

Amendment 49

to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region

Catch Level Adjustments and Allocations for Greater Amberjack

Decision Document



The Amendment 49 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region proposes to adjust catch level adjustments based on SSC recommendations and SEDAR 59 (2020), and address sector allocations.

March 2021

Background

The first assessment of the South Atlantic Greater Amberjack stock occurred in 1999 (Legault and Turner). Due to limited data, this assessment evaluated stock status relative to several scenarios of varying maturity schedules, natural mortalities, and biological reference points (or proxies). Most of these scenarios indicated the stock was likely not overfished nor experiencing overfishing. However, this assessment was conducted prior to the approval of reference points for management use, so no formal determination of stock status for Greater Amberjack could be concluded. A subsequent assessment was conducted through the Southeast Data, Assessment, and Review (SEDAR) process in 2008 (SEDAR 15 2008). The SEDAR 15 (2008) assessment concluded the stock was not overfished nor experiencing overfishing.

The most recent assessment followed a standard approach with data through 2018 (SEDAR 59 2020) and used revised estimates for recreational catch from the Marine Recreational Information Program (MRIP) based on the Fishing Effort Survey (FES). The assessment indicated that the South Atlantic Greater Amberjack stock is not overfished nor undergoing overfishing (**Figure 1**). 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 SEDAR 59 (2020), and address sector allocations.

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/.

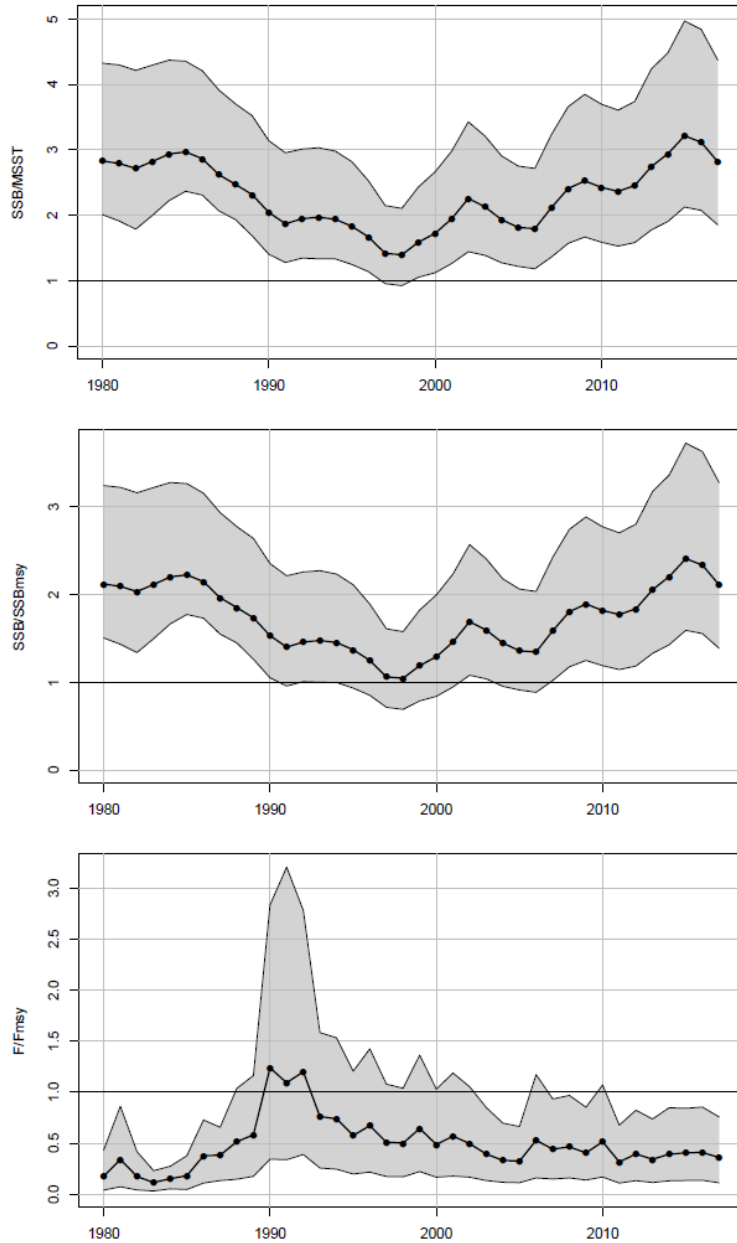


Figure 1. Estimated time series of spawning sock biomass (SSB) and fishing mortality (F) relative to benchmarks. Solid line indicates estimates from base run of the Beaufort Assessment Model; gray error bands indicate 5th and 95th percentiles of the ensemble modeling. Top panel: SSB relative to the minimum stock size threshold (MSST); if less than 1, stock is overfished. Middle panel: SSB relative to SSB_{MSY} ; if less than 1, stock is overfished. Bottom panel: F relative to F_{MSY} ; if > 1 stock is undergoing overfishing. *Source: SEDAR 59 (2020).*

Objectives for this meeting

- Provide guidance on actions and range of alternatives to consider.
- Consider selecting preferred alternative for Action 1 to facilitate further analysis.
- Consider approval for scoping.

Actions in this amendment

Action 1. Adjust catch levels for Greater Amberjack in the South Atlantic based on latest stock assessment

Action 2. Revise sector allocations Greater Amberjack in the South Atlantic

Action 3. Revise the recreational annual catch target for Greater Amberjack in the South Atlantic

Proposed timing

December 2020	Review options paper and provide guidance to staff
March 2021	Review draft actions and alternatives and approve for scoping
Apr-May 2021	Conduct scoping hearings
June 2021	Review scoping comments, review preliminary analyses, and provide guidance to staff
September 2021	Review modifications to the amendment, select preferred alternatives, and approve for public hearings
Oct-Nov 2021	Conduct public hearings
December 2021	Review public comment and approve all actions
March 2022	Review final draft amendment and consider approval for formal review
Late 2022	Regulations effective

Purpose and Need Statement

Proposed modification

The *purpose* of this amendment is to revise the **annual optimum yield and** annual catch limits for Greater Amberjack in the South Atlantic based on the results of the latest stock assessment and revise sector allocations.

The *need* for this amendment is to adjust catch levels based on the latest scientific information and to modify sector allocations to address revised recreational landings estimates in the South Atlantic, while minimizing to the extent practicable, adverse socioeconomic effects and achieve optimum yield on a continuing basis, as per the Magnuson Stevens Fishery Conservation and Management Act.

Committee Action:

PROVIDE GUIDANCE ON PURPOSE AND NEED.

Acceptable Biological Catch and Overfishing Limit

The SSC reviewed the Greater Amberjack stock assessment (SEDAR 59 2020) at their April 2020 meeting. The SSC found that the assessment addressed the terms of reference appropriately, was conducted using the best scientific information available, was adequate for determining stock status and supporting fishing level recommendations and addressed uncertainty consistent with expectations and available information. The SSC applied the ABC control rule and recommended landings levels for ABC and OFL for Greater Amberjack (**Table 1**). Discards were accounted for in the assessment model and not included in the recommended OFLs and ABCs.

The current ABC for Greater Amberjack is 1,968,000 pounds whole weight (lbs ww) (Amendment 25, SAFMC 2011).

Table 1. South Atlantic Greater Amberjack overfishing limit (OFL) and acceptable biological catch (ABC) recommendations based on projections from SEDAR 59 (2020). The assessment and these projections use recreational data calibrated to the Marine Recreational Information Program Fishing Effort Survey (FES).

OFL RECOMMENDATIONS	
Year	Landings (lbs ww)
2020	5,234,000
2021	3,439,000
2022	2,890,000
2023	2,744,000
2024	2,704,000
ABC RECOMMENDATIONS	
Year	Landings (lbs ww)
2020	4,978,000
2021	3,394,000
2022	2,871,000
2023	2,725,000
2024	2,687,000

NOTE: Updated projections that could change OFL and ABC recommendations, as well as annual catch limits based on these recommendations, have been requested from the Southeast Fisheries Science Center and are expected to be available after Briefing Book materials are published but prior to the March 2021 Council Meeting. New projections were requested with management starting in 2022.

Proposed Actions

Proposed modifications

Action 1. Revise the Greater Amberjack annual catch limit and annual optimum yield

Alternative 1 (No Action). The annual catch limit and annual optimum yield for Greater Amberjack are equal to the acceptable biological catch. The current combined commercial and recreational annual catch limit is 1,968,001 pounds whole weight.

Alternative 2. Revise the total annual catch limit and annual optimum yield for Greater Amberjack and set equal to the updated acceptable biological catch based on the results of the latest stock assessment (SEDAR 59 2020). The 2024-25 total annual catch limit would remain in place until modified.

Year	Total ACL (lbs ww)
2021-22	3,394,000
2022-23	2,871,000
2023-24	2,725,000
2024-2025+	2,687,000

NOTE: Proposed annual catch limits are based on recreational data calibrated to the Marine Recreational Information Program Fishing Effort Survey (FES). Future recreational catches under these limits would be monitored by the FES.

Alternative 3. Revise the total annual catch limit and annual optimum yield for Greater Amberjack and set equal to 90% of the updated acceptable biological catch based on the results of the latest stock assessment (SEDAR 59 2020). The 2024-25 total annual catch limit would remain in place until modified.

Year	Total ACL (lbs ww)
2021-22	3,054,600
2022-23	2,583,900
2023-24	2,452,500
2024-2025+	2,418,300

NOTE: Proposed annual catch limits are based on recreational data calibrated to the Marine Recreational Information Program Fishing Effort Survey (FES). Future recreational catches under these limits would be monitored by the FES.

Alternative 4. Revise the total annual catch limit and annual optimum yield for Greater Amberjack and set equal to 80% of the updated acceptable biological catch based on the results of the latest stock assessment (SEDAR 59 2020). The 2024-25 total annual catch limit would remain in place until modified.

Year	Total ACL (lbs ww)
2021-22	2,715,200
2022-23	2,296,800
2023-24	2,180,000
2024-2025+	2,149,600

NOTE: Proposed annual catch limits are based on recreational data calibrated to the Marine Recreational Information Program Fishing Effort Survey (FES). Future recreational catches under these limits would be monitored by the FES.

Discussion:

- The current ABC (**Alternative 1**) was established through the Comprehensive ACL Amendment (Amendment 25 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (FMP) 2011) and was calculated using Marine Recreational Fisheries Statistics Survey (MRFSS) recreational data. SEDAR 59 replaced MRFSS data with MRIP FES data, and MRIP will use the FES methodology to make future recreational estimates. **Alternatives 2-4** are based on updated ABCs, estimated using MRIP FES data.
- The Council has specified that the annual optimum yield (OY), annual catch limit (ACL), and acceptable biological catch (ABC) are equal for most snapper grouper species, including Greater Amberjack (Comprehensive ACL Amendment 2011). OY expressed on an annual basis, as proposed in **Alternatives 1-4**, is not necessarily equal to the long-term OY but is consistent with achieving the long-term OY.
- The commercial and recreational fishing seasons are from March 1 through the end of February. The commercial season is split into two seasons, March through August and September through February (Regulatory Amendment 27, 2019).

Committee Action:

REVIEW RANGE OF ALTERNATIVES AND MODIFY AS NEEDED.

CONSIDER SELECTING A PREFERRED ALTERNATIVE TO FACILITATE FURTHER ANALYSES.

Action 2. Revise the Greater Amberjack sector allocations

NOTE: The total annual catch limits shown in tables under Alternatives 1 through 3 reflect **Action 1-Alternative 2**. These total annual catch limit values incorporate recreational data as per the Marine Recreational Information Program using the Fishery Effort Survey method, as well as updates to commercial and for-hire landings from SEDAR 59.

Alternative 1 (No Action). The Greater Amberjack total annual catch limit is allocated 40.66% to the commercial sector and 59.34% to the recreational sector.

Annual Catch Limits (ACL) under Action 2 Alternative 1, Assuming Action 1 Alternative 2 (Total ACL=SSC-Recommended ABC in Pounds Whole Weight)						
Year	Total ACL (lbs ww)	Commercial (lbs gw)*			Recreational (lbs ww)***	
		ACL	Season 1 Quota	Season 2 Quota**	ACL	ACT
2021-22	3,394,000	1,326,923	796,154	530,769	2,014,000	1,486,735
2022-23	2,871,000	1,122,451	673,471	448,980	1,703,651	1,257,635
2023-24	2,725,000	1,065,370	639,222	426,148	1,617,015	1,193,680
2024-2025+	2,687,000	1,050,514	630,308	420,206	1,594,466	1,177,035

*The Total ACL is allocated in lbs ww to the commercial and recreational sectors. The commercial allocation is then converted to lbs gw for regulatory use in the commercial ACL and seasonal quotas.

**Any remaining quota from commercial Season 1 transfers to Season 2. Remaining quota from Season 2 is not carried forward.

***Recreational catches under these limits would be monitored by the Fishing Effort Survey.

Alternative 2. Apply the current allocation formula (**Equation 1**) to the total annual catch limit using the revised (FES-calibrated) recreational landings and commercial landings used in SEDAR 59 (2020), resulting in a commercial allocation of 29.85% and a recreational allocation of 70.15%.

Annual Catch Limits (ACL) under Action 2 Alternative 2, Assuming Action 1 Alternative 2 (Total ACL=SSC-Recommended ABC in Pounds Whole Weight)						
Year	Total ACL (lbs ww)	Commercial (lbs gw)*			Recreational (lbs ww)***	
		ACL	Season 1 Quota	Season 2 Quota**	ACL	ACT
2021-22	3,394,000	974,103	584,462	389,641	2,380,933	1,757,605
2022-23	2,871,000	823,998	494,399	329,599	2,014,042	1,486,766
2023-24	2,725,000	782,095	469,257	312,838	1,911,621	1,411,159
2024-2025+	2,687,000	771,189	462,713	308,476	1,884,964	1,391,480

*The Total ACL is allocated in lbs ww to the commercial and recreational sectors. The commercial allocation is then converted to lbs gw for regulatory use in the commercial ACL and seasonal quotas.

**Any remaining quota from commercial Season 1 transfers to Season 2. Remaining quota from Season 2 is not carried forward.

***Proposed annual catch limit allocations are based on recreational data calibrated to the Marine Recreational Information Program Fishing Effort Survey. Recreational catches under these limits would be monitored by the Fishing Effort Survey.

Alternative 3. Allocate 35.00% of the total annual catch limit to the commercial sector and 65.00% of the total annual catch limit to the recreational sector.

Annual Catch Limits (ACL) under Action 2 Alternative 3, Assuming Action 1 Alternative 2 (Total ACL=SSC-Recommended ABC in Pounds Whole Weight)						
Year	Total ACL (lbs ww)	Commercial (lbs gw)*			Recreational (lbs ww)***	
		ACL	Season 1 Quota	Season 2 Quota**	ACL	ACL
2021-22	3,394,000	1,142,212	685,327	456,885	2,206,100	1,628,543
2022-23	2,871,000	966,202	579,721	386,481	1,866,150	1,377,592
2023-24	2,725,000	917,067	550,240	366,827	1,771,250	1,307,537
2024-2025+	2,687,000	904,279	542,567	361,712	1,746,550	1,289,303

*The Total ACL is allocated in lbs ww to the commercial and recreational sectors. The commercial allocation is then converted to lbs gw for regulatory use in the commercial ACL and seasonal quotas.

**Any remaining quota from commercial Season 1 transfers to Season 2. Remaining quota from Season 2 is not carried forward.

***Recreational catches under these limits would be monitored by the Fishing Effort Survey.

Equation 1. Formulas for the Greater Amberjack commercial (Com ACL %) and recreational (Rec ACL %) allocation percentages, as specified in the Comprehensive Annual Catch Limit Amendment (SAFMC 2011).

$$Com\ ACL\ \% = \frac{(Avg\ Com\ Landings_{2006-2008} * 0.5) + (Avg\ Com\ Landings_{1986-2008} * 0.5)}{(Avg\ Com + Rec\ Landings_{2006-2008} * 0.5) + (Avg\ Com + Rec\ Landings_{1986-2008} * 0.5)}$$

$$Rec\ ACL\ \% = \frac{(Avg\ Rec\ Landings_{2006-2008} * 0.5) + (Avg\ Rec\ Landings_{1986-2008} * 0.5)}{(Avg\ Com + Rec\ Landings_{2006-2008} * 0.5) + (Avg\ Com + Rec\ Landings_{1986-2008} * 0.5)}$$

Discussion:

- Current sector allocations for Greater Amberjack were first implemented through the Comprehensive ACL Amendment (2011). The formula used to calculate allocations (**Equation 1**) was selected as part of a comprehensive strategy for species without sector allocations because of its consideration of past and present (at the time) landings.
 - The current allocations (**Alternative 1**) were calculated by applying Equation 1 to landings estimates for 1986-2008, using MRFSS data for the recreational sector.
 - **Alternative 2** applies Equation 1 to landings estimates for 1986-2008, using the MRIP FES data for the recreational sector.
 - **Alternative 3** is an approximate midpoint between **Alternative 1** (40.66% commercial and 59.34% recreational) and **Alternative 2** (29.85% commercial and 70.15%)
- The current commercial ACL is 769,368 lbs gw (800,163 lbs ww). The current recreational ACL is 1,167,837 lbs ww.

- 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 commercial quota for Season 1 is 461,633 lbs gw, and 307,755 lbs gw for Season 2.
 - There is a prohibition on commercial harvest annually during April.
- The commercial trip limit may be harvested and possessed in either whole weight or gutted weight. The conversion factor between the two measurements is 1.04.
- The current alternatives for **Actions 1 and 2** would result in a recreational ACL poundage that is greater than or equal to the current value. The commercial ACL poundage may increase, decrease, or stay the same, depending on the alternatives selected (NOTE: Tables under **Action 2** alternatives assume **Action 1-Alternative 2**).
- Landings from 2010-2019, using commercial estimates from SEDAR 59 and FES recreational estimates, have been, on average, 35.28% commercial and 64.72% recreational (**Table 2**).

Table 2. South Atlantic Greater Amberjack landings from 2010-2019. Commercial landings were estimated using data or methods from SEDAR 59 (2020). Recreational landings estimates are from the Marine Recreational Information Program Fishing Effort Survey (FES) and calibration of past landings to the FES. Sources: *SEDAR 59 Assessment Report (2020)*, *SEFSC MRIP FES (Fishing Effort Survey) Recreational ACL dataset (9/16/20)*

Greater Amberjack Landings					
Year	Total Landings (lbs ww)	Commercial		Recreational	
		Landings (lbs ww)	Percentage of Total	Landings (lbs ww)	Percentage of Total
2010	3,731,732	1,063,560	28.50%	2,668,172	71.50%
2011	1,647,764	1,021,820	62.01%	625,944	37.99%
2012	2,365,761	977,720	41.33%	1,388,041	58.67%
2013	2,307,768	899,360	38.97%	1,408,408	61.03%
2014	2,564,472	1,017,440	39.67%	1,547,032	60.33%
2015	3,053,245	852,970	27.94%	2,200,275	72.06%
2016	4,130,802	824,760	19.97%	3,306,042	80.03%
2017	2,837,421	851,160	30.00%	1,986,261	70.00%
2018	1,504,167	623,914	41.48%	880,253	58.52%
2019	2,096,705	481,901	22.98%	1,614,804	77.02%

- Commercial landings of Greater Amberjack in the South Atlantic averaged 95.3% of the commercial ACL from 2012 through 2019. Commercial in-season closures occurred during the 2015-16, 2016-17, and 2017-18 fishing seasons (**Table 3**).

Table 3. Commercial landings of Greater Amberjack from May 2012 through February 2020 and percentage of the commercial annual catch limit (ACL) landed each year. Years with in-season closures due to approaching or exceeding the ACL are indicated with the season ending on the date of the closure.

Year	Season*	Landings	Units	ACL	% ACL
2019-2020**	Mar 1 – Feb 29	411,312	lbs gw	769,388	53.5
2018-2019	Mar 1 – Feb 28	661,392	lbs gw	769,388	86.0
2017-2018	Mar 1 – Oct 18 (closure)	806,175	lbs gw	769,388	104.8
2016-2017	Mar 1 – Oct 4 (closure)	757,171	lbs gw	769,388	98.4
2015-2016	Mar 1 – Jan 21 (closure)	733,838	lbs gw	769,388	95.4
2014-2015	Mar 1 - Feb 28	773,572	lbs gw	769,388	100.5
2013-2014	May 1 – Apr 30	911,603	lbs ww	800,163	113.9
2012-2013	May 1 – Apr 30	547,577	lbs ww	800,163	68.4

Source: SERO Commercial ACL data (10/29/20)

*Commercial closure in April for all yrs

**2020 landings are preliminary.

- Recreational landings of Greater Amberjack in the South Atlantic averaged 86.8% of the recreational ACL from May 2013 through February 2020 (**Table 4**). Recreational landings have been tracked using Marine Recreational Fishery Statistics Survey (MRFSS) estimation methods, rather than the Coastal Household Telephone Survey (CHTS) methods used to estimate recreational harvests for other species.

Table 4. MRFSS and Southeast Regional Headboat Survey (SRHS) landings of Greater Amberjack in lbs ww from May 2013 through February 2020 and corresponding percentage of recreational annual catch limit (ACL) landed each fishing year.

Year	Season	MRFSS Landings (lbs ww)	ACL	% ACL
2019-2020*	March-February	930,216	1,167,837	79.7%
2018-2019	March-February	673,769	1,167,837	57.7%
2017-2018	March-February	1,062,659	1,167,837	91.0%
2016-2017	March-February	1,411,357	1,167,837	120.9%
2015-2016	March-February	1,447,999	1,167,837	124.0%
2014-2015**	May-April	747,144	1,167,837	64.0%
2013-2014	May-April	824,063	1,167,837	70.6%

Source: SEFSC MRFSS (Fishing Effort Survey) Recreational ACL dataset (9/15/20)

* 2020 landings are preliminary.

** 2014/15 fishing year only includes landings through February 29, 2015.

Committee Action:

REVIEW RANGE OF ALLOCATION ALTERNATIVES AND MODIFY AS NEEDED.

Action 3. Revise the Greater Amberjack recreational annual catch target

Alternative 1 (No Action). The Greater Amberjack recreational annual catch target is 992,662 pounds whole weight, and is calculated according to **Equation 2**, using percent standard errors from the Marine Recreational Fisheries Statistics Survey from 2005-2009.

Alternative 2. Revise the Greater Amberjack recreational annual catch target based on **Equation 2**, the recreational annual catch limit as determined by Actions 1 and 2, and updated percent standard error estimates for 2015-2019 from the Marine Recreational Information Program Fishing Effort Survey.

Alternative 3. Remove the existing recreational annual catch target and do not specify a new recreational annual catch target for Greater Amberjack.

Equation 2. Formula for the Greater Amberjack recreational annual catch target (ACT), as specified in the Comprehensive Annual Catch Limit Amendment (SAFMC 2011), using the recreational annual catch limit (ACL) and the average of the percent standard errors of recreational harvest estimates from the 5 previous years (PSE).

$$ACT = ACL * [(1 - PSE) OR 0.5, whichever is greater]$$

Discussion:

- The Greater Amberjack recreational ACT and formula were implemented through the Comprehensive ACL Amendment (SAFMC 2011). (Comprehensive Annual Catch Limit Amendment 2011). The current ACT is based on the current ACL and the average of percent standard errors (PSE) from 2005-2009 (calculated using the MRFSS recreational data).
- The Recreational ACT is not currently used to trigger regulatory action in the South Atlantic or serve any other management function.

IPT Comments/Recommendations:

- Several recreational ACTs (including that for Greater Amberjack) established through the Comprehensive ACL Amendment currently serve no management function.
- **The Council could consider removal of all Snapper Grouper FMP ACTs that are not currently being used in management.**
- **If the Council wants to consider taking action to remove recreational ACTs, an action could be incorporated into this amendment.**

Committee Action:

CONSIDER IPT'S RECOMMENDATION AND PROVIDE GUIDANCE ON ACTION AND ALTERNATIVES.

Current Regulations and Accountability Measures

- Size limits for the commercial and recreational fisheries (Amendment 4, 1991):
 - Commercial: 36-inch fork length minimum size limit.
 - Recreational: 28-inch fork length minimum size limit.
- Annual commercial spawning closure during April (Amendment 9, 1998).
- Recreational bag limit (Amendment 9, 1998): 1 fish per person per day; in April, for-hire/charter boats limited to 1 per person per day or 1 per person per trip, whichever is more restrictive.
- Accountability Measures (AM) for the commercial and recreational fisheries (Comprehensive ACL Amendment 2011) are listed below. The AMs would continue to be applicable to the current range of alternatives considered in **Actions 1 and 2**.
 - Commercial AM: If the ACL is met or is projected to be met, all subsequent purchase and sale is prohibited and harvest and/or possession is limited to the bag limit. If the ACL is exceeded, the Regional Administrator shall publish a notice to reduce the ACL in the following season by the amount of the overage only if the species is overfished.
 - Recreational AM: If the annual landings exceed the ACL in a given year, monitor the following year and shorten the season as necessary. If the ACL is exceeded, the following year's landings would be monitored in-season for persistence in increased landings. The Regional Administrator will publish a notice to reduce the length of the fishing season as necessary.
- 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. 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.
 - The Season 1 commercial trip limit is 1,200 pounds, and the Season 2 commercial trip limit is 1,000 pounds.
- 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/.

Committee Action:

PROVIDE GUIDANCE ON ANY MODIFICATIONS TO MANAGEMENT OR ACCOUNTABILITY MEASURES.

CONSIDER APPROVAL FOR SCOPING.