

Amendment 43 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region

Options Paper SSC Review



Amendment 43 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (Amendment 43) would address fishing level specifications for red snapper in response to the new stock assessment and revise management measures.

9/28/2016

Purpose for Action

The *purpose* of Snapper Grouper Amendment 43 is to revise annual catch limits, management reference points, and management measures for red snapper and revise reporting requirements for snapper grouper species for the recreational sector.

Need for Action

The *need* for the amendment is to end overfishing and rebuild the red snapper stock using the best scientific information available, improve data collection for snapper grouper species, and reduce bycatch of red snapper and other snapper grouper species while minimizing, to the extent practicable, adverse social and economic effects.

Why is the Council Considering Action?

Additional management measures or modifications to current management measures for red snapper are needed to end overfishing of red snapper while continuing to rebuild the stock based on the most recent red snapper stock assessment for the South Atlantic region (SEDAR 41 2016). The Council's Scientific and Statistical Committee (SSC) reviewed the assessment and recommended an acceptable biological catch (ABC). The SSC's previous ABC recommendations for 2012-2019 were much higher than the recommended ABCs from the most recent assessment for the same time period (SEDAR 41 2016). Likely factors for the decrease in the ABC include changes in selectivity, changes in recreational catch estimation methods, modifications to input data, and new scientific information on natural mortality and reproduction. Due to these changes and reduced ABC recommendations from the SSC, the Council may modify existing management criteria and management measures for red snapper to end overfishing of red snapper while continuing to rebuild the stock so it may produce optimum yield, minimize to the extent practicable adverse social and economic effects, minimize bycatch and dead discards, and improve data collection.

Current Actions for Review by SSC

Action 1. Revise Maximum Sustainable Yield (MSY) for Red Snapper in the South Atlantic Region

Alternative 1 (No Action). Currently, MSY equals the yield produced by F_{MSY} . $F_{30\%SPR}$ is used as the F_{MSY} proxy.

Alternative 2. MSY equals the yield produced by F_{MSY} or the F_{MSY} proxy based on the most recent SSC recommendation of F_{MSY} or its proxy.

Alternative 3. MSY equals the yield produced by $F_{20\%SPR}$ based on the most recent SSC recommendation.

Alternative 4. MSY equals the yield produced by F_{Max} based on the most recent SSC recommendation.

Alternative 5. MSY equals the yield produced by $F_{26\%SPR}$ based on the most recent SSC recommendation.

Alternative 6. MSY equals the yield produced by $F_{40\%SPR}$ based on the most recent SSC recommendation.

Alternatives	Equation	F_{MSY}	MSY Values (Numbers of Fish)
Alternative 1 (No Action)	Do not modify the current definition of MSY for red snapper. Currently, MSY equals the yield produced by F_{MSY} . $F_{30\%SPR}$ is used as the F_{MSY} proxy.	$F_{30\%SPR} = 0.204^*$	75,000 (1,926,000 lbs)*
Alternative 2	MSY equals the yield produced by F_{MSY} or the F_{MSY} proxy based on the most recent SSC recommendation of F_{MSY} or its proxy.	F_{MSY} or F_{MSY} proxy	32,000 (430,000 lbs)
Alternative 3	MSY equals the yield produced by $F_{20\%}$ proxy	$F_{20\%SPR}$	
Alternative 4	MSY equals the yield produced by F_{max} proxy	F_{Max}	
Alternative 5	MSY equals the yield produced by $F_{26\%}$ proxy	$F_{26\%SPR}$	
Alternative 6	MSY equals the yield produced by $F_{40\%}$ proxy	$F_{40\%SPR}$	

* Estimates from SEDAR 24 and Amendment 28.

Discussion:

The SSC has been asked provide guidance to the Council on setting different MSY proxies at the October 2016 SSC meeting.

NOTE: The range of alternatives goes beyond the requested information from the SEFSC at the June Council meeting. Some alternatives can be moved to the not considered for detailed analysis but are listed here for consideration.

For each of the alternatives, MSY attributes and rebuilding projections will vary due to changes in the MSY proxy (**Table 4**). **Alternative 1** is the current MSY for red snapper. **Alternative 2** has similar wording to **Alternative 1** but it is intended to enable implementation a new MSY based on recommendation from the SSC without an amendment to the fishery management plan. **Alternative 3** ($F_{20\%SPR}$) is the lowest Council requested F proxy.

Alternative 4 (F_{Max}) is similar to **Alternative 3**. **Alternative 5** ($F_{26\%SPR}$) was not requested by the Council but is used by the Gulf of Mexico Fishery Management Council as the MSY value for red snapper. **Alternative 6** ($F_{40\%SPR}$) was considered for use as the MSY value for red snapper during Amendment 17A.

Table 4. Rebuilding goal, ACL in 2018, OY at equilibrium, years needed to rebuild the stock to SSB_{MSY} and probability of rebuilding to SSB_{MSY} for the different MSY Alternatives.

	FMSY Proxy					
	Alt 1 F_{MSY} or Proxy ($F_{30\%SPR}$)	Alt 2 F_{MSY} or Proxy	Alt 3 ($F_{20\%SPR}$)	Alt 4 (F_{Max})	Alt 5 ($F_{26\%SPR}$)	Alt 6 ($F_{40\%SPR}$)
Rebuilding Goal (SSB_{MSY})						
ACL in Year One (2018)						
OY at Equilibrium						
Years to Rebuild to SSB_{MSY}						
Probability of Rebuilding to SSB_{MSY}						

Action 3. Revise Annual Catch Limits (ACLs) for Red Snapper in the South Atlantic Region

Alternative 1 (No action). Do not adjust annual catch limits (ACLs) for red snapper in the South Atlantic. The commercial and recreational ACLs for red snapper are zero. However, if NMFS determines that the previous year's estimated red snapper landings and dead discards are less than the ABC (Table xx), limited red snapper harvest and possession may be allowed for the current fishing year and the commercial and recreational ACL values would be determined using the following formula:

If total removals_{yr-1} > ABC_{yr-1}, then ACL_{yr} = 0

If total removals_{yr-1} < ABC_{yr-1}, then

$$ACL_{yr} = \left(\frac{(ABC_{yr-2} - estCSR_{yr-2})}{ABC_{yr-2}} + \frac{(ABC_{yr-1} - estCSR_{yr-1})}{ABC_{yr-1}} \right) / 2 * ABC_{yr}$$

where ACL_{yr} equals the ACL in the current fishing year, ACL_{yr-n} and ABC_{yr-n} equals the ACL and ABC for the prior fishing years, and $estCSR_{yr-n}$ equals the estimated dead discards plus landings in the prior fishing years.

If the ABC in the prior fishing year is exceeded, then the ACL in the following year would be set equal to zero. If the ACL is negative (dead discards plus landings exceeds the ABC for the two previous years), the ACL in the following year would be set equal to zero. If the ACL is positive, then the ACL is reduced from the ABC based on the ratio in the equation above.

Alternative 2. Specify ACLs for red snapper using the resulting ABC from the most recent SSC recommendation for **landings and dead discards** using the existing sector allocations (*commercial 28.07% and recreational 71.93%*) through 2019. The 2019 ACL would remain in place until a new ACL is specified. The commercial and recreational ACLs are specified in numbers of landed fish:

Sub-alternative 2a. ACL = ABC (**landings and discards**)

Sub-alternative 2b. ACL = 95% ABC (**landings and discards**)

Sub-alternative 2c. ACL = 90% ABC (**landings and discards**)

Note: The ABC for red snapper has been specified in landings and dead discards. The SSC will be requested to provide guidance on setting the ABC in landings only or landings and discards.

The Council should discuss if they want the ACL/ABC in numbers or weight of red snapper. Numbers of fish has been used in the past because of the inclusion of dead discards. Discards are reported in numbers of fish.

Should discards be included in the ACL if the ABC includes discards?

NOTE: ABC and ACL values in the below tables can change if the Council selects a MSY proxy other than Action 1 Alternative 1 (Status Quo).

ACL = ABC (Sub-alternative 2a)						
Year	Landings ABC (Number of Fish)	Dead Discards ABC (Number of Fish)	Total ABC (Number of Fish)	Total ACL (Number of Fish)	Comm ACL (Number of Fish)	Rec ACL (Number of Fish)
2017	18,000	40,000	58,000	18,000	5,030	12,970
2018	19,000	42,000	61,000	19,000	5,897	13,103
2019	21,000	43,000	64,000	21,000	6,649	14,351
ACL = 95% ABC (Sub-alternative 2b)						
2017	18,000	40,000	58,000	17,100	4,779	12,321
2018	19,000	42,000	61,000	18,050	5,602	12,448
2019	21,000	43,000	64,000	19,950	6,316	13,634
ACL = 90% ABC (Sub-alternative 2c)						
2017	18,000	40,000	58,000	16,200	4,527	11,673
2018	19,000	42,000	61,000	17,100	5,308	11,792
2019	21,000	43,000	64,000	18,900	5,984	12,916

*The commercial ACL was estimated from the landings ABC and the 2012-2014 average commercial weight of from SEDAR 41 (9.71 lbs ww). Recreational ACL is the difference between the landings ABC and commercial ACL.

Discussion:

The current method to determine the ACL and if a season is allowed (**Alternative 1**) was developed in Amendment 28. If the ABC (landings and dead discards) is exceeded in the previous year, then the ACL is set to zero and harvest is not allowed that year. If the catch including landings and dead discards is below the ABC for landings and dead discards in the previous year, then the ACL is calculated based on the average of the ratio of the previous two years' landings and discards to the ABC. If the catch (landings and dead discards) exceeds the combined ABC for two years, then the ACL is set to zero and there is no season. The resulting ABC and ACL are below:

Table 5. Alternative 1 ABC and ACL values from Amendment 28.

Amendment 28					
Year	ABC (Landings in Number of Fish)	ABC (Dead Discards in Number of Fish)	Total ABC (Number of Fish)	Projection of Maximum Possible Commercial ACL (Number of Fish)	Projection of Maximum Possible Recreational ACL (Number of Fish)
2016	69,000	52,000	121,000	Discards Only	Discards Only
2017	74,000	54,000	128,000	Discards Only	Discards Only
2018	79,000	56,000	135,000	24,138*	54,862*
2019	84,000	58,000	142,000	25,960*	58,040*

*The commercial ACL was estimated from the landings ABC and the 2012-2014 average commercial weight of from SEDAR 41 (9.71 lbs ww). Recreational ACL is the difference between the landings ABC and commercial ACL

Alternative 2 would remove the equation developed in Amendment 28 to calculate the ACL. The commercial allocation implemented through Amendment 28 was 28.07% of the total ACL and the recreational allocation was 71.93% based on weight of fish specified through the Comprehensive ACL Amendment (SAFMC 2011). Although the allocation has been based on weight of fish, the ABC has been based on numbers of fish due to the inclusion of dead discards. The fishery dependent reporting requirement for discards and reporting method through fishery dependent sampling programs report numbers of fish, and limited information is available on the size and weight of the discarded fish. Therefore, the ACL for red snapper has been expressed as numbers of fish.

To estimate the commercial portion of the ABC, the landings portion of the proposed ABC (**Sub-alternatives 2a and 3a**) or percentage of the landings ABC (**Sub-alternatives 2b, 2c, 3b, and 3c**) was multiplied by the commercial allocation to get the commercial allocation in weight. Then the commercial allocation in weight was divided by the average commercial weight of red snapper from 2012 to 2014 to get the commercial ACL in number of landed fish. The recreational ACL in number of landed fish was calculated by subtracting the commercial ACL from the landings ABC (**Sub-alternatives 2a and 3a**) or percentage of the landings ABC (**Sub-alternatives 2b, 2c, 3b, and 3c**).

The ACLs are only provided through 2019 based on a recommendation from the Scientific and Statistical Committee. Most of the removals in the last years of the assessment (SEDAR 41) were from dead discards which the committee felt was uncertain and indication of a strong recruitment event. The committee recommended a new assessment be initiated no later than 2019 with data through 2018. The 2019 ABC and ACL recommendations are to carry forward until a new assessment is completed from which the committee can develop new ABC recommendations.

Action 4. Establish a Recreational Annual Catch Target (ACT) for Red Snapper in the South Atlantic Region

Alternative 1 (No Action). There is no recreational annual catch target (ACT) specified for red snapper in the South Atlantic Region.

Alternative 2. ACT = recreational ACL*(1-average 2012 to 2015 PSE) or ACL*0.5, whichever is greater.

Alternative 3. ACT =85% recreational ACL

Alternative 4. ACT = 75% recreational ACL

Alternative 5. ACT = 65% recreational ACL

Alternative 6. ACT = Recreational ACL * (1 - Average of (Landings_{year} – ACL_{year})/ACL_{year}) for the years 2012 to 2014. If landings do not exceed the ACL, the difference is set to zero.

NOTE: ACL and ACT values in the below tables can change if the Council selects a MSY proxy other than Action 1 Alternative 1 (Status Quo).

Year	Total ACL (Number of Fish)		Recreational ACT (Number of Fish)				
	ACL = ABC (Action 3 Sub-alternative 2a)	Recreational ACL	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6
2017	18,000	12,970	6,628	11,025	9,728	8,430	7,652
2018	19,000	13,103	6,696	11,138	9,827	8,517	7,731
2019	21,000	14,351	7,333	12,198	10,763	9,328	8,467
Year	ACL = 95% ABC (Action 3 Sub-alternative 2b)		Recreational ACT (Number of Fish)				
	ACL = 95% ABC (Action 3 Sub-alternative 2b)	Recreational ACL	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6
2017	17,100	12,321	6,296	10,473	9,241	8,009	7,270
2018	18,050	12,448	6,361	10,581	9,336	8,091	7,344
2019	19,950	13,634	6,967	11,589	10,226	8,862	8,044
Year	ACL = 90% ABC (Action 3 Sub-alternative 2c)		Recreational ACT (Number of Fish)				
	ACL = 90% ABC (Action 3 Sub-alternative 2c)	Recreational ACL	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6
2017	16,200	11,673	5,965	9,922	8,755	7,587	6,887
2018	17,100	11,792	6,026	10,023	8,844	7,665	6,958
2019	18,900	12,916	6,600	10,979	9,687	8,395	7,620

Discussion:

The annual catch target (ACT) can be used to limit catch at or below the ACL to account for management uncertainty. Since the ACT is typically set lower, and would be reached sooner,

than the ACL for any given species, using an ACT rather than the ACL as a trigger for an in-season accountability measures (AMs) in the recreational sector may prevent an ACL overage. This more conservative approach would likely help to ensure that recreational data uncertainties do not cause or contribute to excessive ACL overages for vulnerable species. Using recreational ACTs rather than the ACLs to trigger recreational AMs may not eliminate ACL overages completely; however, using such a strategy for the recreational sector may reduce the need to compensate for very large overages. However, in managing the snapper grouper fishery, the Council has chosen not to use ACTs to trigger AMs because it is anticipated that improvements in reporting would significantly reduce management uncertainty. Nevertheless, an ACT can be specified such that the Council can utilize it in its management approach in the future. Currently there is not an annual catch target for red snapper (**Alternative 1**). If an ACT is selected, then the ACT will be dependent on **Action 3** and the ACT values are calculated for **Action 3 Sub-alternatives 2a-c** and **3a-c**. The method used to specify a recreational ACT for other snapper grouper species uses the percent standard error (PSE) from the Marine Recreational Information Program (MRIP) to account for uncertainty in the landings estimate (**Alternative 2, Table 6**). **Alternatives 3, 4, and 5** reduce the management target to a lesser degree than **Alternative 2** by reducing the ACL by a set percentage to account for a variety of recreational management uncertainties.

Table 6. The yearly proportional standard error for the Marine Recreational Intercept Program for number of red snapper landed (A + B1) from 2012 to 2015.

Year	MRIP PSE for Landings in Numbers of Fish
2012	45.2
2013	76.2
2014	31.7
2015	42.4
Average	48.9

Alternative 6 uses a comparison of the ACL to landings to estimate a range of management uncertainty. Red snapper was open for shortened seasons in 2012, 2013, and 2014 and in those years the landings exceeded the ACL each year (**Table 7**). The value for the landings used the estimation from the Marine Recreational Fishery Statistic Survey and Southeast Region Headboat Survey since those estimates were used to determine the ABC and ACL. The ACL was exceeded in the recreational fishery by 41% on average.

The commercial fishery does not typically have an ACT for snapper grouper species since all landings are reported through dealers on a weekly basis and the fishery can be closed within the season through accountability measures. The Council can consider establishing an ACT for the commercial fishery. The commercial fishery exceeded its ACL in 2013 and 2014 (**Table 7**).

Table 7. Recreational and commercial red snapper ACL, landings, and % exceeding ACL from 2012 to 2014. Landings estimate came from SERO Reports to the Council at June Council Meetings.

Year	Recreational			Commercial		
	ACL	Landings	% Exceeding ACL	ACL	Landings	% Exceeding ACL
2012	9,399	15,059	60%	3,668	1,532	0%
2013	9,585	11,767	23%	3,740	5,123	37%
2014	22,576	31,683	40%	8,810	10,827	23%
Average Exceeding ACL			41%			20%

Full Options Paper for Background Information and Includes Proposed Actions and Alternatives. These will be reviewed in more detail at future meetings but the SSC can comment if desired.

What are the Scientific Recommendations from the Assessment and SSC Review?

An update to the stock assessment for red snapper in the southeastern U.S. (SEDAR 41 2016) was conducted in 2015/2016 with data through 2014. The SSC reviewed the results at their May 3-5, 2016 meeting and made the following fishing level recommendations:

Table 1. Red Snapper recommendations from SEDAR 41 and SSC (March 2016).

Criteria	Deterministic
Overfished evaluation ($SSB_{2014}/SSB_{30\%}$)	0.16
Overfishing evaluation	$F_{12-14}/F_{30\%} > 1$
MFMT ($F_{30\%}$)	0.15
$SSB_{30\%}$ (Eggs 1E8)	328,552
MSST (Eggs 1E8)	246,414
MSY (1000 lb)	430
Y at 75% $F_{30\%}$ (1000 lb)	398
ABC Control Rule Adjustment	Under Rebuilding
P-Star	Under Rebuilding

The following tables are the overfishing limit (OFL) and ABC recommendations from the SSC for red snapper in the South Atlantic region based on the results of SEDAR 41 (**Table 2**). Two different start dates for management were used, 2016 and 2017, depending on when management actions are expected to be in place. If the start year is 2017, the OFL and ABC recommendations are lower than if management had started in 2016. This is due to continued overfishing and the need for management actions to end overfishing. Much of the overfishing that is currently occurring on the red snapper stock is due to bycatch which results in a high number of dead discards.

Snapper Grouper Amendment 11 (SAFMC 1999) specified $F_{30\%}$ as a proxy for F_{MSY} and the corresponding yield as a proxy for Maximum Sustainable Yield (MSY) and Amendment 17A (SAFMC 2010) specified the yield at 98% of $F_{30\%}$ as a proxy for the ABC during the rebuilding period. The SSC has been requested to discuss different proxies for MSY by the Council based on discussions at the SSC's meeting in May 2016.

Table 2. Probabilistic projections of red snapper overfishing limit (OFL) and acceptable biological catch (ABC) from 2016 through 2019 for management starts years of 2016 and 2017.

Source: May 2016 SSC Report Revised 9/20/2016

OFL RECOMMENDATIONS (Probabilistic Projections Starting w/ Management Beginning in 2016)				
Year	Landed (lbs)	Dead Discards (lbs)	Landed (#)	Dead Discards (#)
2016	144,000	187,000	16,000	38,000
2017	205,000	222,000	21,000	40,000
2018	241,000	242,000	23,000	41,000
2019	267,000	254,000	24,000	41,000

ABC RECOMMENDATIONS (Probabilistic Projections Starting w/ Management Beginning in 2016)				
Year	Landed (lbs)	Dead Discards (lbs)	Landed (#)	Dead Discards (#)
2016	138,000	180,000 213,000	16,000	36,000
2017	196,000	213,000 233,000	20,000	38,000
2018	233,000	233,000 246,000	22,000	39,000
2019	258,000	246,000 255,000	23,000	39,000

OFL RECOMMENDATIONS (Probabilistic Projections Starting w/ Management Beginning in 2017)				
Year	Landed (lbs)	Dead Discards (lbs)	Landed (#)	Dead Discards (#)
2017	174,000	189,000	18,000	40 35,000
2018	204,000	210,000	19,000	42 37,000
2019	230,000	227,000	21,000	43 39,000

ABC RECOMMENDATIONS (Probabilistic Projections Starting w/ Management Beginning in 2017)				
Year	Landed (lbs)	Dead Discards (lbs)	Landed (#)	Dead Discards (#)
2017	165,000	179,000	17,000	33,000
2018	195,000	200,000	18,000	35,000
2019	220,000	218,000	20,000	37,000

How are Red Snapper Seasons in the South Atlantic Currently Determined?

SEDAR 15 (2009) determined the red snapper stock to be overfished and undergoing overfishing. In response to the stock assessment, the Council recommended implementing the moratorium through Snapper Grouper Amendment 17A (SAFMC 2010). In 2013, a method to annually evaluate whether a limited red snapper season could occur was developed and implemented through Amendment 28 (SAFMC 2013). The method to calculate the ACL from

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the ABC is based on the total red snapper removals in previous years (dead discards + landings). If total removals (dead discards + landings) exceed the ABC in the year prior, then the ACL equals 0. If the total removals are less than the ABC, the ACL is based on average percent harvest (dead discards + landings) over the past two years reduced from the current year's ABC. (NOTE: The commercial allocation in Amendment 28 was 28.07% and the recreational allocation was 71.93% based on weight).

Based on this method, a limited red snapper seasons occurred in 2012, 2013, and 2014. However, the red snapper removals (landings + dead discards) in 2014 and 2015 exceeded the ABC; therefore, the subsequent seasons' ACLs were set to zero and harvest of red snapper was not allowed in 2015 or 2016. The ABCs from Amendment 28 (used to determine seasons through 2019), total ACLs for 2012 through 2019, and total landings for 2012 through 2015 (bold values indicate ABC was exceeded) are shown below:

Table 3. Previous ABC recommendations, ACL based on actions in Amendment 28, landings from 2012 through 2015, and landings plus dead discards from 2012 through 2015.

Year	Landings ABC (Numbers of Fish)	Dead Discards ABC (Number of Fish)	Total ABC (Numbers of Fish)	ACL for Landings only (Numbers of Fish)	Landings (Numbers of Fish)	Landings + Dead Discards* (Numbers of Fish)
2012	45,000	41,000	86,000	13,067	16,591	80,516
2013	52,000	44,000	96,000	13,325	11,767	72,881 or 97,563**
2014	59,000	47,000	106,000	31,387	42,510	205,859
2015	64,000	50,000	114,000	0	2,850	276,729
2016	69,000	52,000	121,000	0		
2017	74,000	54,000	128,000	0***		
2018	79,000	56,000	135,000	TBD^		
2019	84,000	58,000	142,000	TBD^		

*Source: NMFS Red Snapper 2016 Season Presentation to SAFMC June 2016,

**One landings estimate through Marine Recreational Fisheries Statistics Survey (MRFSS) and one with landings was estimated from a study conducted by Florida Fish and Wildlife Research Institute (FWRI). The 72,881 from FWRI was accepted as the estimate of landings.

***Amendment 43 regulations will not be in place until the 2018 fishing season given the time required to complete the amendment process (scoping, public hearings, etc.)

^TBD=to be determined and based on ACL calculation from Amendment 28 shown in [Action 3](#)

Possible Approaches to Managing Red Snapper

The Council recognizes that there are multiple ways to manage the red snapper fishery in the South Atlantic region. The current management approach allows a limited season to harvest red snapper if the total accepted biological catch (ABC), which includes landings and dead discards, is not exceeded. The ABCs in 2014 and 2015 were exceeded, however, and no harvest of red

snapper was allowed in 2015 and 2016 due to the high number of dead discards. Additionally, red snapper were reassessed with data through 2014 in SEDAR 41 (2016), and the stock was again found to be overfished and experiencing overfishing. As required by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson Stevens Act), the Council must end overfishing and rebuild the stock. **Actions 1-5** are requirements in the Act and address specifying or revising the maximum sustainable yield, minimum stock size threshold, annual catch limit, annual catch target, and accountability measures for red snapper based on the most recent recommendations from SEDAR 41 and the SSC. The Council is considering area closures to reduce bycatch of red snapper and end overfishing (**Action 6**) or an adaptive management approach, which would include multiple actions (**Actions 5, 7, 8, 9, 10, and 11**) to reduce bycatch, improve reporting data, end overfishing, and have an adjustable framework to restrict or relax regulation depending on the effectiveness of management measures to control landings and discards.

Actions 1, 2, 3, 5, 6, 7, 11, and 12 would impact commercial fisheries with **Actions 5, 6, 7, and 11** directly impacting management measures for commercial fisheries. **Actions 1, 2, 3, 4, 5, 6, 8, 9, 10, 11 and 12** would impact recreational fisheries with **Actions 5, 6, 8, 9, 10, 11, and 12** directly impacting management measures for recreational fisheries.

Possible Actions and Alternatives

Action 1. Revise Maximum Sustainable Yield (MSY) for Red Snapper in the South Atlantic Region

Alternative 1 (No Action). Currently, MSY equals the yield produced by F_{MSY} . $F_{30\%SPR}$ is used as the F_{MSY} proxy.

Alternative 2. MSY equals the yield produced by F_{MSY} or the F_{MSY} proxy based on the most recent SSC recommendation of F_{MSY} or its proxy.

Alternative 3. MSY equals the yield produced by $F_{20\%SPR}$ based on the most recent SSC recommendation.

Alternative 4. MSY equals the yield produced by F_{Max} based on the most recent SSC recommendation.

Alternative 5. MSY equals the yield produced by $F_{26\%SPR}$ based on the most recent SSC recommendation.

Alternative 6. MSY equals the yield produced by $F_{40\%SPR}$ based on the most recent SSC recommendation.

Alternatives	Equation	F_{MSY}	MSY Values (Numbers of Fish)
Alternative 1 (No Action)	Do not modify the current definition of MSY for red snapper. Currently, MSY equals the yield produced by F_{MSY} . $F_{30\%SPR}$ is used as the F_{MSY} proxy.	$F_{30\%SPR} = 0.204^*$	75,000 (1,926,000 lbs)*
Alternative 2	MSY equals the yield produced by F_{MSY} or the F_{MSY} proxy based on the most recent SSC recommendation of F_{MSY} or its proxy.	F_{MSY} or F_{MSY} proxy	32,000 (430,000 lbs)
Alternative 3	MSY equals the yield produced by $F_{20\%}$ proxy	$F_{20\%SPR}$	
Alternative 4	MSY equals the yield produced by F_{max} proxy	F_{Max}	
Alternative 5	MSY equals the yield produced by $F_{26\%}$ proxy	$F_{26\%SPR}$	

Alternative 6	MSY equals the yield produced by $F_{40\%SPR}$ proxy	$F_{40\%SPR}$	
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* Estimates from SEDAR 24 and Amendment 28.

Discussion:

The SSC has been asked provide guidance to the Council on setting different MSY proxies at the October 2016 SSC meeting.

For each of the alternatives, MSY attributes and rebuilding projections will vary due to changes in the MSY proxy (Table 4). **Alternative 1** is the current MSY for red snapper. **Alternative 2** has similar wording to **Alternative 1** but it is intended to enable implementation a new MSY based on recommendation from the SSC without an amendment to the fishery management plan. **Alternative 3** ($F_{20\%SPR}$) is the lowest Council requested F proxy. **Alternative 4** (F_{Max}) is similar to **Alternative 3**. **Alternative 5** ($F_{26\%SPR}$) was not requested by the Council but is used by the Gulf of Mexico Fishery Management Council as the MSY value for red snapper. **Alternative 6** ($F_{40\%SPR}$) was considered for use as the MSY value for red snapper during Amendment 17A.

Table 4. Rebuilding goal, ACL in 2018, OY at equilibrium, years needed to rebuild the stock to SSB_{MSY} and probability of rebuilding to SSB_{MSY} for the different MSY Alternatives.

	FMSY Proxy					
	Alt 1 F_{MSY} or Proxy ($F_{30\%SPR}$)	Alt 2 F_{MSY} or Proxy	Alt 3 ($F_{20\%SPR}$)	Alt 4 (F_{Max})	Alt 5 ($F_{26\%SPR}$)	Alt 6 ($F_{40\%SPR}$)
Rebuilding Goal (SSB_{MSY})						
ACL in Year One (2018)						
OY at Equilibrium						
Years to Rebuild to SSB_{MSY}						
Probability of Rebuilding to SSB_{MSY}						

COMMITTEE ACTION:

- OPTION 1. APPROVE INCLUSION OF ACTION 1 IN AMENDMENT 43 AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 1 FOR DETAILED ANALYSIS.
- OPTION 2. ADD/MODIFY ALTERNATIVES UNDER ACTION 1 (COMMITTEE TO SPECIFY) AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 1 FOR DETAILED ANALYSIS.
- OPTION 3. DO NOT APPROVE INCLUSION OF ACTION 1 IN AMENDMENT 43.
- OPTION 4. OTHERS??

Action 2. Specify Minimum Stock Size Threshold (MSST) for Red Snapper in the South Atlantic Region

Alternative 1 (No Action). MSST = 75% of SSB_{MSY}.

Alternative 2. MSST = 50% of SSB_{MSY}

Alternative 3. MSST = SSB at 10% SPR

Alternative 4. MSST = 85% of SSB_{MSY}

Comment [CC1]: Value of SPR above 50%SSB_{msy}

Note: SSB_{MSY} values in table below for **Alternative 1** and **2** are dependent on the MSY value selected in **Action 1**.

MSST Values*(Trillion Eggs Spawned)

Alternatives	MSST Equation	Action 1 Alt 1.	Action 1 Alt 2.	Action 1 Alt 3.	Action 1 Alt 4.	Action 1 Alt 5.	Action 1 Alt 6.
Alternative 1 (No Action)	MSST = 75% of SSB _{MSY}	26.424 .6					
Alternative 2	MSST = 50% of SSB _{MSY}	16.4					
Alternative 3	MSST = SSB at xx%SPR	16.4					
Alternative 4	MSST = 85% of SSB _{MSY}	27.9					

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*Values developed from a formula using the most recent SSC recommendation. The values in this amendment were based on output from SEDAR 41.

**Value to be updated with information from SEFSC.

Discussion:

Regulatory Amendment 21, effective November 6, 2014, changed the definition for MSST for select snapper grouper species with low natural mortality (M) from $MSST = SSB_{MSY} * ((1-M) \text{ or } 0.5, \text{ whichever is greater})$ to $MSST = 75\% SSB_{MSY}$, where SSB_{MSY} is the spawning stock biomass then the stock is at the equilibrium maximum sustainable yield. When the natural mortality rate is low, less than 0.25, even small fluctuations in biomass due to natural variations not related to fishing mortality may cause a stock to vary between an overfished or rebuilt condition. When a species is identified as overfished, the Magnuson-Stevens Act requires that a plan be implemented to rebuild the stock. The snapper grouper species with low natural mortality rates addressed in Regulatory Amendment 21 were red snapper, blueline tilefish, gag, black grouper, yellowtail snapper, vermilion snapper, red porgy, and greater amberjack. Redefining MSST for these species was done to help prevent unnecessary overfished designations when small drops in biomass are due to natural variation in recruitment or other

environmental variables, and ensure that rebuilding plans are applied to stocks when truly appropriate. The SEDAR 41 Assessment (2016) estimated a constant natural mortality for red snapper at 0.137, which is within the range of natural mortality values for species addressed in Regulatory Amendment 21 (0.08 – 0.23).

The SSB is measured in number of eggs produced by the mature female population. The SSB at the current MSY proxy (F30%) is 32.9 trillion eggs spawned based on SEDAR 41. The resulting MSST using 75% of SSB_{MSY} (**Alternative 1**) and based on results from SEDAR 41 would be 26.4 trillion eggs spawned. The MSST values for **Alternatives 2** and **3** are lower than that under **Alternative 1** and would provide a larger buffer from MSY before the stock is declared overfished. The tradeoff with lower MSST values is that the number of eggs produced when the stock is at a low level would also be lower, which could translate into less fish available to catch. The egg production at MSST (F30%) for **Alternative 2** is 16.4 trillion eggs which is 10 trillion eggs lower than **Alternative 1**. The MSST (F30%) for **Alternative 3** is approximately 12 trillion eggs.

COMMITTEE ACTION:

OPTION 1. APPROVE INCLUSION OF ACTION 2 IN AMENDMENT 43 AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 2 FOR DETAILED ANALYSIS.

OPTION 2. ADD/MODIFY ALTERNATIVES UNDER ACTION 2 (COMMITTEE TO SPECIFY) AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 2 FOR DETAILED ANALYSIS.

OPTION 3. DO NOT APPROVE INCLUSION OF ACTION 2 IN AMENDMENT 43.

OPTION 4. OTHERS??

Action 3. Revise Annual Catch Limits (ACLs) for Red Snapper in the South Atlantic Region

Alternative 1 (No action). Do not adjust annual catch limits (ACLs) for red snapper in the South Atlantic. The commercial and recreational ACLs for red snapper are zero. However, if NMFS determines that the previous year's estimated red snapper landings and dead discards are less than the ABC (Table xx), limited red snapper harvest and possession may be allowed for the current fishing year and the commercial and recreational ACL values would be determined using the following formula:

If total removals_{yr-1} > ABC_{yr-1}, then ACL_{yr} = 0

If total removals_{yr-1} < ABC_{yr-1}, then

$$ACL_{yr} = \left(\frac{ABC_{yr-2} - estCSR_{yr-2}}{ABC_{yr-2}} + \frac{ABC_{yr-1} - estCSR_{yr-1}}{ABC_{yr-1}} \right) / 2 * ABC_{yr}$$

where ACL_{yr} equals the ACL in the current fishing year, ACL_{yr-n} and ABC_{yr-n} equals the ACL and ABC for the prior fishing years, and $estCSR_{yr-n}$ equals the estimated dead discards plus landings in the prior fishing years.

If the **ABCACL** in the prior fishing year is exceeded, then the ACL in the following year would be set equal to zero. If the ACL is negative (dead discards plus landings exceeds the ABC for the two previous years), the ACL in the following year would be set equal to zero. If the ACL is positive, then the ACL is the reduced from the ABC based on the ratio in the equation above.

Alternative 2. Specify ACLs for red snapper using the resulting ABC from the most recent SSC recommendation for **landings and dead discards** using the existing sector allocations (*commercial 28.07% and recreational 71.93%*) through 2019. The 2019 ACL would remain in place until a new ACL is specified. The commercial and recreational ACLs are specified in numbers of landed fish:

Sub-alternative 2a. ACL = ABC (**landings and discards**)

Sub-alternative 2b. ACL = 95% ABC (**landings and discards**)

Sub-alternative 2c. ACL = 90% ABC (**landings and discards**)

Note: The ABC for red snapper has been specified in landings and dead discards. The SSC will be requested to provide guidance on setting the ABC in landings only or landings and discards.

The Council indicated the ACL/ABC should be in numbers of fish.

Should discards be included in the ACL if the ABC includes discards?

NOTE: ABC and ACL values in the below tables can change if the Council selects a MSY proxy other than Action 1 Alternative 1 (Status Quo).

ACL = ABC (Sub-alternative 2a)						
Year	Landings ABC (Number of Fish)	Dead Discards ABC (Number of Fish)	Total ABC (Number of Fish)	Total ACL (Number of Fish)	Comm ACL (Number of Fish)	Rec ACL (Number of Fish)
2017	18,000	40,000	58,000	18,000	5,030	12,970
2018	19,000	42,000	61,000	19,000	5,897	13,103
2019	21,000	43,000	64,000	21,000	6,649	14,351
ACL = 95% ABC (Sub-alternative 2b)						
2017	18,000	40,000	58,000	17,100	4,779	12,321
2018	19,000	42,000	61,000	18,050	5,602	12,448
2019	21,000	43,000	64,000	19,950	6,316	13,634
ACL = 90% ABC (Sub-alternative 2c)						
2017	18,000	40,000	58,000	16,200	4,527	11,673
2018	19,000	42,000	61,000	17,100	5,308	11,792
2019	21,000	43,000	64,000	18,900	5,984	12,916

*The commercial ACL was estimated from the landings ABC and the 2012-2014 average commercial weight of from SEDAR 41 (9.71 lbs ww). Recreational ACL is the difference between the landings ABC and commercial ACL.

Discussion:

The current method to determine the ACL and if a season is allowed (**Alternative 1**) was developed in Amendment 28. If the ABC (landings and dead discards) is exceeded in the previous year, then the ACL is set to zero and harvest is not allowed that year. If the catch including landings and dead discards is below the ABC for landings and dead discards in the previous year, then the ACL is calculated based on the average of the ratio of the previous two years' landings and discards to the ABC. If the catch (landings and dead discards) exceeds the combined ABC for two years, then the ACL is set to zero and there is no season. The resulting ABC and ACL are below:

Table 5. Alternative 1 ABC and ACL values from Amendment 28.

Amendment 28					
Year	ABC (Landings in Number of Fish)	ABC (Dead Discards in Number of Fish)	Total ABC (Number of Fish)	Projection of Maximum Possible Commercial ACL (Number of Fish)	Projection of Maximum Possible Recreational ACL (Number of Fish)
2016	69,000	52,000	121,000	Discards Only	Discards Only
2017	74,000	54,000	128,000	Discards Only	Discards Only
2018	79,000	56,000	135,000	24,138*	54,862*
2019	84,000	58,000	142,000	25,960*	58,040*

*The commercial ACL was estimated from the landings ABC and the 2012-2014 average commercial weight of from SEDAR 41 (9.71 lbs ww). Recreational ACL is the difference between the landings ABC and commercial ACL

Alternative 2 would remove the equation developed in Amendment 28 to calculate the ACL. The commercial allocation implemented through Amendment 28 was 28.07% of the total ACL and the recreational allocation was 71.93% based on weight of fish specified through the Comprehensive ACL Amendment (SAFMC 2011). Although the allocation has been based on weight of fish, the ABC has been based on numbers of fish due to the inclusion of dead discards. The fishery dependent reporting requirement for discards and reporting method through fishery dependent sampling programs report numbers of fish, and limited information is available on the size and weight of the discarded fish. Therefore, the ACL for red snapper has been expressed as numbers of fish.

To estimate the commercial portion of the ABC, the landings portion of the proposed ABC (**Sub-alternatives 2a and 3a**) or percentage of the landings ABC (**Sub-alternatives 2b, 2c, 3b, and 3c**) was multiplied by the commercial allocation to get the commercial allocation in weight. Then the commercial allocation in weight was divided by the average commercial weight of red snapper from 2012 to 2014 to get the commercial ACL in number of landed fish. The recreational ACL in number of landed fish was calculated by subtracting the commercial ACL from the landings ABC (**Sub-alternatives 2a and 3a**) or percentage of the landings ABC (**Sub-alternatives 2b, 2c, 3b, and 3c**).

The ACLs are only provided through 2019 based on a recommendation from the Scientific and Statistical Committee. Most of the removals in the last years of the assessment (SEDAR 41) were from dead discards which the committee felt was uncertain and indication of a strong recruitment event. The committee recommended a new assessment be initiated no later than 2019 with data through 2018. The 2019 ABC and ACL recommendations are to carry forward until a new assessment is completed from which the committee can develop new ABC recommendations.

COMMITTEE ACTION:

OPTION 1. APPROVE INCLUSION OF ACTION 3 IN AMENDMENT 43 AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 3 FOR DETAILED ANALYSIS.

OPTION 2. ADD/MODIFY ALTERNATIVES UNDER ACTION 3 (COMMITTEE TO SPECIFY) AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 3 FOR DETAILED ANALYSIS.

OPTION 3. DO NOT APPROVE INCLUSION OF ACTION 3 IN AMENDMENT 43.

OPTION 4. OTHERS??

Move to have ACL/ABC in numbers of fish.

Action 4. Establish a Recreational Annual Catch Target (ACT) for Red Snapper in the South Atlantic Region

Alternative 1 (No Action). There is no recreational annual catch target (ACT) specified for red snapper in the South Atlantic Region.

Alternative 2. ACT = recreational ACL*(1-average 2012 to 2015 PSE) or ACL*0.5, whichever is greater.

Alternative 3. ACT =85% recreational ACL

Alternative 4. ACT = 75% recreational ACL

Alternative 5. ACT = 65% recreational ACL

Alternative 6. ACT = Recreational ACL * (1 - Average of (Landings_{year} – ACL_{year})/ACL_{year}) for the years 2012 to 2014. If landings do not exceed the ACL, the difference is set to zero.

NOTE: ACL and ACT values in the below tables can change if the Council selects a MSY proxy other than Action 1 Alternative 1 (Status Quo).

Year	Total ACL (Number of Fish)		Recreational ACT (Number of Fish)				
	ACL = ABC (Action 3 Sub-alternative 2a)	Recreational ACL	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6
2017	18,000	12,970	6,628	11,025	9,728	8,430	7,652
2018	19,000	13,103	6,696	11,138	9,827	8,517	7,731
2019	21,000	14,351	7,333	12,198	10,763	9,328	8,467
	ACL = 95% ABC (Action 3 Sub-alternative 2b)	Recreational ACL	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6
2017	17,100	12,321	6,296	10,473	9,241	8,009	7,270
2018	18,050	12,448	6,361	10,581	9,336	8,091	7,344
2019	19,950	13,634	6,967	11,589	10,226	8,862	8,044
	ACL = 90% ABC (Action 3 Sub-alternative 2c)	Recreational ACL	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6
2017	16,200	11,673	5,965	9,922	8,755	7,587	6,887
2018	17,100	11,792	6,026	10,023	8,844	7,665	6,958
2019	18,900	12,916	6,600	10,979	9,687	8,395	7,620

Discussion:

The annual catch target (ACT) can be used to limit catch at or below the ACL to account for management uncertainty. Since the ACT is typically set lower, and would be reached sooner,

than the ACL for any given species, using an ACT rather than the ACL as a trigger for an in-season accountability measures (AMs) in the recreational sector may prevent an ACL overage. This more conservative approach would likely help to ensure that recreational data uncertainties do not cause or contribute to excessive ACL overages for vulnerable species. Using recreational ACTs rather than the ACLs to trigger recreational AMs may not eliminate ACL overages completely; however, using such a strategy for the recreational sector may reduce the need to compensate for very large overages. However, in managing the snapper grouper fishery, the Council has chosen not to use ACTs to trigger AMs because it is anticipated that improvements in reporting would significantly reduce management uncertainty. Nevertheless, an ACT can be specified such that the Council can utilize it in its management approach in the future. Currently there is not an annual catch target for red snapper (**Alternative 1**). If an ACT is selected, then the ACT will be dependent on **Action 3** and the ACT values are calculated for **Action 3 Sub-alternatives 2a-c and 3a-c**. The method used to specify a recreational ACT for other snapper grouper species uses the percent standard error (PSE) from the Marine Recreational Information Program (MRIP) to account for uncertainty in the landings estimate (**Alternative 2, Table 6**). **Alternatives 3, 4, and 5** reduce the management target to a lesser degree than **Alternative 2** by reducing the ACL by a set percentage to account for a variety of recreational management uncertainties.

Table 6. The yearly proportional standard error for the Marine Recreational Intercept Program for number of red snapper landed (A + B1) from 2012 to 2015.

Year	MRIP PSE for Landings in Numbers of Fish
2012	45.2
2013	76.2
2014	31.7
2015	42.4
Average	48.9

Alternative 6 uses a comparison of the ACL to landings to estimate a range of management uncertainty. Red snapper was open for shortened seasons in 2012, 2013, and 2014 and in those years the landings exceeded the ACL each year (**Table 7**). The value for the landings used the estimation from the Marine Recreational Fishery Statistic Survey and Southeast Region Headboat Survey since those estimates were used to determine the ABC and ACL. The ACL was exceeded in the recreational fishery by 41% on average.

The commercial fishery does not typically have an ACT for snapper grouper species since all landings are reported through dealers on a weekly basis and the fishery can be closed within the season through accountability measures. The Council can consider establishing an ACT for the commercial fishery. The commercial fishery exceeded its ACL in 2013 and 2014 (**Table 7**).

Table 7. Recreational and commercial red snapper ACL, landings, and % exceeding ACL from 2012 to 2014. Landings estimate came from SERO Reports to the Council at June Council Meeting.

Year	Recreational			Commercial		
	ACL	Landings	% Exceeding ACL	ACL	Landings	% Exceeding ACL
2012	9,399	15,059	60%	3,668	1,532	0%
2013	9,585	11,767	23%	3,740	5,123	37%
2014	22,576	31,683	40%	8,810	10,827	23%
Average Exceeding ACL			41%			20%

COMMITTEE ACTION:

OPTION 1. APPROVE INCLUSION OF ACTION 4 IN AMENDMENT 43 AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 4 FOR DETAILED ANALYSIS.

OPTION 2. ADD/MODIFY ALTERNATIVES UNDER ACTION 4 (COMMITTEE TO SPECIFY) AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 4 FOR DETAILED ANALYSIS.

OPTION 3. DO NOT APPROVE INCLUSION OF ACTION 4 IN AMENDMENT 43.

OPTION 4. OTHERS??

Action 5. Revise Optimum Yield (OY) for Red Snapper in the South Atlantic Region

Alternative 1 (No Action). OY = Yield at 98% F_{MSY} (98% $F_{30\%SPR}$)

Alternative 2. OY = Commercial ACL + Recreational ACT

Alternative 3. OY = 75% MSY

Alternative 4. OY is the long-term average catch, which is not designed to exceed the ACL, and will fall between the ACL and ACT.

Discussion:

OY is used to evaluate how effective management has been at achieving the goals and objectives of the FMP. OY is specified in the Magnuson Stevens Act (MSA) as the “*amount of fish that provides the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, while taking into account the protection of marine ecosystems. OY is specified on the basis of ABC, as reduced by relevant economic, social, or ecological factor and the need to address management uncertainty.*” The management regime should be designed to get as close as possible to the OY without causing overfishing. OY must be set below MSY.

Since red snapper is in a rebuilding plan, the fishery cannot harvest at OY. Once the stock is rebuilt, the yield can be evaluated to determine if the fishery is achieving OY. If the fishery is not achieving OY, the management strategy will be modified as required by the MSA.

COMMITTEE ACTION:

OPTION 1. APPROVE INCLUSION OF ACTION 5 IN AMENDMENT 43 AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 5 FOR DETAILED ANALYSIS.

OPTION 2. ADD/MODIFY ALTERNATIVES UNDER ACTION 5 (COMMITTEE TO SPECIFY) AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 5 FOR DETAILED ANALYSIS.

OPTION 3. DO NOT APPROVE INCLUSION OF ACTION 5 IN AMENDMENT 43.

OPTION 4. OTHERS??

Action 6. Establish Closed Areas to Reduce Red Snapper Bycatch and Mortality

Alternative 1 (No Action). The Council has established areas that protect habitat for red snapper and restricted fishing including Deepwater MPAs, Oculina Experimental Closed Area, and special management zones (SMZs). Additional areas that are under review and could be established during the development of this amendment are the five closed area recommendations for Spawning SMZs in Amendment 36.

Alternative 2. Prohibit commercial and recreational fishing for, harvest, and possession of all species in the snapper grouper fishery management unit (FMU) year-round in an area **based on depth**.

Sub-alternative 2a. greater than or less than XX feet/meters

Sub-alternative 2b. ...

Alternative 3. Prohibit all commercial and recreational fishing for, harvest, and possession of red snapper year-round in an area **based on red snapper abundance**. Prohibit commercial and recreational fishing for, harvest, and possession of all species in the snapper grouper fishery management unit (FMU) year-round in an area **based on red snapper abundance**.

Sub-alternative 3a. Areas with catches or CPUE higher than xx??

Sub-alternative 3b. ...

Alternative 4. Prohibit commercial and recreational fishing for, harvest, and possession of all species in the snapper grouper fishery management unit (FMU) year-round in an area **based on red snapper discards**.

Sub-alternative 4a. Areas with discards greater than...

Sub-alternative 4b. ...

Note: Seasonal and area closures could be combined to reduce discards of red snapper. Should alternatives be developed for seasonal and area closures?

Council suggested adding a closure in waters deeper than 150 feet as the maximum depth with alternatives down to 60 feet at 10 ft intervals.

Look at the recommended closure from 17A (98 to 240 ft off SE Georgia and NE Florida) with season opening after the shallow water grouper closed season.

Closure inshore of 98 ft.

Overlay abundance and discards.

Discussion:

Amendment 17A explored using closed areas to end overfishing of red snapper. The alternatives in Amendment 17A for closed areas focused on areas off Georgia's and Florida's coasts, where concentrated landings of red snapper were reported. An example of a closed area was off Georgia and Florida in depths from approximately 100 to 240 feet (**Figure 1**). Prior to

the area closure being enacted, SEDAR 24 (2010) was completed and indicated the large closed area was not necessary to end overfishing and rebuild the stock. Regulatory Amendment 10 (SAFMC 2011) removed the requirement for the snapper grouper fishing closed area.

Because the stock is still experiencing overfishing (SEDAR 41), area closures could be reconsidered to end overfishing of red snapper. Closed areas are a management measure that could be used to reduce mortality and bycatch of red snapper in areas where there is a high abundance of red snapper.

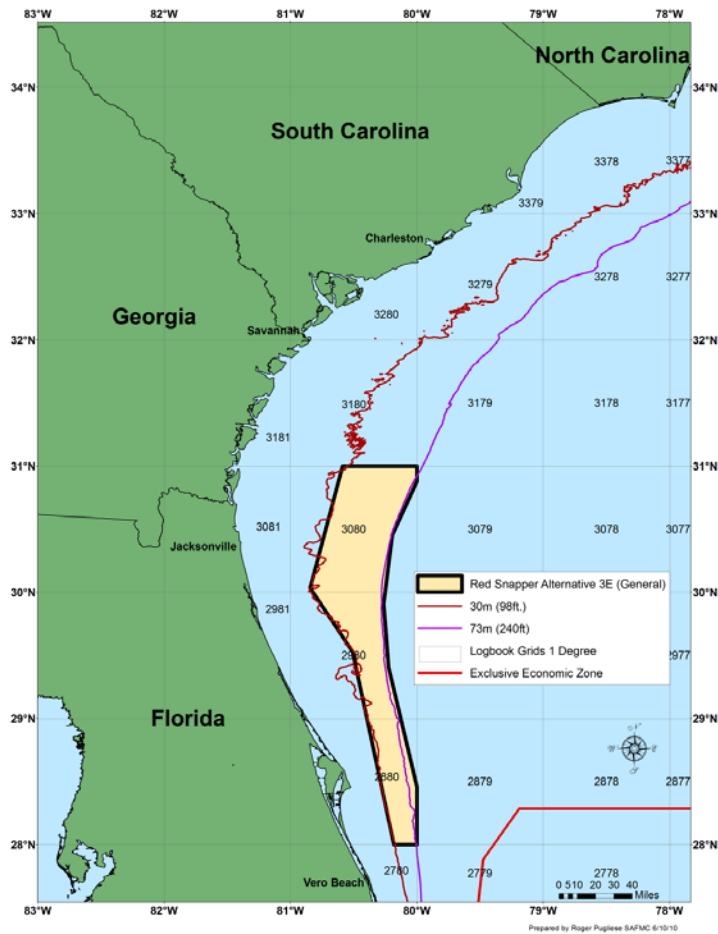


Figure 1. An example of a closed area considered in Amendment 17A.

COMMITTEE ACTION:

OPTION 1. APPROVE INCLUSION OF ACTION 6 IN AMENDMENT 43 AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 6 FOR DETAILED ANALYSIS.

OPTION 2. ADD/MODIFY ALTERNATIVES UNDER ACTION 6 (COMMITTEE TO SPECIFY) AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 6 FOR DETAILED ANALYSIS.

OPTION 3. DO NOT APPROVE INCLUSION OF ACTION 6 IN AMENDMENT 43.

OPTION 4. OTHERS??

Action 7. Management Measures for the Commercial Sector to Allow For Restricted Harvest While Ending Overfishing of Red Snapper in the South Atlantic Region.

Note: The target when projecting the harvest for the different Alternatives/Sub-Alternatives will be based on the ACT, if specified.

Alternative 1 (No Action). Red snapper may not be harvested, possessed, sold, or purchased in or from the South Atlantic EEZ, except if NMFS determines a limited amount of red snapper may be harvested or possessed in or from the South Atlantic EEZ. During a limited commercial fishing season, the commercial trip limit is 75 lbs gutted weight. The red snapper season will remain closed in 2016 and 2017 due to high number of red snapper caught in 2015.

Alternative 2. Establish a red snapper commercial closed season.

Sub-alternative 2a. months

Sub-alternative 2b. months

Sub-alternative 2c. months

Alternative 3. Modify the 75 lbs gutted weight commercial trip limit.

Sub-alternative 3a. trip limit

Sub-alternative 3b. trip limit

Sub-alternative 3c. trip limit

Note: Trip limit could be specified in number or weight.

Alternative 4. Establish a minimum size limit (total length).

Sub-alternative 4a. size limit

Sub-alternative 4b. size limit

Sub-alternative 4c. size limit

Alternative 5. Establish a maximum size limit (total length).

Sub-alternative 5a. size limit

Sub-alternative 5b. size limit

Sub-alternative 5c. size limit

Note: If management alternatives 6-8 are preferred over alternatives 2-5, which is more important, a limited season which will help develop an associated trip and season limit or a trip and size limit which will be used to estimate season based on the ACL/ACT?

Alternative 6. Establish a commercial trip limit and size limit that will most likely result in a **two-month** season for red snapper in the South Atlantic region with the season opening **date xx**.

Sub-alternative 6a. **xx inch size limit** and **xx fish trip limit**

Sub-alternative 6b. **xx inch size limit** and **xx fish trip limit**

Sub-alternative 6c. **xx inch size limit** and **xx fish trip limit**

Note: Date will likely need to be a sub-alternative option if the alternative is recommended for further analysis and the dates need to be specified by the Council.

Alternative 7. Establish a commercial trip limit and size limit that will most likely result in a **four-month** season for red snapper in the South Atlantic region with the season opening **date xx.**

Sub-alternative 7a. xx inch size limit and xx fish trip limit

Sub-alternative 7b. xx inch size limit and xx fish trip limit

Sub-alternative 7c. xx inch size limit and xx fish trip limit

Note: Date will likely need to be a sub-alternative option if the alternative is recommended for further analysis.

Alternative 8. Establish a commercial trip limit and size limit that will most likely result in a **six-month** season for red snapper in the South Atlantic region with the season opening **date xx.**

Sub-alternative 8a. xx inch size limit and xx fish trip limit

Sub-alternative 8b. xx inch size limit and xx fish trip limit

Sub-alternative 8c. xx inch size limit and xx fish trip limit

Note: Date will likely need to be a sub-alternative option if the alternative is recommended for further analysis.

Alternative 9. Landings of red snapper taken from federal waters would not be allowed in:

Sub-alternative 9a. Commercial fishery.

Sub-alternative 9b. Dive fishery.

Discussion:

The ACLs control the annual amount of removals whereas size limits and bag limits can be used to constrain harvest into a selected season length. Due to the low ABC for red snapper under the rebuilding plan, year-round harvest of red snapper is not likely to be feasible, and the open season must be confined to a short time period. The maximum size limit is designed to protect the largest spawning fish from harvest. **Alternatives 2-5** would establish a season, size limit, and trip limit separately. The trip limit could be specified in number of fish or pounds of fish. **Alternatives 6-8** would establish a size limit and trip that is designed keep the commercial season open for the selected time period.

COMMITTEE ACTION:

OPTION 1. APPROVE INCLUSION OF ACTION 7 IN AMENDMENT 43 AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 7 FOR DETAILED ANALYSIS.

OPTION 2. ADD/MODIFY ALTERNATIVES UNDER ACTION 7 (COMMITTEE TO SPECIFY) AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 7 FOR DETAILED ANALYSIS.

OPTION 3. DO NOT APPROVE INCLUSION OF ACTION 7 IN AMENDMENT 43.

OPTION 4. OTHERS??

Action 8. Management Measures for the Recreational Sector to Allow For Restricted Harvest While Ending Overfishing of Red Snapper in the South Atlantic Region.

Note: The target when projecting the harvest for the different Alternatives/Sub-Alternatives will be based on the ACT, if specified.

Alternative 1 (No Action). Red snapper may not be harvested or possessed in or from the South Atlantic EEZ, except if NMFS determines a limited amount of red snapper may be harvested or possessed in or from the South Atlantic EEZ. The recreational bag limit is zero, except during a limited recreational fishing season.

Note: Note: Which management measure is more important, a limited season which will help develop an associated trip and season limit or a trip and size limit which will be used to estimate season based on the ACL/ACT? Other season can be considered besides the months below. The seasons below are based on MRIP waves.

Alternative 2: Modify management measures for private recreational fishermen.

Sub-alternative 2a: Season **May-June** with **xx** inch total length size limit and **xx** fish/person/day bag limit (included in 10 snapper per person limit)

Sub-alternative 2b: Season **July-August** with **xx** inch total length size limit and **xx** fish/person/day bag limit (included in 10 snapper per person limit)

Sub-alternative 2c: Season **May-June** with **xx** inch total length size limit and **xx** fish/vessel/day bag limit (included in 10 snapper per person limit)

Sub-alternative 2d: Season **July-August** with **xx** inch total length size limit and **xx** fish/vessel/day bag limit (included in 10 snapper per person limit)

Sub-alternative 2e: Season **May-August** with **xx** inch total length size limit and 1 fish/person/day bag limit (included in 10 snapper per person limit)

Sub-alternative 2f: Season **July-October** with **xx** inch total length size limit and 1 fish/person/day bag limit (included in 10 snapper per person limit)

Sub-alternative 2g: Season **May-August** with **xx** inch total length size limit and 1 fish/vessel/day bag limit (included in 10 snapper per person limit)

Sub-alternative 2h: Season **July-October** with **xx** inch total length size limit and 1 fish/vessel/day bag limit (included in 10 snapper per person limit)

Alternative 3: Modify management measures for those on a federally-permitted charterboat.

Sub-alternative 3a: Season **May-June** with **xx inch total length size limit and xx** fish/person/day bag limit (included in 10 snapper per person limit)

Sub-alternative 3b: Season **July-August** with **xx inch total length size limit and xx** fish/person/day bag limit (included in 10 snapper per person limit)

Sub-alternative 3c: Season **May-June** with **xx inch total length size limit and xx** fish/vessel/day bag limit (included in 10 snapper per person limit)

Sub-alternative 3d: Season **July-August** with **xx inch total length size limit and xx** fish/vessel/day bag limit (included in 10 snapper per person limit)

- Sub-alternative 3e:** Season **May-August** with **xx** inch total length size limit and 1 fish/**person**/day bag limit (included in 10 snapper per person limit)
- Sub-alternative 3f:** Season **July-October** with **xx** inch total length size limit and 1 fish/**person**/day bag limit (included in 10 snapper per person limit)
- Sub-alternative 3g:** Season **May-August** with **xx** inch total length size limit and 1 fish/**vessel**/day bag limit (included in 10 snapper per person limit)
- Sub-alternative 3h:** Season **July-October** with **xx** inch total length size limit and 1 fish/**vessel**/day bag limit (included in 10 snapper per person limit)

Alternative 4: Modify management measures for those on a federally-permitted headboat.

- Sub-alternative 4a:** Season **May-June** with **xx inch total length size limit and xx** fish/**person**/day bag limit (included in 10 snapper per person limit)
- Sub-alternative 4b:** Season **July-August** with **xx inch total length size limit and xx** fish/**person**/ day bag limit (included in 10 snapper per person limit)
- Sub-alternative 4c:** Season **May-June** with **xx inch total length size limit and xx** fish/**vessel**/day bag limit (included in 10 snapper per person limit)
- Sub-alternative 4d:** Season **July-August** with **xx inch total length size limit and xx** fish/**vessel**/day bag limit (included in 10 snapper per person limit)
- Sub-alternative 4e:** Season **May-August** with **xx** inch total length size limit and 1 fish/**person**/day bag limit (included in 10 snapper per person limit)
- Sub-alternative 4f:** Season **July-October** with **xx** inch total length size limit and 1 fish/**person**/day bag limit (included in 10 snapper per person limit)
- Sub-alternative 4g:** Season **May-August** with **xx** inch total length size limit and 1 fish/**vessel**/day bag limit (included in 10 snapper per person limit)
- Sub-alternative 4h:** Season **July-October** with **xx** inch total length size limit and 1 fish/**vessel**/day bag limit (included in 10 snapper per person limit)

Note: Similar to commercial management measures, a maximum size limit could be considered to protect the largest spawning fish.

Alternative 5: Modify management measures for those on a federally-permitted headboat.

- Sub-alternative 5a:** Season **May-June** with **xx** inch total length size limit and **xx** fish/**person**/day bag limit (included in 10 snapper per person limit)
- Sub-alternative 5b:** Season **July-August** with **xx** inch total length size limit and **xx** fish/**person**/ day bag limit (included in 10 snapper per person limit)
- Sub-alternative 5c:** Season **May-June** with **xx** inch total length size limit and **xx** fish/**vessel**/day bag limit (included in 10 snapper per person limit)
- Sub-alternative 5d:** Season **July-August** with **xx** inch total length size limit and **xx** fish/**vessel**/day bag limit (included in 10 snapper per person limit)
- Sub-alternative 5e:** Season **May-August** with **xx** inch total length size limit and 1 fish/**person**/day bag limit (included in 10 snapper per person limit)
- Sub-alternative 5f:** Season **July-October** with **xx** inch total length size limit and 1 fish/**person**/day bag limit (included in 10 snapper per person limit)
- Sub-alternative 5g:** Season **May-August** with **xx** inch total length size limit and 1 fish/**vessel**/day bag limit (included in 10 snapper per person limit)

Sub-alternative 5h: Season **July-October** with xx inch total length size limit and 1 fish/vessel/day bag limit (included in 10 snapper per person limit)

Alternative 6. Establish an allowable snapper grouper fishing area for recreational fisheries that would remain year-round. Retention of red snapper in any area would be prohibited outside of the open season and fishing for snapper grouper would be allowed seasonally outside the year round fishing area. The snapper grouper fishing area is defined by depth.

Sub-alternative 6a. Establish an allowable snapper grouper fishing area in waters less than **150 feet** to remain open to snapper grouper fishing year-round.

Sub-alternative 6b. Establish an allowable snapper grouper fishing area in waters less than **100 feet** to remain open to snapper grouper fishing year-round.

Sub-alternative 6c. Establish an allowable snapper grouper fishing area in waters less than **90 feet** to remain open to snapper grouper fishing year-round.

Sub-alternative 6d. Establish an allowable snapper grouper fishing area in waters less than **75 feet** to remain open to snapper grouper fishing year-round.

Sub-alternative 6e. Establish an allowable snapper grouper fishing area in waters less than **60 feet** to remain open to snapper grouper fishing year-round.

Council would like to have Action 8 Alternative 6 options to mirror options from Action 6 for depth related closure.

Alternative 7. Establish a snapper grouper fishing season for areas outside the allowable snapper grouper fishing area.

Sub-alternative 7a. The snapper grouper fishing season is xx.

Sub-alternative 7b. The snapper grouper fishing season is xx.

Discussion:

The ACLs control the amount of annual removals whereas size limits and bag limits can be used to constrain harvest into a selected season length. Due to the low ABC for red snapper under the rebuilding plan, year-round harvest of red snapper is not likely to be allowed but must be confined to a short time period. **Alternatives 2-4** include sub-alternatives to limit the season to a confined time period and use size limits and trip limits by sector to best match the management measure with the sector.

Limited Red snapper seasons occurred in 2012, 2013, and 2014 based on previous year's ABCs not being exceeded. However, in 2015 and 2016 the previous year's ABC was exceeded and no season was allowed. Dead discards were higher than the ABC and management actions are needed to reduce the number of dead discards to enable a season to open. The proposed allowable snapper grouper fishing area is designed to allow snapper grouper fishing all year while allowing a short window of access to fish in deeper water. Barotrauma is an issue for many released snapper grouper species. **Alternative 5** would define a snapper grouper fishing area designed to reduce the number of red snapper discards and the mortality of discards by concentrating the fishery in shallower waters where discard mortality is lower. **Alternative 6** would define the time period for recreational snapper grouper fishing in the snapper grouper fishing area.

COMMITTEE ACTION:

OPTION 1. APPROVE INCLUSION OF ACTION 8 IN AMENDMENT 43 AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 8 FOR DETAILED ANALYSIS.

OPTION 2. ADD/MODIFY ALTERNATIVES UNDER ACTION 8 (COMMITTEE TO SPECIFY) AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 8 FOR DETAILED ANALYSIS.

OPTION 3. DO NOT APPROVE INCLUSION OF ACTION 8 IN AMENDMENT 43.

OPTION 4. OTHERS??

Action 9. Establish a Recreational Stamp or Tag Program for Recreational Fishermen to Fish For, Harvest, or Possess Red Snapper in the South Atlantic Region.

Alternative 1 (No Action). Recreational snapper grouper fishing in Federal Waters is an open access fishery with no federal requirement for a recreational stamp or fish tag.

Alternative 2. Require a federal recreational stamp in the South Atlantic Region (federal waters only) for recreational fishermen to fish for, harvest, or possess:

Sub-alternative 2a. red snapper.

Sub-alternative 2b. snapper grouper species associated with red snapper habitat.

Sub-alternative 2c. all species in the snapper grouper fishery management unit.

Alternative 3. Require a harvest tag for recreational fishermen to fish for, harvest, or possess red snapper federal waters.

Note: Alternative 3 will require additional sub-alternatives to define the program such as tag distribution, reporting, transfers, costs, etc.

Alternative 4. Require a notification system prior to return to shore to report incidental catch of red snapper. Fishermen would be required to inform of location and approximate time of returning to port.

Alternative 5. Require recreational fishermen to hail out via phone if targeting species in the snapper grouper fishery management unit. The fishermen would be provided a number issued to the phone number.

Note: Permits office will need to be added to the IPT if stamp or tag is considered.

Discussion:

A recreational fish stamp would not be required on headboats or charter boats. Headboats already have reporting requirements to report number of anglers Joint South Atlantic/Gulf of Mexico Generic Charter/Headboat Reporting in the South Atlantic Amendment (2013) and there is a charter boat amendment in development, which is considering requiring electronic reporting for the charter boat sector (South Atlantic For-Hire Amendment).

Table 8. Number of vessel and angler trips catching red snapper (landings and discards) and number of red snapper observed (A) or reported (B1 and B2) through MRIP intercepts for charter boats and private recreational vessels, 2011-2015.

Number of Trips Intercepted Reporting Red Snapper and Numbers of Red Snapper Intercepted Through MRIP										
Year	Charter					Private				
	Trips	AB1	A	B1	B2	Trips	AB1	A	B1	B2
2011	53	0	0	0	86	21	0	0	0	72
2012	75	45	45	0	124	48	8	8	0	182
2013	71	3	3	0	161	58	12	12	0	129

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2014	188	140	132	8	424	183	138	111	27	629
2015	125	3	0	3	431	122	1	0	1	588

COMMITTEE ACTION:

OPTION 1. APPROVE INCLUSION OF ACTION 9 IN AMENDMENT 43 AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 9 FOR DETAILED ANALYSIS.

OPTION 2. ADD/MODIFY ALTERNATIVES UNDER ACTION 9 (COMMITTEE TO SPECIFY) AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 9 FOR DETAILED ANALYSIS.

OPTION 3. DO NOT APPROVE INCLUSION OF ACTION 9 IN AMENDMENT 43.

OPTION 4. OTHERS??

Action 10. Modify Reporting Requirements for Private Recreational Fishermen.

Alternative 1 (No Action). The current regulations for private recreational vessels were adopted in Amendment 15A (SAFMC 2008) and require the owner or operator of a vessel that fishes for or lands South Atlantic snapper grouper in or from the South Atlantic EEZ who is selected to report by the Science and Research Director (SRD) must--

(1) Maintain a fishing record for each trip, or a portion of such trips as specified by the SRD, on forms provided by the SRD. Completed fishing records must be submitted to the SRD monthly and must either be made available to an authorized statistical reporting agent or be postmarked not later than 7 days after the end of each month. Information to be reported is indicated on the form and its accompanying instructions.

(2) Participate in the NMFS-sponsored electronic logbook and/or video monitoring reporting program as directed by the SRD.*

**Although listed in the Federal Regulations the recreational reporting requirement is not effective until approval is given by the Office of Management and Budget.*

Alternative 2. Require private recreational anglers to complete electronic logbooks. This would require all fishermen with a recreational snapper grouper stamp **to report all catch and discards electronically** when fishing for or catching species listed in the **Action 9 (Stamp or Tag)**.

Sub-alternative 2a. 20% of private recreational anglers would be randomly selected each year to electronically report their catch.

Sub-alternative 2b. 25% of private recreational anglers would be randomly selected each year to electronically report their catch.

Sub-alternative 2c. 50% of private recreational anglers would be randomly selected each year to electronically report their catch.

Sub-alternative 2d. All private recreational anglers would be randomly selected each year to electronically report their catch.

Note: Species listed will come from the preferred list of species in Action 9.

Alternative 3. Require that private recreational fishermen with a snapper grouper stamp submit fishing records for each trip to report:

Sub-alternative 3a. To the SRD **monthly**, or at intervals shorter than a **month** if notified by the SRD, via electronic reporting (via NMFS approved hardware/ software). Electronic reports would be due by seven days following the last day of the month.

Sub-alternative 3b. To the SRD **weekly**, or at intervals shorter than a **week** if notified by the SRD, via electronic reporting (via NMFS approved hardware/ software). Electronic reports would be due by Tuesday following the week that ends on Sunday.

Sub-alternative 3c. To the SRD via electronic reporting (via NMFS approved hardware/ software). **Electronic reports would be required to be completed prior to disembarking from the fishing vessel.**

Alternative 4. Require private recreational anglers with a recreational snapper grouper stamp to **complete logbooks for trips** when fishing for or catching species listed in the **Action 9 (Stamp or Tag)**.

Sub-alternative 4a. Require that private recreational fishermen with a snapper grouper stamp submit fishing records for trips catching or discarding red snapper to the SRD **monthly**, or at intervals shorter than a **month** if notified by the SRD, via NMFS approved reporting sheet. Reports would be required to be post marked seven days following the last day of the month.

Sub-alternative 4b. Require that private recreational fishermen with a snapper grouper stamp submit fishing records for trips catching or discarding red snapper to the SRD **weekly**, or at intervals shorter than a **week** if notified by the SRD, via NMFS approved reporting sheet. Reports would be required to be post marked by Tuesday following the week that ends on Sunday.

Sub-alternative 4c. Require that private recreational fishermen with a snapper grouper stamp submit fishing records for trips catching or discarding red snapper to the SRD via NMFS approved reporting sheet. **Reports would be required to be completed prior to disembarking from the fishing vessel.**

Note: Species listed will come from the preferred list of species in Action 9.

Alternative 5. Stamp renewal is contingent on reporting the previous year.

Note: This will be revised to better match electronic reporting requirements in other regions.

Discussion:

Reporting requirements for headboats developed in the Joint South Atlantic/Gulf of Mexico Generic Charter/Headboat Reporting in the South Atlantic Amendment (2013) require headboats to report each trip electronically. A similar amendment is under development for charter boats which is considering requiring electronic reporting for charter boats (South Atlantic For-Hire Amendment).

COMMITTEE ACTION:

OPTION 1. APPROVE INCLUSION OF ACTION 10 IN AMENDMENT 43 AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 10 FOR DETAILED ANALYSIS.

OPTION 2. ADD/MODIFY ALTERNATIVES UNDER ACTION 10 (COMMITTEE TO SPECIFY) AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 10 FOR DETAILED ANALYSIS.

OPTION 3. DO NOT APPROVE INCLUSION OF ACTION 10 IN AMENDMENT 43.

OPTION 4. OTHERS??

Action 11. Revise Accountability Measures and Establish Adaptive Management for Red Snapper in the South Atlantic Region

Alternative 1 (No Action). The accountability measures (AM) for red snapper listed in Amendment 28 are as follows:

- (1) Track catch per unit effort (CPUE) of red snapper via a fishery-independent monitoring program to track changes in biomass and take action to end overfishing if assessment indicates progress is not being made.
- (2) Track the biomass and CPUE through fishery-dependent sampling.
- (3) CPUE would be evaluated every three years and adjustments would be made by the framework action.
- (4) During the closed seasons, the recreational and commercial ACLs for landings are zero.

The AMs for both sectors listed in federal regulations are:

(1) *Commercial sector.* The commercial ACL for red snapper is zero. However, if NMFS determines that the previous year's estimated red snapper landings and dead discards are less than the ABC, limited red snapper harvest and possession may be allowed for the current fishing year and the commercial ACL value would be determined using the formula described in the FMP. The Assistant Administrator (AA) will file a notification with the Office of the Federal Register to announce the limited commercial ACL for the current fishing year. NMFS will monitor commercial landings during the limited season, and if commercial landings, as estimated by the SRD, reach or are projected to reach the commercial ACL, based on the formula described in the FMP, the AA will file a notification with the Office of the Federal Register to close the commercial sector for red snapper for the remainder of the year. On and after the effective date of the closure notification, all sale or purchase of red snapper is prohibited and harvest or possession of red snapper is limited to the bag and possession limits. This bag and possession limit and the prohibition on sale/purchase apply in the South Atlantic on board a vessel for which a valid Federal commercial or charter vessel/headboat permit for South Atlantic snapper-grouper has been issued, without regard to where such species were harvested or possessed, *i.e.*, in state or Federal waters.

(2) *Recreational sector.* The recreational ACL for red snapper is zero. However, if NMFS determines that the previous year's estimated red snapper landings and dead discards are less than the ABC, limited red snapper harvest and possession may be allowed for the current fishing year and the recreational ACL value would be determined using the formula described in the FMP. The AA will file a notification with the Office of the Federal Register to announce the limited recreational ACL and the length of the recreational fishing season for the current fishing year. The length of the recreational fishing season for red snapper serves as the in-season accountability measure. See § 622.183(b)(5) for details on the recreational fishing season. On and after the effective date of the recreational closure notification, the bag and possession limits for red snapper are zero.

Alternative 2. If commercial landings reach or are projected to reach the commercial annual catch limit (ACL), NMFS would close the commercial sector for the remainder of the fishing year. On and after the effective date of such a notification, all sale or purchase is prohibited and harvest or possession of red snapper in or from the EEZ would be limited to the recreational bag and possession limit. This bag and possession limit applies in the South Atlantic on board a South Atlantic Snapper Grouper

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vessel for which a valid Federal commercial or charter vessel/headboat permit for South Atlantic snapper grouper has been issued, without regard to where such species were harvested, i.e., in state or Federal waters. Additionally, if the commercial ACL is exceeded, NMFS would reduce the commercial ACL in the following fishing year by the amount of the commercial overage, only if red snapper is overfished and:

Sub-alternative 2a. the **total ABC** including landings and dead discards from recreational and commercial sectors is exceeded.

Sub-alternative 2b. the **total ACL** (landings only) from recreational and commercial sectors is exceeded.

Alternative 3. If recreational landings reach or are projected to reach:

Sub-alternative 3a. The recreational ACL, NMFS would close the recreational sector for the remainder of the fishing year, unless, using the best scientific information available, NMFS determines that a closure is unnecessary.

Sub-alternative 3b. The recreational ACT, NMFS would close the recreational sector for the remainder of the fishing year, unless, using the best scientific information available, NMFS determines that a closure is unnecessary.

Alternative 4. If recreational landings exceed the recreational ACL, then during the following fishing year, recreational landings will be monitored for persistence in increased landings. The length of the recreational season and recreational ACL will not be reduced if NMFS determines, using the best scientific information available, that a reduction is unnecessary. If necessary:

Sub-alternative 4a. NMFS would reduce the length of fishing season and the recreational ACL in the following fishing year by the amount of the recreational overage, only if the species is overfished and the **total ABC including landings and dead discards from recreational and commercial sectors** is exceeded.

Sub-alternative 4b. NMFS would reduce **the length of fishing season** and the recreational ACL in the following fishing year by the amount of the recreational overage, only if the species is overfished and the **total ACL (commercial ACL and recreational ACL)** is exceeded.

Note: ABCs are not listed in codified text therefore establishing AMs cannot be based on ABC.

Alternative 5. If total ABC (landings and discards) is exceeded, the stock is overfished, and one sector (e.g. commercial, private recreational, charter, or head boat) exceeds xx% of the discards, adjust management measures for the sector with highest discards.

Sub-alternative 5a. If ABC (landings and discards) is exceeded, the stock is overfished, and one sector (e.g. commercial, private recreational, charter, or head boat) exceeds xx% of the discards, **reduce the following season's length** for the sector to account for the overage.

Sub-alternative 5b. If ABC (landings and discards) is exceeded, the stock is overfished, and one sector (e.g. commercial, private recreational, charter, or head boat) exceeds xx% of the discards, **reduce snapper grouper allowable fishing area** by a defined amount for the sector to reduce discards.

Sub-alternative 5c. If ABC (landings and discards) is exceeded, the stock is overfished, and one sector (e.g. commercial, private recreational, charter, or head boat) exceeds xx% of the discards, **closed defined areas** for the sector to reduce discards.

Note: The % of the discards would need to have sub-alternatives if this alternative is considered for detailed analysis. Additionally the area reductions or closed areas would need to be defined to enable analysis.

ABCs are not listed in codified text therefore establishing AMs cannot be based on ABC.

Alternative 6. If the total ABC is not exceeded, landings do not exceed total ACL, and sector landings are below xx% of the ACL, modify management measures for sectors below ACL by xx% to increase harvest.

Sub-alternative 6a. Decrease the minimum size limit to the next full inch the following year if the sector season is not projected to close.

Sub-alternative 6b. Increase the bag or trip limit by one fish the following year if the sector season is not projected to close.

Discussion:

Accountability measures are designed to adjust management measures to prevent exceeding the ACL. The accountability measure can be designed to limit harvest within season and/or limit harvest the following season. The commercial fishery typically has in season closure due to the more frequent harvest reports and limited number of commercial permits as well as a post-season accountability measure if the stock is overfished.

The recreational fishery typically has post season accountability measures due to the lag in the reporting of the recreational harvest through MRIP. If management measures were not effective in controlling harvest in a given year/season, then the accountability measure could limit harvest the following year/season.

Management since 2011 has been effective in controlling landings below the landings ABC; however, it has not been effective in limiting the number of dead discards, which resulted in the total red snapper ABC being exceeded in 2014 and 2015. Since 2000, the majority of red snapper discards came from the private recreational fishery with the exception of 2011 when the commercial sector accounted the greatest proportion of the discards of red snapper (34.9%, **Table 9**).

Table 9. Percent discards (number of red snapper) for commercial, headboat, charter boat, and private recreational fishery and the total number of discards.

Year	Commercial	Headboat	Charter Boat	Private Rec	Total Discards
2000	5.4%	0.6%	6.2%	87.8%	267,143
2001	6.8%	1.0%	7.4%	84.8%	223,500
2002	18.7%	1.5%	8.6%	71.2%	159,331
2003	4.9%	0.6%	8.6%	85.9%	170,403
2004	1.1%	3.3%	10.6%	85.0%	220,853

2005	11.0%	4.3%	31.9%	52.8%	92,908
2006	3.4%	4.9%	14.3%	77.4%	141,785
2007	3.7%	8.1%	19.1%	69.1%	373,940
2008	2.1%	4.9%	4.7%	88.2%	598,146
2009	4.6%	7.7%	8.0%	79.6%	312,309
2010	9.0%	8.5%	9.8%	72.7%	194,359
2011	34.9%	17.0%	18.1%	30.0%	114,982
2012	9.2%	7.8%	9.1%	73.9%	208,957
2013	12.9%	11.9%	6.6%	68.6%	150,034
2014	7.5%	4.1%	11.1%	77.2%	359,582
2015	5.4%	5.4%	17.5%	71.7%	559,955

COMMITTEE ACTION:

OPTION 1. APPROVE INCLUSION OF ACTION 11 IN AMENDMENT 43 AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 11 FOR DETAILED ANALYSIS.

OPTION 2. ADD/MODIFY ALTERNATIVES UNDER ACTION 11 (COMMITTEE TO SPECIFY) AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 11 FOR DETAILED ANALYSIS.

OPTION 3. DO NOT APPROVE INCLUSION OF ACTION 11 IN AMENDMENT 43.

OPTION 4. OTHERS??

Action 12. Require Use of Best Fishing Practices When Fishing for Snapper Grouper Species With Hook-and-Line Gear to Reduce Mortality and Bycatch of Red Snapper.

Alternative 1 (No Action). Fishermen are required to use non-stainless steel circle hooks when fishing for snapper grouper species with hook and line gear north of 28 degrees. It is unlawful to possess snapper grouper species without possessing non-offset, non-stainless steel circle hooks. The regulation for the use of circle hooks applies to the use of natural baits only. Additionally fishermen are required to have dehooking devices onboard.

Alternative 2. Require descending device and/or venting be onboard a vessel to increase survivorship of released red snapper.

Sub-alternative 2a. Require **venting tool** to be onboard a **recreational** vessel possessing species in the snapper grouper management unit to increase survivorship of released fish.

Sub-alternative 2b. Require **venting tool** to be onboard a **commercial** vessel possessing species in the snapper grouper management unit to increase survivorship of released fish.

Sub-alternative 2c. Require **descending device** to be onboard a **recreational** vessel possessing species in the snapper grouper management unit to increase survivorship of released fish.

Sub-alternative 2d. Require **descending device** to be onboard a **commercial** vessel possessing species in the snapper grouper management unit to increase survivorship of released fish.

Alternative 3. Require use of single hook rigs in the recreational snapper grouper fishery to reduce number of red snapper caught.

Alternative 4. Modify requirement for the use of non-stainless steel circle hooks when fishing for snapper grouper species with hook and line gear north of 28 degrees (approximately 25 miles south of Cape Canaveral, FL). The circle hook requirement applies only to natural baits.

Sub-alternative 4a. Require the use of **non-offset, non-stainless steel hooks** when fishing for snapper grouper species with hook-and-line gear. Apply to the use of natural baits only.

Sub-alternative 4b. Require the use of **non-offset, non-stainless steel circle hooks** when fishing for snapper grouper species with hook and line gear **north of 28 degrees**. It is unlawful to possess snapper grouper species without possessing non-offset, non-stainless steel circle hooks. Apply to the use of natural baits only.

Sub-alternative 4c. Require the use of **non-offset, non-stainless steel circle hooks** when fishing for snapper grouper species with hook and line gear in **depths greater than xx**. It is unlawful to possess snapper grouper species without possessing non-offset, non-stainless steel circle hooks. Apply to the use of natural baits only.

Sub-alternative 4d. Require the use of **non-offset, non-stainless steel circle hooks** when fishing for snapper grouper species with hook and line gear in the **South Atlantic**

EEZ. It is unlawful to possess snapper grouper species without possessing non-offset, non-stainless steel circle hooks. Apply to the use of natural baits only.

Note: The circle hook requirement north of 28 degrees was developed in 17A to reduce the impact to the yellowtail snapper fishery. Does the Council want to consider other alternatives for the circle hook requirement.

Discussion:

Best fishing practices can be effective in reducing mortality and bycatch by planning ahead and avoiding areas where bycatch is likely, avoiding non-target size or species through fishing techniques or gear, using appropriate gear to minimize impacts of capture, releasing the fish with minimal time out of the water and handling. Common examples of best fishing include recompressing fish, reducing the number of hooks fished, avoiding areas where bycatch is likely, avoiding “high grading”, using to hooks that reduce or minimize gut hooking or foul-hooking, using knotless landing nets, etc.

COMMITTEE ACTION:

OPTION 1. APPROVE INCLUSION OF ACTION 12 IN AMENDMENT 43 AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 12 FOR DETAILED ANALYSIS.

OPTION 2. ADD/MODIFY ALTERNATIVES UNDER ACTION 12 (COMMITTEE TO SPECIFY) AND APPROVE THE RANGE OF ALTERNATIVES UNDER ACTION 12 FOR DETAILED ANALYSIS.

OPTION 3. DO NOT APPROVE INCLUSION OF ACTION 12 IN AMENDMENT 43.

OPTION 4. OTHERS??