027, **Alternative 4** has the lowest cumulative ACL which is expected to have the greatest biological benefits to the stock, followed by **Alternative 3** and **Preferred Alternative 2**.
- South Atlantic greater amberjack have a low release mortality rate of 20% (sensitivity range: 10-30%) (SEDAR 15 2008 and SEDAR 59 2020).

Summary of Economic Effects:

- The potential revised total ACLs in **Preferred Alternative 2** and **Alternative 3** are higher than the 5-year average observed landings (FY 2015/16-2019/20) when initially implemented, thus there would be room for an expansion in landings and associated economic benefits. **Alternative 4** would be constraining on harvest and there would be an associated estimated decrease in economic benefits (**Table 1**).
- Preferred Alternative 2 would have the highest potential net economic benefits, followed by Alternative 3 and Alternative 4.

Table 1. Percent difference between the total ACLs in **Action 1** compared to 5-year average landings from fishing years 2015-2016 to 2019-2020.

Fishing Year	Percent difference between the ACL and 5-year average annual landings for Preferred Alternative 2	Percent difference between the ACL and 5-year average annual landings for Alternative 3	Percent difference between the ACL and 5-year average annual landings for Alternative 4
2023-2024	18%	6%	-6%
2024-2025	3%	-7%	-18%
2025-2026	-1%	-11%	-21%
2026-2027+	-3%	-12%	-22%

Summary of Social Effects:

- In general, a higher ACL would lower the chance of triggering a recreational AM and result in the lowest level of negative effects on the recreational and commercial sectors.
- Preferred Alternative 2 would be the most beneficial for fishermen, followed by Alternative 3 and Alternative 4.

Snapper Grouper AP Input:

• For Action 1 (Total Annual Catch Limit and Optimum Yield), rather than the Preferred Alternative that results in a large, short-term increase to the ACL, the AP recommended a

more conservative approach that benefits both sectors and consideration of a consistent ACL. The AP also recommended the Council consider the potential economic implications of large, sudden changes in the ACL.

- The AP recommended an additional Action 1 alternative of a consistent 2.8 million pound total ACL.
 - O An alternative derived from this recommendation was considered but removed from consideration by the Council in December 2021. The Council expressed desire to allow additional fishing opportunities for greater amberjack through the increased ACL, given the positive stock status indicated by the assessment.
- (April 2022) The AP recommended the Total ACL equal the 2026/2027+ ABC (2,669,000 lbs ww).
- Additional input in the April 2022 Snapper Grouper AP Meeting Report.

Committee Action:

- APPROVE MODIFICATIONS TO ACTION 1.
- CONFIRM/SELECT PREFERRED ALTERNATIVE.

Action 2. Revise the greater amberjack sector allocations and sector annual catch limits

Purpose of Action: The Council's Allocations Trigger Policy states the Council will review sector allocations upon completion of a stock assessment. In addition, recreational landings estimates have been revised to adopt the new MRIP FES methodology. This action allows the Council to consider how to allocate the total ACL between the commercial and recreational sectors from the 2022-2023 fishing year onwards under the revised catch levels.

Note: The revised sector annual catch limits shown in Table 1 reflect the revised total annual catch limit in Preferred Alternative 2 of Action 1.

Alternative 1 (No Action). Retain the current recreational sector and commercial sector allocations as 59.34% and 40.66%, respectively, of the revised total annual catch limit for greater amberjack.

Alternative 2. Allocate 70.16% of the revised total annual catch limit for greater amberjack to the recreational sector and 29.84% of the revised total annual catch limit for greater amberjack to the commercial sector.

Preferred Alternative 3. Allocate 65.00% of the revised total annual catch limit for greater amberjack to the recreational sector and 35.00% of the revised total annual catch limit for greater amberjack to the commercial sector.

Alternative 4. Allocate 55.00% of the revised total annual catch limit for greater amberjack to the recreational sector and 45.00% of the revised total annual catch limit for greater amberjack to the commercial sector.

Alternative 5. Allocate 50.00% of the revised total annual catch limit for greater amberjack to the recreational sector and 50.00% of the revised total annual catch limit for greater amberjack to the commercial sector.

Discussion

The allocation percentages in **Alternative 1** (**No Action**) were originally derived by applying the formula: sector annual catch limit = ((mean sector landings 2006-2008)*0.5)) + ((mean sector landings 1986-2008)*0.5) to the landings dataset used in the Comprehensive Annual Catch Limit Amendment (Amendment 25 Snapper Grouper FMP), which included recreational estimates from the Marine Recreational Fisheries Statistics Survey. Future recreational catches under **Alternative 1** (**No Action**), as well as the rest of the Action 2 alternatives, would be monitored via the MRIP FES. Table 2 summarizes the rationale for the allocation alternatives considered. Table 3 summarizes the resulting ACLs for **Preferred Alternative 3**.

Table 2. Current and proposed South Atlantic greater amberjack allocations and rationale for Alternatives 1 (No Action)-5.

Action 2 (Allocations)	Commercial Allocation	Recreational Allocation	Rationale
Alternative 1 (No Action)	40.66%	59.34%	See Council rationale in Section 5.2 in draft doc
Alternative 2*	29.84%	70.16%	This allocation is based on applying the formula of sector annual catch limit = ((mean landings 2006-2008)*0.5)) + ((mean landings 1986-2008)*0.5) to a revised dataset that is inclusive of MRIP FES
Preferred Alternative 3	35.00%	65.00%	This allocation is based on these percentages being approximate midpoints between Alternative 1 and Alternative 2. These percentages are also approximate (rounded to the nearest whole percentage) averages of annual percentages of total landings for each sector from 2010-2019.
Alternative 4	45.00%	55.00%	Additional option considering increase to commercial allocation given growing commercial importance of greater amberjack and ACL reductions to other commercially important snapper grouper species.
Alternative 5	50.00%	50.00%	Additional option considering increase to commercial allocation given growing commercial importance of greater amberjack and ACL reductions to other commercially important snapper grouper species.

Table 3. Sector annual catch limits (ACL) for greater amberjack based on the revised total ACL from Preferred Alternative 2 in Action 1 and allocation percentages from **Preferred Alternative 3** in Action 2 (65.00% recreational and 35.00% commercial). The commercial ACL is allocated 60% to Season 1 (March-August) and 40% to Season 2 (September-February).

Year	Recreational ACL (lbs ww)	Commercial ACL* (lbs gw)	Commercial Season 1 Quota (lbs gw)	Commercial Season 2 Quota** (lbs gw)
2022/2023	2,847,000	1,474,038	884,423	589,615
2023/2024	2,101,450	1,088,029	652,817	435,212
2024/2025	1,831,700	948,365	569,019	379,346
2025/2026	1,754,350	908,317	544,990	363,327
2026/2027+	1,734,850	898,221	538,933	359,288

^{*}The total annual catch limit (ACL) is allocated in pounds whole weight (lbs ww) to the commercial and recreational sectors. The commercial allocation is then converted to pounds gutted weight (lbs gw) for regulatory use in the commercial ACL and seasonal quotas.

^{**}Any remaining quota from commercial Season 1 (March-August) transfers to Season 2 (September-February). Remaining quota from Season 2 is not carried forward.

Summary of Analyses

Commercial Sector

An analysis of three scenarios comparing when commercial sector landings would reach the proposed commercial sector ACLs under the various allocation alternatives for three landings scenarios are in Table 4 for Season 1. **Preferred Alternative 3** could result in a Season 1 closure as early as July 1 to no closure needed during the fishing year. Similarly, predicted closures are presented for Season 2 under two landings scenarios in Table 5. No closures were predicted for Season 2 for **Preferred Alternative 3** Scenarios 1 and 2.

Table 4. Projected commercial closure dates for **Season 1** under the sector allocation alternatives considered for three landings scenarios: 1) a three-year average (2017/18 through 2019/2020), 2) a five-year average (2015/16 through 2019/2020), and 3) the maximum annual

landings during the last five years (2015/16 through 2019/2020).

		Commercial	Scenario 1	Scenario 2	Scenario 3
Alternative	Year	ACL Season 1 (lbs gw)	Closure Date	Closure Date	Closure Date
	2022/2023	1,027,447	None	None	None
1	2024/2025	661,038	None	None	18-Aug
	2026/2027	626,086	None	None	3-Aug
	2022/2023	754,034	None	None	None
2	2024/2025	485,130	None	None	18-Jun
	2026/2027	459,479	None	25-Aug	12-Jun
D., . 6 J	2022/2023	884,423	None	None	None
Preferred 3	2024/2025	569,019	None	None	12-Jul
3	2026/2027	538,933	None	None	1-Jul
	2022/2023	1,137,115	None	None	None
4	2024/2025	731,596	None	None	None
	2026/2027	692,913	None	None	31-Aug
	2022/2023	1,263,462	None	None	None
5	2024/2025	812,885	None	None	None
	2026/2027	769,904	None	None	None

Table 5. Projected commercial closure dates for **Season 2** under the sector allocation alternatives considered for two landings scenarios: 1) a three-year average of the most recent years of complete data (2017/18 through 2019/2020), and 2) the maximum landings in the last five years (2015/16 through 2019/2020). **Note: Scenario 3 is not included in the Season 2 analysis due to recent closures in 2016 and 2017.

2		Commercial	Scenario 1	Scenario 2
Alternative	Year	ACL Season 2 (lbs gw)	Closure Date	Closure Date
	2022/2023	684,965	None	None
1	2024/2025	440,692	None	None
	2026/2027	417,391	None	None
	2022/2023	502,689	None	None
2	2024/2025	323,420	None	13-Feb
	2026/2027	306,319	None	1-Feb
D C I	2022/2023	589,615	None	None
Preferred 3	2024/2025	379,346	None	None
3	2026/2027	359,288	None	None
	2022/2023	758,077	None	None
4	2024/2025	487,731	None	None
	2026/2027	461,942	None	None
	2022/2023	842,308	None	None
5	2024/2025	541,923	None	None
	2026/2027	513,269	None	None

^{*}Commercial ACLs (lbs ww) for greater amberjack are based on the revised total ACL from Preferred Alternative 2 in Action 1, and Alternative 1 (No Action) in Action 2.

Recreational Sector

The predicted closure dates for the recreational sector for the allocations alternatives considered under three landings scenarios are in Table 6. **Preferred Alternative 3** could result in a closure as early as July 15 to no closure needed during the fishing year. No closure dates were needed for landings Scenario 1 because the three-year average of the recreational landings generated landings below all of the recreational ACLs provided in Action 2.

Table 6. Projected recreational closure dates under three landings scenarios: 1) three-year average of the most recent years of complete data (2018/2019 through 2020/2021), 2) five-year average of the most recent years of complete data (2016/2017 through 2020/2021), and 3) the

maximum landings in the last five years of complete data.

	S	Recreational	Scenario 1	Scenario 2	Scenario 3
Alternative	Year	ACL (lbs ww)	Closure Date	Closure Date	Closure Date
	2022/2023	2,599,092	None	None	17-Sep
1	2024/2025	1,672,201	None	None	12-Jul
	2026/2027	1,583,785	None	6-Feb	7-Jul
	2022/2023	3,073,008	None	None	None
2	2024/2025	1,977,109	None	None	29-Jul
	2026/2027	1,872,570	None	None	23-Jul
D 6 J	2022/2023	2,847,000	None	None	19-Jan
Preferred 3	2024/2025	1,831,700	None	None	21-Jul
3	2026/2027	1,734,850	None	None	15-Jul
	2022/2023	2,409,000	None	None	29-Jul
4	2024/2025	1,549,900	None	3-Feb	17-May
	2026/2027	1,467,950	None	12-Jan	12-May
	2022/2023	2,190,000	None	None	22-Jun
5	2024/2025	1,409,000	None	24-Dec	9-May
	2026/2027	1,334,500	None	24-Nov	5-May

^{*}Commercial ACLs (lbs ww) for greater amberjack are based on the revised total ACL from Preferred Alternative 2 in Action 1, and Alternative 1 (No Action) in Action 2.

Summary of Biological Effects:

- Biological effects are not expected to vary among alternatives in **Action 2**, since they do not change the total ACL specified in **Action 1**.
- Alternative 5 would allocate the *highest* percentage of the total ACL to the commercial sector (50.00%), followed by Alternative 4 (45.00%), Alternative 1 (No Action) (40.66%), Preferred Alternative 3 (35.00%), and Alternative 2 (29.84%). Conversely, Alternative 2 would allocate the *highest* percentage of the total ACL to the recreational sector (70.16%), followed by Preferred Alternative 3 (65.00%), Alternative 1 (No Action) (59.34%), Alternative 4 (55.00%), and Alternative 5 with the lowest recreational allocation (50.00%).

Summary of Economic Effects:

• A larger difference between the sector ACL and observed landings would allow for higher potential landings and reduce the likelihood of restrictive AMs being triggered that would lead to short-term negative economic effects (**Table 7**).

- For the commercial sector, Alternative 5 would have the highest potential economic benefits followed by Alternative 4, Alternative 1 (No Action), Preferred Alternative 3, and Alternative 2.
- For the recreational sector, Alternative 2 would have the highest potential economic benefits followed by Preferred Alternative 3, Alternative 1 (No Action), Alternative 4, and Alternative 5.

 Table 7. Percent difference between the sector ACLs in Action 2 compared to 5-year average

landings of greater amberiack from 2015/16-2019/20.^a

Fishing Year	Commercial sector ACL (lbs gw)	Percent difference between the sector ACL and 5-year average commercial landings	Recreational sector ACL (lbs gw)	Percent difference between the sector ACL and 5-year average recreational landings	
		Alternative 1 (No.	Action)		
2023/24	1,263,979	84%	1,918,462	-5%	
2024/25	1,101,730	61%	1,672,201	-17%	
2025/26	1,055,205	54%	1,601,587	-21%	
2026/27+	1,043,476	52%	1,583,785	-22%	
		Alternative	2		
2023/24	927,622	35%	2,268,273	12%	
2024/25	808,549	18%	1,977,109	-2%	
2025/26	774,405	13%	1,893,618	-7%	
2026/27+	765,798	12%	1,872,570	-8%	
		Preferred Altern	ative 3		
2023/24	1,088,029	59%	2,101,450	4%	
2024/25	948,365	38%	1,831,700	-10%	
2025/26	908,317	33%	1,754,350	-13%	
2026/27+	898,221	31%	1,734,850	-14%	
		Alternative	4		
2023/24	1,454,850	112%	1,778,150	-12%	
2024/25	1,268,100	85%	1,549,900	-23%	
2025/26	1,214,550	77%	1,484,450	-27%	
2026/27+	1,201,050	75%	1,467,950	-28%	
Alternative 5					
2023/24	1,616,500	136%	1,616,500	-20%	
2024/25	1,409,000	106%	1,409,000	-30%	
2025/26	1,349,500	97%	1,349,500	-33%	
2026/27+	1,334,500	95%	1,334,500	-34%	

^aAssumes the total ACL in Preferred Alternative 2 of Action 1 to determine the sector ACL.

Summary of Social Effects:

• With Alternative 2 and Alternative 3, there would be a decrease in the commercial percentage compared to Alternative 1 (No Action), which could have some negative

- social effects if commercial fishermen have a negative perception of this change due to the decrease in fishing opportunity and concerns about long-term social effects, especially if future actions further decreased harvest opportunities. The opposite would be true for Alternative 4 and Alternative 5, which would see an increase in the commercial allocation when comparted to Alternative 1 (No Action).
- Projections for Action 1 Preferred Alternative 2 and Action 2 **Preferred Alternative** 3 indicate that the commercial ACL for greater amberjack would not be reached whereas the recreational sector ACL may be reached as early as June 15th or not at all.
- Based on projected date of closure and earlier closures having greater negative social impacts, Alternative 2 is expected to have the least negative social impact on the recreational fishery, followed by Preferred Alternative 3, Alternative 1 (No Action), Alternative 4, and Alternative 5.

Snapper Grouper AP Input:

- For Action 2 (Sector Allocations), the AP recommended **Alternative 1 (No Action)** to be preferred. **This recommendation was maintained at the April 2022 AP meeting.**
- AP members also made the following comments regarding Action 2:
 - O Consider the potential of increased pressure on Greater Amberjack as other fisheries become more restricted.
 - Consider economic implications of a large increase to the recreational ACL
 possibly resulting in an influx of new entrants into the fishery, followed by
 reductions to the ACL over time and limiting use of the resource to the recent
 entrants.
 - o There is not a huge public demand for Greater Amberjack, so no need for very large increase to the commercial ACL (i.e., the supply). This could negatively impact the price, which currently is pretty good.
- Additional input in the April 2022 Snapper Grouper AP Meeting Report.

Committee Action:

- REVIEW UPDATED ANALYSES.
- CONFIRM/SELECT PREFERRED ALTERNATIVE.

Action 3. Increase the recreational minimum size limit for greater amberjack

Purpose of Action: In response to public feedback gathered during scoping of this amendment and given the current stock status, the Council is considering changes to minimum size limits to reduce the difference between the current recreational (28 inches fork length) and commercial (36 inches fork length) size limits. This action is intended to increase fairness and equity between sectors.

Preferred Alternative 1 (No Action). The recreational minimum size limit is 28 inches fork length.

Alternative 2. Increase the recreational minimum size limit to 30 inches fork length.

Alternative 3. Increase the recreational minimum size limit to 32 inches fork length.

Alternative 4. Increase the recreational minimum size limit to 36 inches fork length.

Discussion:

- Minimum size limits for the commercial and recreational sectors (Amendment 4, 1991):
 - o Commercial: 36-inch fork length.
 - o Recreational: 28-inch fork length.

Summary of Analyses

Table 8. Percent reductions of recreational greater amberjack landings for each minimum size limit alternative. These estimates include both MRIP and headboat estimates, with weighting according to percent contribution of each data set to landings from 2015 to 2020.

Action 3 Alternative	Size Limit (Inches FL)	Weighted Percent Reduction (%)
1 (Preferred)	28	0.0
2	30	7.6
3	32	14.7
4	36	35.1

The current maturity schedule for greater amberjack is in **Table 9**.

Table 9. Age, fork length, and percent of mature females for South Atlantic greater amberjack. Source: SEDAR 59 (2020).

Age	Fork Length (in)	Female Maturity
1	19.6	53%
2	25.0	89%
3	29.1	99%
4	32.1	100%
5	34.4	100%

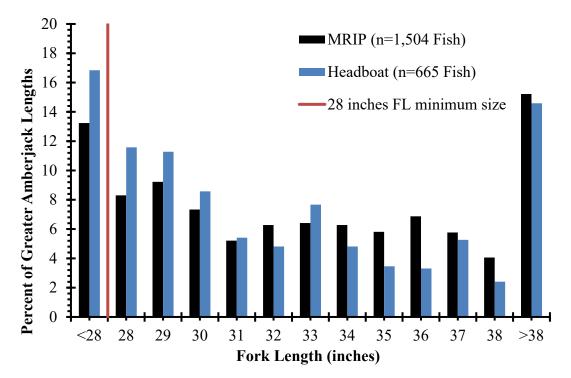


Figure 1. Length distribution of greater amberjack landed recreationally from 2015 through 2020 in the private-charter component (black bars) and the headboat component (blue bars). The orange line represents the current recreational minimum size limit of 28 inches FL. Source: MRIP and Southeast Region Headboat Survey.

Recreational season projections were generated, assuming a total ACL from Action 1-Preferred Alternative 2 (highest total ACL considered) and combined effects of each allocation alternative from Action 2 (sector allocations) and each increased recreational minimum size limit from Action 3, for three different landings scenarios:

- 1) three-year average of the most recent years of complete data (2018/2019 2020/2021)
- 2) five-year average of the most recent years of complete data (2016/2017 2020/2021)
- 3) the maximum landings in the last five years of complete data.

Scenario 1 (three-year average) and Scenario 2 (five-year average) did not estimate any recreational closures for any future years under any Action 3 alternatives.

Predicted in-season closure dates span from as early as July 12 to no in-season closure needed. The recreational quota could be reached as early as July 5 under **Alternative 2**, July 12 under **Alternative 3**, and August 15 under **Alternative 4** (refer to Table 4.3.1.1 and Appendix F of the draft document).

Summary of Biological Effects

- An increased recreational minimum size limit is expected to reduce fishing mortality from recreational landings due to more fish being released as undersized. SEDAR 59 (2020) estimated release mortality for both sectors to be 20%.
- Biological effects to the stock from Alternative 2, Alternative 3, and Alternative 4 could be beneficial relative to Preferred Alternative 1 (No Action).

Summary of Economic Effects

- In general, the larger the size limit, the more that overall harvest will decrease in the short-term, thereby decreasing net economic benefits incurred from such harvest.
- The highest recreational economic benefits would occur under Preferred Alternative 1 (No Action), followed by Alternative 2, Alternative 3, and Alternative 4 (Table 10).

Table 10. Estimated change in recreational landings and short-term net economic benefits from

raising the recreational size limit for greater amberjack.

Alternative	Size Limit (Inches FL)	Weighted Percent Reduction (%)	Estimated Change in Landings (lbs ww)	Estimated Change in Landings (# of fish)	Estimated Change in CS (2020 \$)
Pref. 1 (No Action)	28	0%	1	-	-
2	30	7.60%	-153,960	-7,835	-\$102,718
3	32	14.70%	-297,791	-15,155	-\$198,679
4	36	35.10%	-711,052	-36,186	-\$474,396

Summary of Social Effects

- There is a social trade-off with increasing the recreational minimum size limit (Alternative 2, Alternative 3, and Alternative 4) when compared to Preferred Alternative 1 (No Action):
 - A decrease in the harvest rate from a larger minimum size limit can decrease recreational trip satisfaction (negative social effect).
 - A decrease in the harvest rate from a larger minimum size limit can also decrease the chance of landings reaching the ACL and triggering accountability measures (AM) earlier in the season (positive social effect).

Snapper Grouper AP Input:

• The AP recommended maintaining the current recreational minimum size limit (Action 3 – Alternative 1) (April 2022).

• Additional input in the April 2022 Snapper Grouper AP Meeting Report.

Committee Action:

- REVIEW UPDATED ANALYSES.
- CONFIRM/SELECT PREFERRED ALTERNATIVE.

Action 4. Reduce the commercial minimum size limit for greater amberjack

Purpose of Action: In response to public feedback gathered during scoping of this amendment and given the current stock status, the Council is considering changes to minimum size limits to reduce the difference between the current recreational (28 inches fork length) and commercial (36 inches fork length) size limits. This action is intended to increase fairness and equity between sectors.

Alternative 1 (No Action). The commercial minimum size limit is 36 inches fork length.

Alternative 2. Reduce the commercial minimum size limit to 32 inches fork length.

Alternative 3. Reduce the commercial minimum size limit to 30 inches fork length.

Alternative 4. Reduce the commercial minimum size limit to 28 inches fork length.

Discussion

- Minimum size limits for the commercial and recreational sectors (Amendment 4, 1991):
 - o Commercial: 36-inch fork length.
 - o Recreational: 28-inch fork length.
- Consideration of a reduced commercial minimum size limit was recommended during public scoping and from the Snapper Grouper Advisory Panel (AP) at their April 2021 meeting.
 - o Rationale for consideration include:
 - Increased equity between the sectors.
 - Longer times needed to bring larger fish onboard. Longer boarding times reduce trip efficiency, increase risk of injury to the fish (which would be released if below the minimum size limit), and may serve as an attractant for sharks, potentially leading to depredation.
 - Increased risk of injury to fishermen and fish when trying to bring larger greater amberjack onboard. Injuries to the fish can impact release survival.
 - Smaller greater amberjack are more commercially desirable.
 - The stock assessment indicates that the greater amberjack biomass is above the biomass that would achieve maximum sustainable yield. Thus, the population could possibly sustain harvest of smaller fish.

Summary of Analyses

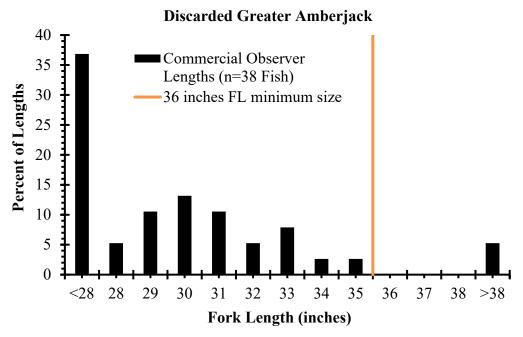


Figure 2. Length distribution (fork length) of greater amberjack released in the commercial sector from 2018 through 2020 in 1-inch length increments. The orange line represents the current commercial minimum size limit of 36 inches fork length.

Source: Commercial observer program (started in the South Atlantic region in 2018).

Summary of Biological Effects:

• Reducing the current 36-inch FL commercial minimum size limit for greater amberjack under **Alternative 2**, **Alternative 3**, or **Alternative 4** could be expected to increase the commercial harvest rate, but reduce commercial discards and release mortality. However, overall harvest and fishing mortality would still be limited by the commercial ACL, which would have neutral biological effects to the stock relative to **Alternative 1** (**No Action**).

Summary of Economic Effects:

- In general, the lower the size limit, the more that overall harvest will increase, thereby increasing economic benefits incurred from such harvest.
- The highest commercial economic benefits would occur under Alternative 4, followed by Alternative 3, Alternative 2, and Alternative 1 (No Action).

Summary of Social Effects:

- There is a social trade-off with reducing the commercial minimum size limit (Alternative 2, Alternative 3, and Alternative 4):
 - An increase in the harvest rate from a smaller minimum size limit can increase commercial trip profitability (positive social effect).

 An increase in the harvest rate from a smaller minimum size limit can also increase the chance of landings reaching the ACL and triggering AMs earlier in the season (negative social effect).

Snapper Grouper AP Input:

- The AP recommended changing the commercial minimum size limit to 34 inches (April 2022).
 - O AP members proposed and discussed several commercial minimum size limits. The final recommendation was developed through compromise and working together between sectors and regions for as equitable a fishery as possible.
- Additional input in the April 2022 Snapper Grouper AP Meeting Report.

Committee Action:

• SELECT PREFERRED ALTERNATIVE.

Action 5. Increase the seasonal commercial trip limits for greater amberjack

Purpose of Action: In response to public feedback gathered during scoping of this amendment and given the current stock status, the Council is considering increasing the Season 2 (September-February) commercial trip limit (1,000 pounds whole or gutted weight) to make it equal to the Season 1 (March-August) commercial trip limit. This action is intended to allow some increase to harvest of a stock that is not overfished and above its reference biomass level.

Alternative 1 (No Action). The March 1 through August 31 (Season 1) commercial trip limit is 1,200 pounds gutted or whole weight for greater amberjack, and the September 1 through the end of February (Season 2) commercial trip limit is 1,000 pounds gutted or whole weight.

Alternative 2. Increase the March 1 through August 31 (Season 1) commercial trip limit for greater amberjack to be:

- 2a. 1,500 pounds gutted or whole weight.
- 2b. 2,000 pounds gutted or whole weight.
- 2c. 2,500 pounds gutted or whole weight.

Alternative 3. Increase the September 1 through the end of February (Season 2) commercial trip limit for greater amberiack to be:

- **3a**. 1,200 pounds gutted or whole weight.
- **3b**. 1,500 pounds gutted or whole weight.
- **3c.** 2,000 pounds gutted or whole weight.
- 3d. 2,500 pounds gutted or whole weight.

Discussion

- The commercial ACL is allocated into two quotas: 60% to the period March 1 through August 31 (Season 1) and 40% to the period September 1 through the end of February (Season 2) (Regulatory Amendment 27 2019). Any remaining quota from Season 1 transfers to Season 2. Any remaining quota from Season 2 is not carried forward.
 - The Season 1 commercial trip limit is 1,200 pounds, and the Season 2 commercial trip limit is 1,000 pounds.
- During April each year, no person may sell or purchase a greater amberjack harvested from the South Atlantic exclusive economic zone and the harvest and possession limit is one per person per day or one per person per trip, whichever is more restrictive.
- Prior to Regulatory Amendment 27, the commercial trip limit was 1,200 pounds year-round. Rationale for changing the trip limit (along with implementation of the commercial split season):
 - [The approved split season and seasonal trip limits] "would strike a balance between improved access to the greater amberjack resource for fishermen throughout the region and economic profitability. Fishermen in Florida target greater amberjack early in the fishing year, when they can also fish for other jacks species; whereas, in the fall, greater amberjack schools are found off North Carolina. Hence, allocating a smaller portion of the ACL at a higher trip limit

early in the year and a larger portion of the ACL at a lower trip limit during the latter part of the year ensures access and profitability to fishermen throughout the region and allows for the entire ACL to be harvested."

Summary of Analyses

Table 11. The projected commercial closure dates for **Season 1** from increasing the trip limit and based on three landings scenarios: 1) three-year average of the most recent years of complete data (2017/18 through 2019/20), 2) five-year average of the most recent years of complete data (2015/16 through 2019/20), and 3) the maximum landings in the last five years of complete data (2015/16 through 2019/20). Predictions assume preferred total ACL and sector allocations from

Actions 1 and 2, respectively.

Alternative	Year	Commercial ACL Season 1 (lbs gw)	Scenario 1	Scenario 2	Scenario 3
			Closure Date	Closure Date	Closure Date
1 (NI - A -4')	2022/2023	884,423	None	None	None
1 (No Action) (1,200 lbs)	2024/2025	569,019	None	None	12-Jul
(1,200 108)	2026/2027	538,933	None	None	1-Jul
	2022/2023	884,423	None	None	None
2a (1,500 lbs)	2024/2025	569,019	None	None	5-Jul
	2026/2027	538,933	None	None	27-Jun
	2022/2023	884,423	None	None	None
2b (2,000 lbs)	2024/2025	569,019	None	None	27-Jun
	2026/2027	538,933	None	None	20-Jun
2c (2,500 lbs)	2022/2023	884,423	None	None	None
	2024/2025	569,019	None	None	21-Jun
	2026/2027	538,933	None	30-Aug	14-Jun

Table 12. The projected commercial closure dates for **Season 2** from increasing the trip limit and based on two landings scenarios: 1) three-year average of the most recent years of complete data (2017/18 through 2019/20), and 2) the maximum landings in the last five years of complete data (2015/16 through 2019/20). Scenario 3 is not included due to recent closures in Season 2. Predictions assume preferred total ACL and sector allocations from Actions 1 and 2, respectively.

Alternatives	Year	Commercial ACL Season 2 (lbs gw)	Scenario 1	Scenario 2
			Closure Date	Closure Date
1 (No Action) (1,000 lbs)	2022/2023	589,615	None	None
	2024/2025	379,346	None	None
	2026/2027	359,288	None	None
3a (1,200 lbs)	2022/2023	589,615	None	None
	2024/2025	379,346	None	None
	2026/2027	359,288	None	None

	2022/2023	589,615	None	None
3b (1,500 lbs)	2024/2025	379,346	None	24-Feb
	2026/2027	359,288	None	11-Feb
	2022/2023	589,615	None	None
3c (2,000 lbs)	2024/2025	379,346	None	4-Feb
	2026/2027	359,288	None	24-Feb
	2022/2023	589,615	None	None
3d (2,500 lbs)	2024/2025	379,346	None	20-Jan
	2026/2027	359,288	None	10-Jan

Summary of Biological Effects

- An increased harvest rate due to an increased trip limit (Alternative 2 or Alternative 3 and their sub-alternatives) could be expected to increase overall harvest and fishing mortality, based on the two most recent years of landings (2018/2019 and 2019/2020) being below the commercial ACL and the intended effect of the commercial split season to reduce the harvest rate, beginning with the 2020/2021 fishing season.
- However, because commercial harvest is still constrained by the ACL and seasonal quotas, and AMs are in place to prevent the ACL from being exceeded, any increase in harvest should not result in adverse biological consequences to the stock. Therefore, the biological effects to the stock from Alternative 2 or Alternative 3 could be neutral relative to Alternative 1 (No Action).
- Season 1 Alternative 2 sub-alternatives:
 - The Season 1 quota could be reached as early as June 20 under **Sub-Alternative 2b**, June 27 under **Sub-Alternative 2a**, and June 14 under **Sub-Alternative 2c**. The most conservative projected landings are under **Alternative 1 (No Action)** in which Season 1 would retain the lowest trip limit at 1,200 pounds, resulting in a possible in-season closure by July 1.
- Season 2 Alternative 3 sub-alternatives

The Season 2 quota could be reached as early as January 10 under **Sub-Alternative 3d**, February 4 under **Sub-Alternative 3c**, February 4 under **Sub-Alternative 3b**, and no inseason closures expected under **Sub-Alternatives 3a**. The most conservative projected landings are under **Alternative 1 (No Action)** in which Season 2 would retain the lowest trip limit at 1,000 pounds, resulting in no expected closures.

Summary of Economic Effects

• Generally, commercial trip limits are not considered to be economically efficient because they require an increase in the number of trips and associated trip costs to land the same amount of fish. However, the negative economic effects of this inefficiency can be offset by price support resulting from the supply limitations and the lengthening of seasons. In terms of potential net economic benefits **Sub-alternative 3d** would provide the potential highest benefit, followed by **Sub-alternative 3c**, **Sub-alternative 2c**, **Sub-alternative 3b Sub-alternative 2b**, **Sub-alternative 3a**, **Sub-alternative 2a**, and **Alternative 1** (**No Action**).

Summary of Social Effects

- Alternative 2 and Alternative 3 would be expected to provide social benefits of greater landings and increased trip efficiency when compared to Alternative 1 (No Action).
- Projections indicate that the commercial ACLs for greater amberjack (Action 2) would not be reached under the any of the alternatives proposed in Action 2 except when using the maximum landings over the last five years (Scenario 3); thus, there is likely a low probability of negative social effects from a commercial closure.

Snapper Grouper AP Input:

- The AP recommended maintaining the current commercial trip limits for both commercial seasons (Action 5 Alternative 1) (April 2022).
- Additional input in the April 2022 Snapper Grouper AP Meeting Report.

Committee Action:

• SELECT PREFERRED ALTERNATIVE.

Action 6. Revise the April spawning closure for greater amberjack

Purpose of Action: In response to public feedback gathered during scoping of this amendment, the Council is considering revising the April spawning closure of the commercial fishery to be a closure of both the recreational and commercial fisheries in April. This action is intended to increase fairness and equity between sectors.

Alternative 1 (No Action). During April each year, no person may sell or purchase a greater amberjack harvested from the South Atlantic exclusive economic zone and the harvest and possession limit is one per person per day or one per person per trip, whichever is more restrictive.

Alternative 2. Specify during April each year, no person may sell or purchase, harvest or possess a greater amberjack from the South Atlantic exclusive economic zone and the harvest and possession limit is zero. This closure would apply to both the recreational and commercial sectors.

Alternative 3. Remove the April spawning closure for greater amberjack. Allow purchase, harvest, and possession of greater amberjack from the South Atlantic exclusive economic zone according to regulations specified for the rest of the year.

Discussion

- During April, each year, possession of greater amberjack on commercial or for-hire (charter and headboat) vessels is limited to one per person per day or one per person per trip, whichever is more restrictive. This limit is the same as the recreational bag limit; however, commercial and recreational vessels are still subject to their respective sector-specific minimum size limit (36 inches fork length for commercial; 28 inches fork length for recreational).
- The spawning closure was implemented through Amendment 9 as an expansion of the original closure established south of Cape Canaveral, FL, through Amendment 4. Council rationale for the expansion of the original closure included concern about the status of greater amberjack and uncertainty about the 1996 NMFS stock assessment.
- Also during April, commercial sale or purchase of greater amberjack from the South Atlantic region is prohibited.
- Alternative 2 would expand the April spawning closure, such that all harvest and possession of greater amberjack (including both recreational and commercial sectors) would be prohibited in April.
- Consideration of expanding the spawning closure to prohibit all harvest of greater amberjack in April was recommended by the Snapper Grouper AP at their April 2021 meeting.
 - o Rationale for consideration include:
 - Increased equity between the sectors.
 - Additional biological/reproductive benefit to the stock from reduced harvest during spawning.

• Alternative 3 would remove the April spawning closure, such that all harvest and possession of greater amberjack (including both recreational and commercial sectors) would be allowed in April according to regulations specified for the rest of the year.

Summary of Analyses

Commercial Sector

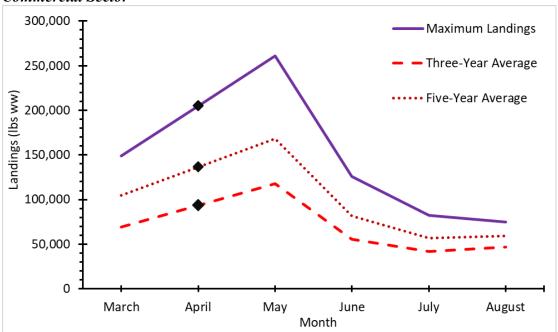


Figure 3. South Atlantic greater amberjack commercial landings in pounds whole weight by month for **Season 1** from 2016 to 2020, three-year average, and five-year average with predicted April landings. Predicted April landings are represented with a black diamond.

Table 13. Projected commercial closure dates for **Season 1** (under preferred total ACL and sector allocations from Actions 1 and 2, respectively) if the commercial sector were open to commercial harvest in April.¹ The closure dates were generated from three landings scenarios: 1) three-year average of the most recent years of complete data, 2) five-year average of the most recent years of complete data, and 3) the maximum landings in the last five years of complete data.

Year	Commercial ACL Season	Scenario 1	Scenario 2	Scenario 3
1001	2	Closure	Closure	Closure
	_	Date	Date	Date
2022/2023	884,423	None	None	26-Aug
2024/2025	569,019	None	11-Aug	26-May
2026/2027	538,933	None	26-Jul	22-May

Summary of Biological Effects

- Under either **Alternative 1** (**No Action**) or **Alternative 2**, additional protection is afforded to the stock in April, during the peak spawning.
- While both alternatives offer some protection to the stock, overall, **Alternative 2** would indirectly provide the greatest biological benefit to the greater amberjack stock compared to **Alternative 1** (No Action), due to reduced fishing mortality from harvest.
- Alternative 3 would be expected to have negative biological effects due to a likely increase in fishing mortality during spawning, a time when historical information indicates that greater amberjack could be more easily caught.

Summary of Economic Effects

- Alternative 2 is expected to result in reduced harvest and reduced economic benefits for the recreational sector, compared to Alternative 1 (No Action).
- Alternative 3 would be expected to increase commercial landings and net operating revenue. From a short-term economic benefits perspective, Alternative 3 would provide the highest economic benefits followed by Alternative 1 (No Action) and Alternative 2.

Summary of Social Effects

- Assuming that closing harvest during spawning ensures sustainable harvest of greater amberjack, long-term benefits to fishing communities in the form of consistent access to the resource would be highest under **Alternative 2**.
- Short-term negative effects on fishing communities due to restrictions in fishing opportunities would be lowest under **Alternative 3**. Such negative effects would have a greater impact on the recreational sector than the commercial sector due to current regulations that already prohibit commercial sale and reduce allowable commercial harvest.

¹ For projected closure dates for the greater amberjack commercial sector season 1 that includes both the combined various trip limit increases from Action 5, and if the commercial sector was open to commercial harvest in April in Action 6, see Table 6 in Appendix F.

• Alternative 3 would provide benefits in the form of increased fishing opportunities for the commercial sector, but it may also result in negative effects if the increased fishing reduces availability of greater amberjack or shortens the length of the commercial season.

Snapper Grouper AP Input:

- The AP recommended maintaining the current April spawning closure (Action 6 Alternative 1) (April 2022).
- Additional input in the April 2022 Snapper Grouper AP Meeting Report.

Committee Action:

• SELECT PREFERRED ALTERNATIVE.

Action 7. Remove recreational annual catch targets from the Snapper Grouper Fishery Management Plan

Alternative 1 (No Action). Retain recreational annual catch targets for species managed under the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region.

Preferred Alternative 2. Remove recreational annual catch targets for species managed under the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region.

Discussion

- Recreational annual catch targets (ACTs) for the Snapper Grouper FMP, established through the Comprehensive ACL Amendment, have been in place since 2012, are not codified, and are not used for management purposes. **Preferred Alternative 2** would remove the need for ACTs to be evaluated and changed when changes are made to the recreational ACL.
- Some recreational ACTs are applied to individual species, while others are applied to species complexes. **Preferred Alternative 2** would remove ACTs from both individual species and complexes.

Summary of Effects

- There are no expected biological, economic, or social effects associated with removal of the ACTs as they are not connected to any AMs or other management functions (**Preferred Alternative 2**).
- Under Alternative 1 (No Action), recreational ACTs must be specified whenever recreational ACLs change. However, because the recreational ACT alternatives as they are presented here do not trigger any corrective or preventative action, no additional inseason monitoring is required regardless of where the recreational ACT level is set. Therefore, administrative burden is expected to be reduced in a small amount under Preferred Alternative 2, compared to Alternative 1 (No Action).

Snapper Grouper AP Input:

• The AP recommended to remove recreational ACTs from the Snapper Grouper FMP (Action 7 – Preferred Alternative 2) (maintained in April 2022).

Committee Action:

- CONFIRM PREFERRED ALTERNATIVE.
- APPROVE ALL ACTIONS IN SG AMENDMENT 49.

Appendix A. Recommended Acceptable Biological Catch and Overfishing Limit for Greater Amberjack

The SSC reviewed SEDAR 59 (2020) during their April 2020 meeting and found that the assessment addressed the terms of reference appropriately, was conducted using the best scientific information available, is adequate for determining stock status and supporting fishing level recommendations, and the methods to address uncertainty were consistent with expectations and available information. The SSC recommended revising the OFL based on projections under a fishing mortality rate that would produce maximum sustainable yield ($F = F_{MSY}$) and applied the ABC control rule to recommend the ABC for greater amberjack. These recommendations were updated to account for additional projections from the Southeast Fisheries Science Center (SEFSC) that applied management from 2022 through 2026 (Table 1.5.1). Discards were projected as separate values from the landings shown in Table 1.5.1.

When developing options for ACLs, years for annual ABCs were considered to apply to the start of the non-calendar fishing year used for greater amberjack (March-February). For example, the 2022 ABC from Table 1.5.1 would be used to define the ACL for the March 2022-February 2023 fishing year.

Table A1. South Atlantic greater amberjack OFL and ABC recommendations, in pounds whole weight (lbs ww), based on projections from SEDAR 59 (2020). The assessment and these projections use recreational data calibrated to the MRIP FES.

Year	OFL (lbs ww)	ABC (lbs ww)
2022	4,615,000	4,380,000
2023	3,283,000	3,233,000
2024	2,839,000	2,818,000
2025	2,719,000	2,699,000
2026	2,691,000	2,669,000