

Amendment 49

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

Scoping Document

April 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://safmc-shinyapps.shinyapps.io/SA_FisheryDataGreaterAmberjack/.

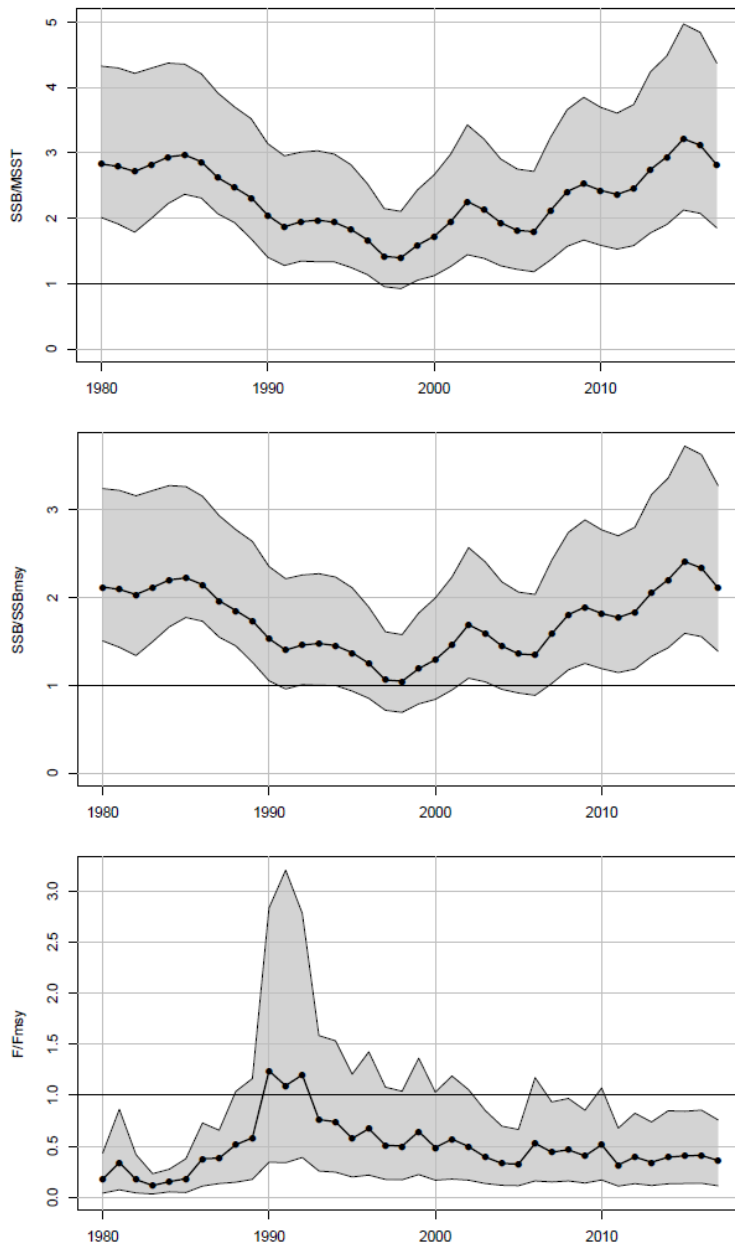


Figure 1. Estimated time series of spawning sock biomass (SSB) and fishing mortality (F) relative to benchmarks. Solid line indicates estimates from base run of the Beaufort Assessment Model; gray error bands indicate 5th and 95th percentiles of the ensemble modeling. Top panel: SSB relative to the minimum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

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 FMP.

Recommended Acceptable Biological Catch and Overfishing Limit for Greater Amberjack

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 recommended revising the overfishing limit (OFL) based on projections under a fishing mortality rate that would produce maximum sustainable yield ($F = F_{MSY}$) and applied the acceptable biological catch (ABC) control rule to recommend the ABC for Greater Amberjack. These recommendations were updated to apply to additional projections from the Southeast Fisheries Science Center (SEFSC) that applied management from 2022 through 2026 (**Table 1**). Discards were projected as separate values from the landings shown in **Table 1**.

When developing options for annual catch limits, 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** would be used to define the ACL for the March 2022-February 2023 fishing year.

Table 1. South Atlantic Greater Amberjack overfishing limit (OFL) and acceptable biological catch (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 Marine Recreational Information Program Fishing Effort Survey (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

Overview of the Commercial Fishery

- Current commercial regulations:
 - Minimum size limit: 36-inch (fork length)
 - Trip limit: 1,200 pounds (whole weight or gutted weight) from March 1 to August 31 (Season 1) and 1,000 pounds from September 1 through the end of February (Season 2). 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.
 - Commercial ACL is allocated 60% to Season 1 and 40% to Season 2. Any remaining quota from Season 1 transfers to Season 2. Any remaining quota from Season 2 is not carried forward.
- Commercial landings of Greater Amberjack in the South Atlantic averaged 88% of the commercial ACL from March 2015 through February 2020 (**Table 2**).

Table 2. Commercial landings of Greater Amberjack in pounds gutted weight (lbs gw) from March 2015 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. *Source: SERO Commercial ACL data (10/29/20)*

Year	Season*	Landings (lbs gw)	ACL (lbs gw)	% ACL
2019-2020**	Mar 1 – Feb 29	411,066	769,388	53.4
2018-2019	Mar 1 – Feb 28	661,392	769,388	86.0
2017-2018	Mar 1 – Oct 18 (closure)	806,175	769,388	104.8
2016-2017	Mar 1 – Oct 4 (closure)	757,171	769,388	98.4
2015-2016	Mar 1 – Jan 21 (closure)	733,838	769,388	95.4

*Commercial closure in April for all years

**2020 landings are preliminary

- Landings data for South Atlantic Greater Amberjack were obtained from the Southeast Fisheries Science Center (SEFSC) commercial ACL datasets (3/8/21; 3/15/21). Predicted future landings were estimated by taking an average of the most recent three years of complete data for each month, as the most recent data are believed to be the best approximation of future harvest (**Figure 2**).
 - There were complete years of data for the most recent two fishing years. Due to closures in October during the 2016-17 and 2017-18 fishing seasons, landings from October through December were obtained from the 2015-16 season and January through February from the 2014-15 fishing season.

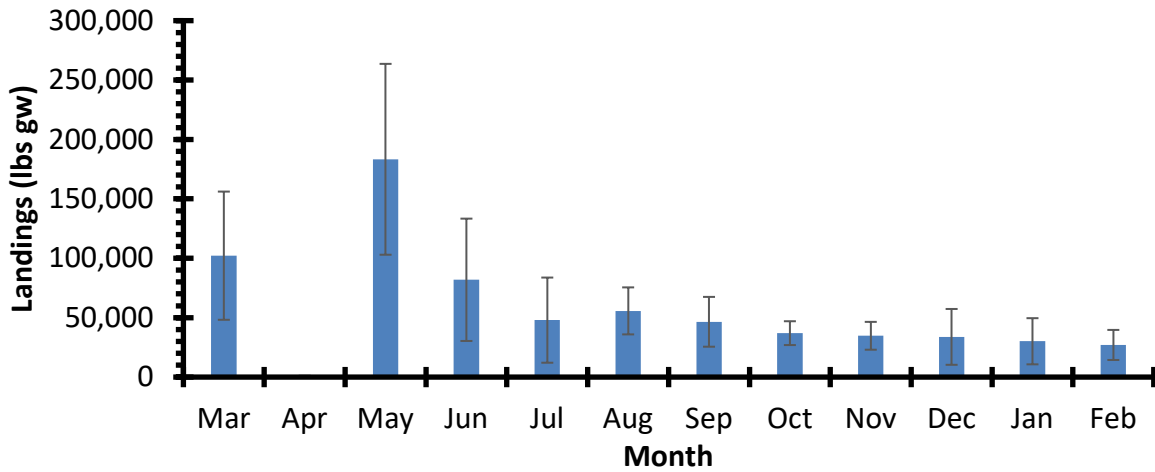


Figure 2. Predicted monthly greater amberjack landings (lbs gw) with 95% confidence interval.
 Source: SEFSC Commercial ACL files (3/8/21 and 3/15/2021)

Overview of the Recreational Fishery

- Current recreational regulations:
 - Minimum size limit: 28-inch (fork length)
 - Bag limit: 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.
- Recreational landings of Greater Amberjack in the South Atlantic from 2015 through 2019 are shown in **Table 3**.

Table 3. Recreational landings in pounds whole weight (lbs ww) of Greater Amberjack from 2015 through 2019. *Sources: SEFSC MRIP FES (Fishing Effort Survey) Recreational ACL dataset (9/16/20)*

Year	Landings (lbs ww)
2019	1,614,804
2018	880,253
2017	1,986,261
2016	3,306,042
2015	2,200,275

NOTE: Dataset includes headboat landings. Estimates are calculated from the current MRIP FES survey.

- Recreational landings are collected in two-month increments called waves (e.g., January and February = wave 1, March and April = wave 2, etc.). Greater Amberjack recreational landings by two-month wave and predicted future landings are shown in **Figure 3**.
 - Predicted future landings were estimated by taking an average of the landings from the most recent three or five years of data. Closures excluded landings from waves six and one (November through February) for the 2016-17 and 2017-18 seasons in the analysis.

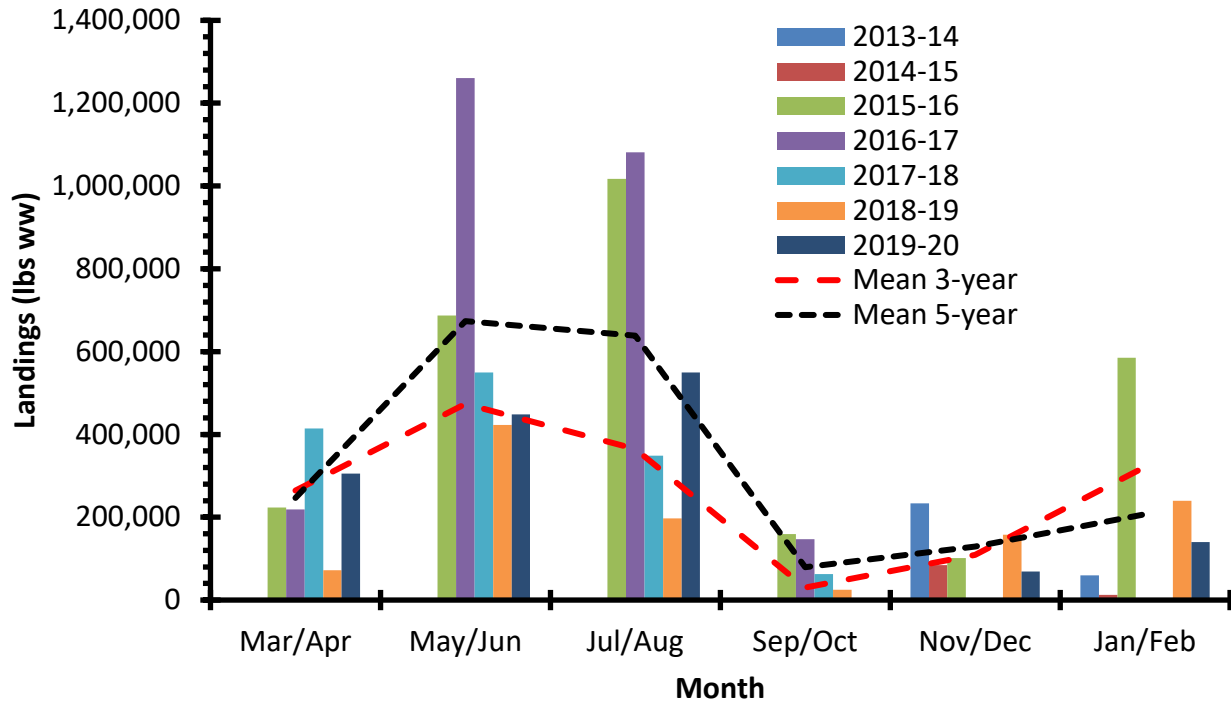


Figure 3. South Atlantic greater amberjack recreational landings by two-month wave and predicted future landings (lbs ww). *Source: SEFSC MRIP FES Recreational ACL Dataset (3/2/21)*

Potential management actions in this amendment

- Adjust catch levels (total annual catch limit and annual optimum yield) for Greater Amberjack
- Revise sector allocations for Greater Amberjack
- Remove recreational annual catch targets not used in current management in the Snapper Grouper FMP

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

Alternative 1 (No Action). The total 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 and annual optimum yield are 1,968,001 pounds whole weight.

Preferred 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 2026-27 total annual catch limit and annual optimum yield would remain in place until modified.

Year	Total ACL (lbs ww)
2022-23	4,380,000
2023-2024	3,233,000
2024-2025	2,818,000
2025-2026	2,699,000
2026-2027+	2,669,000

NOTE: Proposed annual catch limits are based on recreational data calibrated to the Marine Recreational Information Program Fishing Effort Survey (MRIP FES). Future recreational catches under these limits would be monitored by the MRIP 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 2026-27 total annual catch limit and annual optimum yield would remain in place until modified.

Year	Total ACL (lbs ww)
2022-23	3,942,000
2023-2024	2,909,700
2024-2025	2,536,200
2025-2026	2,429,100
2026-2027+	2,402,100

NOTE: Proposed annual catch limits are based on recreational data calibrated to the Marine Recreational Information Program Fishing Effort Survey (MRIP FES). Future recreational catches under these limits would be monitored by the MRIP 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 2026-27 total annual catch limit and annual optimum yield would remain in place until modified.

Year	Total ACL (lbs ww)
2022-23	3,504,000
2023-2024	2,586,400
2024-2025	2,254,400
2025-2026	2,159,200
2026-2027+	2,135,200

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

Action 2. Revise the Greater Amberjack sector allocations and sector annual catch limits

Note: The revised total annual catch limit in Alternatives 1 (No Action) through 3 reflects Preferred Alternative 2 for Action 1: ABC=ACL=OY with implementation in 2022.

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

Year	Total ACL (lbs ww)	Commercial ACL* (lbs gw)	Commercial Season 1 Quota (lbs gw)	Commercial Season 2 Quota** (lbs gw)	Recreational ACL (lbs ww)
2022-2023	4,380,000	1,712,412	1,027,447	684,965	2,599,092
2023-2024	3,233,000	1,263,979	758,387	505,591	1,918,462
2024-2025	2,818,000	1,101,730	661,038	440,692	1,672,201
2025-2026	2,699,000	1,055,205	633,123	422,082	1,601,587
2026-2027+	2,669,000	1,043,476	626,086	417,391	1,583,785

*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 transfers to Season 2. Remaining quota from Season 2 is not carried forward.

Alternative 2. Apply the current allocation formula, Sector Allocation Percentage = ((mean sector landings 2006-2008)*0.5 + (mean sector landings 1986-2008)*0.5) / ((mean total landings 2006-2008)*0.5 + (mean total landings 1986-2008)*0.5, using the Fishing Effort Survey-calibrated recreational landings and commercial landings used in SEDAR 59 (2020). This would result in a commercial allocation of 29.85% and a recreational allocation of 70.15%.

Year	Total ACL (lbs ww)	Commercial ACL* (lbs gw)	Commercial Season 1 Quota (lbs gw)	Commercial Season 2 Quota** (lbs gw)	Recreational ACL (lbs ww)
2022-2023	4,380,000	1,257,144	754,287	502,858	3,072,570
2023-2024	3,233,000	927,933	556,760	371,173	2,267,950
2024-2025	2,818,000	808,820	485,292	323,528	1,976,827
2025-2026	2,699,000	774,665	464,799	309,866	1,893,349
2026-2027+	2,669,000	766,054	459,633	306,422	1,872,304

*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 transfers to Season 2. Remaining quota from Season 2 is not carried forward.

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.

Year	Total ACL (lbs ww)	Commercial ACL* (lbs gw)	Commercial Season 1 Quota (lbs gw)	Commercial Season 2 Quota** (lbs gw)	Recreational ACL (lbs ww)
2022-2023	4,380,000	1,474,038	884,423	589,615	2,847,000
2023-2024	3,233,000	1,088,029	652,817	435,212	2,101,450
2024-2025	2,818,000	948,365	569,019	379,346	1,831,700
2025-2026	2,699,000	908,317	544,990	363,327	1,754,350
2026-2027+	2,669,000	898,221	538,933	359,288	1,734,850

*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 transfers to Season 2. Remaining quota from Season 2 is not carried forward.

Discussion:

- Allocations are being reviewed since the recreational landings stream changed in the new assessment. Recreational estimates are now based on the Marine Recreational Information Program Fishing Effort Survey (MRIP FES).
- Sector allocations for Greater Amberjack were implemented through the Comprehensive ACL Amendment (Amendment 25 to the Snapper Grouper FMP) (SAFMC 2011). The allocation percentages were determined using a formula that used short-term and long-term landings histories for each sector: Sector Allocation Percentage = $\frac{((\text{mean sector landings } 2006-2008) * 0.5 + (\text{mean sector landings } 1986-2008) * 0.5)}{((\text{mean total landings } 2006-2008) * 0.5 + (\text{mean total landings } 1986-2008) * 0.5)}$
 - The recreational landings estimates used in the previous application of the allocation formula to Greater Amberjack were based on the Marine Recreational Fisheries Statistics Survey (MRFSS), which has since been updated to the MRIP FES.
 - **Alternative 1 (No Action)** was developed from application of the allocation formula to landings that included MRFSS data for the recreational sector.
 - **Alternative 2** was developed by applying the allocation formula to landings that included MRIP FES data for the recreational sector.
- **Alternative 3** was developed as an approximate midpoint to **Alternatives 1 (No Action)** and **2** and is approximately equal to averages of annual sector landings percentages for the last 10 years of data (2010-2019; 35.28% for commercial and 64.72% for recreational).

- Season lengths were projected using daily catch rates with upper and lower 95% confidence intervals compared to the different commercial ACL options (**Table 4**). No closures were predicted for any of the ACL options examined.
 - Projections include the highest (**Action 2-Alternative 1 (No Action)**; 40.66%) and lowest (**Action 2-Alternative 2**; 29.85%) commercial allocations considered. The commercial allocation of **Action 2-Alternative 3** is between these values, thus a closure would not be predicted for this option either.

Table 4. Projected closure dates of greater amberjack by fishing year with 95% confidence intervals (CI). These projections assume the total annual catch limits from **Action 1-Preferred Alternative 2** and include the initial (2022-23) and terminal (2026-27) projected fishing years for **Action 2-Alternative 1 (No Action)** and **Alternative 2**.

Fishing Year	Commercial Allocation	ACL (lbs gw)	Closure Date	Season Length (95% CI)
2022-23	40.66%	1,712,412	No Closure	No Closure
2026-27	40.66%	1,043,476	No Closure	No Closure
2022-23	29.85%	1,257,144	No Closure	No Closure
2026-27	29.85%	766,054	No Closure	Dec 27 - No Closure

- The commercial split season was first implemented for the 2020-21 fishing year on February 26, 2020, through Regulatory Amendment 27 to the Snapper Grouper FMP. This measure was put in place to help extend the commercial fishing season throughout the year (excluding the April spawning closure). Data for the 2020-21 fishing year has not yet been finalized.
- Season lengths were projected with cumulative landings and upper and lower 95% confidence intervals compared to the different recreational ACL options (**Table 5**). The predicted closure dates span from September 20 to no closure needed.
 - Projections include the lowest (**Action 2-Alternative 1 (No Action)**; 59.34%) and lowest (**Action 2-Alternative 2**; 70.15%) recreational allocations considered. The recreational allocation of **Action 2-Alternative 3** is between these values, thus predicted closure dates for this alternative would be within the range of September 20 to no closure needed.

Table 5. The projected closure dates for greater amberjack by fishing year and different allocation options using either a three or five-year average of recent landings with 95% confidence interval (CI). These projections assume the total annual catch limits from **Action 1-Preferred Alternative 2** and include the initial (2022-23) and terminal (2026-27) projected fishing years for **Action 2-Alternative 1 (No Action)** and **Alternative 2**.

Fishing Year	Recreational Allocation	ACL (lbs ww)	Projection Method	Closure Date	Season Length (95% CI)
2022-23	59.34%	2,599,092	3-year	No Closure	No Closure
2026-27	59.34%	1,583,785	3-year	No Closure	Sep 7 - No Closure
2022-23	70.15%	3,072,570	3-year	No Closure	No Closure
2026-27	70.15%	1,872,304	3-year	No Closure	Jan 8 - No Closure
2022-23	59.34%	2,599,092	5-year	No Closure	Dec 16 - No Closure
2026-27	59.34%	1,583,785	5-year	September 20	Jul 16 - No Closure
2022-23	70.15%	3,072,570	5-year	No Closure	No Closure
2026-27	70.15%	1,872,304	5-year	January 30	Aug 4 - No Closure

Action 3. Remove recreational annual catch targets from the Snapper Grouper Fishery Management Plan

Alternative 1 (No Action). Retain current recreational annual catch targets for species managed under the Snapper Grouper FMP.

Alternative 2. Remove current recreational annual catch targets for species managed under the Snapper Grouper FMP.

Discussion:

- Recreational annual catch targets (ACTs) established through the Comprehensive ACL Amendment have been in place since 2012, are not codified, and are not used for management purposes. **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. **Alternative 2** would remove ACTs from both individual species and complexes.

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
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

How to Comment

The Council requests that written comments be submitted using the online public comment form for each amendment available from the Public Hearings and Scoping Meetings page at <https://safmc.net/safmc-meetings/public-hearings-scoping-meetings/>.

Comments submitted using the online comment form are immediately posted to the Council's website and available for all Council members and the public to view.

Written comments must be received by 5:00 PM on Friday, April 16, 2021.

Comments by mail: Send comments to John Carmichael, Executive Director, SAFMC, 4055 Faber Place Drive, Suite 201, N. Charleston, SC 29405.

Comments by fax: 843/769-4520.

The Council will hold Scoping Meetings via webinar on April 14 and 15, 2021, at 6 PM. To access the Scoping Document or Presentation, provide comments, or register for Scoping Meetings, please use the link above or contact the Council office at 843/571-4366 (toll free 866/SAFMC-10).