Regulatory Amendment 35

Snapper Grouper Release Mortality Reduction and Red Snapper Catch Levels

Advisory Panel Discussion Document (Updated)

October 2022

NOTE: This document has been updated with additional information since the initial posting.

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 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.

Directed red snapper fishing is limited to a few days of recreational harvest allowed annually and a low annual catch limit (ACL) for the commercial sector with a season beginning each year in July until the ACL is met. These measures, combined with growing fishing effort in the South Atlantic snapper grouper fishery, particularly from the recreational sector, have led to a drastic increase in the number of red snapper that must be released after being caught while fishing for other snapper grouper species. The increase in releases has, in turn, led to an increase in the number of fish that die after being caught and released, despite efforts from management and fishermen to improve survival after release through best practices and the use of descending devices. The number of dead red snapper releases far outnumbers fish removed from the

population by harvest. Large numbers of releases limit the Council's ability to prevent overfishing and reduce the number of fish that can be landed by the fishery.

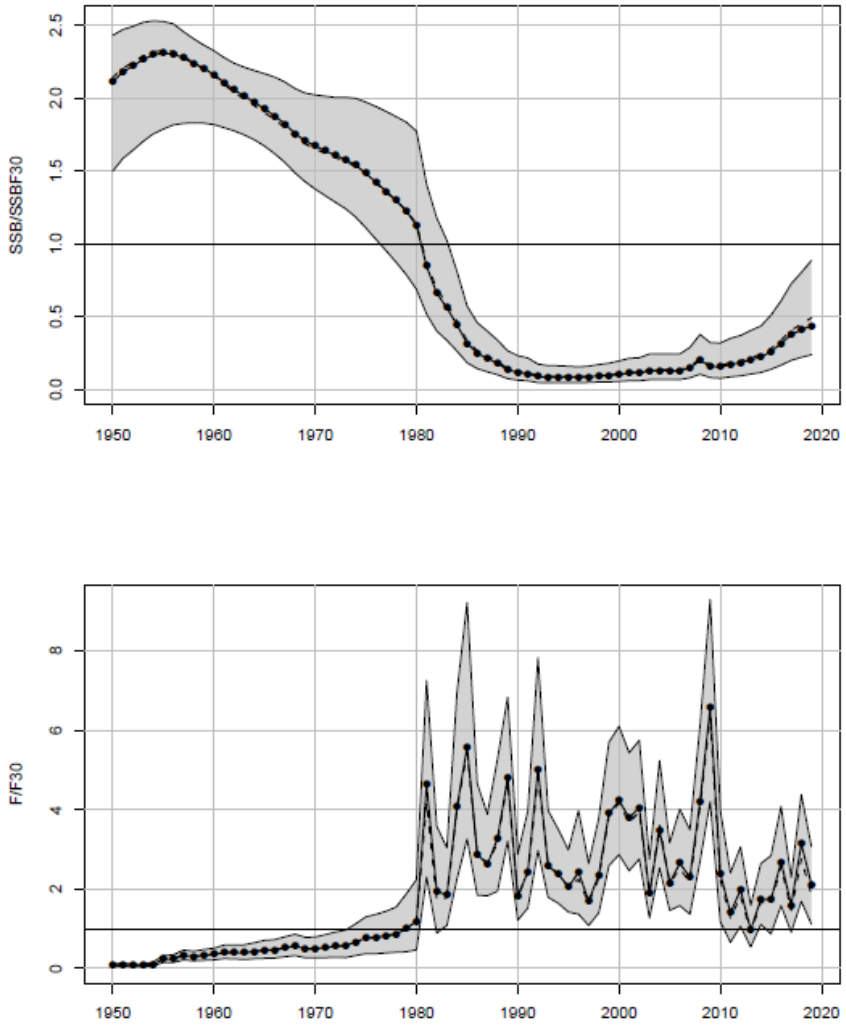

Figure 1. Estimated time series of spawning stock biomass (SSB) and fishing mortality (F) relative to benchmarks. Solid line indicates estimates from base run of the Beaufort Assessment Model; dashed lines represent median values; gray error bands indicate 5th and 95th percentiles of the ensemble modeling. 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 (SSC) recommended new acceptable biological catch (ABC) levels for red snapper based on the results of SEDAR 73 (2021). Implementation of the recommended ABCs would initially entail an approximate one-half reduction from the current ABC (53,000 fish), further limiting the fishery and not addressing the primary source of mortality for the stock (dead releases). Therefore, in March 2022, the Council initiated a regulatory amendment that would: 1) adjust red snapper catch levels to be based on the most recent stock assessment and SSC recommendation, and 2) end overfishing of red snapper

through management measures aimed at reducing releases and release mortality of snapper grouper species.

In June 2022, the Council directed that, in addition to including consideration of new catch levels for red snapper, the amendment include actions to prohibit the use of electric- or hydraulic-powered rod and reel gear and more than one hook per line for the recreational sector while fishing for snapper grouper species. The Council also directed that overfishing of red snapper be addressed through expanded outreach and education on best fishing practices. The Council also requested analyses of snapper-grouper catches and releases by sector, time of year, and area, as well as additional analyses that were compiled for the September 2022 Council Meeting, and can be accessed HERE.

In September 2022, the Council revised its timeline for Regulatory Amendment 35, scheduling consideration for final Council approval to occur in March 2023. Therefore, the amendment will be considered for approval for public hearings at the Council's December 2022 meeting.

Tentative Regulatory Amendment Timing

September 2022	Review options paper and provide guidance to staff
December 2022	Review draft amendment, select preferred alternatives, and approve for public hearings
January-February 2023	Conduct public hearings
March 2023	Review final draft amendment and consider approval for formal review
Mid-2023	Regulations effective (TBD if by July fishing season)

Objective for this meeting

Provide input for Council consideration in developing Regulatory Amendment 35.

Proposed Actions

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

Alternative 1 (No Action).

- Current Acceptable Biological Catch: 53,000 fish
- Total Annual Catch Limit (ACL): 42,510 fish
- Recreational ACL: 29,656 fish
- Commercial ACL: 124,815 pounds whole weight (lbs ww)

Alternative 2.

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

Alternative 3.

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

Alternative 4.

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

Alternative 5.

- Acceptable Biological Catch: Same as Alternatives 2-4
- Total Annual Catch Limit (and Annual Optimum Yield): 0 fish
    - No harvest or possession of red snapper from the South Atlantic Exclusive Economic Zone
    - No harvest or possession of red snapper for federally permitted vessels (commercial or for-hire), regardless of where the fish was caught (i.e., federal or state waters).

Discussion

- **Total ACL is 42,510 fish.** (Amendment 43, 2017)
- The commercial ACL is 28.07% of the total ACL poundage, and the recreational ACL is 71.93% of the total ACL.
    - While changes to sector allocation percentages are not being considered at this time, the average weights used to convert between numbers and pounds will be updated to reflect SEDAR 73 (2021).
- **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.
- For **Alternatives 2-4**, sector ACLs were calculated using average weights from 2017-2019 as estimated by SEDAR 73 (2021). The updated average weights were:
    - Total: 9.80 lbs ww
    - Commercial: 8.67 lbs ww
    - Recreational: 10.30 lbs ww

AP Discussion:

- What should the Council's preferred alternative be for Action 1?

Action 2. Prohibit the use of electrically or hydraulically-powered reels for the snapper grouper recreational sector

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.

Alternative 2. Electrically or hydraulically-powered reels may not be used by the recreational sector to fish for snapper grouper species.

COUNCIL DIRECTED EXPLORATION OF ADDITIONAL ALTERNATIVES WITH CONSIDERATION OF REGULATIONS BEING SPECIFIC TO AREAS BASED ON GEOGRAPHY, DEPTH, AND SPECIES/CATCH DISTRIBUTIONS

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 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 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

Discussion

- Objectives:
  1. Reduce recreational dead releases for the snapper grouper fishery.
  2. Contribute to ending overfishing of red snapper.
- Council has directed the Interdisciplinary Planning Team (IPT) to explore additional options for Actions 2 and 3 with the goal of maximizing efficiency in ending overfishing of red snapper, while minimizing interference with fishing activities for other species.
- The Council has discussed the potential of exceptions for individuals with physical disabilities. Such exceptions must be made as filed in accordance with the Americans with Disabilities Act.
- Barotrauma
  - Catastrophic decompression (swim bladder rupture) at 160 feet

- ~100 feet is typically when decompression is needed

Table 1. 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%.

AP Discussion:

- For what areas, components, or target species in the snapper grouper recreational fishery are electric- or hydraulic-powered rod and reel used?
  - Provide any description of how prominent this gear is in those areas or components of the fishery.
- Should a prohibition of electric- or hydraulic-powered rod and reel gear for the snapper grouper recreational fishery be implemented throughout the region?
  - In what area(s) and/or depth(s) should this regulation be implemented to effectively limit dead releases of species managed under the Snapper Grouper Fishery Management Plan?
    - Consider prominence of use, differences in catch rates of species that cannot be retained, depth and likelihood of release mortality, etc.
  - Are there areas or components of the fishery where this regulation would be expected to have little or no effect on catches of fish that cannot be retained?

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

Alternative 1 (No Action). There is no prohibition on the use of more than one hook per line by the recreational sector while fishing for snapper grouper species.

Alternative 2. Prohibit the use of more than one hook per line for the recreational sector while fishing for snapper grouper species.

COUNCIL DIRECTED EXPLORATION OF ADDITIONAL ALTERNATIVES WITH CONSIDERATION OF REGULATIONS BEING SPECIFIC TO AREAS BASED ON GEOGRAPHY, DEPTH, AND SPECIES/CATCH DISTRIBUTIONS

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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 while fishing for snapper grouper species in the 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

Discussion

- Objectives:
  1. Reduce recreational dead releases for the snapper grouper fishery.
  2. Contribute to ending overfishing of red snapper.
- Council has directed the IPT to explore additional options for Actions 2 and 3 with the goal of maximizing efficiency in ending overfishing of red snapper, while minimizing interference with fishing activities for other species.
- Council staff is conducting a study comparing catch rates between single hook and double hook rigs. FWC also has single-hook/double-hook data that will be investigated to determine how these datasets can be used together to characterize efficiency differences between single and double-hook rigs.

- Reference **Table 1** (above) for information on release mortality rates, catch areas, and depths for select snapper grouper species.
- Barotrauma
    - Catastrophic decompression (swim bladder rupture) at 160 feet
    - ~100 feet is typically when decompression is needed

AP Discussion:

- For what areas, components, or target species in the snapper grouper recreational fishery are lines with more than one hook used?
    - Provide any description of how prominent the use of multi-hook rigs is in those areas or components of the fishery.
- Should a prohibition of more than one hook per line for the snapper grouper recreational fishery be implemented throughout the region?
    - In what area(s) and/or depth(s) should this regulation be implemented to effectively limit dead releases of species managed under the Snapper Grouper Fishery Management Plan?
        - Consider prominence of use, differences in catch rates of species that cannot be retained, depth and likelihood of release mortality, etc.
    - Are there areas or components of the fishery where this regulation would be expected to have little or no effect on catches of fish that cannot be retained?

Best Fishing Practices Appendix

In September 2022, the Council directed that an appendix be added to Regulatory Amendment 35 that would describe ongoing and potentially expanded efforts to increase outreach and education on Best Fishing Practices. While this action is not a regulatory measure, efforts described in this appendix are expected to contribute to reducing dead releases and ending overfishing for several snapper grouper species.

Best Fishing Practices are described and resources are provided on the Council's Best Fishing Practices Webpage.

Summary of Best Fishing Practices Outreach Efforts

Overall Goals and Objectives

- Increase awareness, knowledge and use of fishing methods that will improve survivorship of released fish.
    - Understanding of barotrauma and mitigation strategies, specifically descending devices.
        - Signs of barotrauma, types of descending devices, proper use, and how to create your own if desired.
    - Knowledge of Council regulations related to best fishing practices, including descending devices and circle hooks.
    - Proper fish handling techniques and avoidance of non-target species.
- Increase knowledge of and participation in Council activities.
    - Citizen Science Program including SAFMC Release application.
    - Opportunities to serve on advisory panels or make public comment.
- Build and maintain relationships with fishing communities.
    - Periodic contact both in-person and via email.
    - Redistribution of best fishing practices and Citizen Science outreach materials.

Outreach Strategies:

- Tackle Shop Tours
    - Traveling to tackle shops, marinas, and fishing clubs to chat with stakeholders and distribute educational materials.
    - Developing a tackle shop database to help guide outreach efforts (which tackle shops cater to offshore anglers, have descending devices in stock, etc.)
- Fishing Seminars
    - Working with fishing community leaders and local businesses to hold seminars where staff can demonstrate best fishing practices and provide information on the Citizen Science Program.
- Charter Trips
    - Take charter trips with outdoor writers and social media influencers in the South Atlantic region to demonstrate best fishing practices and citizen science efforts and share how stakeholders can participate and use science in their decision-making.
- Industry Events

- Attending various fishing industry events, such as ICAST, with our best fishing practices display to spread awareness of best fishing practices, Citizen Science, and the Council.

Activities Completed This Year:

- Tackle shops in the following areas were visited:
  - Outer Banks North Carolina (Hatteras, Manteo, Kitty Hawk)
  - Northern South Carolina (Myrtle Beach, Murrells Inlet, Georgetown)
  - Central South Carolina (Charleston)
  - Southern South Carolina (Beaufort, Hilton Head)
  - Northern Georgia (Savannah)
  - Southern Georgia (Darien, Brunswick)
  - Florida Keys (Miami, Key Largo, Marathon, Key West)
- "Responsible and Effective Bottom Fishing" seminar with local charter captains, Mark Phelps and Chuck Griffin, at Haddrell's Point in Mt. Pleasant, South Carolina
  - Approximately fifty people in attendance, asked great questions and seemed interested in best fishing practices and SAFMC Release.
- Outreach at the Governor's Cup tournament in Georgetown, South Carolina.
  - Web analytics showed a large spike in traffic to the Council's best fishing practices webpage during this outreach effort.
- Attended ICAST 2022
  - Fantastic opportunity to talk with leaders in the industry, make contacts, and encourage people to carry descending devices and Council informational materials in their store.
- Charter trip with Good Times Sportfishing and local writers in Hatteras, North Carolina.

Upcoming Outreach Activities:

- Tackle shop outreach in southern North Carolina (Wilmington)
- Tentative seminar in southern South Carolina (Beaufort)
- Charter trip with Miss Judy Charters and local writers in Savannah, Georgia.
- Content creation trip to gather photo and video footage of descending devices and SAFMC Release for use in outreach materials.
- Charter Guide Summit with SCDNR (Charleston, Murrells Inlet, Lemon Island, SC)

Important Note: This level of outreach would *not* be possible without the help of our stakeholders and government partners. The South Atlantic Sea Grant offices involved in the multi-year, multi state reef fish extension grant are collaborating with the Council to provide a South Atlantic Reef Fish Extension/Communication Fellow (Ashley Oliver) to address the communication and outreach needs of the snapper grouper fishery and best fishing practices. While housed at the Council office, the fellow is financially supported through Sea Grant. Additionally, state agencies, local community leaders, and advisory panel members have been instrumental in helping staff find opportunities to share best fishing practices information.

AP Discussion:

- Based on your observations, how prominently are best fishing practices used when fishing for snapper grouper species?
- Are there particular areas or user groups in the fishery that are not aware of or are not typically using best fishing practices?
- Given additional resources, what NEW outreach and communication methods would be most effective to spread information on best fishing practices? How do you receive most of your fishing-related information?
- What industry groups or individuals could be helpful collaborators in spreading information on best fishing practices? Who are people or groups that you seek out for fishing-related information?