

Amendment 49

Catch Level Adjustments and Allocations for Greater Amberjack

Options Paper

December 8, 2020

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.

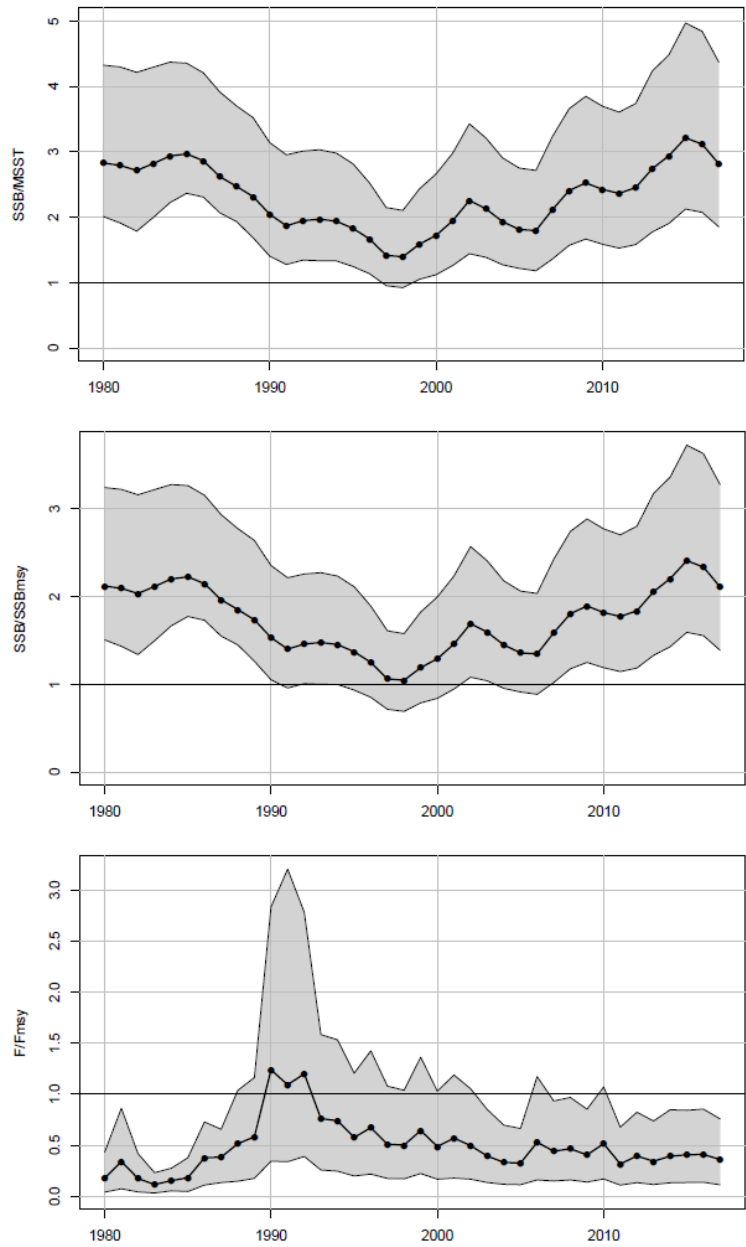


Figure 1. Estimated time series of spawning sock biomass (SSB) and fishing mortality (F) relative to benchmarks. Solid line indicates estimates from base run of the Beaufort Assessment Model; gray error bands indicate 5th and 95th percentiles of the ensemble modeling. Top panel: SSB relative to the minimum 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).*

Proposed management changes in this amendment

- Adjust catch levels for Greater Amberjack in the South Atlantic based on latest stock assessment
- Revise sector allocations for Greater Amberjack in the South Atlantic
- Consider other changes to management

Objectives for this meeting

- Review draft Purpose & Need statement, modify as appropriate, and provide rationale.
- Review options for actions and alternatives and modify as appropriate.

Potential amendment timing

December 2020	Review options paper and provide guidance to staff
March 2021	Review draft amendment 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
Mid to late 2022	Regulations effective

DRAFT Purpose and Need Statements

These Purpose and Need statements are drafts and may change, pending Council guidance at the December 2020 meeting.

The *purpose* of this amendment is to adjust catch levels 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 management based on the latest scientific information and to modify sector allocations to address revised recreational landings estimates in the South Atlantic.

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 the following ABC and OFL for Greater Amberjack. Recommended landings levels are shown in pounds whole weight (lbs ww) and numbers of fish (**Table 1**).

The current ABC for Greater Amberjack is 1,968,000 lbs ww and the total Annual Catch Limit (ACL) is 1,968,000 lbs ww (Amendment 25, SAFMC 2011).

Table 1. South Atlantic Greater Amberjack OFL and ABC recommendations based on projections from SEDAR 59 (2020).

OFL RECOMMENDATIONS		
Year	Landings (lbs ww)	Numbers of Fish
2020	5,234,000	403,000
2021	3,439,000	300,000
2022	2,890,000	270,000
2023	2,744,000	263,000
2024	2,704,000	260,000
ABC RECOMMENDATIONS		
Year	Landings (lbs ww)	Numbers of Fish
2020	4,978,000	382,000
2021	3,394,000	292,000
2022	2,871,000	263,000
2023	2,725,000	257,000
2024	2,687,000	254,000

Options for Proposed Actions

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

- Current ABC values were established through the Comprehensive ACL Amendment (Amendment 25 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (FMP)).
- New ACLs are needed since the SSC recommended new OFL and ABC values.
- Does the Council want to modify the optimum yield (OY) separately from the ACL? The Council has specified $OY=ACL=ABC$ for most snapper grouper species, including Greater Amberjack. National Standard 1 guidelines state that although a Council can establish an annual OY, it must establish a long-term OY.
- OFL and ABC recommendations are for landings; discards were accounted for in the assessment model and not included in the recommended OFLs and ABCs.
- How does the Council want to specify the total ACL (pounds whole weight (lbs ww), pounds gutted weight (lbs gw), or numbers of fish)?
 - Different units are used to manage or regulate different aspects of the fishery.
 - The total, commercial, and recreational ACLs are currently specified in lbs ww.
 - The commercial ACL is tracked in-season as lbs gw, while the recreational ACL is tracked in-season as lbs ww. If the Council specifies the total ACL in numbers of fish, a conversion to lbs would likely be necessary for tracking the commercial harvest.

- Commercial trip limits are specified in lbs ww or lbs gw. The conversion between these units is 1.04 (Regulatory Amendment 27 2019).
 - The recreational bag limit is specified in numbers of fish.
 - The projections from the SEDAR assessment include both numbers and lbs ww of fish.
- Options for developing a range of alternatives:

Option 1 (No Action). The current annual catch limit and optimum yield for Greater Amberjack are equal to the acceptable biological catch (1,968,000 pounds whole weight).

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

Year	Total ACL (lbs ww)	Total ACL (numbers)
2020*	4,978,000	382,000
2021*	3,394,000	292,000
2022	2,871,000	263,000
2023	2,725,000	257,000
2024	2,687,000	254,000

*Given the timing of amendment development, new catch levels would likely be effective beginning in the 2022 fishing year.

Option 3. Revise the total annual catch limit and optimum yield for Greater Amberjack and set equal to 90% of the updated acceptable biological catch. The 2024 annual catch limit would remain in place until modified.

Year	Total ACL (lbs ww)	Total ACL (numbers)
2020*	4,480,200	343,800
2021*	3,054,600	262,800
2022	2,583,900	236,700
2023	2,452,500	231,300
2024	2,418,300	228,600

*Given the timing of amendment development, new catch levels would likely be effective beginning in the 2022 fishing year.

Option 4. Revise the total annual catch limit and optimum yield for Greater Amberjack and set equal to 80% of the updated acceptable biological catch. The 2024 annual catch limit would remain in place until modified.

Year	Total ACL (lbs ww)	Total ACL (numbers)
2020*	3,982,400	305,600
2021*	2,715,200	233,600
2022	2,296,800	210,400
2023	2,180,000	205,600
2024	2,149,600	203,200

*Given the timing of amendment development, new catch levels would likely be effective beginning in the 2022 fishing year.

Committee Action:

Provide guidance on range of options to develop.

2. Revise the Greater Amberjack sector allocations

- Allocations need to be reviewed since the recreational landings stream changed in the new assessment. Landings estimates now conform to the new Fishing Effort Survey.
- Current sector allocations for Greater Amberjack were first implemented through Comprehensive ACL Amendment (2011). The formula used to calculate allocations (shown below) was selected as part of a comprehensive strategy for species without sector allocations because of its consideration of past and present (at the time) participation in the fishery. Current allocations: 40.66% commercial (800,163 lbs ww); 59.34% recreational (1,167,837 lbs ww).

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

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

- If the Council does not consider other sector allocation options besides Option 2, this amendment could be a framework instead of a full plan amendment.
- The commercial ACL is allocated into a split season, with 60% allocated to the period March 1 through August 31 (Season 1) and 40% to the period September 1 through the end of February (Season 2). Unused quota from Season 1 transfers to Season 2 (Regulatory Amendment 27, effective February 26, 2020).
- Options for developing a range of alternatives:

Option 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.

Option 2. Apply the current allocation formula to the total annual catch limit using the revised (FES-calibrated) recreational landings and commercial landings used in SEDAR 59.

This would result in a commercial allocation of 29.85% and a recreational allocation of 70.15% using revised recreational landings estimates.

Annual Catch Limits (ACL) under Action 2 Option 2, Assuming Total ACL=Revised ABC in Pounds Whole Weight (Action 1 Option 2)			
Year	Total ACL (lbs ww)	Commercial ACL (lbs ww)	Recreational ACL (lbs ww)
2020*	4,978,000	1,485,871	3,492,129
2021*	3,394,000	1,013,067	2,380,933
2022	2,871,000	856,958	2,014,042
2023	2,725,000	813,379	1,911,621
2024	2,687,000	802,036	1,884,964

*Given the timing of amendment development, new catch levels would likely be effective during 2022 fishing year.

Option 3. Allocate the total annual catch limit to maintain the current commercial annual catch limit of 800,163 lbs ww (769,388 lbs gw).

Annual Catch Limits (ACL) under Action 2 Option 3, Assuming Total ACL=Revised ABC in Pounds Whole Weight (Action 1 Option 2)			
Year	Total ACL (lbs ww)	Commercial ACL (lbs ww)	Recreational ACL (lbs ww)
2020*	4,978,000	800,163	4,177,837
2021*	3,394,000	800,163	2,593,837
2022	2,871,000	800,163	2,070,837
2023	2,725,000	800,163	1,924,837
2024	2,687,000	800,163	1,886,837

*Given the timing of amendment development, new catch levels would likely be effective during 2022 fishing year.

Option 4. Remove sector allocations and manage under a total annual catch limit.

Others?

Committee Action:

Provide guidance on range of options to develop.

3. Revise the Greater Amberjack recreational annual catch target

- The current Greater Amberjack recreational annual catch target (ACT) is based on the current ACL values.
- The Greater Amberjack ACT and formula were implemented through the Comprehensive ACL Amendment (SAFMC 2011).
- Recreational ACTs are not currently used to trigger regulatory action in the South Atlantic.
- Options for developing a range of alternatives:

Option 1 (No Change). The Greater Amberjack recreational annual catch target is 992,662 pounds whole weight and is determined using the existing formula: ACT equals $ACL \times (1 - PSE)$ or $ACL \times 0.5$, whichever is greater; where ACT = annual catch target, ACL = annual catch limit, and PSE = average of the percent standard errors of harvest from the 5 previous years (when previously applied, 2005-2009).

Option 2. Revise the Greater Amberjack recreational annual catch target based on a revised recreational annual catch limit and updated percent standard error estimates (PSE) for 2015-2019.

The average PSE for MRIP FES landings from 2015-2019 in lbs ww is .2618. Recreational ACTs for recreational ACLs resulting from Action 1 Option 2 and Action 2 Option 2 are shown below.

Action 3 Option 2 Annual Catch Targets (ACT) for Recreational Annual Catch Limits (ACL), Assuming Total ACL=Revised ABC in Pounds Whole Weight (Action 1 Option 2) and Sector Allocation Defined in Action 2 Option 2		
Year	Recreational ACL (lbs ww)	Recreational ACT (lbs ww)
2020*	3,492,129	2,577,889
2021*	2,380,933	1,757,605
2022	2,014,042	1,486,766
2023	1,911,621	1,411,159
2024	1,884,964	1,391,480

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

Others?

Committee Action:

Provide guidance on range of options to develop.

Additional Questions/Information to Consider:

- 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 2**).

Table 2. Commercial landings of Greater Amberjack from May 2012 through February 2020 and percentage of the commercial 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 (lbs)	Units	ACL (lbs)	% ACL
2019-2020**	Mar 1 – Feb 29	411,312	gw	769,388	53.5
2018-2019	Mar 1 – Feb 28	661,392	gw	769,388	86.0
2017-2018	Mar 1 – Oct 18 (closure)	806,175	gw	769,388	104.8
2016-2017	Mar 1 – Oct 4 (closure)	757,171	gw	769,388	98.4
2015-2016	Mar 1 – Jan 21 (closure)	733,838	gw	769,388	95.4
2014-2015	Mar 1 - Feb 28	773,572	gw	769,388	100.5
2013-2014	May 1 – Apr 30	911,603	ww	800,163	113.9
2012-2013	May 1 – Apr 30	547,577	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 3**). 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 3. 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 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.

- **Figure 2** shows Greater Amberjack commercial and recreational landings by calendar year from 1986 through 2019. Recreational landings are shown using the current (MRFSS) and future (FES) tracking estimation methods.

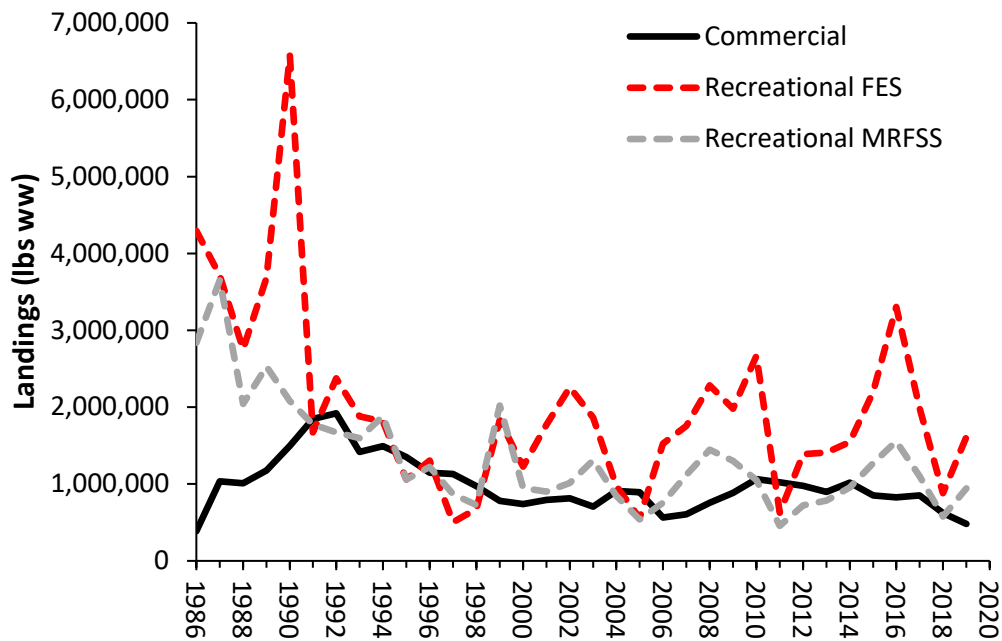


Figure 2. Greater Amberjack commercial and recreational landings (lbs ww) by year from 1986 through 2019. Commercial landings using data or methods from SEDAR 59 are in black. Recreational landings estimates based on the MRFSS are in gray and revised recreational landings estimates based on the Fishing Effort Survey (FES) are in red. Headboat landings from the SRHS are included in both recreational datasets. Sources: SEDAR 59 Assessment Report (2020), SEFSC MRFSS (Fishing Effort Survey) Recreational ACL datasets (5/19/20; 9/15/20), SEFSC MRIP FES (Fishing Effort Survey) Recreational ACL dataset (9/16/20)

- **Are adjustments to other aspects of existing management necessary?**
 - 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):
 - 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 fishing year for the commercial and recreational sectors changed from May-April to March-February, starting with the 2014-2015 fishing year (Regulatory Amendment 14 2014). The April commercial closure was maintained as part of the new fishing year.
 - 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.

Committee Action:

Provide guidance on whether to develop action(s) for changes to current management measures.