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

Options Paper

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, revise management measures, and consider establishing recreational reporting requirements for the snapper grouper fishery.

Revised
02/14/2017

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.

How Does This Amendment Match the Council's 2016-2020 Vision Blueprint for the Snapper Grouper Fishery?

The 2016-2020 Vision Blueprint for the Snapper Grouper Fishery (Vision Blueprint) was approved in December 2015 and is intended to inform management of the snapper grouper fishery through 2020. As such, the Vision Blueprint serves as a "living document" to help guide future management, builds on stakeholder input and how the South Atlantic Council envisions future management of the fishery, guides the development of new amendments that address priority objectives and strategies, and illustrates actions that could be developed through the regular amendment process. The Vision Blueprint is organized into four strategic goal areas: (1)

Science, (2) Management, (3) Communication, and (4) Governance. Each goal area has a set of objectives, strategies, and actions. The actions in Amendment 43 correspond to different objectives and strategies in the Vision Blueprint.

Actions 1-5 correspond directly to mandates in the Magnuson-Stevens Fishery Conservation and Management Act (MSA). **Actions 1- 5** address revising maximum sustainable yield, minimum stock size threshold, annual catch limits, annual catch targets, and optimum yield. These management actions are designed to address the mission statement for the Vision Blueprint by meeting the mandates of the MSA and National Standards of the MSA. The alternatives for each action provide a range of management alternatives while meeting the requirements of the law. Actions 1-5 also address the broad Vision Blueprint Science goal to ensure that "*management decisions for the snapper grouper fishery are based upon robust, defensible science that considers qualitative and quantitative data analyzed in a timely, clear, and transparent manner that builds stakeholder confidence*."

Action 6 would close potential fishing areas for all snapper grouper fishing to reduce bycatch of red snapper. During Vision Port Meetings, several fishermen stated they did not want to have additional closed areas but many stated they wanted to have an opportunity to keep red snapper. While consideration of additional closed areas is not included in priority actions in the 2016-2020 Vision Blueprint, reducing bycatch/discards is Objective 4 under the Management goal (see Appendix B of the Vision Blueprint). Included under this objective are actions to consider time/area closures for all snapper grouper species.

Bycatch is an important consideration in the management of South Atlantic red snapper. Red snapper dead discards in 2014 and 2015 exceeded the acceptable biological catch and resulted in a season for red snapper not being opened. The new acceptable biological catch coming from the latest Scientific and Statistical Committee (SSC) recommendation are lower than previous catch recommendations. The average amount of dead discards in 2014 and 2015 (>200,000 fish) was four times the newly recommended acceptable biological catch for 2017. As the population continues to recover from being overfished, more red snapper are expected to be encountered and discarded. The Council is developing an adaptive management approach (**Actions 7** through **12**) to allow for a low level of red snapper harvest and reduce dead discards. In addition to the regulatory actions, fishermen will need to avoid catching red snapper to keep the harvest below the acceptable biological catch.

Action 7 considers several commercial management measures, which would be designed to keep harvest of red snapper under an annual catch limit. The measures include a commercial season for red snapper, trip limit, and minimum size limit. These actions address some of the short-term actions in the 2016-2020 Vision Blueprint under the broad Management goal. **Action 8** considers several recreational management measures, which would be designed to keep harvest of red snapper under an annual catch target. These measures include a recreational season for red snapper, minimum size limit, bag limit, an allowable recreational fishing area that would be open all year, and an open season in deeper water to limit bycatch of red snapper. These proposed measures would directly address priority actions under Management Strategy 2.3, namely consideration of a recreational season or a "time-out" period of no fishing for the recreational fishery. Under Strategy 3.2, the proposed measures would address consideration of number of days allowed to fish vs. bag limits for the recreational sector. The proposed measures

would also address priority "hot topic" items such as setting a fishing season at the beginning of the fishing year with known open and close dates (Objective 4, Strategy 4.1).

Action 9 proposes a recreational stamp or tag program to fish for snapper grouper species. This measure is included in the 2016-2020 Vision Blueprint under Strategy 2.2 to support development of management approaches that address the amount of effort in the snapper grouper fishery. **Action 10,** which considers some level of recreational reporting, was also a popular item among stakeholders during Vision Meetings and directly addresses Objective 4, Strategy 4.2: Support further development of reporting mechanisms for all sectors in the snapper grouper fishery (see Appendix B of the Vision Blueprint). Fishermen repeatedly express concern with the estimates of recreational harvest from the Marine Recreational Information Program (MRIP). The proposed actions in Amendment 43 would be used to develop a new method to estimate private recreational harvest. Headboats are already required to fill out a logbook for every trip and there is an amendment in development to require charter boats to submit electronic logbooks for each trip.

Action 11 addresses accountability measures and adaptive management for red snapper. Under this approach fishermen would need to actively avoid red snapper to maintain harvest below the overfishing limit and acceptable biological catch and reduce dead discards. Management measures proposed in **Actions 6-8** are designed to reduce the catch and discards of red snapper. However, should these measures prove ineffective, accountability measures proposed under **Action 11** would take effect to reduce catch and discards. The proposed accountability measures would include in-season changes in management if landings/dead discards exceed the annual catch limit or the acceptable biological catch.

Action 12 proposes best fishing practices to reduce the bycatch and discard mortality of red snapper. Some of the alternatives were suggested by stakeholders during Vision Port Meetings including the use of single hook rigs when targeting deepwater species and requiring descending devices. The circle hook alternatives proposed under **Action 12** were developed based on management in other areas. Best fishing practices are the subject of Strategy 4.4 under Objective 4 in the Vision Blueprint (see Appendix B): develop management approaches that support "Best Fishing Practices" to help avoid bycatch and reduce discard mortality.

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 show 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 start 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	16,000	36,000
2017	196,000	213,000	20,000	38,000
2018	233,000	233,000	22,000	39,000
2019	258,000	246,000	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	35,000
2018	204,000	210,000	19,000	37,000
2019	230,000	227,000	21,000	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

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; however due to newer estimation methods for the recreational catch with the Access Point Angler Intercept Survey, the allocation has changed slightly to 30.57% commercial and 69.43% recreational*).

Based on this method, 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 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 MSA, 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, 11,** and **12** 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.

Re-incorporated Alternatives 3-6 which had specific SPR values for F_{MSY} proxy

Discussion:

Maximum sustainable yield (MSY) is the largest long-term average catch that can be taken from a stock or stock complex under prevailing ecological and environmental conditions. MSY for snapper grouper species was initially specified in Amendment 11 (SAFMC 1998) to the Snapper Grouper FMP. **Alternative 1** uses the proxy to calculate the MSY established in Amendment 11, $F_{30\%SPR}$ (SAFMC 1998). **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. A**lternative 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. For the alternatives, MSY values (**Table 4**) attributes and rebuilding projections (**Table 5**) will vary due to changes in the MSY proxy.

As a benchmark, MSY establishes a value that other parameters use to condition subsequent management actions, and as such, defining MSY takes special significance. The setting of MSY does not have direct negative or positive biological impacts.

In the October 2016 SSC Meeting, the SSC discussed a range of MSY values ($F_{20\%SPR}$, F_{Max}, $F_{27\%SPR}$, and $F_{30\%SPR}$) that were analyzed by the Southeast Fishery Science Center. The SSC did not recommend changing the MSY proxy. There was little difference between the F rates that were compared. The SSC felt there was not compelling scientific evidence to change the proxy and the status determination was not likely to change with different proxies. Changing the MSY proxy to a lower level has a higher risk of overfishing than the current proxy of $F_{30\%}$.

Table 4. Alternatives for setting MSY or its proxy and MSY Values.

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.

Table 5. 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 $XX_{\%\ SPR}$

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

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) or 0.5, 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 (**Table 6**). 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** and **Alternative 3** is 16.4 trillion eggs which is approximately 8 trillion eggs lower than **Alternative 1**. The MSST (F30%) for **Alternative 4** is approximately 27.9 trillion eggs, which is closest the MSY proxy.

Table 6. Alternatives to calculate the MSST equation and the resulting number of eggs produced for **Action 1** alternatives.

		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}	24.6					
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					

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

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). 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, a 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 formula established in Amendment 28.

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 for landings (*commercial 30.57% and recreational 69.43%*) 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**)

Discussion:

The current method to determine the ACL and if a season is allowed (**Alternative 1**) was developed in Amendment 28. The ACL is set to zero for recreational and commercial fisheries. However if the ABC (landings and dead discards) is not exceeded in the previous year, then a limited red snapper harvest and possession may be allowed. The harvest is calculated using an equation established in Amendment 28. The formula is

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), a season is not allowed. If the ACL is positive, then the ACL is the reduced from the ABC based on the ratio in the equation above.

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, there is no season. The resulting ABC and ACL from Amendment 28 for 2016 through 2019 are below:

Table 7. **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	TBD	TBD
2019	84,000	58,000	142,000	TBD	TBD

Alternative 2 would remove the equation developed in Amendment 28 to calculate the ACL. The commercial allocation implemented through Amendment 28 was 30.57% of the total ACL and the recreational allocation was 69.43% based on weight of fish specified through the Comprehensive ACL Amendment (SAFMC 2011). However red snapper recreational landings estimate were recalculated using the Angler Point Intercept Access Survey for SEDAR 41. Based on the changes in the recreational landings from 1986 to 2008, the recreational allocation is 69.43% and commercial is 30.57%. 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-alternative 2a**) or percentage of the landings ABC (**Sub-alternatives 2b** and **2c**) was multiplied by the commercial allocation to get the commercial allocation in weight. Then the commercial allocation in weight was divided by the average weight of red snapper from the ABC projections (**Table 2**) 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-alternative 2a**) or percentage of the landings ABC (**Sub-alternatives 2b** and **2c**) (**Table 8**).

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.

The Scientific and Statistical Committee recommended using catch and dead discards in tracking removals from the stock. If dead discards are not tracked with landings, then there is an increased risk of overfishing. Estimates of PSE for red snapper landings and discards (A, B1, and B2 combined) from 2012 to 2015 are below the 60% threshold, which indicates the value is usable for management (ACCSP 2016).

Table 8. Commercial and recreational ACL in numbers of fish from 2017 to 2019 based on **Sub-alternatives 2a-2c**. Note if MSY proxy changes then values in Table 8 will change.

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)
ACL = ABC (Sub-alternative 2a)						
2017	17,000	33,000	50,000	17,000	5,197	11,803
2018	18,000	35,000	53,000	18,000	5,503	12,497
2019	20,000	37,000	57,000	20,000	6,114	13,886
ACL = 95% ABC (Sub-alternative 2b)						
2017	17,000	33,000	50,000	16,150	4,937	11,213
2018	18,000	35,000	53,000	17,100	5,227	11,873
2019	20,000	37,000	57,000	19,000	5,808	13,192
ACL = 90% ABC (Sub-alternative 2c)						
2017	17,000	33,000	50,000	15,300	4,677	10,623
2018	18,000	35,000	53,000	16,200	4,952	11,248
2019	20,000	37,000	57,000	18,000	5,503	12,497

The commercial ACL was estimated from the landings ABC and the projected annual average red snapper weight of from SEDAR 41 (**Table 2**). Recreational ACL is the difference between the landings ABC and commercial ACL.

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??

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

Alternative 1 (No Action). A recreational annual catch target (ACT) is not 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.

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 set lower or equal to 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. The ACTs would be used to trigger AMs. 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**. The range of ACT alternatives reduces the ACL by 15% to 48.9% (**Table 9**). 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 10**). **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.

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 11**). 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. If one from **Alternative 3** through **6** is selected, the uncertainty in the recreational landings would not be included in the calculation of the ACL.

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 commercial fishery exceeded it's ACL in 2013 and 2014 (**Table 11**).

Table 9. Recreational red snapper ACT alternatives.
*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)**.*

	Total ACL (Number of Fish)	Rec ACL (Number of Fish)	Rec ACT (Number of Fish)				
Year	**ACL = ABC (Action 3Sub-alternatives 2a and 3a)**		Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6
2017	17,000	11,803	6,031	10,033	8,852	7,672	6,964
2018	18,000	12,497	6,386	10,622	9,373	8,123	7,373
2019	20,000	13,886	7,096	11,803	10,415	9,026	8,193
	ACL = 95% ABC (Action 3 Sub-alternatives 2b and 3b)		Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6
2017	16,150	11,213	5,730	9,531	8,410	7,288	6,616
2018	17,100	11,879	6,070	10,097	8,909	7,721	7,009
2019	19,000	13,192	6,741	11,213	9,894	8,575	7,783
	ACL = 90% ABC (Sub-alternatives 2c and 3c)		Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6
2017	15,300	10,623	5,428	9,030	7,967	6,905	6,268
2018	16,200	11,248	5,748	9,561	8,436	7,311	6,636
2019	18,000	12,497	6,386	10,622	9,373	8,123	7,373

Table 10. 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**

Table 11. 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. ACL in 2015 was 0.

	Recreational			Commercial		
Year	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). Optimum Yield (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= 75%F_{MSY}

Alternative 5. OY= ACL ≤ ABC

Alternative 6. OY is the long-term average catch, which is not designed to exceed the ACL, and will fall between the ABC 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.

The current OY (**Alternative 1**) is the yield at 98% of FMSY, which is based on a proxy $F_{30\%SPR}$. **Alternative 2** sums the commercial ACL and recreational ACT to determine the OY. For **Alternative 2**, the OY is calculated using the recreational ACT because the recreational fishery might reduce harvest from the ACL to have an increased opportunity to catch fish. **Alternative 3** sets the OY as 75% of MSY and Alternative sets OY as 75% of F_{MSY}. **Alternative 5** sets OY equal to ACL and less than or equal to the ABC depending on which alternative is selected in **Action 3**.

Alternative 6 uses a slightly different approach Alternatives 2-4 and uses long-term average catch to determine OY. The long-term average catch should be based on a time period of consistent management and ABC.

Table 12. Estimates of OY for the range of **Alternatives 1-5** in **Action 5**.

Optimum Yield					
Year	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5
2017					
2018					
2019					

Table 13. Estimate of OY for **Alternative 6** in **Action 5**. The annual ABC, commercial ACL, and recreational ACT for 2017 to 2019 are averaged. The commercial ACL is used to calculate OY minimum since an ACT is not specified for the commercial fishery.

Year	ABC	Commercial ACL	Recreational ACT	OY (min)	OY (max)
2017					

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 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. …

Alternative 5. Prohibit commercial and recreational fishing for, harvest, and possession of all species in the snapper grouper fishery management unit (FMU) during a time period in an area **based on seasonal and spatial red snapper abundance.** The time period and area of closure are:

Sub-alternative 5a. Areas and seasons with CPUE from fishery independent surveys greater xx…

Sub-alternative 5b. …

*Note: Multiple areas could be selected for closure if alternatives for **Action 6** are selected. Minimum and maximum size criteria for the closed area should be recommended for the development of alternatives.*

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. A map of the probability of encounter of a spawning condition female has been developed for red snapper during peak spawning time (**Figure 2**). Red snapper peak spawning occurs in water temperatures from 24.7 to 29 C around the time of the new moon. Red snapper in spawning condition were predicted to be encountered most commonly in depths between 79 and 98 feet (24-30 meters) (Farmer et al., in prep).

The Snapper Grouper AP was concerned with large areas closure because of the impact it would have on commercial and for-hire industries. The AP discussed considering seasonal closures over spatial closures and minimizing impact to commercial and for-hire sectors because they can avoid red snapper.

There are limited data available to describe the areas where and seasons when landings of red snapper occur. Seventy percent of reported red snapper discards from 2010 to 2015 came from the private recreational fishery. Unfortunately, data on specific dates and locations are not available for private recreational and charter boat harvest and discards of red snapper. Commercial and headboat harvest and discards are reported through logbooks and date and location of harvest can be determined. Since the majority of discards come from the private recreational fishery, analysis of data may be required combine data into large regions and across years to decrease uncertainty in the results or data would need to be analyzed based on county of landing. Data from fishery independent studies will likely be used to describe red snapper abundance.

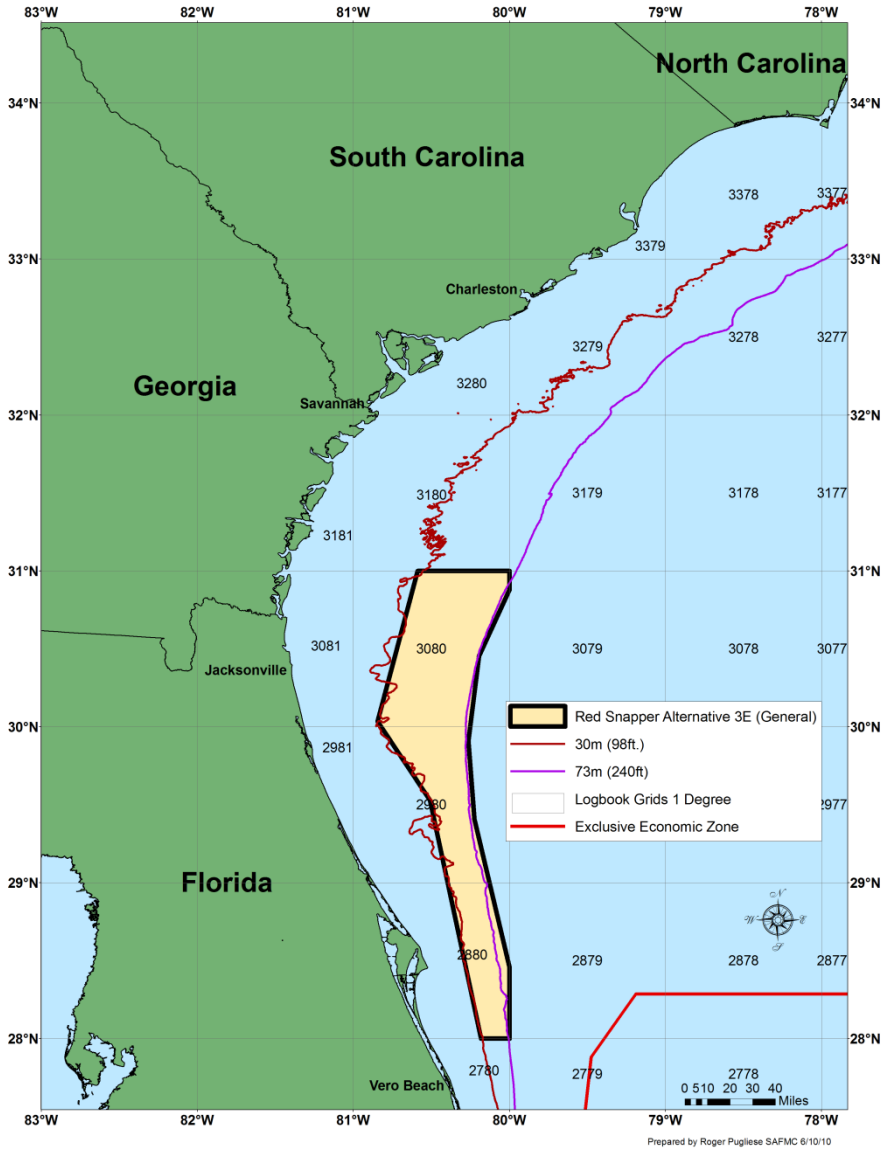

Figure 1. An example of a closed area considered in Amendment 17A.

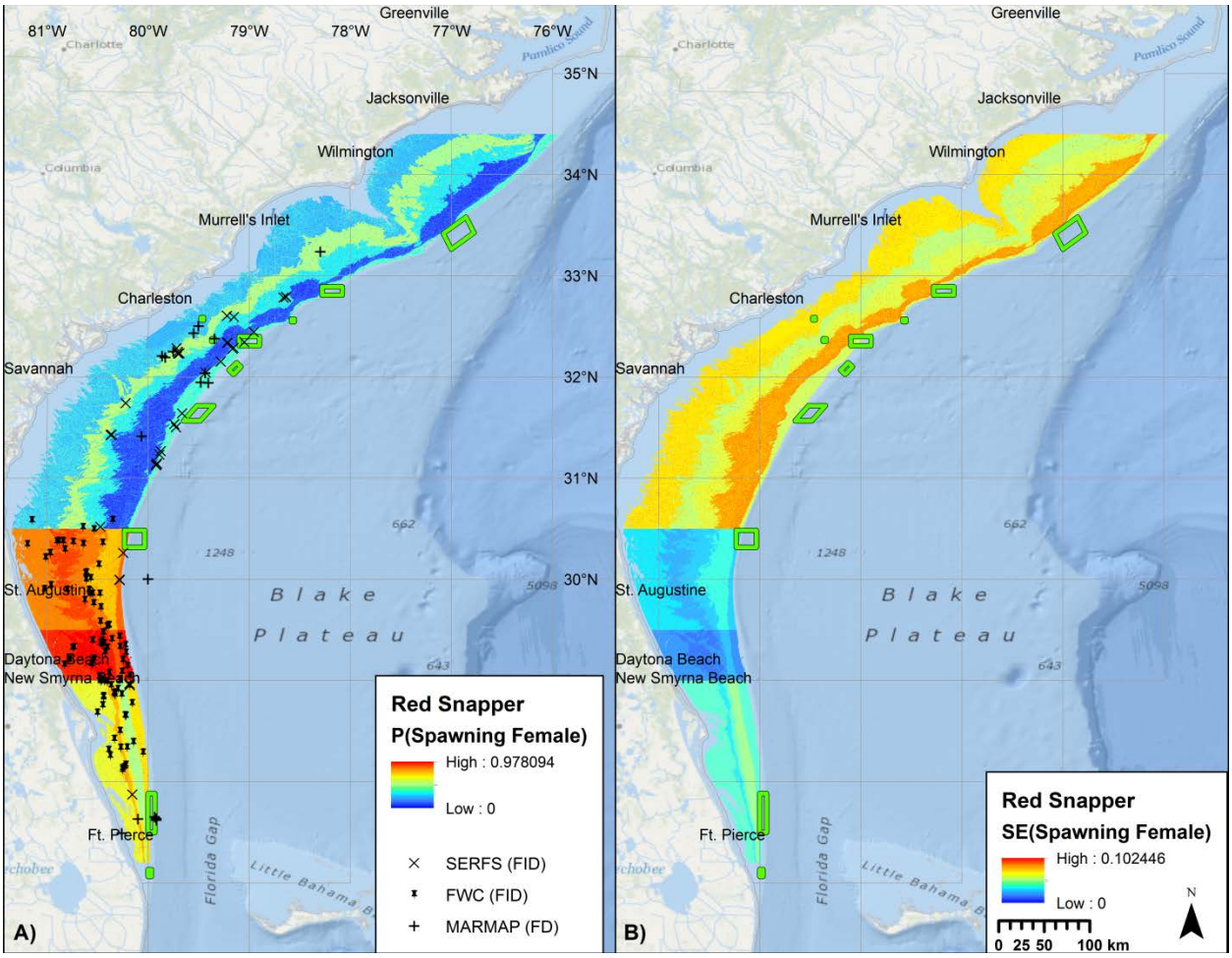

Figure 2. A) Probability of encountering a spawning condition female during peak spawning (June and July) around the time of a new moon and B) the standard error for the estimate. Included on the map are the Deepwater MPAs, Oculina Experimental Closed Area and sample locations of spawning condition females. Source: Farmer et al. (in prep).

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

Note: Multiple alternatives can be selected. A minimum and maximum size limit can be combined to develop a slot limit.

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. Prohibit commercial harvest of red snapper in or from the South Atlantic EEZ.

Sub-alternative 2a. months
Sub-alternative 2b. months
Sub-alternative 2c. months
Sub-alternative 2d. year-round.

Alternative 3. Modify the commercial trip limit for federally-permitted vessels.

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 commercial minimum size limit (total length).

Sub-alternative 4a. size limit
Sub-alternative 4b. size limit
Sub-alternative 4c. size limit

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

Sub-alternative 5a. size limit
Sub-alternative 5b. size limit
Sub-alternative 5c. size limit

Alternative 6. Prohibit commercial possession and harvest of red snapper in or from South Atlantic EEZ using spearfishing gear.

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 Council is considering keeping the fishery closed during the spawning months based on stakeholder input gathered during Vision Port Meetings or keep the commercial fishery closed due to the very low ACL (<7,000 fish). The spawning months for red snapper are May through October with a prolonged peak from June

through September (White and Palmer 2004, Sedberry et al. 2006). A low trip limit could be specified in number of fish or pounds of fish to avoid targeting of red snapper during the open season. Minimum and maximum size limit could be designed to protect small fish or the largest spawning fish from harvest. **Alternatives 2-5** could establish a season, size limit, and trip limit separately.

Alternative 6 prevents targeting red snapper with spearfishing gear. The commercial ACL for red snapper is very small and the Council is considering management measures to keep the fishery as a bycatch fishery.

The Snapper Grouper AP discussed avoiding an opening during the spawning season, aligning the season with vermilion or grouper opening, and considering a bycatch allowance to gather data for assessments. The AP noted that the commercial fishermen could avoid areas with red snapper.

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

Note: Multiple alternatives can be selected. A minimum and maximum size limit can be combined to develop a slot limit.

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.

Alternative 2. Allow recreational harvest of red snapper in or from the South Atlantic EEZ until the ACT is met or projected to be met.

Sub-alternative 2a. 1 month
Sub-alternative 2b. Saturdays and Sundays for 1 month
Sub-alternative 2c. 2 months
Sub-alternative 2d. do not allow for recreational harvest.

Alternative 3. Modify the recreational bag limit for red snapper.

Sub-alternative 3a. xx per person
Sub-alternative 3b. xx per vessel

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

Sub-alternative 4a. size limit
Sub-alternative 4b. size limit
Sub-alternative 4c. size limit

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

Sub-alternative 5a. size limit
Sub-alternative 5b. size limit
Sub-alternative 5c. size 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.

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.

Alternative 8. Prohibit 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.**

Alternative 9. Prohibit 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**.

*Note: Multiple areas could be recommended for closure if alternatives for **Alternatives 8 and 9** are selected. Minimum size criteria for the closed area should be recommended for the development of alternatives.*

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 2-5** develops alternatives to allow for a short red snapper season, set size limits, and bag limits.

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 because many species in the snapper grouper fishery management unit suffer from barotrauma when released. **Alternative 6** 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 7** would define the time period for recreational snapper grouper fishing in the snapper grouper fishing area.

Alternatives 8 and **9** would close specified areas to recreational fishing.

The Snapper Grouper AP was concerned about developing recommendations for such a low ACL. The size limits did not make much sense if you are trying to reduce discards. The AP noted that smaller fish do survive better than larger red snapper. The group also discussed the need for the for-hire fishery to have an access season longer than one month and potentially establish different access seasons for for-hire and private recreational components.

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 Private Recreational Snapper Grouper Permit 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 from private recreational vessels in Federal Waters is an open access fishery with no federal requirement for a recreational permit or fish tag.

Alternative 2. Require a federal recreational permit 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. Establish conditions to renew or maintain a valid permit.

Sub-alternative 3a. A permit is only valid if a completed logbook is filed for the previous time block (**Action 10**) including no fishing reports.
Sub-alternative 3b. A permit cannot be renewed until all logbook reports for the previous year have been filed.

Alternative 4. Require a harvest tag for recreational fishermen to fish for, harvest, or possess red snapper federal waters.
*Note: **Alternative 4** will require additional sub-alternatives to define the program such as tag distribution, reporting, transfers, costs, etc.*

Questions from IPT to consider in development of a permit

1) Is this a fisher permit or a vessel permit? Currently, only the dealer permit and operator cards are by person; the rest are vessel permits. Many of the aspects of the permit will be linked to reporting requirements and will need to be considered when developing a permit (Action 10 in the amendment).

- For instance, we need to know what kind of data will be collected from the permit application. Name and address of every recreational angler fishing for red snapper? If so, that means we need a permit that is issued *per person.* An individual permit will give us a count of effort, and could be used to collect various socio-economic data about these fishers. However, we lose linkage to the vessel and cannot threaten to deny permit renewal for vessel non-compliance (below).

- Do we want to collect information for every vessel that goes fishing, including vessel number, owner name and address? Vessel permits will give us a better linkage to vessel logbooks/reports (if required), but we won't know how many total fishers are out there and who they are.

2) What type of data will be reported by the permit holder (who, where fishing, demographic information, etc.)?

3) What will the permit requirement be (fish for or possess, similar to charter/headboat requirements)?

- For example, the charter/headboat requirement is as follows: For a person aboard a vessel that is operating as a charter vessel or headboat to fish for or possess, in or from the EEZ, South Atlantic snapper-grouper, a valid charter vessel/headboat permit for South Atlantic snapper-grouper must have been issued to the vessel and must be on board.

4) Is the permit required to fish for and possess red snapper or all snapper grouper species?

5) If just for fishing for or possessing red snapper, would the permit be required for all the South Atlantic or a specific region(s)? Would the permit be required for fishing the entire fishing year or only during specific times?

6) Would this permit be for private angling with all approved fishing gear types for rec red snapper?

7) Who will be responsible for logistics, NOAA or states?

8) Will the permit be limited access (limit on the number of permits)?

9) If there is limited access, is the permit transferable?

10) What is the renewal period for the permit? Typically, permits must be renewed within 1 year, by the birthdate of the permit holder.

11) What are the permit renewal requirements? Such as reporting or landings information from the previous year needed for renewal.

12) Would there be any unique permit display requirements? (A regular vessel permit is currently an 8.5x11 piece of paper.)

Issues to consider

The permit office will need a substantial increase in staff to process the potential number of permits. There could be administrative costs to IT and SEFSC also.

There will be a delay (estimated to be between 30-60 days) between when someone applies for a permit and when they receive the permit.

Making this permit obtainable via online will greatly reduce administrative costs to the agency.

Can information be collected through the state license without creating a new permit?

NMFS will charge a cost that will cover the administrative costs of the permit.

Discussion:

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

The permit (**Alternative 2**) would be used to improve estimates of fishing effort for trips that target species in the snapper grouper fishery management unit and match the Visioning Blue 2016-2020 where stakeholders requested a recreational stamp (or permit). Less than 10% of the fishing trips occurring in the South Atlantic region fish in federal waters based on Marine Recreational Intercept Program data. Trips in federal waters include trips targeting cobia, dolphin, king mackerel, Spanish mackerel, and tuna as well as snapper grouper species. In order to improve estimates of snapper grouper fishing without substantially increasing sampling effort in MRIP, a permit could be required. The average number of intercepts from 2013 to 2015 for private fishing trips reporting catching or discarding a species managed by the Council was 3,466 trips (**Table 14**). Over 2,000 of the intercepted trips reported catching or discarding species in the snapper grouper fishery management unit. The vast majority of intercepted trips catching or discarding species in the snapper grouper fishery management unit reported black sea bass, gray snapper, or white grunt. The number of intercepted trips reporting catching or discarding red snapper was less than 10 fish per year for trips originating in North Carolina, South Carolina, or Georgia. An average 110 intercepted trips originating from Florida reported catching or discarding red snapper off Florida from 2012 to 2015. Given the low number of red snapper intercepts, managing red snapper on a spatial or temporal scale based on recreational landings or discards will have significant uncertainty. Low number of intercepts is likely for many species in the snapper grouper complex and a permit for the fishery management unit will enhance fishing effort estimates for all snapper grouper species.

The Marine Recreational Intercept Program also includes a survey component to estimate fishing effort. The response rate for the recreational effort estimation (phone call) is very low. Only 8% of phone calls from the survey team are answered (Andrews 2015). The survey is switching to a mail based survery because it had a much higher response rate (36%). In Florida where a mail survey is used to estimate effort in the Reef Fish fishery, the response rate is approximately 20% but varies depending on strata (Beverly Sauls, FWRI, November 11, 2016).

The Mid-Atlantic Fishery Management Council faced a similar situation in the estimation private recreational landings estimate for blueline tilefish. The landings in the Mid-Atlantic region were under 500 fish per year prior to 2015 with no fish were intercepted from 2010 to 2014 (Personal communication, NMFS, November 14, 2016). The MAFMC heard reports of blueline tilefish being caught at public meetings and in newspapers. The MAFMC is proposing

to implement a permit using the HMS system for golden and blueline tilefish in the Blueline Tilefish Amendment to the Tilefish Fishery Management Plan.

States in the Gulf of Mexico have taken steps to improve their estimation of recreational red snapper catch. Alabama, Mississippi, and Texas have developed electronic reporting applications to improve estimates of red snapper or reef fish landings. Alabama uses the Snapper Check App to improve estimates of red snapper landings. The app requires a fishermen representative to report the catch for the vessel along with number of anglers (AL DCNR 2015). The app requires information on number of anglers, fish harvested, dead discards, vessel registration, county of landings, type of trip, and trip access type. In 2015, it was estimated that 18,938 anglers that landed or discarded red snapper; however, the final number was expanded by a trip correction factor. Mississippi required fishermen to hail out and hail in through the Tails n' Scales App. There are approximately 2,000 fishermen using the App. Texas uses the Snapper Survey to validate the harvest estimate for red snapper, improve the design of a future monitoring program, and index fishery health. Fishermen are required to have a Texas saltwater fishing license, but they are not required to report landings. Florida requires a Reef Fish permit for private recreational anglers and supplements the Marine Recreational Intercept Program by targeting docks/boat ramps where snapper grouper fishermen are likely to return to port. Florida has over 400,000 anglers with their Reef Fish permit. However, this permit was a free permit and in some instances, the clerk added the permit to the fisherman's license without the fisherman requesting it. Louisiana requires a free Recreational Offshore Landings Permit and but does not require reporting of red snapper.

During the Vision process for the Snapper Grouper Fishery Management Plan, stakeholders suggested state by state or regional quotas. However the resolution of the private recreational landings data may be too imprecise to enable analyses at a scale smaller than a South Atlantic region. Establishing a permit could help to improve effort and landings estimate for the private recreational fishery therefore enabling state by state or regional management.

Alternative 3 is designed to increase/ensure compliance of the reporting requirements. Outreach and adequate regulations will be needed so that fishermen will report their landings. Compliance will likely increase overtime as fishermen become more accustomed the new reporting requirements.

Table 14. Number of private recreational trips intercepted by Marine Recreational Intercept Program by state from 2013 to 2015.

Total Number of Trips Intercepted by MRIP Survey					
State	Year	Red Snapper	Snapper Grouper	SAFMC Species	All Species
		Private	Private	Private	Private
NC	2013	1	763	1,110	4,396
	2014	4	508	771	3,188
	2015	3	581	982	3,328
SC	2013	1	143	161	995
	2014	8	288	324	1,337
	2015	1	266	305	1,391
GA	2013	5	75	78	490
	2014	10	85	87	746
	2015	1	62	70	694
FL	2013	51	1,208	1,507	3,568
	2014	161	2,052	2,538	5,471
	2015	117	1,873	2,464	5,436
South Atlantic	2013	58	2,189	2,856	9,449
	2014	183	2,933	3,720	10,742
	2015	122	2,782	3,821	10,849

The tag (**Alternative 4**) would be used to report recreational landings of red snapper. The recreational ACL for red snapper is less than 14,000 fish under the current MSY proxy, $F_{30\%SPR}$. Harvest from 2012 to 2014 exceeded 14,000 in 2012 and 2014 with two or three weekends of allowable harvest. Reporting harvest through a tag program will enable the collection of effort data and landings data. The Mid-Atlantic Fishery Management Council noted that a catch card with a tag requirement improved reporting for Highly Migratory Species (MAFMC 2016).

The Snapper Grouper AP discussed considering an option for just deepwater species, removing all snapper grouper species as a part of the permit conditions, consult with HMS on the design of the permit, consult with NOAA GC on how to address permit violators, adding economic data to the information being collected, and noted that the purpose of the permit should be to identify the universe of fishermen.

The Information and Education AP discussed the public's poor perception of recreational data. They discussed the need for outreach on why the Council was developing actions, why the number of red snapper discards is so high yet the fishery remains closed/overfished, and researching other tagging program such as salmon and deer/duck.

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). There is no reporting requirement for recreational anglers although the Council approved an action which would require owner or operator to complete fishing records if selected by the Science and Research Director (SAFMC 2008).

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

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 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 permit 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 permit to **complete logbooks for trips** when fishing for or catching species listed in the **Action 9 (Permit 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. Require reporting to the NMFS or state agency prior to returning to shore of incidental red snapper catch. Fishermen would be required to inform of location and approximate time of returning to port.

Alternative 6. Require recreational fishermen to hail out via phone or electronic device if targeting species in the snapper grouper fishery management unit. The fishermen would be provided a number issued to the phone or electronic device.

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).

The current language for private recreational vessel reporting requirements was developed in Amendment 15A (SAFMC 2008). Although the language was approved by the Council, it has not been approved by the Office of Management and Budget and not effective until done so. The language states "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."

It is not known if or when this language would be approved by the Office of Management and Budget.

Alternative 2 specifies a percentage of the fishery to participate in the reporting. It is estimated that less than 1% of the trips are intercepted through MRIP. Therefore the intercept of a single fish through MRIP will be expanded by a significant amount to account for the trips that are not intercepted. Self-reported logbooks could be used to increase the sample size of numbers of trips reporting. The Mid-Atlantic Fishery Management Council is proposing to require 100% reporting for blueline and golden tilefish since they are rare event species. Many species in the snapper grouper fishery management complex could be considered rare event species including

red snapper (**Table 15**). Requiring reporting of landings could help to improve the accuracy and precision of the private recreational landings.

Alternative 3 specifies the reporting timeframe for fishermen with a private recreational snapper grouper permit. The fishermen could report on a monthly, weekly, or per trip basis. In the Mid-Atlantic Fishery Management Council's Blueline Tilefish Amendment, it is proposed to require recreational fishermen report their landings via an electronic reporting application prior to removing tilefish from the vessel or removing the vessel from the water.

Alternative 4 would allow fishermen to complete either paper or electronic logbooks whereas **Alternative 2** would only allow electronic logbooks be available for use.

Alternative 5 would require fishermen to report an incidental catch of red snapper. This would increase the number of trips reporting red snapper and potential assist in determining where areas of high red snapper bycatch occur.

Alternative 6 would require fishermen to hail out if they are going to target species in the snapper grouper fishery management unit and a permit would be sent to an electronic device for the trip. A similar system is used by Mississippi Department of Natural Resources to track red snapper landings. In addition to the hail-out requirement, the Mississippi DNR requires fishermen to hail-in with information on catch. The fishermen would not be able to hail out again until a hail-in is completed for the previous trip. Currently Mississippi program only requires reporting of red snapper but it could be modified to include additional species. There are approximately 2,000 anglers using the application. Some of the fishermen request being able to report through other means and are accommodated by the DNR through a phone-in system.

The Snapper Grouper AP discussed the difficulty of a hail-in hail-out system, the need for a simple system, and not placing any requirements prior to a fishing trip.

The Information and Education AP discussed that a hail-in and hail-out system could discourage multiple recreational trips in a day.

It should be noted that before any new system is deemed best scientific information and usable for management, the new system would have to be certified by the Marine Recreational Intercept Program. Currently, Mississippi is going through the certification process. An important part of any new program will be developing methods to track compliance.

Table 15. Number of private vessel trips catching red snapper (landings and discards) and number of red snapper observed (A) or reported (B1 and B2) through MRIP intercepts for private recreational vessels, 2011-2015.

Number of Trips Intercepted Reporting Red Snapper and Numbers of Red Snapper Intercepted Through MRIP					
Year	Private				
	Trips	AB1	A	B1	B2
2011	21	0	0	0	72
2012	48	8	8	0	182
2013	58	12	12	0	129
2014	183	138	111	27	629
2015	122	1	0	1	588

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). Current accountability measures were developed for commercial and recreational fisheries in Amendment 28.

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 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 or component (e.g. commercial, private recreational, or for-hire) 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, or for-hire) 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, or for-hire) 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, or for-hire) 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. Changing areas will take more time to complete than changing a season. Area options should be developed for corresponding overages in ABC or ACL.

Alternative 6. If the total red snapper ABC is not exceeded, landings do not exceed total ACL, and sector or component 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 for red snapper to the next full inch the following year if the sector or component season is not projected to close.

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

Sub-alternative 6c. Increase the length of the open season in deeper water by one week the following year if the sector season or component is not expected to close.

Sub-alternative 6d. Increase the length of the open season for red snapper by one week the following year if the sector season or component is not expected to close.

Note: Need to specify if the AMs would revert the following year.

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.

The current accountability measures for red snapper were developed in Amendment 28 (SAFMC 2013). The AMs 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.

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 16**).

Table 16. 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 possessing species in the snapper grouper fishery management unit 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 fishery 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.

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. Several groups have developed recommendations for best fishing practices and information on best fishing practices can be found at FishSmart.org, Florida Sea Grant, North Carolina Division of Marine Fisheries, and NOAA.

The Snapper Grouper AP discussed requiring a certification to ensure fishermen are applying Best Fishing Practices, how the commercial sector has learned how to avoid red snapper, single hook rig might not be effective for reducing catch, and post release survival is influenced by temperature.

The Information and Education AP discussed developing outreach on barotrauma and discards and potentially look at other programs such as the Florida Keys National Marine Sanctuary and Biscayne Bay Wildlife Refuge best fishing practices for options.

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??