Amendment 53

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

Catch Level Adjustments, Rebuilding Schedule, and Allocations for Gag

Decision Document

September 2022

Background

The most recent stock assessment for gag, SEDAR71, was completed in 2021. The terminal year of the assessment is 2019. This assessment used revised estimates for recreational catch from the Marine Recreational Information Program (MRIP) based on the Fishing Effort Survey (FES). The results of this assessment indicated that the stock is overfished and experiencing overfishing (**Figure 1**). The Council's Scientific and Statistical Committee (SSC) reviewed SEDAR 71 at their April 2021 meeting and

determined that the assessment is based on the best scientific information available (BSIA). SEDAR Assessment:

http://sedarweb.org/docs/sar/SEDAR_71_SAR_4.19.21_final_withaddendum.pdf/

Gag management measures have been modified through past amendments to end overfishing and better achieve ACLs. These modifications have included changes to the bag limit, minimum size limit, and season length (**Appendix A**).

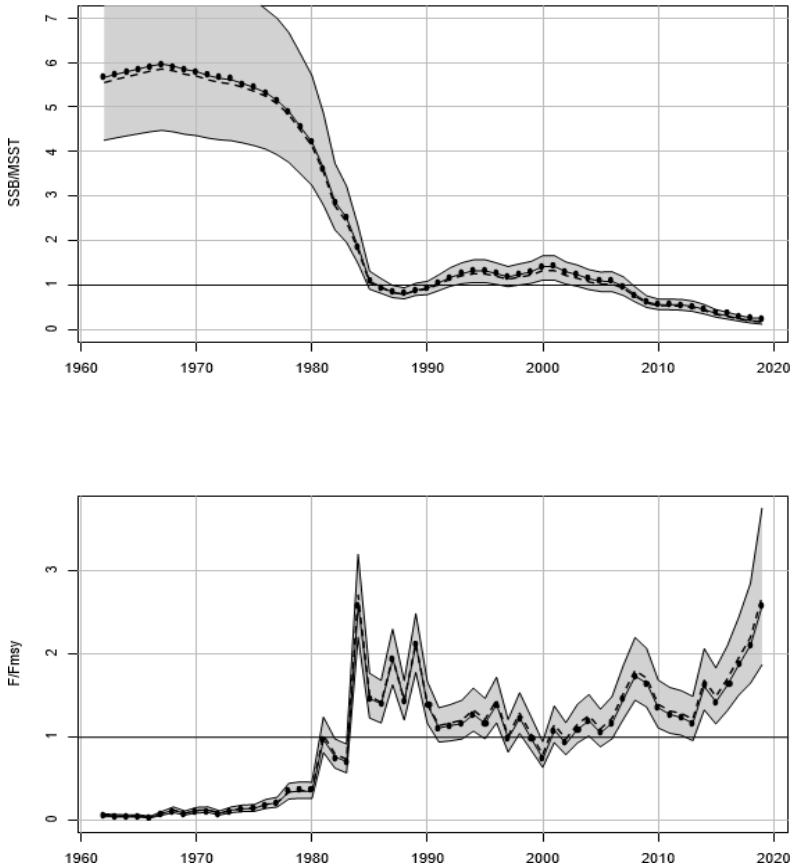

Figure 1. Estimated time series of spawning stock biomass (SSB) and fishing mortality (F) relative to benchmarks. Solid line indicates estimates from base run of the Beaufort Assessment Model; gray error bands indicate 5th and 95thpercentiles of the ensemble modeling. Top panel: SSB relative to the minimum stock size threshold (MSST); if less than 1, stock is overfished. Bottom panel: F relative to F_{MSY}; if > 1 stock is undergoing overfishing. *Source: SEDAR 71 (2021).*

The Council reviewed the results of the assessment and the SSC's recommendations for the overfishing limit (OFL) at their June 2021 meeting and initiated a plan amendment to adjust catch levels to end overfishing and rebuild the stock.

The National Marine Fisheries Service (NMFS) notified the Council on July 23, 2021, that management action is necessary for gag as thestock is undergoing overfishing and remains overfished. Once the Council is notified that a stock is undergoing overfishing and is overfished, the Magnuson-Stevens Fishery Conservation and Management Act requires the Council and NMFS to end overfishing immediately and implement a rebuilding plan within two years.

Under National Standard 1 guidelines, if astock can be rebuilt in 10 years or less, then the rebuilding plan may not exceed 10 years. Assessment projections indicated the gag stock can rebuild in 7 years in the absence of fishing mortality, therefore, the rebuilding plan for gag may not exceed 10 years.

During their April 2022 meeting, the Snapper Grouper Advisory Panel (AP) reviewed adiscussion document updated after the March 2022 Council meeting, which included some preferred alternatives. AP comments are provided in the AP Report.

Fishery Overview: https://safmc-shinyapps.shinyapps.io/SA_FisheryDataGag/

Table 1. A summary of the stock status and milestone history for South Atlantic snowy grouper.

Background Overview		
SEDAR History	**Stock Status**	
Assessment	**Overfished**	**Overfishing**
SEDAR 10 (2006)		X
SEDAR 10 Update (2014)		X
SEDAR 71 (2021)	X	X
Pre-Amendment Action Schedule		
Assessment results reviewed	21-Jun	
Direction to start amendment	21-Jun	
Rebuilding timeframe (T_{max}) provided	21-Sep	
NFMS letter received	July 23rd 2021	

Proposed management changes in this amendment

- Establish a rebuilding plan
- Adjust catch levels (acceptable biological catch and annual catch limit) and revise annual optimum yield
- Revise sector allocations
- Consider other changes to management

Objectives for this meeting

- Review actions and alternatives and preliminary effects analysis
- Select preferred alternatives as appropriate
- Approve amendment for public hearings

Amendment timing

June 2021	Reviewed SEDAR 71 results and direct staff to begin a plan amendment
September 2021	Review options paper and provide guidance to staff
October 2021	Obtain input from AP
December 2021	Review AP comments, review preliminary analyses, and approve for scoping
March 2022	Review scoping comments and make needed modifications
April 2022	Obtain input from AP
June 2022	Preliminary analysis, and provide guidance to staff
September 2022	**Review draft amendment, select preferred alternatives, and approve for public hearings**
Fall 2022	Conduct public hearings
December 2022	Review public hearing comments, select preferred alternatives, and approve all actions
March 2023	Review final amendment and approval for final review

Council action at previous meeting

- **Purpose and Need:** Accepted the addition of overfishing limit to the purpose statement
- **Action 3 (Allocations):** Selected Alternative 4 (Share the Pain, Share the Gain Method), Sub-Alternative 4b (5 yr basis for method) as the preferred alternative.
- **Action 4a (Commercial Trip Limit):** Directed IPT to develop additional alternatives which incorporate an increasing trip limit based on projected landings from the decision tool and selected Alternative 2 as the preferred.
- **Action 4b (Commercial Spawning Season Closure):** Selected Alternative 1 (No Action) as the preferred alternative.

- **Action 5a (Recreational Vessel Limit):** Directed staff to include additional alternatives that incorporate both a separation of recreational vessel types and an increasing vessel/bag limit.
- **Action 5b (Recreational Spawning Season Closure):** Selected Alternative 1 (No Action) as the preferred alternative.
- **Action 6 (Commercial Accountability Measures):** Removed Action.
- **Action 7 (Recreational Accountability Measures):** Directed staff to remove Alternative 5, selected Alternative 4 (retain in-season closure, un-coupling post-season AM from total ACL) as the preferred alternative.

Purpose and Need Statements

The *purpose* of this fishery management plan amendment is to establish a rebuilding plan, set an acceptable biological catch and overfishing limit, revise annual catch limits and sector allocations, and make modifications to management measures and accountability measures for South Atlantic gag based on the results of the most recent stock assessment.

The *need* for this fishery management plan amendment is to end overfishing of South Atlantic gag, rebuild the stock, and achieve optimum yield while minimizing, to the extent practicable, adverse social and economic effects.

DRAFT MOTION: APPROVE PURPOSE AND NEED STATEMENT, AS REVISED.

Proposed Actions

Action 1. Establish a rebuilding plan for gag

Purpose of Action

A rebuilding plan must be established to end overfishing and rebuild the stock of gag in the South Atlantic as a result of the overfished determination from the SEDAR 71 (2021) stock assessment.

Alternative 1 (No Action). The South Atlantic stock of gag is currently not under a rebuilding plan.

Alternative 2. Establish a rebuilding plan with a rebuilding timeframe to equal the shortest possible time to rebuild in the absence of fishing mortality (T_{min}). This would equal 7 years with the rebuilding period ending in 2029. 2023 would be Year 1.

Preferred Alternative 3. Establish a rebuilding plan with a rebuilding timeframe to equal T_{max}. This would equal 10 years with the rebuilding period ending in 2032. 2023 would be Year 1.

Table 2. ACL, OY, and ABC alternatives of **Action 1**.

Alternative	Rebuilding Timeframe	Terminal Year
Alternative 1 (no change)	0 years	NA
Alternative 2	T_{min}, 7 Years	2029
Preferred Alternative 3	**T_{max}, 10 Years**	**2032**

Discussion:

- Note that **Alternative 2** assumes that fishing mortality is zero and discards are eliminated. Therefore, it can be expected that under this scenario rebuilding would take longer than 7 years if discards are assumed to be greater than zero.

- Guidance on how to define the upper (Tmax) and lower (Tmin) bounds of a rebuilding schedule are specified in the National Standard 1 (NS1) Guidelines[1]

    - "Tmin means the amount of time the stock or stock complex is expected to take to rebuild to its MSY biomass level in the absence of any fishing mortality. In this context, the term "expected" means to have at least a 50 percent probability of attaining the Bmsy, where such probabilities can be calculated. The starting year for the T_{min} calculation should be the first year

[1] National Standard Guidelines are available at the following web address: https://www.fisheries.noaa.gov/national/laws-and-policies/national-standard-guidelines.

that the rebuilding plan is expectedto be implemented."

- "If T_{min} for the stock or stock complex is 10 years or less, then T_{max} is 10 years."

- Assessment projections indicated the gag stock can rebuild in 7 years in the absence of fishing mortality; therefore, the rebuilding plan for gag may not exceed 10 years.

Summary of Biological Effects:

- Ranking (highest potential biological benefit to lowest):
  1. **Alternative 2**
  2. **Preferred Alternative 3**
- Additional considerations:
  - **Alternative 1 (No Action)** is not a viable alternative.
  - A rebuilding plan that is expected to rebuild the stock in less time is expected to provide the greatest biological benefit.

Summary of Economic Effects:

- Ranking (highest potential economic benefit to lowest):
  1. **Alternative 2**
  2. **Preferred Alternative 3**
- Additional considerations:
  - Ranking considers the long-term economic benefit
  - A shorter rebuilding period could potentially accrue benefits sooner than a longer rebuilding period.

Summary of Social Effects:

- Ranking (highest potential social benefit to lowest):
  1. **Preferred Alternative 3**
  2. **Alternative 2**
- Additional considerations:
  - **Preferred Alternative 3** is likely to have fewer short-term negative social effects as it establishes a longer rebuilding schedule than **Alternative 2.**

Committee Action:

- REVIEW DRAFT EFFECTS.
- REVIEW RANGE OF ALTERNATIVES.

Action 2. Revise the overfishing limit, acceptable biological catch, total annual catch limit, and annual optimum yield for gag to reflect the new overfishing limit and updated acceptable biological catch recommendations

Purpose of Action

The gag total annual catch limit (ACL) is being revised to incorporate the new acceptable biological catch (ABC) recommendations of the SSC, based on the SEDAR 71 (2021) stock assessment, as well as the updated recreational landings from the Marine Recreational Information Program's (MRIP) Fishing Effort Survey (FES).

Alternative 1 (No Action). The total annual catch limit and annual optimum yield for gag are equal to 95% of the **current** acceptable biological catch (734,350 pounds gutted weight). The current acceptable biological catch and overfishing limit are inclusive of recreational estimates from the Marine Recreational Information Program's Coastal Household Telephone Survey.

Preferred Alternative 2. Revise the acceptable biological catch and overfishing limit for gag and set them equal to the most recent recommendation from the Scientific and Statistical Committee. Revise the total annual catch limit and annual optimum yield for gag and set them **equal to the recommended** acceptable biological catch. The recommended acceptable biological catch and overfishing limit are inclusive of recreational estimates from the Marine Recreational Information Program's Fishing Effort Survey.

Alternative 3. Revise the acceptable biological catch and overfishing limit and set them equal to the most recent recommendation from the Scientific and Statistical Committee. Revise the total annual catch limit and annual optimum yield for gag and set them equal to **95% of the recommended** acceptable biological catch. The recommended acceptable biological catch and overfishing limit are inclusive of recreational estimates from the Marine Recreational Information Program's Fishing Effort Survey.

Alternative 4. Revise the acceptable biological catch and overfishing limit and set them equal to the most recent recommendation from the Scientific and Statistical Committee. Revise the total annual catch limit and annual optimum yield for gag and set them equal to **90% of the recommended** acceptable biological catch. The recommended acceptable biological catch and overfishing limit are inclusive of recreational estimates from the Marine Recreational Information Program's Fishing Effort Survey.

Table 3. Summary of ACL, OY, and ABC alternatives for **Action 2**.

Alternative	ABC, total ACL, annual OY	Recreational landings data used
Alternative 1 (No Action)	ACL=OY=current ABC	MRIP-CHTS
Preferred Alternative 2	**ACL=OY=updated ABC**	**MRIP-FES**
Alternative 3	ACL=OY=95% updated ABC	MRIP-FES
Alternative 4	ACL=OY=90% updated ABC	MRIP-FES

Table 4. Total ACL values in pounds gutted weight for each alternative under **Action 2**.

	ACL (pounds gw)									
	2023	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032***
Alternative 1**	734,350	734,350	734,350	734,350	734,350	734,350	734,350	734,350	734,350	734,350
Preferred Alternative 2***	**175,632**	**261,171**	**348,352**	**435,081**	**524,625**	**617,778**	**711,419**	**800,088**	**879,758**	**948,911**
Alternative 3***	166,850	248,112	330,934	413,327	498,394	586,889	675,848	760,084	835,770	901,465
Alternative 4***	158,069	235,054	313,517	391,573	472,163	556,000	640,277	720,079	791,782	854,020

*2032 values would remain in place until modified.
**The ACL for Alternative 1 is inclusive of recreational landings tracked using the MRIP Coastal Household Telephone Survey.
***The ACLs for Alternatives 2 through 5 would be inclusive of recreational landings tracked using the MRIP Fishing Effort Survey.

Discussion:

- The Council has specified OY=ACL=ABC for most snapper grouper species. NS 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 landed catch, as discards are estimated elsewhere in the assessment.

- While not applicable to the existing sector ACL, recreational landings were similar to commercial landings in recent years when examined in FES terms (**Figure 2**).

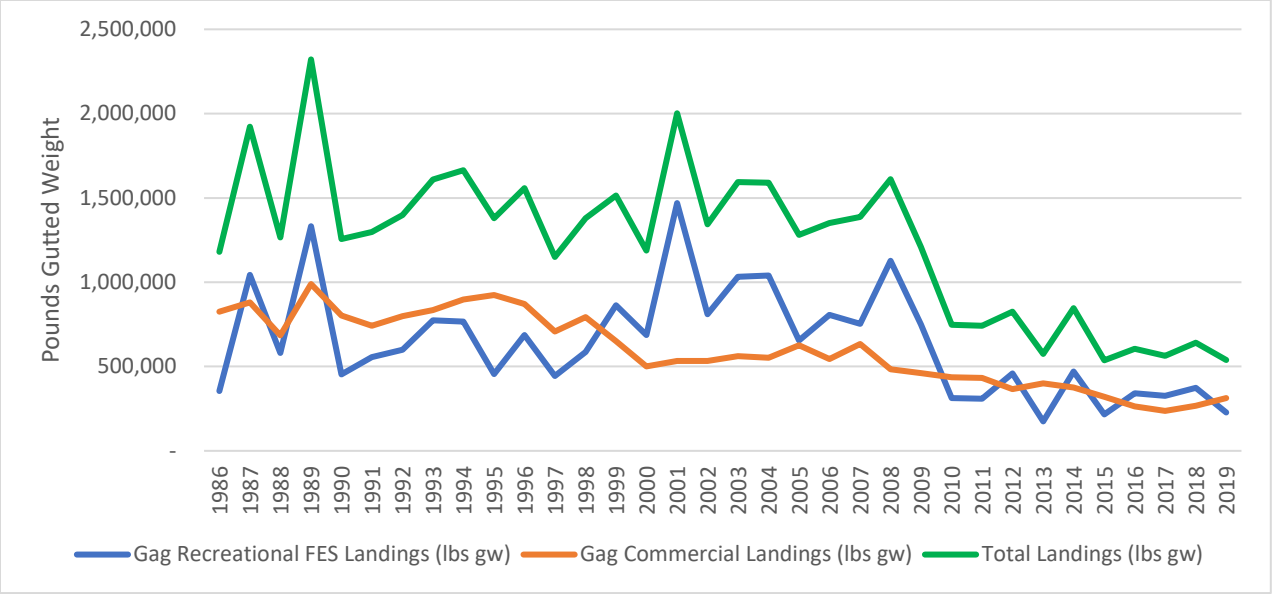

Figure 2. The recreational (MRIP FES) (blue), commercial landings (orange), and total landings (green) from 1986-2019.

- When compared to the last 5 years of total landings (lbs gw, inclusive of MRIP FES recreational landings) the ACL is predicted to be constraining on harvest when compared to average 2015-2019 landings until the year 2028 when it is higher than average 2015-2019 landings (**Figure 3**).

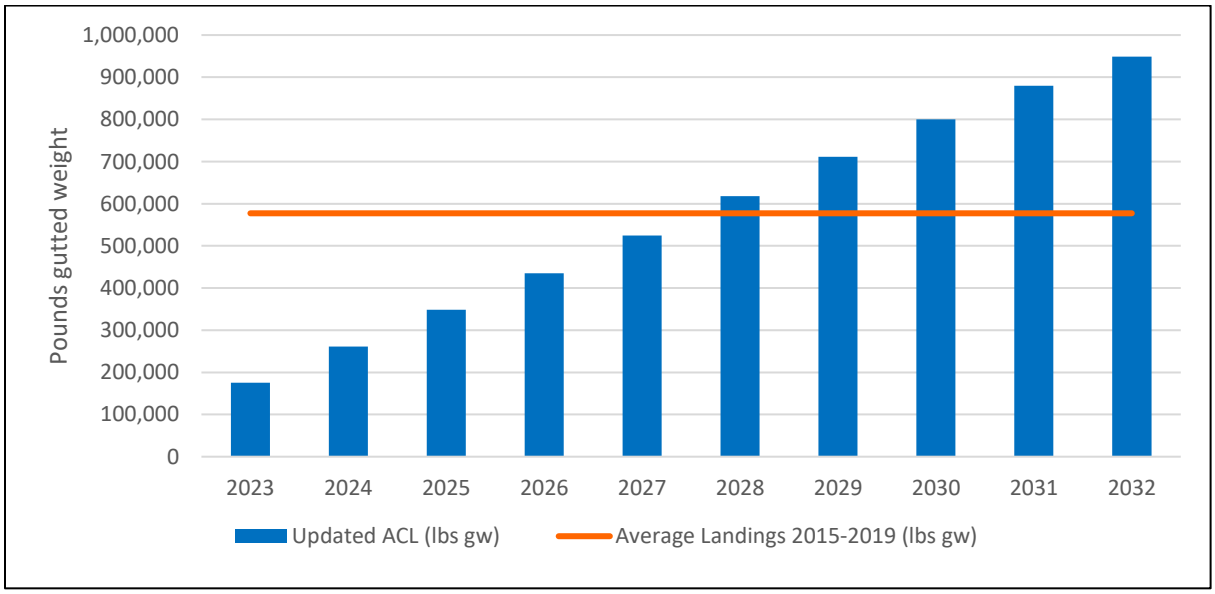

Figure 3. The comparison of the total gag landings (i.e. commercial and recreational) from 2015-2019 (orange line) and proposed total ACLs (blue) under **Preferred Alternative 2** for **Action 2.**

Summary of Biological Effects:

- Ranking (highest potential biological benefit to lowest):
  1. **Alternative 4**
  2. **Alternative 3**
  3. **Preferred Alternative 2**
- Additional considerations:
  - **Alternative 1 (No Action)** is not a viable alternative since it includes an ACL that would not end the overfishing of the stock and is not based on BSIA.
  - Lower ACLs (**Alternative 3** and **4**) would result in fewer fish to catch, earlier closures, and higher regulatory discards. Higher ACLs (**Pref. Alt 2**) would allow for more fish to catch resulting in longer seasons/later closures and lower regulatory discards.

Summary of Economic Effects:

- Ranking (highest potential economic benefit to lowest):
  1. **Preferred Alternative 2**
  2. **Alternative 3**
  3. **Alternative 4**
- Additional considerations:
  - ACLs that allow for more fish to be landed can result in increased economic benefits as long as those ACLs do not affect the long-term health of the stock.

Summary of Social Effects:

- Ranking (highest potential social benefit to lowest):
  1. **Preferred Alternative 2**
  2. **Alternative 3**
  3. **Alternative 4**
- Additional considerations:
  - ACLs do not directly affect resource users, rather the likelihood of an AM being triggered has social effect.
  - A higher ACL lowers the chance of an AM being triggered and therefore negative social effects.

Committee Action:

- REVIEW DRAFT EFFECTS.
- REVIEW RANGE OF ALTERNATIVES.

Action 3. Revise the gag sector allocations and sector annual catch limits

Purpose of Action

Allocations need to be reviewed since the recreational landings stream changed in the new assessment. Recreational landings are now estimated using data from the Fishing Effort Survey (FES) rather than the Coastal Household Telephone Survey (CHTS).

Alternative 1 (No Action). Retain the current commercial and recreational allocations as 51.00% and 49.00%, respectively, of the revised total annual catch limit for gag.

Alternative 2. Allocate 36.37% of the revised total annual catch limit for gag to the commercial sector and 63.63% of the revised total annual catch limit for gag to the recreational sector.

Alternative 3. Allocate 43.06% of the revised total annual catch limit for gag to the commercial sector and 56.94% of the revised total annual catch limit for gag to the recreational sector.

Preferred Alternative 4. To determine allocations throughout the rebuilding plan, use the following method: Use the total commercial and Marine Recreational Information Program Fishery Effort Survey recreational landings (*Sub-Alternatives 4a and 4b*) as a baseline for initial reductions; apply the percent reduction from the total landings scenarios to the 2023 total annual catch limit evenly between sectors; apply each subsequent annual increase in the total annual catch limit evenly to each sector annual catch limit for Year 2 and each year thereafter throughout the rebuilding plan. Sector annual catch limits in the terminal year of the rebuilding plan (2032) would remain in place until modified.

> **Sub-Alternative 4a**. To determine allocations throughout the rebuilding plan, use the average commercial and recreational Marine Recreational Information Program Fishing Effort Survey landings from 2017-2019 as the baseline (3-year average).
>
> **Preferred Sub-Alternative 4b**. To determine allocations throughout the rebuilding plan, use the average commercial and recreational Marine Recreational Information Program Fishing Effort Survey landings from 2015-2019 as the baseline (5-year average).

Table 5. A summary of alternatives for **Action 3**.

Alternative	Commercial/Recreational Allocation	Basis for allocation
Alternative 1 (No Action)	51.00%/49.00%	Landings distribution 1999-2003 used in Amendment 19 that incorporated CHTS recreational landings
Alternative 2	36.37%/63.63%	Updated landings distribution 1999-2003 incorporating MRIP FES recreational landings
Alternative 3	43.06%/56.94%	Comp ACL Amendment Allocation Formula that uses (0.5*landings from 1986 to 2008)+(0.5*landings from 2006 to 2008).
Preferred Alternative 4		
Sub-alternative 4a	Changes each year depending on initial decrease and subsequent increases	Distribution of commercial and recreational (MRIP FES) landings from 2017-2019
Preferred Sub-alternative 4b	Changes each year depending on initial decrease and subsequent increases	Distribution of commercial and recreational (MRIP FES) landings from 2015-2019

Note: all alternatives applied to the preferred alternative for the total ACL in **Action 2**.

Table 6. Total ACL and allocations for **Alternatives 1 (No Action)-3** under **Action 3**.

Alternative 1 (No Action)			
Year	**Total ACL (lbs gw)**	**Total Commercial ACL (lbs gw) (51%)**	**Recreational ACL (lbs gw) (49%)**
2023	175,632	89,572	86,060
2024	261,171	133,197	127,974
2025	348,352	177,660	170,692
2026	435,081	221,891	213,190
2027	524,625	267,559	257,066
2028	617,778	315,067	302,711
2029	711,419	362,824	348,595
2030	800,088	408,045	392,043
2031	879,758	448,677	431,081
2032	948,911	483,945	464,966
Alternative 2			
Year	**Total ACL (lbs gw)**	**Total Commercial ACL (lbs gw) (36.37%)**	**Recreational ACL (lbs gw) (63.63%)**
2023	175,632	63,877	111,755
2024	261,171	94,988	166,183
2025	348,352	126,696	221,656
2026	435,081	158,239	276,842
2027	524,625	190,806	333,819
2028	617,778	224,686	393,092
2029	711,419	258,743	452,676
2030	800,088	290,992	509,096
2031	879,758	319,968	559,790
2032	948,911	345,119	603,792
Alternative 3			
Year	**Total ACL (lbs gw)**	**Total Commercial ACL (lbs gw) (43.06%)**	**Recreational ACL (lbs gw) (56.94%)**
2023	175,632	75,627	100,005
2024	261,171	112,460	148,711
2025	348,352	150,000	198,352
2026	435,081	187,346	247,735
2027	524,625	225,904	298,721
2028	617,778	266,015	351,763
2029	711,419	306,337	405,082
2030	800,088	344,518	455,570
2031	879,758	378,824	500,934
2032	948,911	408,601	540,310

Note: The revised sector annual catch limits in Alternative 1 (No Action) through 3 reflect the revised total annual catch limit in Preferred Alternative 2 of Action 2. The revised total annual catch limit includes recreational landings from MRIP using the FES method where appropriate, as well as updates to commercial and headboat landings used in the latest assessment (SEDAR 71).

- **Tables 7** and **8** present sector ACLs under **Sub-Alternative 4a** and **Preferred Sub-Alternative 4b**.

Table 7. Sector ACLs for **Sub-Alternative 4a** for **Action 3**, based on average gag landings from 2017-2019. Recreational landings are based on the MRIP FES method. Total ACL is reflective of Preferred Alternative 2 of Action 2.

Basis Years	Average Commercial Landings (lbs gw)	Average Recreational Landings (lbs gw)	Total Landings (lbs gw)
Average from 2017-2019	231,736	364,331	596,067

Year 1 Allocations						
Year 1	**Total ACL (lbs gw)**	**Percent Reduction Needed**	**Commercial ACL (lbs gw)**	**Commercial Allocation %**	**Recreational ACL (lbs gw)**	**Recreational Allocation %**
2023	175,632	71%	68,281	39%	107,350	61%

Remaining Rebuilding Years Allocations							
Years 2-10	**Total ACL (lbs gw)**	**Total Increase from Previous Year**	**Total Increase for Each Sector**	**Commercial ACL (lbs gw)**	**Commercial Allocation %**	**Recreational ACL (lbs gw)**	**Recreational Allocation %**
2024	261,171	85,539	42,770	111,051	43%	150,120	57%
2025	348,352	87,181	43,591	154,641	44%	193,710	56%
2026	435,081	86,729	43,365	198,006	46%	237,075	54%
2027	524,625	89,729	44,772	242,778	46%	281,847	54%
2028	617,778	89,544	46,577	289,354	47%	328,423	53%
2029	711,419	93,544	46,821	336,175	47%	375,244	53%
2030	800,088	79,670	44,335	380,509	48%	419,578	52%
2031	879,758	79,670	39,835	420,344	48%	459,413	52%
2032	948,911	69,153	34,576	454,921	48%	493,990	52%

Table 8. Sector ACLs for **Preferred Sub-Alternative 4b** for **Action 3**, based on average gag landings from 2015-2019. Recreational landings are based on MRIP FES methods. Total ACL is reflective of Preferred Alternative 2 of Action 2.

Basis Years	Average Commercial Landings (lbs gw)	Average Recreational Landings (lbs gw)	Total Landings (lbs gw)
Average from 2015-2019	280,440	296,804	577,244

Year 1 Allocations						
Year 1	**Total ACL (lbs gw)**	**Percent Reduction Needed**	**Commercial ACL (lbs gw)**	**Commercial Allocation %**	**Recreational ACL (lbs gw)**	**Recreational Allocation %**
2023	175,632	70%	85,326	49%	90,306	51%

Remaining Rebuilding Years Allocations							
Year 2-10	**Total ACL (lbs gw)**	**Total Increase from Previous Year**	**Total Increase for Each Sector**	**Commercial ACL (lbs gw)**	**Commercial Allocation %**	**Recreational ACL (lbs gw)**	**Recreational Allocation %**
2024	261,171	85,539	42,770	128,096	49%	133,057	51%
2025	348,352	87,181	43,591	171,687	49%	176,666	51%
2026	435,081	86,729	43,365	215,051	49%	220,030	51%
2027	524,625	89,729	44,772	259,823	50%	264,802	50%
2028	617,778	89,544	46,577	306,400	50%	311,379	50%
2029	711,419	93,544	46,821	353,220	50%	358,199	50%
2030	800,088	88,669	44,335	397,555	50%	402,534	50%
2031	879,758	79,670	39,835	437,390	50%	442,369	50%
2032	948,911	69,153	34,577	471,966	50%	476,945	50%

Discussion:

- **Preferred Alternative 4** is a novel allocation method that was proposed in December 2021. The method aims to implement the equal reductions in harvest needed in year one to achieve updated catch levels, proportional on a percent-basis to the way the fishery is operating. After the initial year, the catch levels increase, and this increase is split equally between sectors.

- For the last 5 years, both sectors have been harvesting under their respective sector ACLs. There have been no in-season closures for gag from 2015-2019 for either sector.

- The proposed commercial ACLs for 2023-2027 for all alternatives (colored bars) are below the average commercial landings from 2015-2019 (blue dashed line), with **Alternative 1 (No Action)** nearing average landings in 2027 (**Figure 4**).

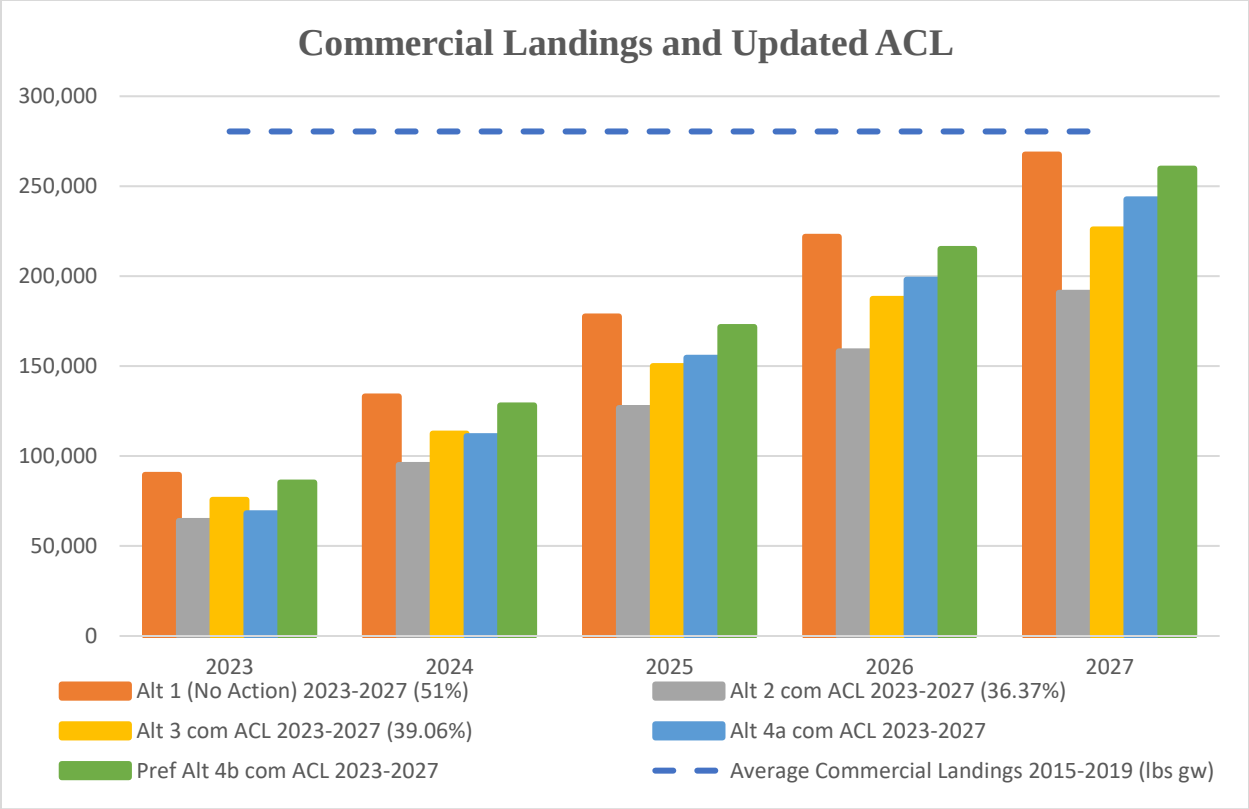

Figure 4. Average commercial landings (lbs gw) from 2015-2019 compared to the proposed ACLs from **Alternative 1 (No Action) – Preferred Sub-Alternative 4b** for **Action 3**.

- The proposed recreational ACLs for 2023-2027 for all alternatives (colored bars) are below the average recreational landings from 2015-2019 (blue dashed line), with **Alternative 2** and **Alternative 3** nearing average landings in 2027 (**Figure** 5).

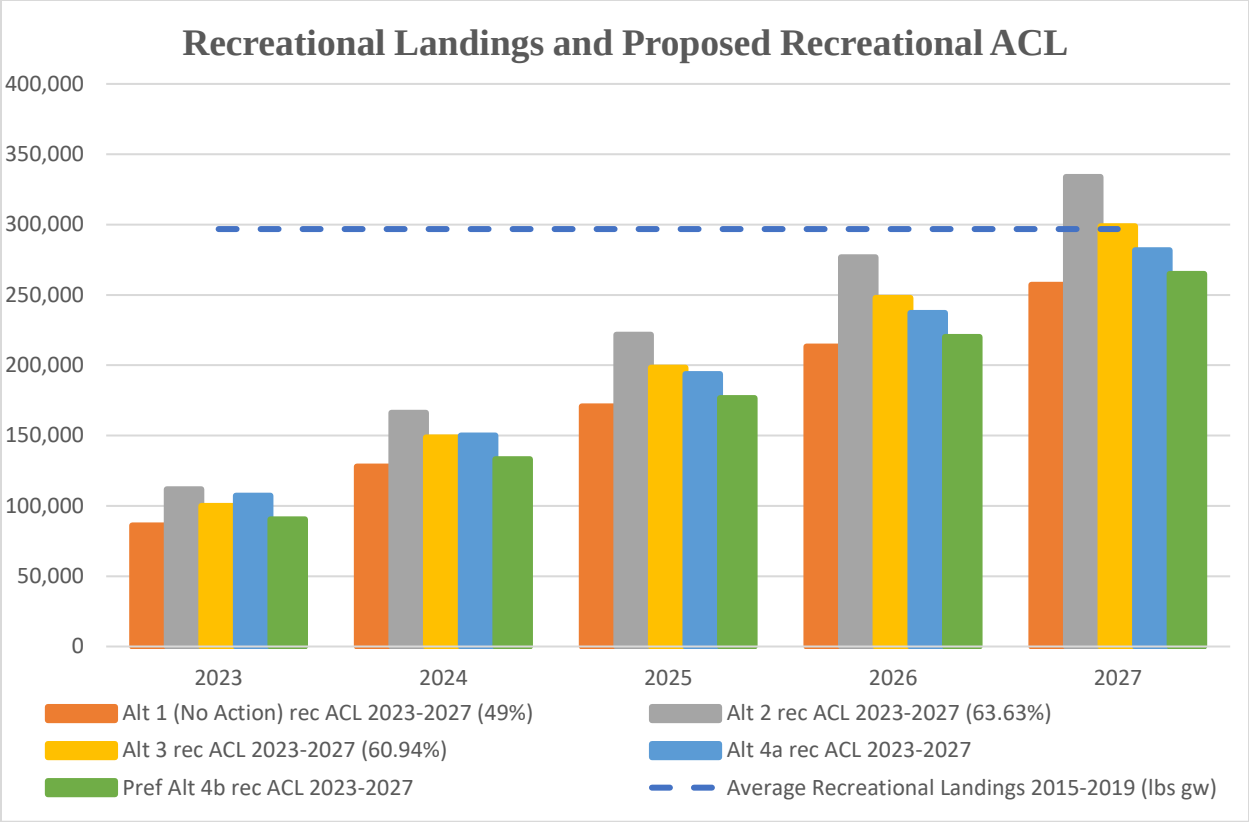

Figure 5. Average recreational landings (lbs gw) from 2015-2019 (MRIP FES units) compared to the proposed ACLs from **Alternative 1 (No Action) – Preferred Sub-Alternative 4b** for **Action 3**.

Preliminary Analysis:

- The predicted season length for each sector is summarized in **Table 9**:
    - Commercial sector
        - Under **Alternatives 2** and **3** the commercial sector is predicted to close in early June within the first year of the rebuilding plan (2023).
        - By 2027 the season is predicted to close in early November for **Alternative 2** and mid-December for **Alternative 3**.
        - By 2032 (end of the rebuilding plan) there are no expected closures. 2029 is the first year the landings are predicted to be below the commercial ACL.
        - Under **Sub-Alternatives 4a** and **4b (Preferred)** the commercial sector is predicted to close for early June and end of June respectively, within the first year of the rebuilding timeframe (2023). In 2027 and thereafter, there are no expected closures.
    - Recreational sector
        - Under **Alternative 2** the recreational sector is predicted to close after 58 days in 2023. The recreational season is predicted to continue to close each year until 2027. 2027 and each year thereafter, throughout the rebuilding plan there are no expected closures.

  - Under **Alternative 3**, a 52-day season, closing in June is predicted in 2023. The season length is predicted to increase in 2027, with a closure expected in early December. After 2028, there are no expected closures under this alternative.
  - Under **Sub-alternatives 4a** and **4b (Preferred)** a roughly 50-day season is expected in 2023 for both alternatives. Closures are predicted to continue through 2027 where the season is expected to close in early November for **Sub-Alternative 4a** and mid-October for **Preferred Sub-Alternative 4b**. By 2028 and thereafter, closures are not expected.

- See **Appendix C** for full analysis.

Table 9. The projected South Atlantic gag commercial and recreational landings (lbs gw) and closure dates expected with each proposed annual catch limit alternative for **Action 3**. **Alternative 1 (No Action)** of **Action 3** is omitted since it is identical to Action 2 Alternatives.
Note: All sector allocation options considered in **Action 3** were applied to the revised total ACL of preferred Alternative 2 of Action 2. All ACLs and projected landings are in pounds gutted weight.
*The recreational ACLs presented are inclusive of recreational landings tracked using the MRIP Fishing Effort Survey.

Action 3, Alternative 2: 63.63% recreational and 36.37% commercial								
Year	Rec. ACL*	Predicted Rec. Landings	Rec. Closure Date	Days Open in Rec. Season	Comm. ACL	Predicted Comm. Landings	Comm. Closure Date	Days Open in Comm. Season
2023	111,755	311,339	**Jun 28**	58	63,877	231,667	**Jun 9**	39
2027	333,819		None	245	190,806		**Nov 4**	187
2032	603,792		None	245	345,119		None	245
Action 3, Alternative 3: 43.06% recreational and 56.94% commercial								
Year	Rec. ACL*	Predicted Rec. Landings	Rec. Closure Date	Days Open in Rec. Season	Comm. ACL	Predicted Comm. Landings	Comm. Closure Date	Days Open in Comm. Season
2023	100,005	311,339	**Jun 22**	52	75,627	231,667	**Jun 18**	48
2027	298,721		**Dec 9**	222	225,904		**Dec 22**	235
2032	540,310		None	245	408,601		None	245
Action 3, Sub-Alternative 4a: 3-year average shared reduction								
Year	Rec. ACL*	Predicted Rec. Landings	Rec. Closure Date	Days Open in Rec. Season	Comm. ACL	Predicted Comm. Landings	Comm. Closure Date	Days Open in Comm. Season
2023	107,350	311,339	**Jun 26**	56	68,281	231,667	**Jun 12**	42
2027	281,847		**Nov 9**	192	242,778		None	245
2032	493,990		None	245	454,921		None	245
Action 3, Preferred Sub-Alternative 4b: 5-year average shared reduction								
Year	Rec. ACL*	Predicted Rec. Landings	Rec. Closure Date	Days Open in Rec. Season	Comm. ACL	Predicted Comm. Landings	Comm. Closure Date	Days Open in Comm. Season
2023	90,306	311,339	**Jun 17**	47	85,327	231,667	**Jun 25**	55
2027	264,802		**Oct 22**	174	259,823		None	245
2032	476,945		None	245	471,966		None	245

Summary of Biological Effects:

- Ranking (highest potential biological benefit to lowest): Sector ACLs under this action would not be expected to result in any biological changes, positive or negative.
- Additional considerations:

- Higher sector ACLs for one sector could result in earlier closures for the other sector, however both sectors currently have AMs in place.

Summary of Economic Effects:

- Ranking (highest potential economic benefit to lowest):
  Commercial sector:
  1. **Alternative 1 (No Action)**
  2. **Preferred Sub-Alternative 4b**
  3. **Alternative 3**
  4. **Sub-Alternative 4a**
  5. **Alternative 2**

  Recreational Sector:
  1. **Alternative 2**
  2. **Sub-Alternative 4a**
  3. **Alternative 3**
  4. **Preferred Sub-Alternative 4b**
  5. **Alternative 1 (No Action)**
- Additional considerations:
  - Sector ACLs that allow for more fish to be landed can result in increased economic benefits.

Summary of Social Effects:

- Ranking (highest potential social benefit to lowest):
  Commercial sector:
  1. **Alternative 1 (No Action)**
  2. **Preferred Sub-Alternative 4b**
  3. **Alternative 3**
  4. **Sub-Alternative 4a**
  5. **Alternative 2**

  Recreational sector:
  1. **Alternative 2**
  2. **Sub-Alternative 4a**
  3. **Alternative 3**
  4. **Preferred Sub-Alternative 4b**
  5. **Alternative 1 (No Action)**
- Additional considerations:
  - Allocations that decrease a sector's ACL could have negative social effects.
  - Because of the reduction in catch from Action 2, regardless of the allocation, sector ACLs are expected to be constraining for both sectors initially.

Committee Action:

- REVIEW DRAFT EFFECTS.
- REVIEW RANGE OF ALTERNATIVES.

Action 4. Modify the commercial management measures for gag

4.1 Sub-action 4a. Reduce the commercial trip limit for gag

Purpose of Sub-action

The Council is considering modifying the commercial trip limit to achieve the reduction in harvest needed to constrain catch to the updated commercial ACLs, while maintaining an extended commercial season.

Alternative 1 (No Action). The commercial gag trip limit is 1,000 pounds gutted weight until 75% of the commercial annual catch limit is met, at which time the commercial trip limit is reduced to 500 pounds gutted weight for the remainder of the fishing year or until the commercial annual catch limit is met.

Alternative 2. Reduce the gag commercial trip limit to 200 pounds gutted weight.

Preferred Alternative 3. Reduce the gag commercial trip limit to 300 pounds gutted weight.

Alternative 4. Reduce the gag commercial trip limit to 400 pounds gutted weight.

Alternative 5. Reduce the gag commercial trip limit to 500 pounds gutted weight.

DRAFT Alternative 6. Reduce the gag commercial trip limit to 300 pounds gutted weight in 2023 then increase the commercial trip limit to 500 pounds gutted weight in 2026 and to 1,000 pounds gutted weight in 2027 where the trip limit would remain 1,000 and thereafter until modified.

Table 10. Summary of Alternatives under Action 4, Sub-action 4a.

Alternatives	Trip Limit
Alternative 1 (No Action)	1,000 lbs gw until 75% of the commercial ACL is met then 500 lbs gw
Alternative 2	200 lbs gw
Preferred Alternative 3	300 lbs gw
Alternative 4	400 lbs gw
Alternative 5	500 lbs gw
Alternative 6	300 lbs gw in 2023, 500 lbs gw in 2026, 1,000 lbs gw in 2027 and thereafter until modified

Discussion:

- The current gag commercial trip limit and step down were established through Regulatory Amendment 14 to the FMP (2014).

- Since its implementation, landings exceeded 75% of the commercial ACL in 2014, 2015, and 2016; however, the trip limit step-down was triggered in 2015 only.

- From 2014 to 2019 there has been only one commercial closure, which occurred in November of 2014 (**Table 11**).

Table 11. Commercial landings history under the current trip limit and step-downs from 2014 (implementation) to 2019.

Year	% Commercial ACL Used	Trip Limit Reduction Y/N	Reduction Date
2019	74.5	N	NA
2018	71.5	N	NA
2017	61.8	N	NA
2016	78.9	N	N
2015	96.3	Y	October 18, 2015
2014	102.9	N	N

Preliminary Analysis:

- A majority (78%) of trips harvesting gag landed less than 200 lbs gw, and most (94%) landed less than 500 lbs gw (**Figure 6**).

- See **Appendix C** for full analysis.

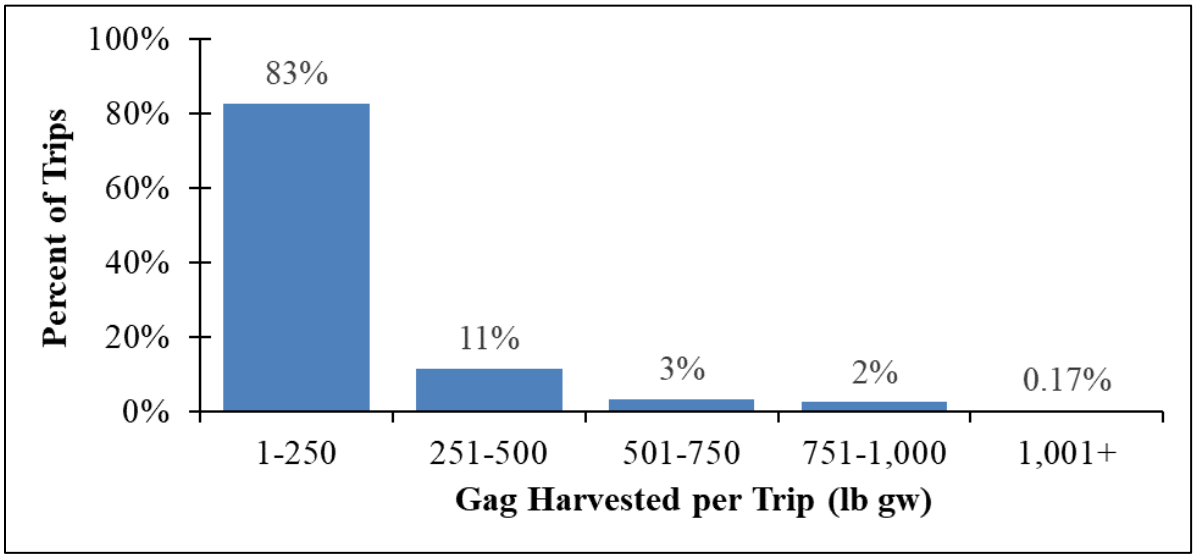

Figure 6. The percent of commercial trips (n=8,607) harvesting gag by bin from 2017 through 2019. Source: SEFSC commercial logbook (May 6, 2021).

Table 12. The predicted percent change in landings per trip from the current 1,000 lbs gw trip limit.

Current Trip Limit (lbs gw)*	Potential Trip Limit (lbs gw)	Predicted Change in Landings
1,000	500	-8%
1,000	400	-13%
1,000	300	-20%
1,000	200	-32%

* current trip limit includes a step down to 500 lbs gw when 75% of the commercial ACL is met.

- **Alternative 6** was developed after the June 2022 meeting where the Council gave the IPT discretion to determine the years where the commercial ACL would not be exceeded, and therefore appropriate to increase the commercial trip limit. The IPT constructed the following tables to display when overages are expected to end under different trip limits. The commercial overages were determined using the decision tool (see Attachment 5c) and are based on projected landings.

Table 13. The expected commercial ACL overage expected under the 300 lbs gw trip limit for **Alternative 6** for Sub-**Action 4a**. Note: the total ACL used is ACL=OY=ABC, commercial ACL is based on the Share the Pain Share the Gain (SPSG) 5 yr basis allocation method (Preferred Alternative 4, Preferred Sub-Alternative 4b of Action 3).

Year	Allocations Alternative	Trip Limit	Commercial ACL Overage? Y/N	Overage %
2023	SPSG, 5 yr basis	300 lbs gw	Y	117%
2024	SPSG, 5 yr basis	300 lbs gw	Y	45%
2025	SPSG, 5 yr basis	300 lbs gw	Y	8%
2026	SPSG, 5 yr basis	300 lbs gw	N	-14%
2027	SPSG, 5 yr basis	300 lbs gw	N	-29%
2028	SPSG, 5 yr basis	300 lbs gw	N	-40%
2029	SPSG, 5 yr basis	300 lbs gw	N	-48%
2030	SPSG, 5 yr basis	300 lbs gw	N	-53%
2031	SPSG, 5 yr basis	300 lbs gw	N	-58%
2032	SPSG, 5 yr basis	300 lbs gw	N	-61%

IPT Comments and Recommendation: The IPT recommends the following:

- The IPT notes that South Atlantic gag is scheduled to be assessed in 2025 with results anticipated in 2026. This could give the Council an idea of rebuilding success before the trip limit is increased, which could be done in a framework amendment if appropriate. As it is written now in **Alternative 6**, the trip limit would increase in 2026 and 2027 regardless of the rebuilding progress.
- The IPT emphasizes being cautionary due to uncertainties with rebuilding of the stock, the trip limit increases are based on ***projected*** landings from the decision tool. Is there another trigger the Council would like to consider?

- The commercial trip limit can be changed quickly through a framework amendment.

Summary of Biological Effects:

- Biological effects are not expected to differ among alternatives in terms of risk to overfishing because harvest would be limited to the commercial ACL.
- Under **Alternative 6**, the commercial trip limit would be increased regardless of whether adequate rebuilding occurs, which could have negative effects on the stock.
- Reducing the commercial trip limit could extend the length of the commercial season, therefore alternatives that provide the largest trip limit could result in a shorter season and an increase in discards.

Summary of Economic Effects:

- Ranking (highest potential economic benefit to lowest):
  1. **Alternative 1 (No Action)**
  2. **Alternative 5**
  3. **Alternative 4**
  4. **Alternative 6**
  5. **Preferred Alternative 3**
  6. **Alternative 2**
- Additional considerations:
    - Trip limits are not considered to be economically efficient since they require an increase in the number of trips to land the same amount of fish.
    - Negative economic effects of trip limits can be offset by supply limitations that lead to elevated prices and from the lengthening of fishing seasons.

Summary of Social Effects:

- Ranking (highest potential social benefit to lowest):
  1. **Alternative 6**
  2. **Alternative 1 (No Action)**
  3. **Alternative 5**
  4. **Alternative 4**
  5. **Preferred Alternative 3**
  6. **Alternative 2**
- Additional considerations:
    - Ranking is based on short-term social effects.
    - Lower trip limits would likely result in the largest reduction in landings, therefore negative social effects.
    - While shorter seasons can result in negative social effects, slowing the rate of harvest contributes to the rebuilding plan, which contributes to long-term social benefits.
    - Because of the reduction in harvest, **Alternative 1 (No Action)** through **Alternative 6** are all expected constrain harvest during the beginning of the rebuilding plan.

Committee Action:

- REVIEW DRAFT EFFECTS.
- REVIEW RANGE OF ALTERNATIVES.
    - Provide guidance on inclusion of **Alternative 6**.

4.2 Sub-action 4b. Modify the commercial spawning season closure for gag

Purpose of Sub-action

The Council is considering modifying the commercial spawning season closure to allow for an increased opportunity for gag spawning before being harvested.

Preferred Alternative 1 (No Action). The annual commercial gag spawning season closure is from January 1 through April 30.

Alternative 2. Extend the annual commercial gag spawning season closure to January 1 through May 31.

Alternative 3. Extend the annual commercial gag spawning season closure to December through April 30.

Alternative 4. Extend the annual commercial gag spawning season closure to December 1 through May 31.

Table 13. A summary of alternatives for **Action 4**, **Sub-action 4b**.

Alternatives	Spawning Season Closure
Alternative 1 (No Action)	January 1 - April 30
Alternative 2	One additional spring month (May)
Alternative 3	One additional winter month (December)
Alternative 4	One additional winter month (December) and one additional spring month (May)

Discussion:

- The gag spawning season closure was established through Amendment 16 to the FMP (2009) to protect gag grouper, and other shallow water groupers, spawning aggregations (Coleman *et al.* 2000). Spawning aggregations are particularly vulnerable to fishing gear due to aggression during these events (Thompson and Munro 1974; Gilmore and Jones 1992).

- In 2020, through Regulatory Amendment 30 to the FMP, the annual red grouper spawning season closure was extended to May 31 in federal waters off of North Carolina and South Carolina only. Many fishermen noted observing spawning aggregations in May which led to concerns over the efficacy of the spawning season closure. The spawning season closure was extended to provide red grouper additional spawning opportunities.

Preliminary Analysis:

- When examining the seasonality of the commercial fishery, historical and projected landings are highest May through July, leveling out from September through December (**Figure 7**).

- See **Appendix C** for full analysis.

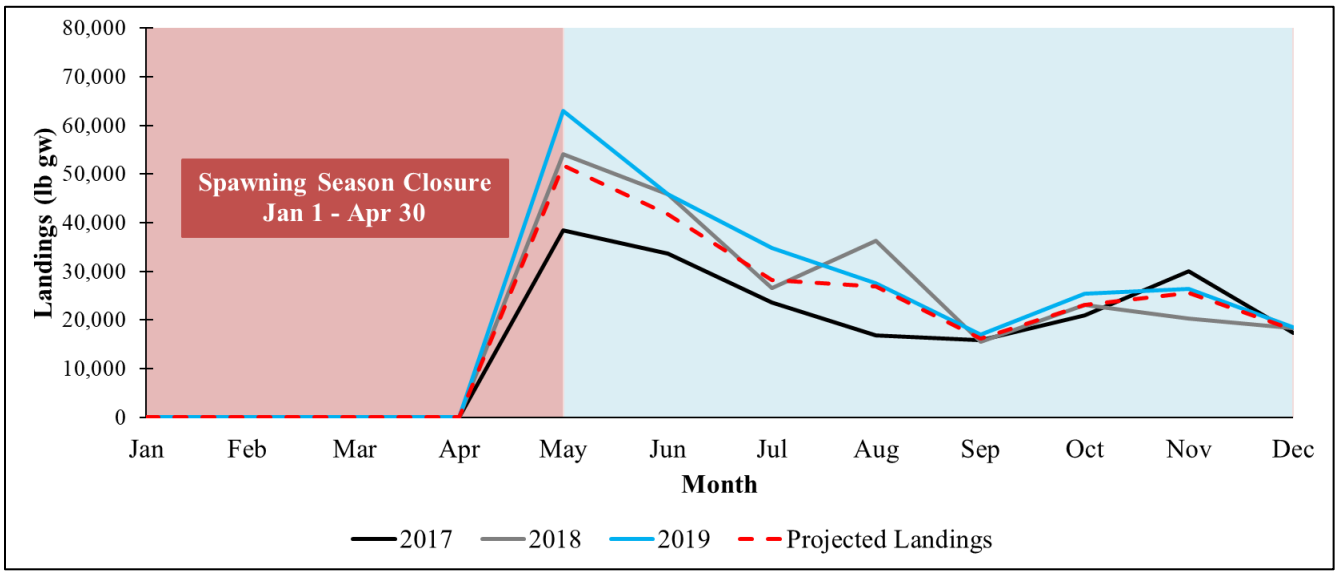

Figure 7. South Atlantic gag commercial landings by month from 2017-2019 and predicted 2023 landings. All of the landing projections assume no landings between January and April 30 for the spawning season closure.

Summary of Biological Effects:

- Ranking (highest potential biological benefit to lowest):
  1. **Alternative 4**
  2. **Alternative 2** and **3**
  3. **Preferred Alternative 1 (No Action)**
- Additional considerations:
  - A longer spawning season provides the most biological benefit to the stock.
  - The current spawning season does encompass peak spawning for gag.

Summary of Economic Effects:

- Ranking (highest potential economic benefit to lowest):
  1. **Preferred Alternative 1 (No Action)**
  2. **Alternative 3**
  3. **Alternative 2**
  4. **Alternative 4**
- Additional considerations:
  - Rankings consider the short-term economic effects.
  - Providing increased spawning protection would potentially provide improvements in stock abundance and therefore long-term economic benefits.
  - A longer spawning season closure would restrict access to the fishery which would have negative short-term economic effects.

Summary of Social Effects:

- Ranking (highest potential social benefit to lowest):

1. **Preferred Alternative 1 (No Action)**
2. **Alternative 3**
3. **Alternative 2**
4. **Alternative 4**

- Additional considerations:
    - Rankings consider short-term social effects.
    - Gag commercial landings have historically been highest during the month of May.
    - The potential effects on commercial fishing businesses and coastal communities will be a trade-off between the biological benefits of the closure and increased commercial fishing opportunities.
    - A longer spawning season closure would provide long-term social benefit since it would provide biological benefit for the stock.

Rationale for Considered But Rejected Appendix (if the Council retains the selected Preferred):

- **Preferred Alternative 1 (No Action)** already encompasses peak spawning months, therefore extending the spawning season would not be expected to provide a substantial increase in biological benefit to the stock.
- The Council will rely on the current spawning season to protect gag spawning.

Committee Action:

- REVIEW DRAFT EFFECTS.
- REVIEW RANGE OF ALTERNATIVES.
- DISCUSS PREFERRED ALTERNATIVE.
    - Provide guidance on whether to keep **Sub-Action 4b** in the amendment if the continued preference is **Alternative 1 (No Action)**. Should the sub-action be included for public hearings?

Action 5. Modify the recreational management measures for gag

5.1 Sub-action 5a. Establish a recreational vessel limit for gag

Purpose of Sub-action

The Council is considering establishing a recreational vessel limit to achieve the reduction in harvest needed to constrain catch to the updated recreational ACLs, while maintaining recreational access.

Alternative 1 (No Action). There is no recreational vessel limit for gag grouper. The recreational gag bag limit is 1 fish per person per day within the 3 shallow water grouper aggregate (no more than 1 grouper may be gag or black grouper).

Alternative 2. Retain the current bag limit. Establish a recreational gag vessel limit of 2 fish per vessel per day, not to exceed the daily bag limit, whichever is more restrictive for the:

Sub-Alternative 2a. private recreational component.
Sub-Alternative 2b. for-hire component

Alternative 3. Retain the current bag limit. Establish a recreational gag vessel limit of 4 fish per vessel per day, not to exceed the daily bag limit, whichever is more restrictive, for the:

Sub-Alternative 3a. private recreational component.
Sub-Alternative 3b. for-hire component

Alternative 4. Retain the current bag limit. Establish a recreational gag vessel limit of 6 fish per vessel per day, not to exceed the daily bag limit, whichever is more restrictive, for the:

Sub-Alternative 4a. private recreational component.
Sub-Alternative 4b. for-hire component

DRAFT Alternative 5. Retain the current bag limit. Establish a recreational gag vessel limit of 2 fish per vessel per day, not to exceed the daily bag limit, then increase the recreational gag vessel limit to 4 fish per vessel per day in 2026 when the recreational annual catch limit is not projected to be met, for the:

Sub-Alternative 5a. private recreational component
Sub-Alternative 5b. for-hire component

DRAFT Alternative 6. Retain the current bag limit. Establish a recreational gag vessel limit of 4 fish per vessel per day, not to exceed the daily bag limit, then increase the recreational gag vessel limit to 6 fish per vessel per day in 2028 when the recreational annual catch limit is not projected to be met, for the:

Sub-Alternative 6a. private recreational component
Sub-Alternative 6b. for-hire component

DRAFT Alternative 7. Retain the current bag limit. Establish a recreational gag vessel limit of 6 fish per vessel per day, not to exceed the daily bag limit, then remove the recreational gag vessel limit in 2028 when the recreational annual catch limit is not projected to be met, for the:

Sub-Alternative 7a. private recreational component

Sub-Alternative 7b. for-hire component

Table 14. A summary of alternatives under **Action 5**, **Sub-action 5a**.

Alternative	Vessel Limit	Explanation
Alternative 1 (No Action)		
1 fish per person per day, no vessel limit		No change
Alternative 2: 2 fish per vessel per day*		
Sub-Alternative 2a	2 fish/vessel/day, private rec only	A set vessel limit for either all rec (only choose the alternative no sub-alts) or either component (sub-alt a or b)
Sub-Alternative 2b	2 fish/vessel/day, charter and headboat only	
Alternative 3: 4 fish per vessel per day*		
Sub-Alternative 3a	4 fish/vessel/day, private rec only	A set vessel limit for either all rec (only choose the alternative no sub-alts) or either component (sub-alt a or b)
Sub-Alternative 3b	4 fish/vessel/day, charter and headboat only	
Alternative 4: 6 fish per vessel per day*		
Sub-Alternative 4a	6 fish/vessel/day, private rec only	A set vessel limit for either all rec (only choose the alternative no sub-alts) or either component (sub-alt a or b)
Sub-Alternative 4b	6 fish/vessel/day, charter and headboat only	
Alternative 5: 2 fish/vessel/day in 2023, then 4 fish/vessel/day in 2026**		
Sub-Alternative 5a	2 fish/vessel/day in 2023, 4 fish/vessel/day in 2026 for private rec only	an increasing vessel to vessel limit when projected landings show ACL is not exceeded. Choose either all rec (only choose the alternative no sub-alts) or either component (sub-alt a or b)
Sub-Alternative 5b	2 fish/vessel/day in 2023, 4 fish/vessel/day in 2026 for charter and headboat only	
Alternative 6: 4 fish/vessel/day in 2023, then 6 fish/vessel/day in 2028**		
Sub-Alternative 6a	4 fish/vessel/day in 2023, 6 fish/vessel/day in 2028 for private rec only	an increasing vessel to vessel limit when projected landings show ACL is not exceeded for either. Choose either all rec (only choose the alternative no sub-alts) or either component (sub-alt a or b)
Sub-Alternative 6b	**4** fish/vessel/day in 2023, 6 fish/vessel/day in 2028 for charter and headboat only	
Alternative 7: 6 fish/vessel/day in 2023, then 1 fish/person/day in 2028**		
Sub-Alternative 7a	6 fish/vessel/day in 2023, 1 fish/ person/day in 2028 for private rec only	an increasing vessel to bag limit when projected landings show ACL is not exceeded. Choose either all rec (only choose the alternative no sub-alts) or either component (sub-alt a or b)
Sub-Alternative 7b	6 fish/vessel/day in 2023, 1 fish/ person/day in 2028 for charter and headboat only	

*vessel limit not to exceed the 1 per person per day bag limit.
**bag or vessel limit will remain in place until modified

Discussion:

- The proposed reduction in the recreational ACL will result in an approximately 70% reduction in harvest from 2019 catch levels to the updated catch levels for 2023. To maintain recreational access, a vessel limit would help to constrain catch to the updated catch levels. Catch levels are predicted to increase in subsequent years.

- The current gag bag limit is tied to the grouper aggregate and specifies one gag OR one black grouper. The current alternatives do not modify the bag limit for black grouper, which would remain as 1 black grouper per person per day within the grouper aggregate.

- **Alternatives 5** through **7** were developed after the June 2022 meeting where the Council gave the IPT discretion to determine the years where the recreational ACL would not be exceeded, and therefore appropriate to increase the vessel limit. The IPT constructed the following tables (**Tables 15** through **18**) to display when overages are expected to end under different vessel limits. The recreational overages were determined using the decision tool (see Attachment 5d) and based on projected landings.

Table 15. The expected recreational ACL overage under the 2 fish per vessel limit for **Alternative 5** for **Sub-Action 5a**. Note: the total ACL used here is ACL=OY=ABC, commercial ACL is based on the Share the Pain Share the Gain (SPSG) 5 yr basis allocation method (Preferred Alternative 4, Preferred Sub-Alternative 4b of Action 3).

Year	Allocations Alternative	Vessel Limit	ACL Overage? Y/N	Overage %
2023	SPSG, 5 yr basis	2 fish/v/d	Y	142%
2024	SPSG, 5 yr basis	2 fish/v/d	Y	64%
2025	SPSG, 5 yr basis	2 fish/v/d	Y	24%
2026	SPSG, 5 yr basis	2 fish/v/d	N	-1%
2027	SPSG, 5 yr basis	2 fish/v/d	N	-17%
2028	SPSG, 5 yr basis	2 fish/v/d	N	-30%
2029	SPSG, 5 yr basis	2 fish/v/d	N	-39%
2030	SPSG, 5 yr basis	2 fish/v/d	N	-46%
2031	SPSG, 5 yr basis	2 fish/v/d	N	-51%
2032	SPSG, 5 yr basis	2 fish/v/d	N	-54%

Table 16. The expected recreational ACL overage expected under the 4 fish per vessel limit for **Alternative 6** for **Sub-Action 5a**. Note: the total ACL used here is ACL=OY=ABC, commercial ACL is based on the Share the Pain Share the Gain (SPSG) 5 yr basis allocation method (Preferred Alternative 4, Preferred Sub-Alternative 4b of Action 3).

Year	Allocations Alternative	Vessel Limit	ACL Overage? Y/N	Overage %
2023	SPSG, 5 yr basis	4 fish/v/d	Y	208%
2024	SPSG, 5 yr basis	4 fish/v/d	Y	109%
2025	SPSG, 5 yr basis	4 fish/v/d	Y	57%
2026	SPSG, 5 yr basis	4 fish/v/d	Y	26%
2027	SPSG, 5 yr basis	4 fish/v/d	Y	5%

2028	SPSG, 5 yr basis	4 fish/v/d	N	-11%
2029	SPSG, 5 yr basis	4 fish/v/d	N	-22%
2030	SPSG, 5 yr basis	4 fish/v/d	N	-31%
2031	SPSG, 5 yr basis	4 fish/v/d	N	-34%
2032	SPSG, 5 yr basis	4 fish/v/d	N	-42%

Table 17. The expected recreational ACL overage expected under the 6 fish per vessel limit for **Alternative 7** for **Sub-Action 5a**. Note: the total ACL used here is ACL=OY=ABC, commercial ACL is based on the Share the Pain Share the Gain (SPSG) 5 yr basis allocation method (Preferred Alternative 4, Preferred Sub-Alternative 4b of Action 3).

Year	Allocations Alternative	Vessel Limit	ACL Overage? Y/N	Overage %
2023	SPSG, 5 yr basis	6 fish/v/d	Y	228%
2024	SPSG, 5 yr basis	6 fish/v/d	Y	123%
2025	SPSG, 5 yr basis	6 fish/v/d	Y	68%
2026	SPSG, 5 yr basis	6 fish/v/d	Y	35%
2027	SPSG, 5 yr basis	6 fish/v/d	Y	12%
2028	SPSG, 5 yr basis	6 fish/v/d	N	-5%
2029	SPSG, 5 yr basis	6 fish/v/d	N	-17%
2030	SPSG, 5 yr basis	6 fish/v/d	N	-26%
2031	SPSG, 5 yr basis	6 fish/v/d	N	-33%
2032	SPSG, 5 yr basis	6 fish/v/d	N	-38%

Table 18. The expected recreational ACL overage expected under the 1 fish per person limit for **Alternative 7** for **Sub-Action 5a**. Note: the total ACL used here is ACL=OY=ABC, commercial ACL is based on the Share the Pain Share the Gain (SPSG) 5 yr basis allocation method (Preferred Alternative 4, Preferred Sub-Alternative 4b of Action 3).

Year	Allocations Alternative	Vessel Limit	ACL Overage? Y/N	Overage %
2023	SPSG, 5 yr basis	none, 1 fish/p/d	Y	245%
2024	SPSG, 5 yr basis	none, 1 fish/p/d	Y	134%
2025	SPSG, 5 yr basis	none, 1 fish/p/d	Y	76%
2026	SPSG, 5 yr basis	none, 1 fish/p/d	Y	41%
2027	SPSG, 5 yr basis	none, 1 fish/p/d	Y	18%
2028	SPSG, 5 yr basis	none, 1 fish/p/d	N**	0%
2029	SPSG, 5 yr basis	none, 1 fish/p/d	N	-13%
2030	SPSG, 5 yr basis	none, 1 fish/p/d	N	-23%
2031	SPSG, 5 yr basis	none, 1 fish/p/d	N	-30%
2032	SPSG, 5 yr basis	none, 1 fish/p/d	N	-35%

*****Preliminary landings predict a fishing year with no overage with landings falling at the recreational ACL

Preliminary Analysis:

- See **Appendix C** for full analysis.

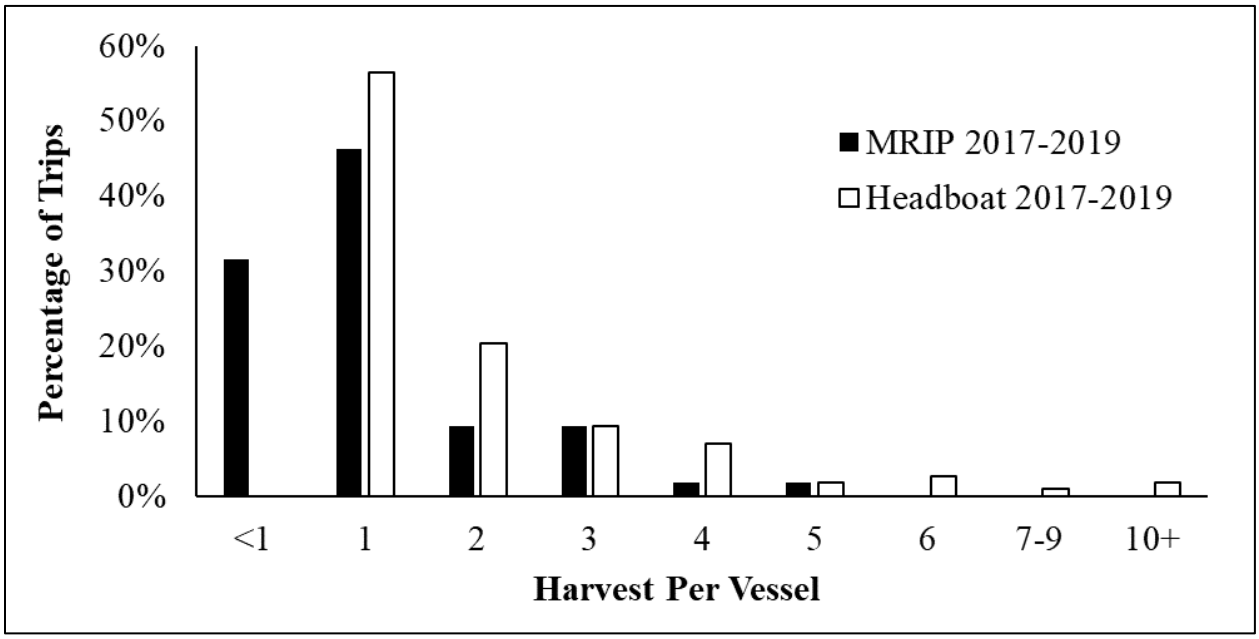

Figure 8. Distribution of South Atlantic gag harvested per vessel trip from the two recreational datasets: MRIP FES (n = 54 trips), and headboat (n= 897 trips).

Table 19. The predicted percent change in landings per recreational trip (MRIP and Southeast Region Headboat Survey) from the current 1 fish per person per day limit.

Current Vessel Limit (# of fish)	Potential Vessel Limit (# of fish)	MRIP (Private and Charter Vessels) Predicted Change in Landings	SRHS (Headboat Vessels)Predicted Change in Landings
1 pp/day	6 per vessel	0%	-5%
1 pp/day	4 per vessel	-1%	-11%
1 pp/day	2 per vessel	-16%	-30%

- From 2017 through 2019, there were 33 charter trips and 21 private trips in the MRIP FES and 897 trips in the SRHS that reported harvesting gag in the South Atlantic. All trips reported landing one gag or fewer per person per day. Additionally, a majority of trips (82% charter and 71% private) in the MRIP FES and over half (57%) in the SRHS reported harvesting one gag or fewer per trip (**Figure 9**).

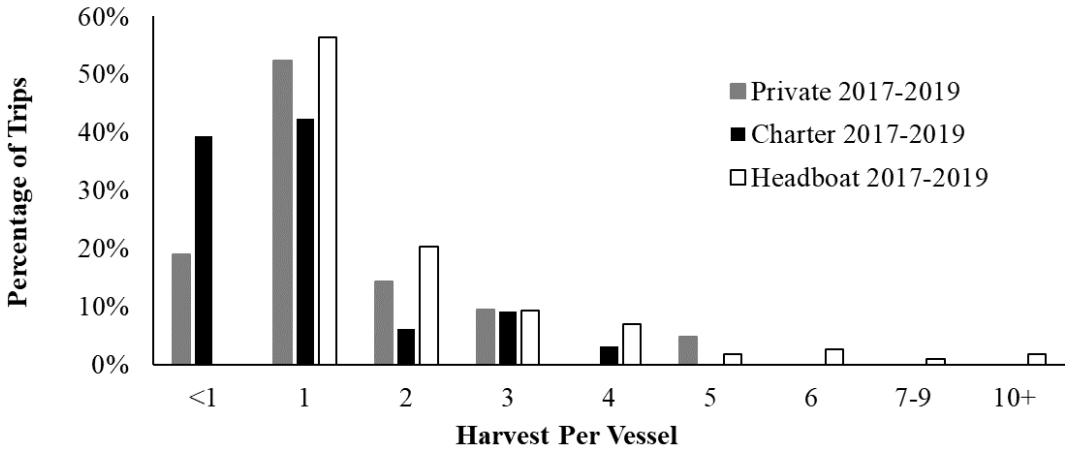

Figure 9. Distribution of South Atlantic gag harvested per vessel trip from the two recreational datasets: MRIP FES (n = 21 private trips and 33 charter trips), and SRHS (n= 897 headboat trips).

- Estimated reductions from projected landings for potential trip limits are shown in **Table 20**.

Table 20. The predicted percent change in landings per trip from the current 1 fish per person per day (pp/day) limit. Each **Sub-Action 5a** alternative specifies that a vessel limit or a 1 fish pp/day limit will be imposed, depending on whichever is more restrictive. Since current regulations already specify 1 fish pp/day, there is no predicted percent change in landings per trip should the bag limit of 1 fish pp/day be more restrictive.

Action 5 Alternatives	Potential Vessel Limit (# of fish)	MRIP Private Predicted Change in Landings	MRIP Charter Predicted Change in Landings	SRHS Predicted Change in Landings
Alternative 1 (No Action)	1 fish pp/day	0%	0%	0%
Alternative 2	2 per vessel			
Alternative 2a	2 per vessel: private sector	-20%	--	--
Alternative 2b	2 per vessel: for-hire sector	--	-13%	-30%
Alternative 3	4 per vessel			
Alternative 3a	4 per vessel: private sector	-3%	--	--
Alternative 3b	4 per vessel: for-hire sector	--	0%	-11%
Alternative 4	6 per vessel			

Alternative 4a	6 per vessel: private sector	0%	--	--
Alternative 4b	6 per vessel: for-hire sector	--	0%	-5%
Alternative 5	6 per vessel			
Alternative 5a	6 per vessel: private sector	0%	--	--
Alternative 5b	6 per vessel: for-hire sector	--	0%	-5%

IPT Comments and Recommendation:

- Is the Council's intention to create a vessel limit per ***day*** or per ***trip***? The differentiation was discussed at the July IPT meeting and the IPT would like confirmation of the Council's preferred vessel limit.
- When separating the recreational vessel types, the IPT recommends separating private recreational and for-hire (i.e. charter/headboat in combination) only.
- The IPT notes that South Atlantic gag is scheduled to be assessed in 2025 with results anticipated in 2026. This could give the Council an idea of rebuilding success before the vessel limit is increased, which could be done in a framework amendment.
- The IPT emphasizes being cautionary due to uncertainties with rebuilding of the stock, the vessel limit changes are based on ***projected*** landings from the decision tool. Is there another trigger the Council would like to consider?
- Vessel limit can be changed quickly through a framework amendment.

Summary of Biological Effects:

- Biological effects are not expected to differ among alternatives in terms of risk to overfishing because harvest would be limited to the recreational ACL.
- Under **Alternative 5** through **Alternative 7**, the recreational vessel limit would be increased regardless of whether adequate rebuilding occurs, which could have negative effects on the stock.
- Potentially, the larger the recreational vessel limit, the shorter the recreational season and therefore the higher the discards.

Summary of Economic Effects:

- If the economic benefits from a longer fishing season offset the reductions in harvest on a trip level, the implementation of vessel limits (**Alternatives 2** through **7**) would increase economic benefits compared to **Alternative 1 (No Action)**.
- Allowing vessel limits to increase in later years as the ACL is increased (**Alternatives 5** through **7**) could help better utilize the sector ACL as it increases, and total economic benefits derived from that ACL. Assuming this were the case, economic benefits from a prolonged season would be highest under **Alternative 2**, followed by **Alternative 5**, **Alternative 3**, **Alternative 6**, **Alternative 4**, **Alternative 7,** and **Alternative 1 (No Action)**.
- Additional considerations:

- Implementing a vessel limit would likely result in a reduction in harvest and potential economic benefits on a given trip, therefore **Alternative 2** through **7** would be expected to reduce consumer surplus on some fishing trips.
- More restrictive vessel limits could result in longer seasons and increased access to the fishery.

Summary of Social Effects:

- Ranking (highest potential social benefit to lowest):
  Considering the longest access to the fishery:
  1. **Alternative 2**
  2. **Alternative 3**
  3. **Alternative 4**
  4. **Alternative 5**
  5. **Alternative 6**
  6. **Alternative 7**
  7. **Alternative 1 (No Action)**

  Considering the lowest reduction in landings:
  1. **Alternative 1 (No Action)**
  2. **Alternative 5, 6,** and **7**
  3. **Alternative 4**
  4. **Alternative 3**
  5. **Alternative 2**

Committee Action:

- REVIEW DRAFT EFFECTS.
- REVIEW RANGE OF ALTERANTIVES.
  - Provide guidance on inclusion of **Alternatives 5** through **7**.
- SELECT A PREFERRED ALTERNATIVE.

5.2 Sub-action 5b. Modify the recreational spawning season closure for gag

Purpose of Sub-action

The Council is considering modifying the recreational spawning season closure to allow for an increased opportunity for gag spawning before being targeted by the fishery.

Preferred Alternative 1 (No Action). The gag annual recreational spawning season closure is from January 1 through April 30.

Alternative 2. Extend the annual recreational gag spawning season closure to January 1 through May 31.

Alternative 3. Extend the annual recreational gag spawning season closure to December 1 through April 30.

Alternative 4. Extend the annual recreational gag spawning season closure to December 1 through May 31.

Table 20. A summary of alternatives for Action 5, Sub-Action 5b.

Alternatives	Spawning Season Closure
Alternative 1 (No Action)	January 1 - April 30
Alternative 2	One additional month in the spring (May)
Alternative 3	One additional month in the winter (December)
Alternative 4	One additional month in the winter (December) and one additional month in the spring (May)

Discussion:

- The gag spawning season closure was established through Amendment 16 to the FMP (2009) to protect gag grouper, and other shallow water groupers, spawning aggregations (Coleman *et al.* 2000). Spawning aggregations are particularly vulnerable to fishing gear due to aggression during these events (Thompson and Munro 1974; Gilmore and Jones 1992).

- In 2020, through Regulatory Amendment 30 to the FMP, the red grouper spawning season closure was extended to May 31 in federal waters off of North Carolina and South Carolina only. Many fishermen noted observing spawning aggregations in May which led to concerns over the efficacy of the spawning season closure. The spawning season closure was extended to provide red grouper additional spawning opportunities.

Preliminary Analysis:

- The seasonality of recreational landings of gag is variable; however, landings were highest historically for 2019 and are projected to be highest in May through July. During 2018 landings were highest in the fall.

- See **Appendix C** for full analysis.

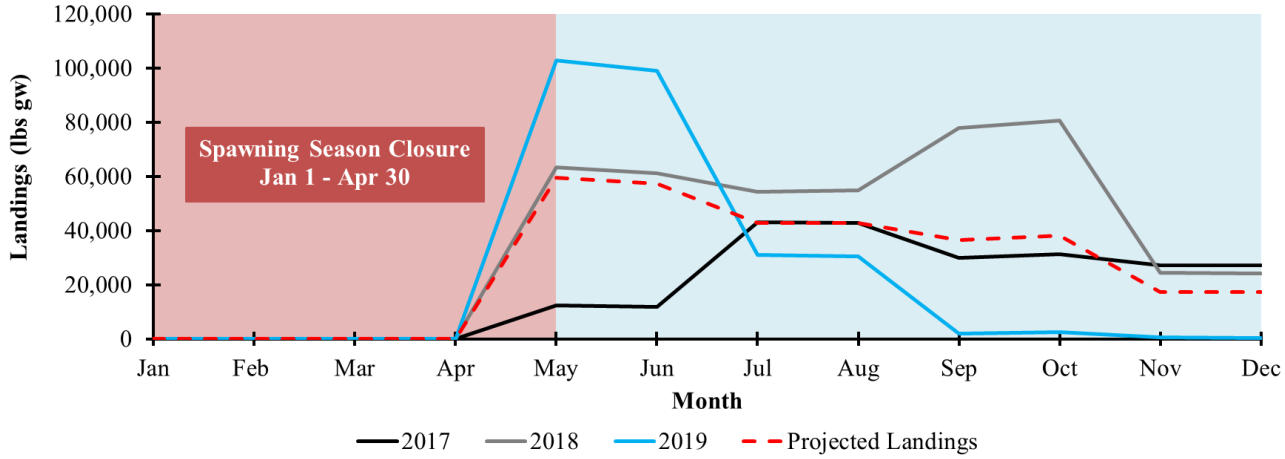

Figure 9. South Atlantic gag recreational landings by month from 2017-2019 and predicted 2023 landings. All of the landing projections assume no landings between January 1 and April 30 for the spawning season closure.

Summary of Biological Effects:

- Ranking (highest potential biological benefit to lowest):
  1. **Alternative 4**
  2. **Alternative 2** and **3**
  3. **Preferred Alternative 1 (No Action)**
- Additional considerations:
  - A longer spawning season provides the most biological benefit to the stock.
  - The current spawning season does encompass peak spawning.

Summary of Economic Effects:

- Ranking (highest potential economic benefit to lowest):
  1. **Preferred Alternative 1 (No Action)**
  2. **Alternative 3**
  3. **Alternative 2**
  4. **Alternative 4**
- Additional considerations:
  - Rankings consider the short-term economic effects.
  - Providing increased spawning protection would potentially provide improvements in stock abundance and therefore long-term economic benefits.
  - A longer spawning season closure would restrict access to the fishery which would have negative short-term economic effects.

Summary of Social Effects:

- Ranking (highest potential social benefit to lowest):
  1. **Preferred Alternative 1 (No Action)**
  2. **Alternative 3**

3. **Alternative 2**
4. **Alternative 4**

- Additional considerations:
    - Rankings consider short-term social effects.
    - The potential effects on recreational fishing businesses and coastal communities will be a trade-off between the biological benefits of the closure and increased commercial fishing opportunities.
    - A longer spawning season closure would provide long-term social benefit since it would provide biological benefit for the stock.

Rationale for Considered But Rejected Appendix (if the Council retains the selected Preferred):

- **Preferred Alternative 1 (No Action)** already encompasses peak spawning months, therefore extending the spawning season would not be expected to provide a substantial increase in biological benefit to the stock.
- The Council will rely on the current spawning season to protect gag spawning.

Committee Action:

- REVIEW DRAFT EFFECTS.
- REVIEW RANGE OF ALTERNATIVES.
- CONFIRM PREFERRED ALTERNATIVE.
    - Provide guidance on whether to keep **Sub-Action 5b** in the amendment if the continued preference is **Alternative 1 (No Action)**. Should the sub-action be included for public hearings?

Action 6. Revise the gag recreational accountability measures

Purpose of Action

Modifications to gag recreational accountability measures are being considered to prevent recreational landings from exceeding the recreational ACL and correct for overages if they occur.

Alternative 1 (No Action). If recreational landings reach or are projected to reach the recreational annual catch limit, recreational harvest of gag is closed for the remainder of the fishing year, regardless of stock status, unless National Marine Fisheries Service determines that no closure is necessary based on the best scientific information available. If recreational landings exceed the recreational annual catch limit, then during the following fishing year recreational landings will be monitored for a persistence in increased landings. If the total annual catch limit is exceeded and gag are overfished, the length of the recreational fishing season and the recreational annual catch limit are reduced by the amount of the recreational annual catch limit overage.

Alternative 2. The recreational gag season will start annually on May 1. The National Marine Fisheries Service will annually announce the recreational fishing season end dates in the Federal Register and by other methods, as deemed appropriate. The fishing season will end on the date National Marine Fisheries Service projects the recreational annual catch limit will be met.

Alternative 3. Remove the current recreational in-season accountability measures. If recreational landings exceed the recreational annual catch limit, reduce the length of the following year's recreational fishing season by the amount necessary to prevent the recreational annual catch limit from being exceeded in the following year. However, the length of the recreational season will not be reduced if the Regional Administrator determines, using the best scientific information available, that it is not necessary.

Preferred Alternative 4. Retain the current recreational in-season accountability measures. If recreational landings exceed the recreational annual catch limit, reduce the length of the following year's recreational fishing season by the amount necessary to prevent the recreational annual catch limit from being exceeded in the following year. However, the length of the recreational season will not be reduced if the Regional Administrator determines, using the best scientific information available, that it is not necessary.

Table 21. Summary of recreational accountability measure alternatives for **Action 7**.

	In-Season AM		Post-Season AM	
	Triggers	**AM**	**Triggers**	**AM**
Alternative 1 (no change)	Recreational landings exceed/expected to exceed sector ACL	Current recreational season closes	• Recreational landings exceed/expected to exceed the recreational ACL • Total ACL exceeded • Stock is overfished ***All triggers mustbe present for AM to occur**	• Recreational landings are monitored during the following year and if necessary: • Recreational ACL for the following year reduced by the overage • Recreational season for the following year is reduced to ensure the recreational ACL is not exceeded
Alternative 2	NMFS will annually announce the recreational fishing season end date			
Alternative 3	NONE		Recreational landings exceed recreational ACL ***No longer tied to stock status or total ACL**	Recreational season for the following year is reduced by the amount necessary to prevent the recreational ACL from being exceeded
Preferred Alternative 4	Recreational landings exceed/expected to exceed sector ACL	Current recreational season closes	Recreational landings exceed recreational ACL ***No longer tied to stock status or total ACL**	Recreational season for the following year is reduced by the amount necessary to prevent the recreational ACL from being exceeded

Discussion:

- Recreational AMs for other snapper grouper species with short recreational seasons, such as red porgy (Amendment 50), have proposed removing the in-season closure and "un-coupling" the post-season AM trigger from the total ACL and stock status.

- **Alternative 2** would operate similar to the season announcement for black sea bass except that NMFS would only be announcing the end of the season. Commercial harvest would be allowed after the end of the spawning season closure (Sub-action 4b).

Summary of Biological Effects:

- Ranking (highest potential biological benefit to lowest): It is difficult to rank these alternatives as they all contain attributes that would lead to biological benefits and adverse effects.
  Alternative 1 (No Action): has both an in-season and post-season AM but may not be most effective for a short recreational season.
  Alternative 2: would be functional for a short season but does not have a payback if the ACL is exceeded.
  Alternative 3: removing the in-season AM could have adverse effects but the post-season would be more effective.
  Preferred Alternative 4: would retain the in-season closure and adopt the more effective post-season AMs.
- Additional considerations:
  - A functional AM is critical as the AMs are likely to be triggered under updated harvest levels.

Summary of Economic Effects:

- Ranking (highest potential economic benefit to lowest): It is difficult to rank these alternatives as they differ in whether they provide adverse effects/benefits in the short or long-term.
  Alternative 1 (No Action): This is the most stringent AM and therefore would have the most negative short-term effects but provide long-term benefits.
  Alternative 2: This would limit long-term harvest of gag but could result in economic benefits that mitigate the short-term cost by allowing more time to adjust to the changing harvest regulations.
  Alternative 3: Effects would be similar to **Alternative 2,** but the AM would be triggered with a single year of landings rather than be in place every year. Because there is not an in-season AM, potential harvest is likely higher increasing short-term economic benefits.
  Preferred Alternative 4: Effects would be similar to **Alternative 3** but there would be lower potential short-term benefits and long-term costs since the in-season AM would be retained.

Summary of Social Effects:

- Ranking (highest potential social benefit to lowest): It is difficult to rank these alternatives as they all contain attributes that would lead to social benefits and adverse effects.
  Alternative 1 (No Action): Could lead to inconsistent closure dates through the payback portion of the post season AM, provides long-term benefit of helping to prevent overages and correcting them if they occur.
  Alternative 2: Season lengths/dates would vary year to year and would not provide a reopening opportunity, announcement would provide time for recreational fishermen to plan trips.
  Alternative 3: No in-season closure would provide for increase fishing opportunities within the current season however the removal of the two post-season triggers could lead to a variable season year to year if ACL overages occur.

Preferred Alternative 4: The in-season closure could result in fewer fishing opportunities within the current fishing year. The removal of the two post-season triggers could lead to a variable season year to year if ACL overages occur.

- Additional considerations:
    - AMs can have a direct and indirect social effect since, when triggered, can restrict harvest, however they contribute to the sustainability of the stock which has long-term social benefits.

Committee Action:

- REVIEW DRAFT EFFECTS.
- REVIEW RANGE OF ALTERNATIVES.

DRAFT MOTION: APPROVE AMENDMENT 53 AND ALL ACTIONS, AS REVISED, FOR PUBLIC HEARINGS .

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