Regulatory Amendment 35

Red Snapper Catch Levels and Snapper Grouper Release Mortality Reduction

Decision Document

December 2022

****REVIEW OF THE DRAFT AMENDMENT DOCUMENT FOR THE DECEMBER 2022 MEETING IS STILL IN PROGRESS. IF NECESSARY BASED ON THAT REVIEW, AN UPDATE OF THIS DOCUMENT WILL BE POSTED WITH THE DRAFT AMENDMENT BY NOVEMBER 30.****

Background

Red snapper have been in a rebuilding plan since 2011, with the stock expected to be rebuilt by 2044. The most recent stock assessment for South Atlantic red snapper, SEDAR 73 (2021) with data through 2019, determined the stock to still be overfished and undergoing overfishing, but making progress in rebuilding (**Figure 1**). The National Marine Fisheries Service (NMFS) notified the South Atlantic Fishery Management Council (Council) of the stock status on July 23, 2021. Stock assessment summary information, a history of management, and the most recent fishery performance report for red snapper can be found in its Fishery Overview.

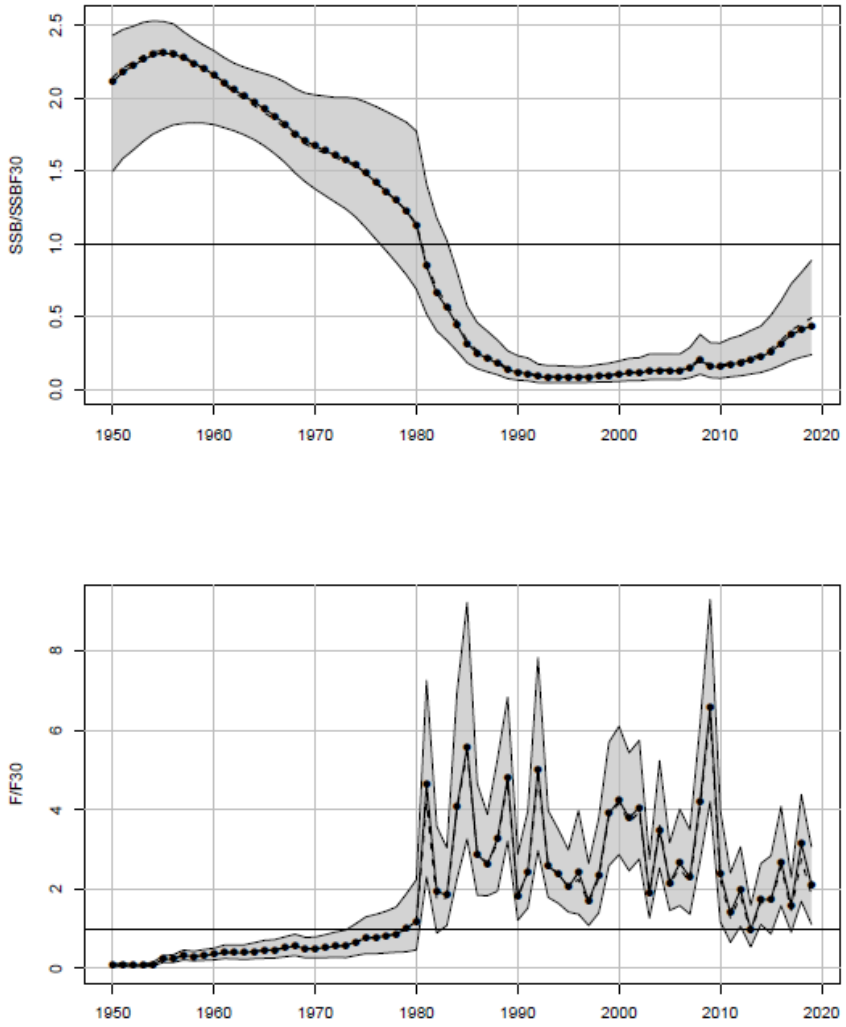

Figure 1. Estimated time series of spawning stock biomass (SSB) and fishing mortality (F) relative to benchmarks. Solid line indicates estimates from base run of the Beaufort Assessment Model; dashed lines represent median values; gray error bands indicate 5th and 95th percentiles of the ensemble modeling. Top panel: SSB relative to $SSB_{F30\%}$; if less than 1, stock is overfished. Bottom panel: F relative to $F_{30\%}$; if > 1 stock is undergoing overfishing. *Source: SEDAR 73 (2021).*

In September 2021, the Council's Scientific and Statistical Committee (SSC) recommended new acceptable biological catch (ABC) levels for red snapper based on the results of SEDAR 73 (2021). Therefore, the Council must reduce ABC and the total ACL based on the SSC's most recent recommendation, consistent with National Standard 1 of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). Implementation of the recommended ABCs would initially entail an approximate one-half reduction from the current ABC (53,000 fish). A reduction in the current OFL (56,000 fish) is also needed. The first action in Regulatory Amendment 35 would reduce the catch levels of red snapper based on the SSC's most recent recommendations following SEDAR 73 (2021).

The results of SEDAR 73 indicated that overfishing of red snapper is being primarily driven by high numbers of dead discards[1] by the recreational sector. While dead discards comprise approximately 85% of the allowable removals (landings + dead discards) for red snapper (Table 1), dead discards also comprise notable portions of allowable removals for other stocks managed under the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (Snapper Grouper FMP). Large numbers of dead discards limit the Council's ability to prevent overfishing and reduce the number of fish that can be landed by the fishery. Therefore, actions to reduce dead discards for all species managed under the Snapper Grouper FMP are considered in the second and third actions of this framework amendment. These actions consider, while recreationally fishing for snapper grouper species, prohibiting the use of electrically or hydraulically-powered reels and prohibiting the use of more than one hook per line.

The Council also intends to address the overfishing of red snapper and recreational discarding of snapper grouper species through expanded outreach and education on best fishing practices. Information on current and potentially expanded outreach and education efforts will be included in an appendix to Regulatory Amendment 35.

The purpose of the actions addressing reels and hooks per line, as well as the consideration of expanded outreach and education efforts, is to reduce dead discards of all species in the fishery management unit, not just red snapper. There are 55 species managed in the snapper grouper fishery management unit and several of them are experiencing overfishing. The snapper grouper fishery is characterized by high discards, high fishing effort, and year-round fishing for many species. Low recruitment and high fishing effort contribute to the overfishing and overfished stock status of many snapper grouper species.

To end overfishing and rebuild overfished stocks, fishery managers often employ management measures such as reduced catch limits, closed seasons, lower bag and trip limits, and minimum size limits. However, in a multispecies fishery, such as South Atlantic snapper grouper, reductions to allowable harvest of one species using these management measures does not mean that effective fishing effort will be reduced for that species, because fisherman can indiscriminately target other species in the same area. Stricter management measures can increase regulatory discards of a stock, which increases the number of dead discards. Additionally, if abundance of a stock increases under strict limits (as is intended by changing management measures to reduce harvest), regulatory discards will further increase due to more frequent catches in situations where that species cannot be retained. Therefore, regulatory changes to end overfishing of a species that co-occurs with species not experiencing overfishing and in a fishery with indiscriminate effort must reduce effective effort on the entire group (or a large majority) of co-occurring species.

Regulatory Amendment 35 is the first of a multi-step approach to end overfishing of South Atlantic red snapper. This framework amendment will be followed by the completion of a Management Strategy Evaluation (MSE) of the snapper grouper fishery (which is currently in

[1] This document denotes fish caught and released alive by the recreational fishery as recreational "discards". "Discards" in this document is equivalent to the term "releases" used in the Council's Best Fishing Practices materials or "Released Alive (Type B2)" used by the Marine Recreational Information Program.

progress) that will provide information that fishery managers can use to manage this multi-species fishery in a more holistic manner. The MSE will then be followed by an amendment to the Snapper Grouper FMP that will implement Council actions based on the MSE and the most current scientific information available at that time. The collective actions of Regulatory Amendment 35 and the amendment that will follow the MSE are expected to end overfishing of red snapper.

Proposed management changes in this amendment

- Adjust catch levels for red snapper in the South Atlantic based on latest stock assessment (SEDAR 73, 2021).
- Prohibit the use of electrically or hydraulically-powered reels for the recreational sector of the snapper grouper fishery.
- Prohibit the use of more than one hook per line for the recreational sector of the snapper grouper fishery

Objectives for this meeting

- Review draft Purpose & Need statement, modify as appropriate, and provide rationale.
- Review actions, alternatives, and draft alternatives; provide direction on which draft alternatives should be included for further consideration
- Consider approval for public hearings
    - Discuss timing and location of public hearings

Potential amendment timing

September 2022	**Review options paper and provide guidance to staff**
December 2022	Review draft actions and alternatives and approve for public hearings
January 2023	Conduct public hearings
March 2023	Review public comment and final draft amendment, approve all actions, consider approval for formal review
Mid-2023	Regulations effective

DRAFT Purpose and Need Statements

Purpose: The *purpose* of this framework amendment is to revise the ~~overfishing limit,~~ acceptable biological catch and annual catch limits for red snapper in the South Atlantic based on the results of the latest stock assessment; and implement management measures to reduce dead discards for the South Atlantic snapper grouper fishery.

Need: The *need* for this framework amendment is to ensure red snapper catch limits are based on the best scientific information available and to ~~end~~ address overfishing of the South Atlantic red snapper stock by reducing dead discards, while minimizing negative social and economic effects to the extent practicable, consistent with the Magnuson-Stevens Fishery Conservation and Management Act and its National Standards.

Committee Action:

- Review the Purpose and Need statements as revised.
- Consider accepting the revisions to the Purpose and Need statements.

Proposed Actions and Alternatives

Action 1. Reduce the acceptable biological catch, total annual catch limit, and sector annual catch limits, and establish an annual optimum yield for South Atlantic red snapper

Purpose of Action: The latest stock assessment (SEDAR 73 2021) indicated the stock is overfished and experiencing overfishing. Action is needed because the SSC recommended a new ABC based on results of SEDAR 73, The Council must establish an annual OY and reduce the ABC, total ACL, and sector ACLs. The Council can not set the total ACL above the SSC's recommended ABC.

Alternative 1 (No Action). The current acceptable biological catch for South Atlantic red snapper is 53,000 fish. The total annual catch limit is 42,510 fish. The commercial sector annual catch limit is 124,815 pounds whole weight. The recreational sector annual catch limit is 29,656 fish. Red snapper may only be harvested or possessed in or from the South Atlantic exclusive economic zone during the commercial and recreational fishing seasons.

Alternative 2. Reduce the red snapper acceptable biological catch and set it equal to the most recent recommendation from the Scientific and Statistical Committee. Revise the total annual catch limit and establish an annual optimum yield for red snapper and set them **equal to** the recommended acceptable biological catch. Red snapper may only be harvested or possessed in or from the South Atlantic exclusive economic zone during the commercial and recreational fishing seasons. The 2027 total annual catch limit and annual optimum yield would remain in place until modified.

Fishing Year	ABC (numbers of fish)	Annual OY=Total ACL (numbers of fish)	Commercial ACL (lbs ww)	Recreational ACL (numbers of fish)
2023	28,000	28,000	77,016	19,119
2024	31,000	31,000	85,268	22,119
2025	33,000	33,000	90,769	24,119
2026	35,000	35,000	96,270	26,119
2027+	36,000	36,000	99,021	27,119

Alternative 3. Reduce the red snapper acceptable biological catch and set it equal to the most recent recommendation from the Scientific and Statistical Committee. Revise the total annual catch limit and establish an annual optimum yield for red snapper and set them equal to **95%** of the recommended acceptable biological catch. Red snapper may only be harvested or possessed in or from the South Atlantic exclusive economic zone during the commercial and recreational fishing seasons. The 2027 total annual catch limit and annual optimum yield would remain in place until modified.

Fishing Year	ABC (numbers of fish)	Annual OY=Total ACL (numbers of fish)	Commercial ACL (lbs ww)	Recreational ACL (numbers of fish)
2023	28,000	26,600	73,166	17,719
2024	31,000	29,450	81,005	20,569
2025	33,000	31,350	86,231	22,469
2026	35,000	33,250	91,457	24,369
2027+	36,000	34,200	94,070	25,319

Alternative 4. Reduce the red snapper acceptable biological catch and set it equal to the most recent recommendation from the Scientific and Statistical Committee. Revise the total annual catch limit and establish an annual optimum yield for red snapper and set them equal to **90%** of the recommended acceptable biological catch. Red snapper may only be harvested or possessed in or from the South Atlantic exclusive economic zone during the commercial and recreational fishing seasons. The 2027 total annual catch limit and annual optimum yield would remain in place until modified.

Fishing Year	ABC (numbers of fish)	Annual OY=Total ACL (numbers of fish)	Commercial ACL (lbs ww)	Recreational ACL (numbers of fish)
2023	28,000	25,200	69,315	16,319
2024	31,000	27,900	76,741	19,019
2025	33,000	29,700	81,692	20,819
2026	35,000	31,500	86,643	22,619
2027+	36,000	32,400	89,119	23,519

Alternative 5. Reduce the red snapper acceptable biological catch and set it equal to the most recent recommendation from the Scientific and Statistical Committee. Revise the total annual catch limit and establish an annual optimum yield for red snapper and set them equal to **0 fish**. Red snapper may not be harvested or possessed in or from the South Atlantic exclusive economic zone. These restrictions also 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, regardless of where the fish has been harvested.

Fishing Year	ABC (numbers of fish)	Annual OY=Total ACL (numbers of fish)	Commercial ACL (lbs ww)	Recreational ACL (numbers of fish)
2023	28,000	0	0	0
2024	31,000	0	0	0
2025	33,000	0	0	0
2026	35,000	0	0	0
2027+	36,000	0	0	0

Discussion

- The SSC reviewed the South Atlantic red snapper stock assessment (SEDAR 73 2021) at their April 2021 and July 2021 meetings.
- The SSC recommended the overfishing limit (OFL) be based on results of a projection that included recent (last 10 years) average recruitment, a discard mortality rate that accounts for descending device usage based on current and predicted levels of use, a fishing mortality rate of F30% (the fishing mortality rate when the spawning potential ratio equals 30%; a proxy for F_{MSY}), and no reallocation of fishing mortality from discards to landings. This projection was run out through 2044 to determine if the stock would rebuild within the rebuilding timeframe (see Additional Information for the projection of the entire rebuilding timeframe). The projections indicated the stock would rebuild within the rebuilding timeframe.
- Recommended landings and projected discard levels are provided for the next 5 years (**Table 1**). The current OFL for red snapper is 56,000 fish, and the current ABC is 53,000 fish, based on the SSC's recommendation following the SEDAR 41 stock assessment (2017). The total ACL is 42,510 fish (Amendment 43, SAFMC 2017).

Table 1. Proposed OFL and ABC levels (the SSC recommended ABC equal OFL) recommended for South Atlantic red snapper by the SSC, based on projections from SEDAR 73 (2021).

Year	ABC/OFL Landings (lbs ww)	ABC/OFL Dead Discards (lbs ww)	ABC/OFL Landings (numbers of fish)	ABC/OFL Dead Discards (numbers of fish)	Percent Reduction in ABC/OFL Landings (numbers of fish) from Current ACL
2023	327,000	1,036,000	28,000	202,000	34.13%
2024	368,000	1,076,000	31,000	207,000	27.08%
2025	408,000	1,104,000	33,000	210,000	22.37%
2026	446,000	1,122,000	35,000	211,000	17.67%
2027+	480,000	1,133,000	36,000	212,000	15.31%

- Staff investigating current Optimum Yield (for **Alternative 1 (No Action)**).

- The Council discussed sector allocations for red snapper at their June 2022 meeting and noted that they do not feel the need to consider changes to allocations at this time because, unlike many other species, the primary recreational data source used in SEDAR 73 was the Florida State Reef Fish Survey, and that survey was not changed by the Marine Recreational Information Program's (MRIP) transition from the Coastal Household Telephone Survey to the mail-based Fishing Effort Survey in 2018.
    - Commercial allocation: 28.07% of the total ACL
    - Recreational allocation: 71.93% of the total ACL
    - The Council determined that this existing allocation remains fair and equitable and noted that sector allocations can be considered following the ongoing management strategy evaluation (MSE)
- Current ACL units and allocation method (Amendment 43, 2017)
    - **Total ACL is 42,510 fish.**
    - The commercial ACL is 28.07% of the total ACL poundage, and the recreational ACL is 71.93% of the total ACL.
    - **Commercial ACL is 124,815 pounds whole weight (lbs ww).**
        - To calculate the commercial ACL, the total ACL in numbers of fish is converted to weight using the projected average weight for 2018 (10.46 lbs ww) from SEDAR 41 (2017).
    - **Recreational ACL is 29,656 fish.**
        - To calculate the recreational ACL, the commercial ACL in lbs ww is converted to numbers of fish using the average weight of commercially caught red snapper from 2012 to 2014 (9.71 lbs ww) (SEDAR 41, 2017).
        - The recreational ACL is the difference between the total ACL in numbers of fish and the commercial ACL in numbers of fish.
- Same *allocation method* as Amendment 43 (2017) was applied to the total ACLs considered in Action 1. However, under **Alternatives 2-5**, the *total average weight and commercial average weight* were updated to reflect estimates from SEDAR 73 (2021):
    - Updated total average weight: 9.80 lbs ww
        - Average of estimated annual average weights of fish landed from 2017-2019
    - Updated commercial average weight: 8.67 lbs ww
        - Average of estimated annual average weights of fish commercially landed from 2017-2019

Committee Action:

- Review alternatives for Action 1 and consider selecting a preferred alternative for public hearings.

Action 2. Prohibit the use of electrically or hydraulically-powered reels to fish recreationally for snapper grouper species

Purpose of Action: The latest stock assessment (SEDAR 73 2021) indicated the South Atlantic red snapper stock is experiencing overfishing due primarily to mortality associated with recreational discards. Other snapper grouper species also experience large numbers of dead discards, which limit the Council's ability to prevent overfishing and reduce the number of fish that can be landed by the fishery. Action is needed to improve efficiency in the South Atlantic recreational snapper grouper fishery, consistent with National Standard 5 of the Magnuson-Stevens Act.

Alternative 1 (No Action). There is no prohibition on the use of electrically or hydraulically powered reels by the recreational sector to fish for snapper grouper species in the South Atlantic Exclusive Economic Zone.

Alternative 2. Prohibit the use of electrically or hydraulically-powered reels by the recreational sector to fish for snapper grouper species, in the South Atlantic Exclusive Economic Zone.

THE COUNCIL DIRECTED EXPLORATION OF ADDITIONAL ALTERNATIVES WITH CONSIDERATION OF REGULATIONS BEING SPECIFIC TO AREAS BASED ON GEOGRAPHY, DEPTH, AND SPECIES/CATCH DISTRIBUTIONS. THE FOLLOWING DRAFT ALTERNATIVES AND SUB-ALTERNATIVES WERE DEVELOPED BY THE IPT. FURTHER DIRECTION ON WHICH ALTERNATIVES AND SUB-ALTERNATIVES SHOULD BE INCLUDED IN ACTION 2 IS NEEDED.

Draft alternatives and sub-alternatives

DRAFT Alternative 3. Prohibit the use of electrically or hydraulically-powered reels by the recreational sector to fish for snapper grouper species in the South Atlantic Exclusive Economic Zone off:

- **Sub-Alternative 3a.** North Carolina
- **Sub-Alternative 3b.** South Carolina
- **Sub-Alternative 3c.** Georgia
- **Sub-Alternative 3d.** North Florida (counties include Nassau, Duval, Saint Johns, Flagler, Volusia)
- **Sub-Alternative 3e.** Central Florida (counties include Brevard, Indian River, St Lucie)
- **Sub-Alternative 3f.** South Florida (counties include Martin, Palm Beach, Broward, Miami-Dade, Monroe)

DRAFT Alternative 4. Prohibit the use of electrically or hydraulically-powered reels by the recreational sector while fishing for snapper grouper species in the South Atlantic Exclusive Economic Zone in an area associated with the following depths:

Sub-Alternative 4a. Less than 100 feet
Sub-Alternative 4b. 100 feet to 200 feet
Sub-Alternative 4c. 200 feet to 300 feet
Sub-Alternative 4d. Greater than 300 feet

ADDITIONAL SUB-ALTERNATIVE DERIVED FROM AP RECOMMENDATION ON ACTION 3:
Sub-Alternative 4e. Greater than 150 feet

Discussion

- Objectives:
  1. Reduce recreational dead discards for the snapper grouper fishery.
     a. Electrically or hydraulically-powered reels reduce the time required to land a caught fish.
     b. Prohibiting electrically or hydraulically-powered reels is expected to increase the average time required to reel and catch a fish, resulting in fewer fish caught per trip and overall.
     c. Fewer fish caught results in fewer discards.
     d. Discard mortality rates applied to a smaller number of discards results in fewer dead discards.
  2. Contribute to ending overfishing of red snapper.
     a. Recreational dead discards are the primary result of fishing mortality for red snapper. Reducing the fishing mortality rate throughout the snapper grouper fishery by prohibiting electrically or hydraulically-powered reels for the recreational sector will also reduce dead discards and the fishing mortality rate of red snapper.
- Figure 2 shows depth zones by area. For **Draft Alternatives 3** and **4**, if included, waypoints defining regulatory area boundaries would need to be developed.
  - **Alternative 4** language would be updated to reflect waypoints rather than enforcing by depth.
- Different regulations in different areas can create enforcement difficulties. More different areas, more difficulty (e.g., different regulations in different parts of Florida would increase enforcement difficulty)
  - Need to check with the Council on how to address a stowing provision and state that these types of rods must be stowed and unavailable for use while fishing for snapper-grouper species; does this need to be stated specifically in the document? Does NMFS OLE have a recommendation?
- Species distributions
  - Table 2 shows rates of recreational releasing, release mortality, and the percentage of recreational catch that results in release mortality, along with recreational catch areas and literature-based depth ranges for snapper grouper species.

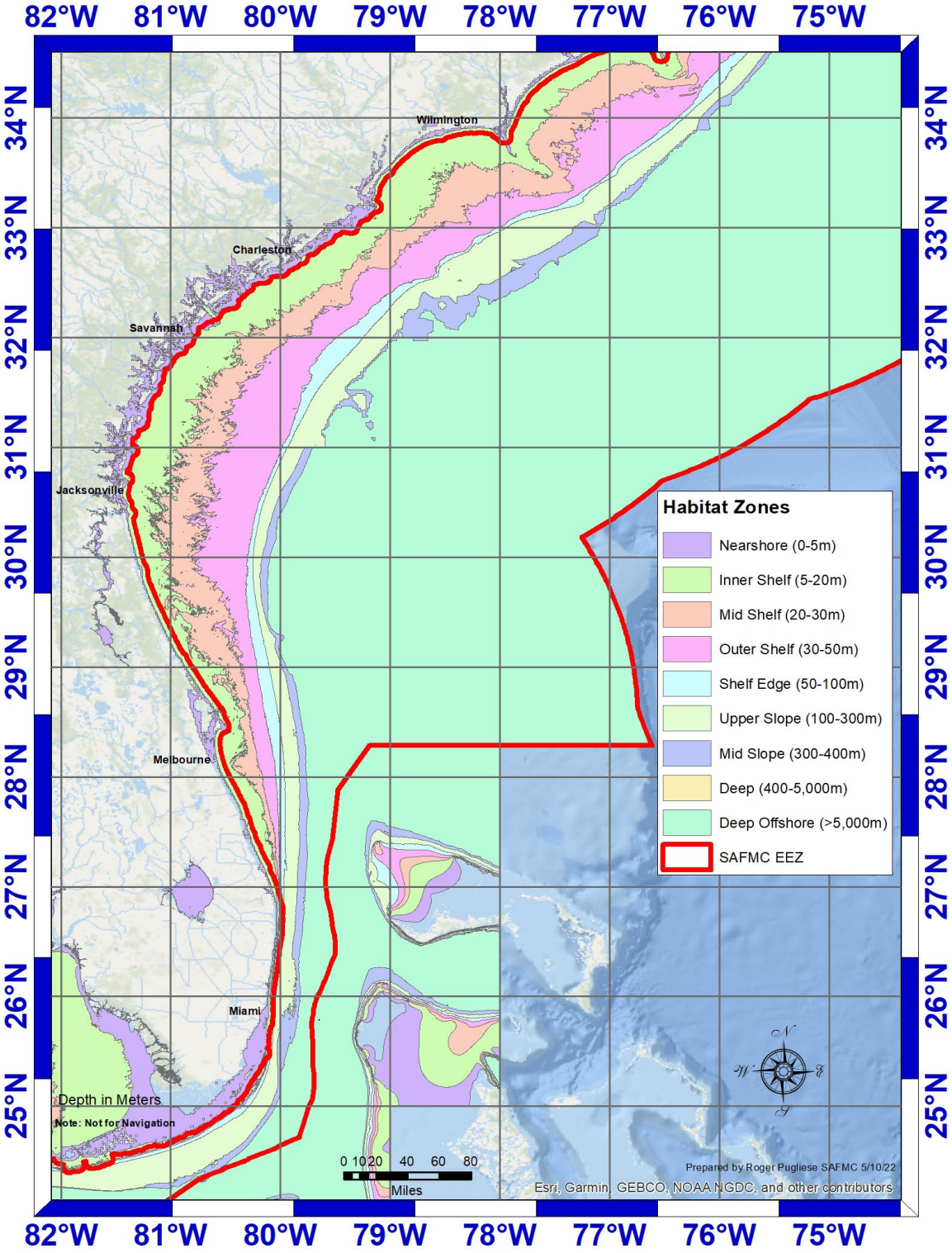

Figure 2. Map of habitat zones associated with depth for the South Atlantic EEZ. Meter to feet conversions: 30 m = 98 feet; 50 m = 164 ft.

Table 2. South Atlantic snapper grouper species percentage of recreational catch released, release mortality rate, percentage of recreational catch removed from the populations by release mortality, primary and secondary recreational catch areas (MRIP and SRHS; 2017-2021), and depth range based on scientific literature. Catch areas are based on landing location and are attributed to federal waters off North Carolina (NC), South Carolina (SC), Georgia (GA), North Florida (N FL; including Nassau, Duval, Saint Johns, Flagler, and Volusia counties), Central Florida (C FL; including Brevard, Indian River, and St. Lucie counties), and South Florida (S FL; including Martin, Palm Beach, Broward, Miami-Dade, and Monroe counties).

Species	Average % Released	Release Mortality %	% of Recreational Catch Removed via Release Mortality	Primary Catch Area	Secondary Catch Area	Depth Range
BLACK GROUPER	74%	20%	15%	S FL	C FL	30 to 98 ft
BLACK SEA BASS	95%	14%	13%	NC	SC	7-394 ft (adults most common 66-197 ft)
BLUELINE TILEFISH	7%	82%	6%	NC	S FL	98-774 ft
GAG	71%	25%	18%	N FL	S FL	131-498 ft
GRAY TRIGGERFISH	60%	13%	8%	S FL	N FL	up to 328 ft
GREATER AMBERJACK	57%	20%	11%	N FL	C FL	60-1,181 ft
MUTTON SNAPPER	82%	15%	12%	S FL	C FL	82-312 ft
RED GROUPER	75%	20%	15%	S FL	C FL	16-984 ft (NC most common: 88-249 ft; SE FL most common: 88-249 ft)
RED PORGY	44%	41%	18%	N FL	SC	up to 918 ft; most common 82-295 ft
RED SNAPPER	89%	23%*	20%	N FL	C FL	33-623 ft
SCAMP	45%	26%	12%	SC	NC	98-328 ft
SNOWY GROUPER	18%	100%	18%	S FL	C FL	98-1,722 ft
VERMILION SNAPPER	63%	38%	24%	N FL	SC	59 to 400 ft (most abundant less than 250 ft)
WHITE GRUNT	49%		0%	S FL	N FL	59-180 ft
YELLOWTAIL SNAPPER	66%	15%	10%	S FL	C FL	up to 590 ft; adults typically 33-230 ft

Overfished stock

*For red snapper, the private recreational release mortality estimate was applied; the for-hire recreational release mortality estimate was 22%.

Committee Action:

- Provide guidance on the range of alternatives that should be considered for Action 2. Which, if any, of the additional draft alternatives should be included for further consideration?
- Consider selecting preferred alternative for public hearings.

Action 3. Prohibit the use of more than one hook per line for the snapper grouper recreational sector

Purpose of Action: The latest stock assessment (SEDAR 73 2021) indicated the South Atlantic red snapper stock is experiencing overfishing due primarily to mortality associated with recreational discards. Other snapper grouper species also experience large numbers of dead discards, which limit the Council's ability to prevent overfishing and reduce the number of fish that can be landed by the fishery. Action is needed to improve efficiency in the South Atlantic recreational snapper grouper fishery, consistent with National Standard 5 of the Magnuson-Stevens Act.

Alternative 1 (No Action). There is no prohibition on the use of more than one hook per line by the recreational sector to fish for snapper grouper species in the South Atlantic Exclusive Economic Zone.

Alternative 2. Prohibit the use of more than one hook per line for the recreational sector to fish for snapper grouper species in the South Atlantic Exclusive Economic Zone.

THE COUNCIL DIRECTED EXPLORATION OF ADDITIONAL ALTERNATIVES WITH CONSIDERATION OF REGULATIONS BEING SPECIFIC TO AREAS BASED ON GEOGRAPHY, DEPTH, AND SPECIES/CATCH DISTRIBUTIONS. THE FOLLOWING DRAFT ALTERNATIVES AND SUB-ALTERNATIVES WERE DEVELOPED BY THE IPT. FURTHER DIRECTION ON WHICH ALTERNATIVES AND SUB-ALTERNATIVES SHOULD BE INCLUDED IN ACTION 2 IS NEEDED.

Draft alternatives and sub-alternatives

DRAFT Alternative 3. Prohibit the use of more than one hook per line for the recreational sector to fish for snapper grouper species in the South Atlantic Exclusive Economic Zone off:

Sub-Alternative 3a. North Carolina

Sub-Alternative 3b. South Carolina

Sub-Alternative 3c. Georgia

Sub-Alternative 3d. North Florida (counties include Nassau, Duval, Saint Johns, Flagler, Volusia)

Sub-Alternative 3e. Central Florida (counties include Brevard, Indian River, St Lucie)

Sub-Alternative 3f. South Florida (counties include Martin, Palm Beach, Broward, Miami-Dade, Monroe)

DRAFT Alternative 4. Prohibit the use of more than one hook per line for the recreational sector to fish for snapper grouper species in the South Atlantic Exclusive Economic Zone in an **area associated with depth:**

Sub-Alternative 4a. Less than 100 feet
Sub-Alternative 4b. 100 feet to 200 feet
Sub-Alternative 4c. 200 feet to 300 feet
Sub-Alternative 4d. Greater than 300 feet

ADDITIONAL SUB-ALTERNATIVE DERIVED FROM AP RECOMMENDATION:
Sub-Alternative 4e. Greater than 150 feet

Discussion

- Objectives:
  1. Reduce recreational dead discards for the snapper grouper fishery.
     a. More hooks per line increases the likelihood of catching a fish and potentially the number of fish caught per drop.
     b. Prohibiting the use of more than one hook per line is expected to reduce the number of fish caught per drop, resulting in fewer fish caught per trip and overall.
     c. Fewer fish caught results in fewer discards.
     d. Discard mortality rates applied to a smaller number of discards results in fewer dead discards.
  2. Contribute to ending overfishing of red snapper.
     a. Recreational dead discards are the primary result of fishing mortality for red snapper. In reducing dead discards throughout the snapper grouper fishery by limiting the number of hooks that may be used by the recreational fishery, dead discards of red snapper and the fishing mortality rate for red snapper will be reduced.
- Figure 2 shows depth zones by area. For **Draft Alternatives 3** and **4**, if included, waypoints defining regulatory area boundaries would need to be developed.
  - **Alternative 4** language would be updated to reflect waypoints rather than enforcing by depth.
- Different regulations in different areas can create enforcement difficulties. More different areas, more difficulty.
- Species distributions
  - Table 2 shows rates of recreational releasing, release mortality, and the percentage of recreational catch that results in release mortality, along with recreational catch areas and literature-based depth ranges for snapper grouper species.
- Council staff is collecting data to compare catch rates between single hook and double hook rigs. Data from these collections will be combined with previously collected data from Florida FWC to characterize efficiency differences between single and double-hook rigs.
  - SSC reviewed preliminary results at their October 2022 meeting.

Committee Action:

- Provide guidance on the range of alternatives that should be considered for Action 3. Which, if any, of the additional draft alternatives should be included for further consideration?
- Consider selecting preferred alternative for public hearings.

Additional Information

1. Best Fishing Practices Appendix

In September 2022, the Council directed an appendix to Regulatory Amendment 35 be developed that would discuss a summary of current best fishing practices outreach and education efforts as well as how these efforts could be expanded. This appendix will be discussed at the December 2022 Council Meeting by the Outreach and Communications Committee and be included in the Regulatory Amendment 35 draft document.

2. Additional SEDAR 73 model run

In September 2022, the Council requested a hypothetical sensitivity run of the SEDAR 73 (red snapper) assessment model that assumes recreational discards are 50% less than the initially estimated values and descending devices are used 100% of the time on impaired fish that were released. This run has been provided by the Southeast Fisheries Science Center and will be presented at the December 2022 Council Meeting.

3. SSC-Recommended SEDAR 73 Red Snapper Catch Projections

Table 3. Scenario 13 projection results with F= F30 starting in 2022 and recent average recruitment. Benchmarks are based on Block 3 and discard mortality on Block 4 with no reallocation of F toward landings. R = number of age-1 recruits (in 1000s), F = fishing mortality rate (per year), S = spawning stock (1e8 eggs), L = landings expressed in numbers (n, in 1000s) or whole weight (w, in 1000 lb), D = dead discards expressed in numbers (n, in 1000s) or whole weight (w, in 1000 lb), and pr.reb = proportion of stochastic projection replicates with SSB ≥ SSB_{F30}. The extension "b" indicates expected values (deterministic) from the base run; the extension "m" indicates median values from the stochastic projections.

year	R.b	R.m	F.b	F.m	S.b	S.m	L.b(n)	L.m(n)	L.b(w)	L.m(w)	D.b(n)	D.m(n)	D.b(w)	D.m(w)	pr.reb
2020	718	628	0.39	0.34	307585	325212	40	39	416	409	443	407	2019	1910	0.053
2021	718	629	0.35	0.31	347034	372325	39	38	420	413	332	288	1626	1473	0.117
2022	718	629	0.21	0.21	401322	430186	25	28	284	319	195	189	983	996	0.206
2023	718	629	0.21	0.21	465178	491225	28	31	327	363	202	191	1036	1016	0.307
2024	718	629	0.21	0.21	529917	551037	31	33	368	403	207	194	1076	1034	0.415
2025	718	630	0.21	0.21	593360	608291	33	35	408	441	210	196	1104	1050	0.526
2026	718	623	0.21	0.21	653509	662653	35	36	446	475	211	196	1122	1062	0.637
2027	718	630	0.21	0.21	710246	712268	36	38	480	506	212	197	1133	1067	0.733
2028	718	629	0.21	0.21	762093	757711	38	39	511	533	212	197	1138	1072	0.81
2029	718	630	0.21	0.21	809274	799286	39	40	538	559	212	197	1143	1076	0.871
2030	718	624	0.21	0.21	851779	835646	40	41	562	581	212	198	1146	1080	0.915
2031	718	625	0.21	0.21	889553	868429	41	42	584	602	212	198	1148	1083	0.946
2032	718	628	0.21	0.21	923163	896936	42	43	603	619	213	198	1151	1086	0.968
2033	718	627	0.21	0.21	952682	921751	42	44	620	635	213	198	1153	1092	0.98
2034	718	631	0.21	0.21	978473	944097	43	44	634	649	213	199	1154	1093	0.988
2035	718	629	0.21	0.21	1001094	963960	44	45	647	662	213	199	1156	1096	0.993
2036	718	626	0.21	0.21	1020799	981064	44	45	658	673	213	199	1157	1097	0.996
2037	718	630	0.21	0.21	1037826	995602	44	45	668	683	213	199	1158	1099	0.998
2038	718	629	0.21	0.21	1052612	1008953	45	46	676	692	213	199	1159	1103	0.999
2039	718	629	0.21	0.21	1065380	1019871	45	46	683	698	213	199	1160	1103	0.999
2040	718	630	0.21	0.21	1076422	1030010	45	46	689	704	213	198	1161	1102	1
2041	718	634	0.21	0.21	1085957	1038653	45	47	695	710	213	199	1161	1105	1
2042	718	627	0.21	0.21	1094186	1046759	46	47	699	715	213	199	1162	1102	1
2043	718	631	0.21	0.21	1101288	1053572	46	47	703	719	213	199	1162	1103	1
2044	718	627	0.21	0.21	1107417	1059173	46	47	707	722	213	199	1163	1104	1