Regulatory Amendment 22 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region

DECISION DOCUMENT

Revise the annual catch limits (ACLs), and optimum yield (OY) for gag and wreckfish and revise management measures for gag





Environmental Assessment Regulatory Impact Review

NOVEMBER 20, 2014

What Action Is Being Proposed?

Regulatory Amendment 22 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (Snapper Grouper FMP) proposes to adjust the Annual Catch Limits (ACL) and Optimum Yield (OY) for gag and wreckfish, and modify the recreational bag limit for gag within the aggregate bag limit.

Who is Proposing the Action?

The South Atlantic Fishery Management Council (South Atlantic Council) is proposing Regulatory Amendment 22 to the Snapper Grouper FMP (Regulatory Amendment 22). The South Atlantic Council recommends management measures to the National Marine Fisheries Service (NMFS) who ultimately implements the actions in the framework

Purpose for Action

The *purpose* for the amendment is to: adjust annual catch limits (ACL) and optimum yield (OY) for gag and wreckfish, and modify the recreational bag limit for gag.

Need for Action

The *need* for the amendment is to address the recent stock assessment results for gag and wreckfish and prevent overfishing while minimizing, to the extent practicable, adverse social and economic effects; and (2) ensure that OY is being achieved by increasing the bag limit for gag thus imparting socio-economic benefits to resource users.

amendment through the development of regulations on behalf of the Secretary of Commerce. NMFS is a line office in the National Oceanic and Atmospheric Administration within the Department of Commerce.

COMMITTEE ACTION:

The Committee approved the Purpose and Need statements at their September 2014 meeting. The Committee should review the Purpose and Need above and make sure they reflect the Council's intent and the requirements to develop a specific purpose and need.

REQUIRED COMMITTEE ACTION:

OPTION 1. ACCEPT THE PURPOSE AND NEED. OPTION 2. MODIFY THE PURPOSE AND NEED. OPTION 3. OTHERS??

Why are the South Atlantic Council and NMFS Considering Action?

Revise the Annual Catch Limits (ACL) and Optimum Yield (OY) for Gag

In 2006, the gag (*Mycteroperca microlepis*) stock was assessed through Southeast Data Assessment and Review (SEDAR) process as a benchmark assessment (SEDAR 10 2006), which indicated that it was undergoing overfishing and approaching an overfished condition. Measures to end overfishing were contained in Amendment 16 to the Snapper Grouper FMP (SAFMC 2008). An update assessment to evaluate the stock status of gag off the southeastern United States was conducted in 2014 (SEDAR 10 Update 2014). The primary objectives were to update and improve the 2006 SEDAR 10 benchmark assessment for gag and to provide new stock projections. For the update assessment, data compilation and assessment methods were guided by SEDAR 10 (2006), as well as more recent SEDAR assessments. The assessment period for gag was 1962-2012. Results of the 2014 update assessment revealed that the gag stock in the South Atlantic is experiencing overfishing based on the average fishing mortality rates from 2010-2012, but is not overfished. However, the fishing mortality rate for 2012 and the projected fishing mortality rate in 2013 based on the actual landings, suggest that overfishing ended in 2012. At the June 2014 South Atlantic Council meeting, the chair of the Scientific and Statistical Committee (SSC) stated "The best we can tell based on the way that we are projecting – given all the uncertainties that we know exists in projections, it looks like we're not going to be overfishing going into the future." A letter from NMFS to the South Atlantic Council Chairman dated September 8, 2014, stated that gag is neither overfished nor undergoing overfishing.

At their April 2014 meeting, the South Atlantic Council's SSC stated that the update assessment is the best scientific information available and considered it could be used for management of the gag resource in the South Atlantic. Revisions in the data and methods were reasonable and the SSC determined that the assessment can be used for catch level recommendations. The SSC recommended using 5-year projections at P*=50% for overfishing limit and at P*=30% for acceptable biological catch (ABC). Hence, the South Atlantic Council is taking action through Regulatory Amendment 22 to adopt the SSC's recommendations and revise the ACL and OY for gag to ensure overfishing does not occur.

Modify the recreational bag limit for gag within the aggregate bag limit

Less than half of the recreational ACL for gag has been met each year since it was put in place in 2011. Furthermore, it is not anticipated that the new recreational ACL proposed in Regulatory Amendment 22 would be met if landings are maintained at their current levels. Thus, the South Atlantic Council is considering an action that would allow for an increase in recreational harvest of gag through adjustments to the recreational bag limit.

Revise the Annual Catch Limits (ACL) and Optimum Yield (OY) for Wreckfish

A statistical catch-at-age assessment of the wreckfish stock in the South Atlantic was conducted in 2012. At their spring 2014 meeting, the South Atlantic Council's SSC conducted a review of the assessment and accepted it as representing the best available scientific information on the current status of wreckfish in South Atlantic waters, and considered it appropriate for management decisions. Hence, the South Atlantic Council, through Regulatory Amendment 22, is taking action to update the wreckfish ACL and OY based on the SSC's recommendations for ABC and OFL.

Summary of Effects

Alternatives for Action 1

(Preferred alternatives in **bold**)

- 1. No Action. Retain the current annual catch limits (ACL) and optimum yield (OY) for gag. Optimum Yield (OY) will remain equal to the yield produced by Foy (Amendment 16). If a stock is overfished, F_{OY} remains equal to the fishing mortality rate specified by the rebuilding plan designed to rebuild the stock to SSB_{MSY} within the approved schedule. After the stock is rebuilt, F_{OY} = a fraction of F_{MSY} . ABC = 805,000 pounds gutted weight (lbs gw; landings only); OFL = Yield at F_{MSY} = 903,000 lbs gw. The total ACL (Yield at 75%F_{MSY}) will continue to be 694,000 lbs gw. Commercial and recreational allocations will continue to be 51% and 49%, respectively. The directed commercial ACL will continue to be 326,722 lbs gw (reduced from 353,940 lbs gw commercial ACL to account for gag discard mortality from commercial trips that target co-occurring species (i.e., red grouper and scamp) during a gag closure). The recreational ACL will continue to be 340,060 lbs gw. Currently, there are no ACTs for gag.
- 2. Preferred. ACL = OY = ABC projected landings from 2015-2019 with P*=0.3. The ACL for 2019 would remain in place until modified.
- 3. ACL = OY = 0.95*Proposed ABC. The ACL for 2019 would remain in place until modified.
- 4. ACL = OY = 0.90*Proposed ABC. The ACL for 2019 would remain in place until modified.
- 5. ACL = OY = 0.80*Proposed ABC. The ACL for 2019 would remain in place until modified.

Action 1. Revise the annual catch limits (ACL) and optimum yield (OY) for gag

Biological Effects

Retaining the ACLs and OY specified in Alternative 1 (No Action) would not update harvest parameters for gag using the best available scientific information from the recent stock assessment update. Under Alternatives 2 (Preferred)-5, the P* approach, which is a component of the ABC control rule, is used to specify the ABC and the overfishing limit (OFL) values, where P* is equal to the acceptable probability of overfishing. A smaller P* provides a larger buffer against overfishing, resulting in reduced catches. Under these alternatives, the ACL and OY for gag are updated based upon results from the updated gag assessment, and recommendations from the South Atlantic Council's SSC. and have a greater positive

biological effect on the stock by reducing the commercial and recreational ACLs.

Amendment 16 to the Snapper Grouper FMP (SAFMC 2009a) included a measure to close commercial harvest of all shallow water groupers when the gag quota was met. This measure was removed in Regulatory Amendment 15 (SAFMC 2013a). However, Regulatory Amendment 15 reduced the gag ACL by 27,218 lbs gw to account for discard mortality of gag when fishermen target other co-occurring shallow water groupers after gag is closed (termed the 'directed quota'). Total dead discards in pounds were calculated by combining the pounds of gag lost to discard mortality from non-target trips with the pounds of gag lost to discard mortality from target trips switching to target other

shallow water grouper. The analysis is described in detail in **Appendix E** of Regulatory Amendment 15 (SAFMC 2013a). Because the gag assessment update included landings data through 2012, and the management measure that closes harvest for all shallow water grouper when the gag quota is met was removed in 2013 through Regulatory Amendment 15, **Alternative 2 (Preferred)** through **5** would retain the 27,218 lbs gw reduction in the gag commercial ACL specified in Regulatory Amendment 15.

Alternative 2 (Preferred) would set the ACL equal to the ABC (Table S-1). The NS1 guidelines indicate the ACL may typically be set very close to the ABC. Alternatives 3, 4, and 5 would have a greater positive biological effect than Alternative 1 (No Action) and Preferred Alternative 2 because they would create a buffer between the ACL/OY and the ABC, with Alternative 5 setting the most conservative ACL at 80% of the ABC (Tables S-2 to S-4). Creating a buffer between the ACL/OY and ABC would provide greater assurance that overfishing is prevented and the long-term average biomass is near or above the biomass associated with MSY. Setting a buffer between the ACL and ABC would be appropriate in situations where there is uncertainty in whether or not management measures are constraining fishing mortality to target levels. With vastly improved commercial monitoring mechanisms recently implemented, it is unlikely that repeated commercial ACL overages would occur. Thus, there may not be a biological need to set the ACL below the ABC.

Table S-1. ABC and ACLs for gag specified under **Alternative 2 (Preferred)** where ACL = OY = ABC.

Year	ABC	Total ACL	Commercial ACL (51%)	Directed Commercial Quota*	Recreational ACL (49%)
2015	666,000	666,000	339,660	312,442	326,340
2016	671,000	671,000	342,210	314,992	328,790
2017	713,000	713,000	363,630	336,412	349,370
2018	748,000	748,000	381,480	354,262	366,520
2019	773,000	773,000	394,230	367,012	378,770

All values in pounds gutted weight (lbs gw)

Table S-2. ABC and ACLs for gag specified under Alternative 3 where ACL = OY = 95%ABC.

Year	ABC	Total ACL	Commercial ACL (51%)	Directed Commercial Quota*	Recreational ACL (49%)
2015	666,000	632,700	322,677	295,459	310,023
2016	671,000	637,450	325,100	297,882	312,351
2017	713,000	677,350	345,449	318,231	331,902
2018	748,000	710,600	362,406	335,188	348,194
2019	773,000	734,350	374,519	347,301	359,832

All values in lbs gw

^{*}Directed commercial quota = Commercial ACL - 27,218 lbs gw.

^{*}Directed commercial quota = Commercial ACL - 27,218 lbs gw.

Table S-3. ABC and ACLs for gag specified under Alternative 4 where ACL = OY = 90%ABC.

Year	ABC	Total ACL	Commercial ACL (51%)	Directed Commercial Quota*	Recreational ACL (49%)
2015	666,000	599,400	305,694	278,476	293,706
2016	671,000	603,900	307,989	280,771	295,911
2017	713,000	641,700	327,267	300,049	314,433
2018	748,000	673,200	343,332	316,114	329,868
2019	773,000	695,700	354,807	327,589	340,893

All values in lbs gw

Table S-4. ABC and ACLs for gag specified under Alternative 5 where ACL = OY = 80%ABC.

Year	ABC	Total ACL	Commercial ACL (51%)	Directed Commercial Quota*	Recreational ACL (49%)
2015	666,000	532,800	271,728	244,510	261,072
2016	671,000	536,800	273,768	246,550	263,032
2017	713,000	570,400	290,904	263,686	279,496
2018	748,000	598,400	305,184	277,966	293,216
2019	773,000	618,400	315,384	288,166	303,016

All values in lbs gw

Economic Effects

Whenever ACLs are changed, economic effects can be expected if the changes are expected to have an effect on the number of fish or trips that can or will be taken by a sector. When a sector's ACL decreases, it can be expected that there would be negative direct effects for the commercial sector in that fewer trips would be taken. When the recreational sector's ACL is reduced, the overall consumer surplus is reduced in those years.

In terms of economic effects, for both the commercial and recreational sectors, compared to **Alternative 1** (**No Action**), **Alternative 2** (**Preferred**) would be expected to result in the best change in economic benefits (a net increase in commercial revenue and angler consumer surplus (CS)), followed by **Alternative 3**, **Alternative 4**, and **Alternative 5**, each of which would be expected to result in a net decrease in economic benefits (commercial revenue and angler CS).

Social Effects

Gag is an important component to the commercial species landed in several North Carolina and South Carolina communities, in addition to potentially being an important recreational species. Changes to the ACL and access to the resource could affect individuals and businesses in these communities.

^{*}Directed commercial quota = Commercial ACL – 27,218 lbs gw.

^{*}Directed commercial quota = Commercial ACL - 27,218 lbs gw.

In general, the higher the ACL, the greater the short-term social and economic benefits that would be expected to accrue, assuming harvest does not result in overfishing and long-term management goals are met. Adhering to sustainable harvest through an ACL is assumed to result in net long-term positive social and economic benefits.

Alternative 1 (No Action), which specifies an ACL higher than the SSC's catch level recommendation, could be expected to be the most beneficial for fishermen in 2015 and 2016 unless it results in overfishing. Alternative 1 (No Action), however, would result in an ACL that is higher than the ABC recommended by the South Atlantic Council's SSC and possibly not sustainable. However, the increase in the ACL during 2017-2019 under Preferred Alternative 2 would likely result in greater social benefits for the commercial and recreational fleets than Alternative 1 (No Action). Incorporating a buffer between ABC and ACL under Alternatives 3-5, and decreasing the available quota for gag could have negative effects on fishermen and communities if access to the gag resource is restricted due to triggering AMs if landings reach the ACL.

Additionally, adjustments in an ACL based on updated information from a stock assessment would have the most long term benefits to fishermen and communities because catch limits would be based on the current conditions, even if the updated information indicates that a lower ACL is appropriate to sustain the stock. Alternatives 2 (Preferred)-5 would incorporate new information and recommendations, and would be more beneficial in the long term to communities and fishermen than Alternative 1 (No Action).

Snapper Grouper AP Input:

MOTION: RECOMMEND ALTERNATIVE 2 AS PREFERRED FOR ACTION 1 *Action 1. Revise the annual catch limits (ACL) and optimum yield (OY) for gag* **Alternative 2.** ACL = OY = ABC projected landings from 2015-2019 with P*=0.3. The ACL for 2019 would remain in place until modified.

APPROVED BY AP

Public Hearing Input:

- Use the poundage of gag currently allocated to account for post-quota bycatch mortality (PQBM) as a bycatch allowance once the directed commercial quota has been landed. Fishermen would be allowed a 50-pound allowance.
- The current PQBM for gag was grossly overestimated. Before any adjustments are made to the gag ACL, the Council should consider a more realistic estimate of discard mortality.
- Support for Council's preferred alternatives under Actions 1 & 3 (gag & wreckfish ACLs).

SSC Input

The SSC reviewed the gag stock assessment update at their April 2014 meeting. The SSC recommended the assessment as the best scientific information available and consider it could be used for management of the gag resource in the South Atlantic. Revisions in the data and methods were reasonable and the assessment could be used for catch level recommendations. Regarding the next assessment of gag, the SSC

recommended that it be conducted within the next 3-4 years and at least as a 'Standard Assessment'. The possible addition of the video index and a different approach to indices development might require a benchmark assessment, however.

REQUIRED COMMITTEE ACTION:

OPTION 1. DO NOT MODIFY ACTION 1 AND ALTERNATIVES.

OPTION 2. MODIFY ACTION 1 AND ALTERNATIVES.

OPTION 3. OTHERS??

Action 2. Modify the recreational bag limit for gag within the aggregate bag limit

Alternatives for Action 2

(Preferred alternatives in **bold**)

- 1. No Action. Retain the current aggregate grouper bag limit of 3 fish. Within this limit, only one fish can be a gag or black grouper.
- 2. Increase the gag bag limit to 2 fish within the 3 fish aggregate bag limit. Only one fish within the aggregate can be a black grouper.
- 3. Increase the gag bag limit to 3 fish within the 3 fish aggregate bag limit. Only one fish within the aggregate can be a black grouper.

Biological Effects

Under Alternative 1 (No Action), there would be a continued positive biological benefit for gag by limiting harvest to one gag or black grouper per person per day within the 3-grouper aggregate. Alternative 2 and Alternative 3 would increase the gag bag limit to two and three gag per person per day; respectively, within the 3-grouper aggregate to help achieve the recreational ACL proposed in Action 1. The black grouper bag limit would

remain at one per person per day within the aggregate grouper bag limit. When compared to Alternative 1 (No Action), the biological consequences of increasing the recreational gag bag limit within the 3 fish aggregate grouper bag limit under **Alternative** 2 and Alternative 3 are likely to be negligible, since the updated SEDAR 10 Update (2014) stock assessment and information included below (Tables S-5 and S-6) indicate that the 3-fish aggregate bag limit is only met rarely by recreational anglers. Additionally, the gag recreational ACL has not been met during the past 4 fishing years: 23% of the recreational ACL was met in 2013, 52% in 2012, 49.9% in 2011, and 50.5% in 2010. If the ACL is met, AMs are in place to ensure overfishing does not occur. Furthermore, increasing the gag bag limit within the grouper aggregate bag limit under Alternative 2 and Alternative 3 is not likely to increase harvest of other groupers and tilefish within the aggregate. Alternatives 2 and 3 would change the allowance of 1 gag or black grouper within the 3-fish aggregate grouper bag limit to 1 black grouper within the grouper aggregate, which could potentially increase the black grouper harvest. However, the low landings per angler for gag and/or black grouper trips (Tables S-5 and S-6) indicates that it is unlikely that the increase in the black grouper bag limit under Alternatives 2 and 3 within the 3-fish grouper aggregate would have much effect on black grouper landings.

Table S-5. Number of trips that caught a species in aggregate grouper bag limit and the average

landings per angler per trip (LPA) by year from the MRIP data.

		2009	2010	2011	2012	2013
	Trips that caught an aggregate fish	145	448	278	446	359
Aggregate	Positive aggregate trips (landed an aggregate fish)	72	139	96	167	118
greg	Trips that with aggregate LPA ≥ 3	3	8	5	16	12
Ag	Average aggregate LPA, all aggregate trips (max = 3)	0.45	0.29	0.29	0.34	0.33
	Average aggregate LPA, positive trips (max = 3)	0.90	0.92	0.84	0.90	1.0
	Trips that landed gag	27	38	28	52	24
	Trips that discarded gag	38	121	93	154	78
Gag	% aggregate trips that landed gag	19%	8%	10%	12%	7%
	Average gag LPA, all aggregate trips (max = 1)	0.07	0.05	0.05	0.05	0.03
	Average gag LPA, positive trips (max = 1)	0.40	0.53	0.50	0.43	0.47
	Trips landed black grouper	6	11	7	18	16
Black grouper	% all aggregate trips that landed black grouper	4%	2%	3%	4%	4%
Bla	Average black grouper LPA, all aggregate trips (max = 1)	0.03	0.01	0.02	0.02	0.02
	Average black grouper LPA, positive trips (max = 1)	0.65	0.33	0.78	0.46	0.43
	Trips landed gag and/or black grouper	33	48	35	69	40
ack	% all aggregate trips that landed gag and/or black grouper	23%	11%	13%	15%	11%
d bla	Trips where gag/ black grouper LPA ≥ 1	3	10	8	13	6
Gag and black grouper	Trips landing both gag and black grouper	0	1	0	1	0
Gag	Average gag/black grouper LPA, all aggregate trips	0.10	0.05	0.07	0.07	0.05
	Average gag/black grouper LPA, positive trips	0.44	0.50	0.56	0.45	0.45

Table S-6. Number of trips that caught a species in aggregate grouper bag limit and the average landings per angler per trip (LPA) by year from the HBS data.

		2009	2010	2011	2012	2013
	Trips that caught an aggregate fish	4967	4916	3772	4572	4423
gate	Positive aggregate trips (landed an aggregate fish)	2583	2344	1988	1926	2007
Aggregate	Trips with aggregate LPA ≥ 3	23	12	32	47	20
Ag	Average aggregate LPA, all aggregate trips (max = 3)	0.13	0.13	0.16	0.13	0.12
	Average aggregate LPA, positive trips (max = 3)	0.24	0.28	0.31	0.30	0.27
	Trips that landed gag	1177	1122	922	674	663
	Trips that discarded gag	2048	1760	1428	1855	913
Gag	% aggregate trips that landed gag	24%	23%	24%	15%	15%
	Average gag LPA, all aggregate trips (max = 1)	0.03	0.03	0.03	0.02	0.02
	Average gag LPA, positive trips (max = 1)	0.12	0.14	0.14	0.13	0.10
per	Trips landed black grouper	138	138	176	163	240
grou	% all aggregate trips that landed black grouper	3%	3%	5%	4%	5%
Black grouper	Average black grouper LPA, all aggregate trips (max = 1)	0.003	0.003	0.006	0.004	0.007
Bla	Average black grouper LPA, positive trips (max = 1)	0.10	0.12	0.13	0.12	0.13
	Trips landed gag and/or black grouper	1293	1240	1085	823	865
ack	% all aggregate trips that landed gag and/or black grouper	26%	25%	29%	18%	20%
d bla	Trips where gag/black grouper LPA ≥ 1	18	19	15	20	6
Gag and black grouper	Trips landing both gag and black grouper	22	20	13	14	38
Gag	Average gag/black grouper LPA	0.03	0.04	0.04	0.02	0.02
	Average gag/black grouper LPA, positive trips	0.12	0.14	0.14	0.13	0.11

Table S-7	Projected	landings o	of dad	(lbs aw)	under	proposed bag limits	:
1 abic 0-1.	1 TOJCCICG	iaiiaiiiqo (Ji yay	(IDS GW)	unuci	proposed bag innit	ι.

ACL	Dog Limit	Projected					
ACL	Bag Limit	Closure date	Days Open*	Landings	% ACL		
ACL - ADC.	Status Quo			98,582	30%		
ACL = ABC: 326,340 lb gw	Gag Bag limit = 2	12/31	245	133,587	41%		
320,340 10 gw	Gag Bag limit = 3			168,592	52%		
ACL = 95%ABC:	Status Quo			98,582	32%		
310,023 lb gw	Gag Bag limit = 2	12/31	245	133,587	43%		
310,023 10 gw	Gag Bag limit = 3			168,592	54%		
ACL = 90%ABC	Status Quo			98,582	34%		
293,706 lb gw	Gag Bag limit = 2	12/31	245	133,587	45%		
293,700 10 gw	Gag Bag limit = 3			168,592	57%		
ACL = 80%ABC	Status Quo			98,582	38%		
261,072 lb gw	Gag Bag limit = 2	12/31	245	133,587	51%		
201,072 10 gw	Gag Bag limit = 3			168,592	65%		

^{*120} days correspond to the 4-month spawning season closure

Economic Effects

The bag limit analysis, which takes into account the possible ACLs from **Action 1**, indicates that the entire recreational ACL is not expected to be caught under any of the alternatives under **Action 2**. Allowing recreational fishermen to keep as many fish as possible without exceeding their sector ACL could increase both consumer surplus (CS) for the fishermen, and net operating revenue (NOR) for the for-hire portion of the sector.

Based on the assumptions of the bag limit analysis, and relative to **Alternative 1** (**No Action**), **Alternative 3** is expected to have greater increase in CS than would be expected under **Alternative 2**. The overall increase in CS for recreational trips is expected to be minor. The for-hire target effort is so low, that no expected change would occur; hence, no increase in Net Operating Revenue is expected. However, note that additional benefits may be received if there is an increase in for-hire target effort (due to an increase in the number of trips due to an increase in the bag limit).

Additionally, it must be noted that the current recreational ACL for gag is underharvested and it is possible that changing the gag bag limit could increase the number of trips taken, thus increasing the number of trips where one or more fish are caught. It is possible that the current bag limit for black and gag may be limiting the number of trips with any level of gag harvest and, by severing the gag-black connection, there may be an increase in trips with a gag. Thus, there could be an increase in trips with gag in total, as well as an increase in trips with multiple gag. However, it is not possible to estimate any change in the number of trips that may be taken that land gag.

Social Effects

In general, the social effects of increasing the bag limit for gag grouper within the 3-grouper aggregate would be associated with the expected biological costs (if any) of each alternative, as well as the effects on current recreational fishing opportunities. The expected effects on recreational fishermen and for-hire businesses under the proposed

alternatives would depend on any resulting changes in access to the resource through estimated season length, in addition to opportunities to reach the recreational ACL.

The bag limits for gag proposed in **Alternative 2** and **Alternative 3** would not be expected to shorten the season length under any ACLs proposed in **Action 1**, and it can be assumed that gag fishing opportunities under current conditions would be the same for **Alternative 2** and **Alternative 3**. However, **Table S-7** and **Appendix F** also suggest that only a portion of the recreational gag ACL would be reached under the proposed bag limits in **Alternative 2** and **3**. If the management goal is to reach the total ACL for gag, not harvesting a portion due to the bag limits could result in foregone benefits to recreational fishermen. Conversely, there are benefits to not harvesting all allowable ACL, such as leaving fish for future fishing opportunities in addition to biological benefits of lower removals of gag.

Snapper Grouper AP Input:

- It doesn't make sense to increase the bag limit on gag. There is some support from recreational divers, but hook and line fishermen aren't catching these fish. In Florida, the gag fishery is a spring and late summer fishery. Concern that the FL fishery could close if the ACL were met in the future.
- Need to have better information on recreational landings before increasing the gag bag limit.

MOTION: RECOMMEND ALTERNATIVE 1 (NO ACTION) AS PREFERRED FOR ACTION 2

Action 2. Modify the recreational bag limit for gag within the aggregate bag limit APPROVED BY AP

Public Hearing Input:

• Recommend Alternative 1 (No Action) for Action 2 (modification to gag bag limit)

SSC Input

The SSC reviewed the gag bag limit analysis conducted by SERO staff. Overall, the Committee found the analysis to be sound, the presentation informative, and after discussion accepted the methodology to represent the best scientific information available. The Committee provided the following suggestions for future analyses:

- 1. Since changes in angler behavior are not explicitly accounted for in the analysis, the assumption that everyone who met the bag limit in the past will meet the new, increased bag limit might not be realistic. In fact, assuming everyone will meet an increased bag limit is actually a very liberal assumption with regard to catch rates. Therefore, the SSC suggested that future analyses consider other alternatives and provide sensitivity analyses to such assumptions. Assumptions must also be evaluated in more detail, on a species by species basis.
- 2. The SSC requests that SEFSC comments on management analyses, such as bag limit evaluations, be provided in the briefing materials when such analyses are reviewed by the SSC.

3. The SSC recommends providing adequate time for SSC review of management evaluations in future amendment planning.

The SSC supports reviewing management analyses as applied to specific stocks through an ad hoc sub-committee when such analyses must be considered outside of the regular SSC scheduled meetings. This approach can be applied when the general analytical methods has been previously reviewed and endorsed by the Committee, as is the case with bag limit evaluations. The sub-committee will meet via webinar or conference call and report its findings in writing to the SSC for review before they are provided to the Council.

REQUIRED COMMITTEE ACTION: SELECT A PREFERRED ALTERNATIVE FOR ACTION 2

OPTION 1. SELECT ALTERANTIVE 2 AS PREFERRED FOR ACTION 2 OPTION 2. SELECT ALTERNATIVE 3 AS PREFERRED FOR ACTION 2 OPTION 3. OTHERS?

Action 3. Revise the annual catch limits (ACL) and optimum yield (OY) for wreckfish

Alternatives* for Action 3

(Preferred alternatives in **bold**)

- 1. No Action. Retain the current annual catch limits (ACL) and optimum yield (OY) for wreckfish. The wreckfish ABC=ACL=OY=235,000 pounds whole weight (lbs ww). Commercial and recreational allocations will remain equal to 95% and 5%, respectively. The commercial ACL will continue to be 223,250 lbs ww. The recreational ACL will continue to be 11,750 lbs ww. Currently, there are no annual catch targets (ACTs) for wreckfish.
- 2. Preferred. ACL = OY = Proposed ABC. The ACL for 2020 would remain in place until modified.
- 3. ACL = OY = 0.95*Proposed ABC. The ACL for 2020 would remain in place until modified.
- 4. ACL = OY = 0.90*Proposed ABC. The ACL for 2020 would remain in place until modified.
- 5. ACL = OY = 0.80*Proposed ABC. The ACL for 2020 would remain in place until modified.

Biological Effects

Alternative 1 (No Action) would retain the current ACL, equal to the ABC=OY=ABC 235,000 lbs ww. Sector allocations for the commercial and recreational ACLs are 95% (223,250 lbs ww) and 5%, respectively, (11,750 lbs ww). The amount of wreckfish that are allocated to recreational fishermen is very small, (approximately 300-350 fish), as wreckfish average weight is 30 to 40 lbs ww. Since ACLs for wreckfish were implemented in 2012, the recreational ACL has not been met.

Like Alternative 1 (No Action), Alternatives 2 (Preferred)-5 would set OY equal to the ACL (Tables S-8 to S-11). NS1 establishes the relationship between conservation and management measures, preventing overfishing, and achieving OY from each stock, stock complex, or fishery. The long-term objective is to achieve OY through annual achievement of an ACL.

The biological benefits of

Alternatives 2 (Preferred) through Alternative 5 would be less than under Alternative 1 (No Action) because they would increase the ACL and OY for wreckfish based upon a percentage of the updated ABC (100% to 80%, respectively). However, a new assessment has been conducted for wreckfish, and the South Atlantic Council's SSC has increased their catch level recommendations indicating that there is not a biological need to retain the ACL at the levels specified under Alternative 1 (No Action). Thus, compared to Alternative 1 (No Action), increasing the ACL under Alternative 2 (Preferred)-5 would not be expected to negatively impact the health of the wreckfish stock. Alternative 2 (Preferred) would set the ACL equal to the SSC's recommendation for the updated ABC. The preferred alternative for ACL specified for wreckfish in the Comprehensive ACL Amendment (SAFMC 2011a) also set ACL equal to the ABC. A buffer between the ACL/OY and ABC would provide greater assurance that overfishing is prevented and the long-term average biomass is near or above SSB_{MSY}. However, as mentioned for gag under Action 1, commercial monitoring mechanisms have been

improved and a Joint Dealer Reporting Amendment (GMFMC & SAFMC 2013b), which became effective on August 7, 2014, requires dealers to report landings electronically each week. Furthermore, overages of the commercial ACL are not expected because an individual transferable quota (ITQ) program is in place where there is a limited number of quota shares and a cap on the number of wreckfish quota shares a single entity may own. Under the ITQ program, commercial wreckfish landings are tracked closely, due to mandatory reporting requirements.

Table S-8. ABC and ACLs for wreckfish specified under **Alternative 2 (Preferred)** where ACL = OY = ABC.

Year	New ABC lbs ww	ACL	Commercial ACL (95%)	Recreational ACL (5%)
2015	433,000	433,000	411,350	21,650
2016	423,700	423,700	402,515	21,185
2017	414,200	414,200	393,490	20,710
2018	406,300	406,300	385,985	20,315
2019	396,800	396,800	376,960	19,840
2020	389,100	389,100	369,645	19,455

Table S-9. ABC and ACLs for wreckfish specified under Alternative 3 where ACL = OY = 95%ABC.

Year	New ABC lbs ww	ACL	Commercial ACL (95%)	Recreational ACL (5%)
2015	433,000	411,350	390,783	20,568
2016	423,700	402,515	382,389	20,126
2017	414,200	393,490	373,816	19,675
2018	406,300	385,985	366,686	19,299
2019	396,800	376,960	358,112	18,848
2020	389,100	369,645	351,163	18,482

Table S-10. ABC and ACLs for wreckfish specified under Alternative 4 where ACL = OY = 90%ABC.

*7	New ABC	ACI	Commercial	Recreational
Year	lbs ww	ACL	ACL (95%)	ACL (5%)
2015	433,000	389,700	370,215	19,485
2016	423,700	381,330	362,264	19,067
2017	414,200	372,780	354,141	18,639
2018	406,300	365,670	347,387	18,284
2019	396,800	357,120	339,264	17,856
2020	389,100	350,190	332,681	17,510

Table S-11. ABC and ACLs for wreckfish specified under Alternative 5 where ACL = OY = 80%ABC.

Year	New ABC lbs ww	ACL	Commercial ACL (95%)	Recreational ACL (5%)
2015	433,000	346,400	329,080	17,320
2016	423,700	338,960	322,012	16,948
2017	414,200	331,360	314,792	16,568
2018	406,300	325,040	308,788	16,252
2019	396,800	317,440	301,568	15,872
2020	389,100	311,280	295,716	15,564

Economic Effects

Whenever ACLs are changed, economic effects can be expected if the changes are expected to have an effect on the number of fish that can be taken by any sector. When the commercial sector's ACL increases, it can be expected that there would be positive direct effects in that more trips would be taken, assuming the entire ACL would be caught. When the recreational sector's ACL is increased, the overall consumer surplus would increase due to the greater availability of fish. All alternatives other than **Alternative 1 (No Action)** would increase the ACL for both sectors over what is currently available. **Preferred Alternative 2** would be expected to provide the highest level of benefits to fishermen, followed (in order) by **Alternative 3**, **Alternative 4**, and **Alternative 5**. The ACL level in **Alternative 1 (No Action)** would be expected to result in the fewest benefits to wreckfish fishermen. Positive direct economic effects to the commercial sector from the proposed alternatives would be moderate, while the positive effects for the recreational sector would be considered minimal.

Social Effects

Information about the social dimensions of the wreckfish portion of the snapper grouper fishery is described in **Section 3.3.2**. As described in **Section 4.1.3**, the higher the ACL, the greater the short-term social and economic benefits that would be expected to accrue. **Preferred Alternative 2** would be expected to provide the highest level of benefits to fishermen, followed (in order) by **Alternative 3**, **Alternative 4**, and **Alternative 5**. The ACL level in **Alternative 1** (**No Action**) would be expected to result in the fewest benefits to wreckfish fishermen.

Snapper Grouper AP Input:

- There are currently only 3 fishermen fishing for wreckfish. In the last 3 years the ACL has been landed. Also in the last 3 years, the recreational sector has had 0 landings. Why have a recreational ACL set that high? It is taking fish away from the public.
- Comp ACL Amendment set initial ACL for wreckfish. At the time, the Council was concerned that the recreational sector was targeting wreckfish (deep dropping) and there should be an ACL. However, there are few or no intercepts through MRIP.

MOTION: RECOMMEND ALTERNATIVE 2 AS PREFERRED FOR ACTION 3 *Action 3. Revise the annual catch limits (ACL) and optimum yield (OY) for wreckfish* **Alternative 2.** ACL = OY = Proposed ABC. The ACL for 2020 would remain in place until modified.

APPROVED BY AP

MOTION: COUNCIL SHOULD CONSIDER A 1% RECREATIONAL ALLOCATION FOR WRECKFISH APPROVED BY AP

Public Hearing Input:

- Establish a 500,000-pound wreckfish quota with a 2,000-pound trip limit for commercial snapper/grouper permit holders that do not own shares in the fishery.
- Consider buying back wreckfish shares that are being sold and putting in an open access quota.
- Support for Council's preferred alternatives under Actions 1 & 3 (gag & wreckfish ACLs).
- Recommend a reduction in the recreational allocation for wreckfish to 1% of the total ACL.

SSC Input

The SSC reviewed the wreckfish assessment at their April 2014 meeting. In general, the SSC found it to be an improvement over the Depletion Corrected Average Catch analysis conducted previously but noted that the current assessment is still a relatively data poor assessment. The SSC accepted the wreckfish benchmark assessment as representing the best available scientific information on the current status of wreckfish in South Atlantic waters and considered it appropriate for SAFMC management decisions. Below are some of the specific comments and discussion points, taken directly from the SSC report:

- -The question of where recruitment is coming from is critical to this assessment, but there is circumstantial evidence suggesting that the local spawning stock is producing the recruits that are entering the South Atlantic fishery. Juveniles are not commonly seen in the South Atlantic. Mostly are seen in the Eastern Atlantic and some off the northeast US. It is very likely that juveniles in the Eastern Atlantic are undergoing fishing mortality but levels are unknown.
- Another large point of uncertainty is the fact that 33% of the landings were confidential. However, an alternative run was done with a trend from the actual data and the model was insensitive to these changes.
- Members of the Committee expressed concern that the assessment's estimate of MSY was heavily influenced by landings history. Wreckfish CPUE has been extremely consistent through the history of the ITQ despite wide fluctuations in landings and research indicates that the magnitude of landings has been driven almost exclusively by economic rather than biological factors. If fisheries-dependent stock assessment models assume MSY and MEY (maximum economic yield) are equivalent, then resulting estimates may significantly underestimate MSY, particularly for transient stocks.

REQUIRED COMMITTEE ACTION:

OPTION 1. DO NOT MODIFY ACTION 3 AND ALTERNATIVES.

OPTION 2. MODIFY ACTION 3 AND ALTERNATIVES.

OPTION 3. OTHERS??

REQUIRED COMMITTEE ACTION: FINAL APPROVAL OF REGULATORY AMENDMENT 22

DRAFT MOTION: APPROVE SNAPPER GROUPER REGULATORY AMENDMENT 22 FOR SECRETARIAL REVIEW AND DEEM THE CODIFIED TEXT AS NECESSARY AND APPROPRIATE. GIVE STAFF EDITORIAL LICENSE TO MAKE ANY NECESSARY EDITORIAL CHANGES TO THE DOCUMENT/CODIFIED TEXT AND GIVE THE COUNCIL CHAIR AUTHORITY TO APPROVE THE REVISIONS AND RE-DEEM THE CODIFIED TEXT.