

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 management measures for red snapper, consider establishing recreational reporting requirements for the snapper grouper fishery, and develop best fishing practices.

Revised
5/22/2017
Attachment 6d

Note: Actions included in this document are Actions 7-10 and 12 from the options paper reviewed by the Council at the March 2017 meeting. The other actions in the March options paper were requested to be removed by the Council until a new ABC is recommended by the SSC. The SSC did not recommend changing the ABC; however, the MRIP survey is not sufficient to track landings for the ABC. Currently, the Amendment 28 ACL calculation method is still in place and would need to be replaced prior to any opening. The purpose and need may need to be changed depending on the actions that the Council selects to include in the amendment.

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.

COMMITTEE ACTION:

MODIFY AND APPROVE PURPOSE AND NEED STATEMENTS, AS APPROPRIATE

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.

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 Management 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 Management 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 under formal review to require charter boats to submit electronic logbooks for each trip.

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.

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. The Council is considering an adaptive management approach, which would include multiple actions (**Actions 7, 8, 9, 10, and 12**) 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 7 and 12 would impact commercial fisheries. **Actions 8, 9, 10, and 12** would impact recreational fisheries.

Possible Actions and Alternatives

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.

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. June to September (avoiding peak spawning season for red snapper)

Sub-alternative 2b. May to October (avoiding spawning season for red snapper)

Sub-alternative 2c. year-round.

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

Sub-alternative 3a. XX pounds whole weight

Sub-alternative 3b. XX fish

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

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

Sub-alternative 4a. 16 inches total length

Sub-alternative 4b. 18 inches total length

Sub-alternative 4c. 20 inches total length

Note: Currently there is not a size limit

Alternative 5. Prohibit commercial possession and harvest of red snapper in or from South Atlantic EEZ using spearfishing gear.

Discussion:

Size limits and bag limits can be used to constrain harvest into a selected season length. 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 2-4** could establish a season, size limit, and trip limit separately.

Alternative 5 prevents targeting red snapper with spearfishing gear. Since the red snapper would likely be a bycatch fishery, harvesting red snapper with spearfishing gear would be a targeted fishery.

Snapper Grouper AP Input:

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. Since the commercial fishery operates typically in deeper water than the recreational fishery, a size limit might result in dead discards. The red snapper fishery should be managed as a bycatch fishery and prohibiting spearfishing might create enforcement issues since many dive trips also hook-and-line fish.

Law Enforcement AP Input:

The Law Enforcement AP discussed the enforceability of different regulations. If a trip is intercepted offshore, then number of fish is easier to enforce. The US Coast Guard would likely intercept trips offshore and some state intercepts would occur offshore. Most state intercepts would occur at the dock and weight or number of Red Snapper would be equally enforceable. A trip limit in number of Red snapper could lead to high-grading.

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.

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. 4 months

Sub-alternative 2e. do not allow recreational harvest.

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

Sub-alternative 3a. 1 per person per day

Sub-alternative 3b. 2 per person per day

Sub-alternative 3c. xx per vessel per day

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

Sub-alternative 4a. 16 inches total length

Sub-alternative 4b. 18 inches total length

Sub-alternative 4c. 20 inches total length

Note: Currently there is not a size limit

Alternative 5. Establish an allowable snapper grouper fishing area for recreational fisheries that would remain open 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 5a. Establish an allowable snapper grouper fishing area in waters less than **150 feet** to remain open to snapper grouper fishing year-round.

Sub-alternative 5b. Establish an allowable snapper grouper fishing area in waters less than **120 feet** to remain open to snapper grouper fishing year-round.

Sub-alternative 5c. Establish an allowable snapper grouper fishing area in waters less than **110 feet** to remain open to snapper grouper fishing year-round.

Sub-alternative 5d. Establish an allowable snapper grouper fishing area in waters less than **100 feet** to remain open to snapper grouper fishing year-round.

Sub-alternative 5e. Establish an allowable snapper grouper fishing area in waters less than **90 feet** to remain open to snapper grouper fishing year-round.

Sub-alternative 5f. Establish an allowable snapper grouper fishing area in waters less than **75 feet** to remain open to snapper grouper fishing year-round.

Alternative 6. Establish a snapper grouper fishing season for areas outside the allowable snapper grouper fishing area.

Sub-alternative 6a. The snapper grouper fishing season is May-August. (match the deep-water season)

Sub-alternative 6b. The snapper grouper fishing season is Jan-May. (avoid red snapper peak spawning months)

Sub-alternative 6c. The snapper grouper fishing season is October-December. (avoid red snapper peak spawning months)

Alternative 7. 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 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 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 slow the rate of harvest so that harvest is likely to reach the ACL in a selected season length. Harvest

of red snapper is likely to be confined to a short time period. **Alternatives 2-4** allow for a short red snapper season, set size limits (**Figures 1 and 2**), and bag limits (**Tables 1 and 2**). Due to the closed season since 2015 and the increase in the chevron trap index, estimating the effect of season is not possible. Information on the potential impact of size limits is gathered through the MRIP observer program that observes headboat discards in Florida, Georgia, North Carolina, and South Carolina and charter boats in Florida. In most years, over 75% of the observed red snapper off Florida on charter boats and headboats were less than 18 inches except for 2010 and 2011 when 75% of observed red snapper were less than 21 and 22 inches total length, respectively (**Figure 1**). The number of observed red snapper on headboats off Georgia, North Carolina, and South Carolina was much lower than in Florida and was more variable with 75% of observed red snapper being less than 21 to 29 inches total length depending on year (**Figure 2**).

The number of red snapper caught per angler varied for each component of the recreational sector and year. Over 75% of the trips averaged less than one red snapper per angler on headboats and charter boats from 2010 to 2014 (**Tables 1 and 2**). In 2015 and 2016, a higher percent of the trips caught one or more red snapper per angler per trip, on average. Fishers on private recreational trips averaged less than one red snapper per angler on 46 to 76% of the trips (average 56%) (**Table 3**).

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 since dead discards were higher than the ABC. Management actions are now needed to reduce the number of dead discards and possibly allow a season. 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 5** would define a snapper grouper fishing area designed to reduce the number of red snapper discards and the mortality of discards by concentrating the fishery in shallower waters where discard mortality is lower. **Alternative 6** would define the time period for recreational snapper grouper fishing in the snapper grouper fishing area.

Alternatives 7 and 8 would close specified areas to recreational fishing.

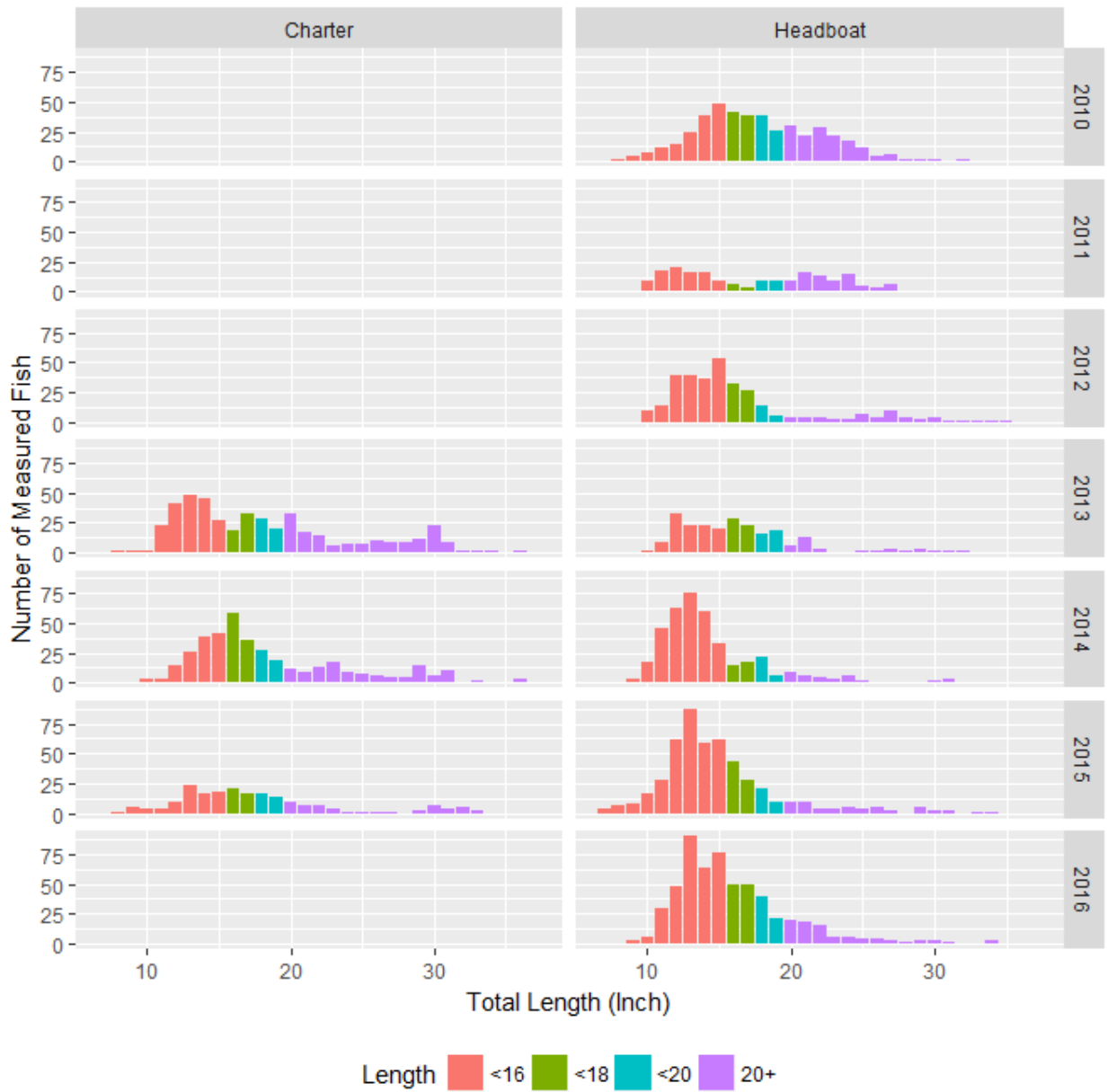


Figure 1. Unexpanded length distribution (inches total length) of red snapper observed on charter boats and headboats from 2010 to 2016 off Florida. The different colors in the graphs refer to sub-alternatives for **Alternative 4**.

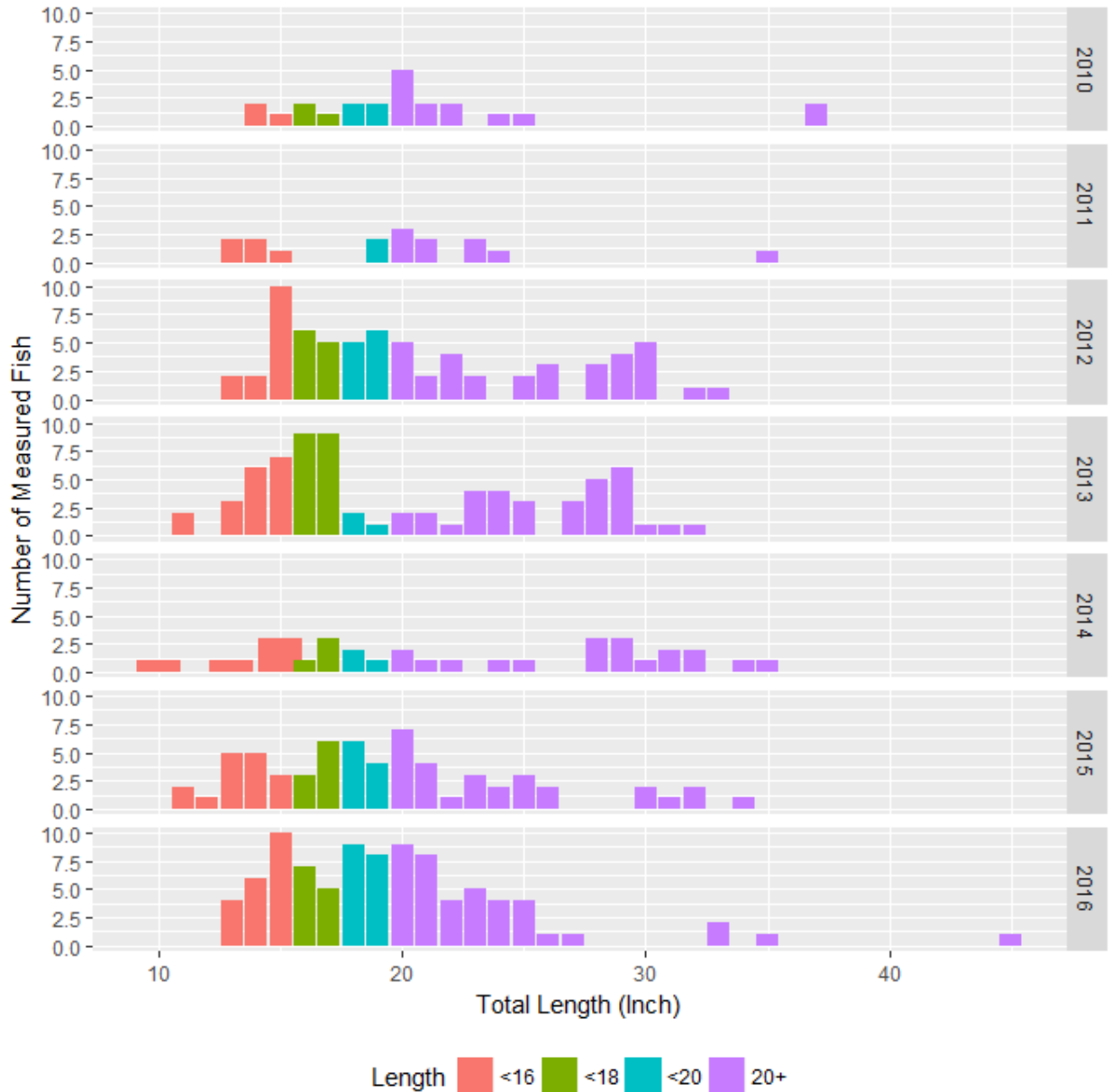


Figure 2. Unexpanded length distribution (inches total length) of red snapper observed on headboats from 2010 to 2016 off Georgia, North Carolina, and South Carolina. The different colors in the graphs refer to sub-alternatives for **Alternative 4**. Charter boats were not observed in these states.

Table 1. Logbook reported average catch (A, B1, and B2; numbers of fish) of red snapper per angler per trip day from 2010 to 2016 from headboats landing in Florida, Georgia, North Carolina, and South Carolina. Some headboats reported fishing for more than one day.

Year	Average Catch Per Angler Per Trip Day											
	0.25	0.75	1	2	3	4	5	6	7	8	9	10+
2010	1,106	473	351	86	38	15	10	1	2			2
2011	1,058	357	290	98	33	15	9	4		2	1	3
2012	914	469	279	83	32	10	6	2	2	2		3
2013	866	390	213	75	37	17	7	10	6	1	1	9
2014	949	423	286	86	35	12	3	7	3		2	4
2015	735	413	375	95	32	13	4	4	5	1		
2016	669	376	371	151	76	30	8	6	4	5		4

Table 2. MRIP estimates of average catch (A, B1, and B2; numbers of fish) of red snapper per trip day from 2010 to 2016 from charter vessels landing in Florida, Georgia, North Carolina, and South Carolina.

Year	Average Catch Per Angler Per Trip Day											
	0.25	0.75	1	2	3	4	5	6	7	8	9	10+
2010	40	6	8									
2011	36	11	2									
2012	58	8	7	1								
2013	45	13	14									
2014	99	36	30	8	2	3		2				
2015	56	33	24	4	6		1					
2016	38	13	13	3	3							1

Table 3. MRIP estimates of average catch (A, B1, and B2; numbers of fish) of red snapper per angler trip day from 2010 to 2016 from private recreational fishing boats landing in Florida, Georgia, North Carolina, and South Carolina.

Year	Average Catch Per Angler Per Trip Day											
	0.25	0.75	1	2	3	4	5	6	7	8	9	10+
2010	20	14	10	3	2		3					
2011	6	5	6	3								1
2012	13	9	21	1				1				3
2013	27	17	7	2	2	3						
2014	54	46	61	9	3	4	1	3				2
2015	25	37	29	13	4	2	5	3	2			4
2016	47	47	24	25	10	4	9	1	4			8

Snapper Grouper AP Input:

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 South Atlantic Snapper Grouper

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.

The Snapper Grouper AP did not make any motions regarding Action 8 but made several comments on the recreational management measures alternatives. The comments may not represent the consensus of the group. Comments included:

- Allow harvest two days per week.
- **Alternative 6c** made the most sense for a season since **Alternative 6a** would overlap with the spawning season and **Alternative 6b** would overlap with the shallow-water grouper closure.
- Consider a distance from shore as an alternative to depth closures.
- Harvest is still allowed in Florida state waters.
- Red snapper discards are being observed in the Keys.

Law Enforcement AP Input:

The Law Enforcement AP indicated that the depth-based closure would be hard to enforce and they reiterated the need for straight lines. It would be difficult to prove where fish were harvested when fishermen are intercepted at the dock. Additional closed area regardless of shape/size will require more officers and more patrols to enforce. They did note that having the open closer to shore is better but still difficult to enforce.

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?

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

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

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:

The Council is considering a private recreational snapper grouper permit to identify the universe of recreational anglers which will be used to improve effort estimation. 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 formal review, 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 2016-2020 Visioning Blueprint where stakeholders requested a recreational stamp (or permit). Less than 10% of the fishing trips occurring in the South Atlantic region occur in federal waters based on Marine Recreational Information Program (MRIP) 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 4**). 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 2013 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 MRIP 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 survey 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 (Mid-Atlantic 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. No fish were intercepted from 2010 to 2014 (Personal communication, NMFS, November 14, 2016). The MAFMC heard at public meetings and in newspaper reports of blueline tilefish being caught. 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 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 application. 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 MRIP 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 Visioning process for the snapper grouper fishery, 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 at the level of the 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 4. 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. Reporting harvest through a tag program will enable the collection of effort data and landings data. The Mid-Atlantic Council noted that a catch card with a tag requirement improved reporting for Highly Migratory Species (MAFMC 2016).

Snapper Grouper AP Input:

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 General Counsel 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 Snapper Grouper AP recommended making **Alternative 2, Sub-Alternative 2c** as the preferred for **Action 9**, which recommends a stamp for private recreational anglers for all species in the snapper grouper fishery management unit. They also recommended making **Alternative 3, Sub-Alternative 3b** as the preferred for **Action 9**, with the intent that the reporting requirement to renew or maintain a permit be fulfilled for the previous year.

Information and Education AP Input:

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.

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.

Sub-alternative 2e. Private recreational anglers could voluntarily 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 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 5. 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 formal review for charter boats which proposes 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 was not approved by the Office of Management and Budget and therefore is not effective. 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.

Electronic logbooks would require development of a smartphone application or web-based reporting method. Smartphone application or web-based reporting methods could supplement or provide an alternative to the MRIP survey, which is used to collect data for snapper grouper species in the South Atlantic. Little research has been conducted on the long-term efficacy and accuracy of smartphone or web-based reporting for large-scale recreational fisheries (Venturelli et al. 2017), and there is concern that the reporting could be biased (Jiorle et al. 2015).

A recent study evaluated the use of a smartphone application in Washington, where catch cards are required for reporting all salmon harvest (as well as sturgeon, steelhead, and halibut). Catch cards programs can be expensive to track harvest and methods to correct for reporting bias can be cost prohibitive, but reporting through smartphone applications could be viable and cost effective option for estimating recreational catch (Stunz et al. 2014, Papenfuss et al. 2015, McCormick 2017). Harvest estimates from smartphones were derived using reports from dockside samplers and smartphone reporting. Using this approach, the precision of the harvest estimate reported via smartphone increased as the percent of the anglers reporting increased and bias was not significant (McCormick 2017).

Red snapper landings have been tracked using different methods in the Gulf of Mexico including two popular smartphone applications: iSnapper and Tails n' Scales. The iSnapper application is a voluntary self-reporting tool to report recreational catches, which was found to estimate landings accurately (Stunz et al. 2014). In Mississippi, fishers are required to report red snapper landings using the Tails n' Scales application. The application is in the process of being approved through MRIP but preliminary estimates indicate very different landings from the smartphone application and MRIP survey (combined with web-based and phone-in options) (C. Somerset, personal communication, November 9, 2016).

A recent review of smartphone reporting applications described potential problems, benefits, and reporting standards (Venturelli et al. 2017). The reporting smartphone application should include several data elements that would collect information on the fisher's demographics, fishing effort, and catch and harvest. Reporting and retention is likely to improve if a single application is required to report landings instead of having multiple mobile applications to report for state fisheries or species specific fisheries (Venturelli et al. 2017). The Socio-Economic Panel of the Scientific and Statistical Committee suggested several methods to encourage reporting and retention; however, no formal recommendations were made and research would be needed to determine the best method to encourage retention and reporting.

The SAFMC obtained funding to conduct a pilot project to collect data on catch and effort via a smartphone application from private recreational fishers. The pilot project will be used to permit and collect data from up to 200 volunteer anglers and the data will be transmitted to the Atlantic Coast Cooperative Statistics Program (ACCSP) for long-term data storage. Recreational catch and harvest estimates for South Atlantic fisheries derived through a smartphone application would need to get validated through MRIP and methods would need to be developed to ensure the estimates are unbiased and validated (Jiorle et al. 2015, Venturelli et al. 2017).

Action 10 includes alternatives to require reporting in private recreational snapper grouper fishery and reporting frequency. **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 an 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 Council is proposing to require 100% reporting for blueline and golden tilefish since they are rare event species like many snapper grouper species (**Table 5**). 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 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 5 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.

It should be reiterated 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 and validate the estimate.

Table 5. 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

Snapper Grouper AP Input:

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 Snapper Grouper AP also recommended adding sub-alternatives for 1% and 10% of private recreational anglers selected to report their catch in **Action 10 Alternative 2**. Some on the AP were concerned about safety when requiring reporting prior to disembarking.

Law Enforcement AP Input:

The Law Enforcement AP discussed that voluntary reported data could be more accurate and currently there is no way to enforce non-reporting. They suggested use of outreach and social

media to improve compliance. Any reporting requirement is going to increase enforcement burden.

Information and Education AP Input:

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

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.

Sub-alternative 2e. Require use of descending device when releasing red snapper in depths greater than 100 ft.

Alternative 3. Require use of single hook rigs if:

Sub-alternative 3a. fishing for or possessing red snapper.

Sub-alternative 3b. fishing for or possessing snapper grouper species.

Is above for commercial and recreational?

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 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](http://FloridaSeaGrant.com), [North Carolina Division of Marine Fisheries](http://NorthCarolinaDivisionofMarineFisheries.com), and [NOAA](http://NOAA.gov).

The rockfish fishery on the West Coast is also impacted by discard mortality. An outreach campaign was conducted to encourage fishers to use descending devices to reduce discard mortality of released rockfishes. Due to usage of descending devices, the Pacific Fishery Management Council reduced the discard mortality rate based on advice from their Scientific and Statistical Committee. More recently, Oregon enacted a regulation to require a descending device in 2017. The regulation is:

*“When angling for groundfish or Pacific halibut in the Pacific Ocean or when in possession of groundfish or Pacific halibut, all vessels shall have a functional descending device on board and shall use a descending device when releasing any rockfish outside of the 30-fathom curve (defined by latitude and longitude) as shown in **Title 50 Code of Federal Regulations Part 660 Section 71**. Upon request, a descending device shall be presented for inspection by any person authorized to enforce the wildlife laws or a representative of the Department. In this subsection, “descending device” means a device capable of returning a rockfish back to a depth of at least 100 feet to assist the fish in recompression and to improve the fish’s chance of survival.”*

Discard mortality information has been presented to the SSC and a new estimate of discard mortality will be developed based on tagged and recaptured red snapper from Florida and North Carolina. Additionally a potential reduction in the overall discard mortality rate was proposed to the SSC based on usage of descending devices. Since some red snapper will die due to the impact of catch and release, hooking injury, fish cannot be descended, or predation after release, the percent reduction for using descending devices when releasing red snapper will be less than 100%. The SSC indicated that compliance with a regulation for using descending devices might be less than compliance with circle hook regulation north of 28° north, which has approximately a 50% compliance rate on observed trips off Florida (Sauls et al. 2015). Venting is another mechanism to potentially reduce discard mortality of red snapper. Literature is mixed on the benefits of venting released fish (Diamond et al. 2011, Campbell et al. 2012, Drumhiller et al. 2014, Curtis et al. 2015). Based on tagged and recaptured fish, venting does seem to have a positive impact on survival of released fish in the South Atlantic region (Sauls et al, in prep).

Alternative 3 would prevent fishers from catching more than one fish on a single drop if the bag limit is limited to one fish for some species. Single hook rigs were mentioned during visioning as a potential way to reduce the number of discards. Since fishers could only catch one fish per drop, fishers can leave areas with abundance of low bag limit species prior to exceeding the bag limit.

Another mechanism to reduce discard mortality is to redefine the circle hook regulation to include that the circle hooks be non-offset (**Alternative 4**). Offset circle hooks have a higher propensity for gut hooking or deep hooking, which lead to delayed mortality, than non-offset circle hooks (Sauls and Alaya 2012, Sauls et al. 2015). Both of these hook types typically have a higher survival of released fish and lower percentage of gut hooked fish than j-hooks (Bacheler and Buckel 2004, Sauls and Alaya 2012, Sauls et al. 2015) although some literature indicates little benefit of circle hooks to reduce discard mortality (Burns and Froeschke 2012, Campbell et al. 2012).

The different options in **Alternative 4** are proposed to avoid impacts to the yellowtail snapper fishery while reducing hooking injuries for red snapper and other snapper grouper species. In public scoping for Amendment 43, several fishermen noted the presence of red snapper in the Keys, which was uncommon prior to 2010. **Sub-Alternative 4a** would require the use on non-offset circle hooks when fishing for snapper grouper species in all waters. **Sub-Alternative 4b** would require the use on non-offset circle hooks when fishing for snapper grouper species north of 28° latitude. **Sub-Alternative 4c** would require the use on non-offset circle hooks based on a depth where yellowtail snapper are uncommon. **Sub-Alternative 4d** would require the use on non-offset circle hooks when fishing for snapper grouper species in federal waters.

Snapper Grouper AP Input:

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.

Law Enforcement AP Input:

The Law Enforcement AP suggested considering more specific language for a descending device, consider enforcement guidelines for any spatial changes to the circle hook requirement, and consider adding having the descending device readily accessible.

Information and Education AP Input:

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.

Timing

Proposed Draft Timing:

- a. Committee/Council review draft options and public scoping comment; provide guidance on actions/alternatives – March 2017
- b. Present revised Actions/Alternatives with effects analysis to the Council to provide guidance at June 2017 Council meeting.
- c. In June 2017, Council votes to send Amendment 43 out for Public Hearings in August 2017.
- d. At September 2017 Council meeting, review public hearing comments, provide guidance on actions/alternatives.
- e. At December 2017 Council Meeting SAFMC takes final action and votes to send Amendment 43 for Secretarial review.

Note: Timeline will likely need to change