

EXPLORING APPROACHES FOR INNOVATIVE MANAGEMENT
OF THE PRIVATE RECREATIONAL SECTOR OF
THE SOUTH ATLANTIC SNAPPER GROUPER FISHERY

Regional Meetings Report
March 2019

American Sportfishing Association

Table of Contents

Executive Summary	3
Background	5
1. Important Species, Seasonality and Angler Preferences.....	6
2. Harvest Rate Management for Key Snapper Grouper Species	8
3. Harvest Tags for Certain Deepwater Species	9
4. Recreational Registration/Stamp and Electronic Reporting	11
5. Reducing Release Mortality.....	13
Recommendations to the South Atlantic Fishery Management Council	14
Appendix: Meeting Summaries	16
1. Important Species, Seasonality and Angler Preferences.....	16
2. Harvest Rate Management for Key Snapper Grouper Species	19
3. Harvest Tags for Certain Deepwater Species	19
4. Recreational Registration/Stamp and Electronic Reporting	20
5. Reducing Release Mortality.....	23

Executive Summary

The American Sportfishing Association (ASA), in partnership with Yamaha Marine Group and the Coastal Conservation Association (CCA), has launched a project to explore new ideas for management of the private recreational sector of the South Atlantic Snapper Grouper fishery. A workshop with South Atlantic Fishery Management Council (Council) members and recreational representatives was held in September 2018 in Charleston, South Carolina, as the project's first step. Subsequently, a series of regional meetings were held November 2018 through January 2019 to get input from local anglers on new ideas for the private recreational sector of the South Atlantic Snapper Grouper fishery. Discussion topics included: angler satisfaction, important species, seasonality of recreational angling, and regional variation; harvest rate management; harvest tags for certain deepwater species; registration or recreational stamp; recreational reporting; and barotrauma reduction.

This report includes the key points for each discussion topic along with details on different perspectives from the meetings. While the impacts of red snapper restrictions vary throughout the region, the species continues to be an important focus for many anglers. Inability to keep red snapper, misalignment of science and management with anglers' experiences and observations, shifting effort to other species, and red snapper discards have negative effects on recreational trip satisfaction. These impressions weighed heavily on our workshop discussions.

A summary on the topics from each meeting is provided in the appendix. The outcomes of the workshop and regional meetings have been incorporated into the following recommendations to the Council, in no specific order of prioritization:

- Because regional variation in important target species and seasonality of species abundance affect trip satisfaction for anglers, the Council should consider regional regulations for appropriate species. Tailored regulations will allow the greatest flexibility for anglers to select the best days for fishing.
- The Council should continue to explore harvest rate management for high value snapper grouper species with red snapper as the priority, and communicate with the public on how harvest rate management could improve consistency and stability of recreational seasons. Although this approach would be integrated with the current requirements for annual catch limits (ACLs), a system that provides predictable seasons and minimal regulatory changes would be expected to increase recreational fishing opportunities and improve angler satisfaction.
- The Council could consider submitting an application for an Exempted Fishing Permit (EFP) to NOAA Fisheries for a pilot program to test harvest tags for certain deepwater species, such as those with low ACLs or low abundance, to get a more accurate estimate of recreational catch and collect information on these species. If the Council pursues this option, the program should include both private and for-hire vessels. It will be important that exploration of a pilot program for tags for deepwater or other Snapper Grouper species include consideration of the negative effects on anglers who may be restricted from catching the designated species due to the low number of available tags. Harvest tags should not be considered for species that are popular and easily accessible to most anglers.

- The Council should work with state partners to establish a registration for anglers targeting snapper grouper species, with consistency across all states. A small fee may be necessary to offset administrative costs and to help ensure only anglers participating in the fishery enter into the program. As an initial step, the Council may consider asking NOAA Fisheries if it is possible to generate an estimate of the number of anglers fishing in the South Atlantic exclusive economic zone (EEZ). This would help guide the state partners in their design of a permit system.
- The Council should continue development of Snapper Grouper Amendment 46 to implement required or selective reporting (i.e., a small number of anglers selected to report, using information from registration or recreational stamp) for recreational anglers, and continue outreach on benefits of providing data. Reporting for high value or low ACL species may be an appropriate first step, with requirements for additional species added later as anglers become comfortable with reporting. If reporting is established through state programs, all requirements and protocol should be consistent throughout the region.
- The Council should continue development of Snapper Grouper Regulatory Amendment 29 to require use of descending devices or venting tools, along with other best fishing practices, to reduce release mortality. The Council should consider a broad definition of descending devices to allow multiple options for anglers. Outreach on benefits and proper use of these tools should be expanded through partnerships with states and local organizations.

Background

The American Sportfishing Association (ASA), Yamaha Marine Group and the Coastal Conservation Association (CCA) have launched a project to explore new ideas for management of the private recreational sector of the South Atlantic Snapper Grouper fishery. A workshop was held in September 2018 in Charleston, South Carolina, as the project's first step. Participants included South Atlantic Fishery Management Council (Council) members and staff; representatives from ASA, Yamaha Marine Group and CCA; and representatives from the Snapper Grouper Advisory Panel (AP) and the Scientific and Statistical Committee (SSC). Workshop discussions included the pros and cons of approaches and components such as harvest rate management, harvest tags, seasons, recreational registration or stamp, recreational reporting, barotrauma reduction, and exempted fishing permits, and ways that these measures could be applied in the South Atlantic region. Several approaches emerged from this initial workshop as options deserving further discussion at regional meetings with recreational anglers in each state. In March 2019, the Council will receive a report on the outcome of the meetings and recommendations from ASA and partners for new ideas in private recreational management based on input from the workshop and from local anglers at the regional meetings.

Goals for Regional Meetings

The purpose of the regional meetings was to get input from local representatives in the recreational community around the South Atlantic on important species, seasonality of recreational angling, and regional management concerns. Each group was also provided an overview of several potential approaches for management generated at the September 2018 workshop. Each group discussed ideas for private recreational management and provided recommendations on how each approach would affect private recreational fishing opportunities in their area. The regional meetings were held at:

- Ladson, SC: November 27, 2018
- St. Augustine, FL: December 11, 2018
- West Palm Beach, FL: December 13, 2018
- Greenville, NC: January 7, 2019
- Brunswick, GA: January 10, 2019

Topics for Discussion

- Important species, seasonality of recreational fishing, and angler preferences in each area
- Necessary information for each area to incorporate regional variation for season-based or latitudinal management
- Harvest rate management for key snapper grouper species
- Harvest tags for certain deepwater species (low ACL or naturally low abundance species)
- Improved information about anglers and recreational catch through registration/stamp and electronic reporting
- Reducing release mortality with best practices, descending devices, etc., and obstacles for anglers to use these methods

1. Important Species, Seasonality and Angler Preferences

Following an introduction to the project and goals for the regional meetings, each group started with a discussion of what makes a good recreational trip, important species, the best times of year for fishing, and other angler preferences. The discussion questions included:

- What makes a good recreational fishing trip?
- What are the important species in your area? How has management affected opportunities to target these species?
- When are the important times of year for recreational fishing? How has management affected opportunities to fish during those times?
- Is there consistent access to recreational opportunities in your area to sustain the businesses associated with recreational fishing (bait and tackle, marinas, tourism, etc.)?
- What information would be necessary to consider season-based management or area-based management (regulations specific to a specific time of year or to a specific area)?

Key Points

- Most participants characterized a good trip as being able to catch a lot of fish and keep enough fish to make the money, time and planning the trip worthwhile. Generally, 'enough' fish meant at least one trophy fish for the boat (legal to keep), and some fish to take home to eat.
- A good trip includes enough opportunity to go fishing when it best suits an angler's time and preferred conditions (weather, week vs weekend, etc.).
- Restrictions on red snapper affect trip satisfaction due to discards and having to avoid red snapper to catch other species.
- Red snapper was the focus of most of the meetings, with other important species including gag grouper, vermilion snapper, black sea bass and gray triggerfish.
- Variety of fish (including non-snapper grouper species) is important for anglers, because this provides opportunity to keep the desired number of fish by switching target species.
- Participants at all meetings noted that trips targeting snapper grouper occur all year, with variation in the peak times across the region depending on weather and access to popular species.
- Most of the groups pointed out the economic benefits of red snapper recreational seasons as an indicator of the impact of closures on local businesses associated with recreational fishing, and also noted that boat manufacturers and gear/tackle businesses have reduced inventory in response to restricted access.
- Meeting participants all felt that their area was different from the other areas, and these characteristics affected how and when the angler chose to take a trip.

What makes a good trip?

Each meeting kicked off with a discussion of the characteristics of a good fishing trip. Overall, a good trip is catching many fish and keeping some fish to make the time, money and planning for the trip worthwhile to the angler. Some anglers practice catch and release, while some anglers want to "fill the cooler," but most anglers are happy with a fun, relaxing day that includes hitting a few good spots and catching several fish in a short period (even if those fish are released), catching at least one large fish that is a good fight (and a good story for the boat), and having a few fish to take home. In general, anglers who fish more frequently are less likely

to want to take home more than a few fish, while those who only have a few trips a year will want to keep more fish.

Angler satisfaction is also linked to being able to take a trip when it best suits the angler's preferences for the time of year, time of the week, weather, and other factors. These preferences may depend on planning requirements such as travel and transportation to the coast, taking time off from work, and preferred weather conditions, but regulations should maximize the number of available fishing days so that anglers themselves can choose the best time to go fishing.

Important Species and Seasonality

At all meetings except for West Palm Beach, Florida, the most important species and main topic of discussion was red snapper. Meeting participants were unhappy with the continued restrictions on recreational fishing for red snapper and expressed repeatedly that discards of red snapper negatively affected trip satisfaction. There was also concern about science and management not aligning with anglers' experiences on the water and their perception of a healthy red snapper stock that should be accessible.

In most areas, other important species include gag grouper and other shallow-water grouper species, black sea bass, vermilion snapper, and gray triggerfish. In south Florida, yellowtail snapper and other shallow-water snappers are important for recreational anglers. The availability and accessibility of these species helps to somewhat reduce the negative effects of red snapper restrictions, but some meeting participants noted that having to shift effort to other species results in maximizing those bag limits, which may impact those stocks in the future.

Meeting participants noted that recreational fishing for snapper grouper species can occur all year depending on weather, fish availability, and the ability of the angler to travel to fishing areas (i.e., adequate boat and gear). The peak seasons for all areas except West Palm Beach were in the late spring to early fall, when there are more days with good weather and more anglers can take the time for a trip. In south Florida, fishing occurs throughout the year. The Georgia meeting participants noted that although summer months have more fishable days, some anglers prefer late spring and early fall to avoid impacts of sharks that arrive in the summertime.

Overall, adequate seasons that allow anglers enough flexibility to go fishing on the days that work best for them is important. Availability of target species, travel to fishing areas, and suitable weather varies for each area, and trip satisfaction is closely tied to flexibility in selecting the best day possible for a trip.

Effects of Accessibility to Key Species on Fishing-Associated Businesses

Meeting participants pointed out that some boat manufacturers and gear/tackle shops have reduced inventory for bottom-fishing in response to restrictions affecting access to snapper grouper species. Some anglers are switching to inshore species that do not require offshore boats or gear because they do not feel the travel to fishing areas is worth the effort if they cannot keep the popular species. While local businesses have been affected by internet sales and large corporate stores, there is still enough fishing to sustain these businesses in most areas.

Most of the meeting participants pointed out the economic benefit to local businesses from recreational seasons for red snapper. When the recreational seasons are announced, the economic benefits extend to shops with gear, tackle and bait, along with hotels, restaurants, and for-hire fishing businesses. One meeting participant pointed out that even the local grocery stores experience additional revenue from the recreational red snapper season. Overall, the economic benefits from red snapper seasons are an indicator for potential benefits to local businesses from increased access to popular snapper grouper species.

Regional Variation

Discussion about characteristics that could be considered for latitudinal management allowed the respective groups to talk about what distinguishes their area from other parts of the region. The general points included distance to fishing areas and the number of days with suitable and safe weather for a trip. Overall, regional variation is tied to the need for flexibility in anglers being able to select when to take a trip.

Additionally, the effects of red snapper restrictions varied, with some areas experiencing fewer impacts by having more fishable days and availability of other species to make the trip worthwhile without being able to keep red snapper. Interaction with red snapper is different for each area, and trip satisfaction is negatively affected by discards and by having to move locations in order to avoid red snapper. Some meeting participants noted that there was a lot of effort required to access species that are open to harvest while avoiding those that are closed.

2. Harvest Rate Management for Key Snapper Grouper Species

A brief overview of harvest rate management (HRM) and potential options was provided to each group, with more emphasis on which species would be appropriate for a different monitoring approach and fishery conditions that could indicate changes in the fishery, rather than on the technical details of harvest rate management. The overview included how HRM uses exploitation rate targets to reach the desired removal and biomass and would modify management to focus on how the Council monitors and responds to changes in the fishery. The example of striped bass management was presented. A detailed discussion of HRM is provided in the discussion document from the September 2018 meeting available at:

http://safmc.net/download/BriefingBookCouncilMtgSept2018/TAB01-RecreationalWorkshop/Att1_September2018RecWorkshop_BackgroundSummaryForDiscussion082818.pdf.

The groups discussed the following questions:

- What are the Top 5 Snapper Grouper species that should be considered for harvest rate management, in which the SAFMC would receive updated information on stock status every one or two years and could adjust management if needed?
- What information about fishery conditions (other than landings and effort data) would be necessary for the SAFMC to better respond to changes? Is that information available?

Key Points

- Anglers were supportive of revised monitoring and response to fishery changes for popular species such as red snapper to provide more predictability and flexibility, which were noted by meeting participants during discussion of trip satisfaction and angler preferences.
- Most meeting participants felt that science and management aligned with fishery conditions for most snapper grouper species, with the exception of red snapper. While HRM may not be a priority approach for most species, it could be a useful tool to continue exploring for future applications.

The technical details of harvest rate management were not discussed at the meetings, with discussion more focused on species that participants felt needed more frequent review. With the exception of red snapper, most participants expressed that current management measures were appropriate for snapper grouper species. Gag grouper was the only species (other than red snapper) identified as a potential issue of science and management lagging behind anglers' observations on the water, in that the stock was healthier than the most recent assessment information (North Carolina meeting). However, meeting participants repeatedly noted that predictability and flexibility were important for trip satisfaction, and HRM may be a useful tool to continue to explore for the Council to address future concerns.

Some meeting participants felt that striped bass management was not a good example to follow for slow-growing snapper grouper species, due to differences in the species and state fisheries. Changes in a stock of snapper grouper species would take time to become apparent than a faster growing species and would not necessarily merit the time and resources to provide more frequent updates on the stock that would not show changes over short periods (i.e., one or two years). However, it should be noted that HRM would not require more frequent assessments, and pre-recruitment data would more likely be the basis for setting targets and responding to changes in the fishery.

3. Harvest Tags for Certain Deepwater Species

Each group was provided an overview of harvest tags in game management and for some fish species, and use of tags to collect data or to limit harvest of a species. Meeting participants were specifically asked for input on a pilot program for harvest tags of deepwater species with low annual catch limits or low abundance, such as snowy grouper, blueline tilefish, golden tilefish, and wreckfish, and the pros and cons of this approach.

The main challenges for harvest tags are fairness and efficiency in tag distribution, how to issue enough tags to ensure that all available fish can be harvested without exceeding the annual catch limit, and ensuring access for all anglers who wish to participate. However, an exempted fishing permit (EFP) issued by NMFS may allow for a pilot program to try harvest tags for one or more appropriate species and evaluate the outcome to determine whether a harvest tag program would be viable.

Each group discussed the following:

- Which deepwater Snapper Grouper species could be appropriate for management under a harvest tags?

- What is the best way to distribute the harvest tags?

Eligibility: anyone, all anglers with state license, all anglers targeting these species

- Is the information available now to identify anglers targeting these species?

Key Points

- Anglers were supportive of harvest tags for certain deepwater species in limited applications.
- The average angler does not target deepwater species and the potential participants in a tag program would be self-limiting.
- Tags should be available to all anglers, but require some kind of effort (e.g., calling to request the tag the day before the trip) to limit tag recipients to only interested anglers.
- Reporting should be required for each tag received, including unsuccessful trips.
- Management measures in place will need to be considered, specifically bag/boat limits, and possibly modified to align with a harvest tag program for some species.
- A tag program and required reporting will likely not be a burden to anglers who target these species.
- Discussion was focused on tags for certain deepwater species, although some meeting participants also commented on tags for red snapper as a way to extend the season length. Some participants did not support red snapper tags due to the additional burden on anglers and concern about allocation.

Overall, meeting participants were supportive of harvest tags for certain deepwater species with low annual catch limits or low abundance (such as snowy grouper, golden tilefish, blueline tilefish, and wreckfish), although they noted that the number of anglers targeting these species is low compared to other snapper grouper species due to the specialized gear and knowledge required to catch some deepwater species. Participants noted that most anglers would not be interested in obtaining a tag for species that they do not usually target, and the allocation pool would likely be self-limiting, which may help to address concerns raised during previous Council discussions about how to fairly distribute tags.

There was concern about fairness in getting the tags to anglers who would use them (instead of obtaining a tag to sell or to purposely not use them), but an idea was presented in St. Augustine to address this concern. The proposed allocation would allow anyone to request a tag for the select species, but the angler would have to call to obtain the tag before the trip (e.g., 24 hours before the planned trip). A report on the trip and catch would be required within a specified time period (e.g., one week), and failure to report could result in ineligibility to request any subsequent tags. If the trip is reported as unsuccessful, the tag goes back into the pool for future recipients. When all available tags are used, recreational harvest of the species is closed for the rest of the fishing season. This idea was also presented at subsequent meetings, and in

general participants were supportive of exploring this idea for allocating tags through a pilot program.

Current regulations for deepwater species that may be included would need to be considered during development of the program. For example, there is a limit of one fish per boat per day for snowy grouper in place, but that requirement could be modified to allow for more than one angler to request a snowy grouper tag for the boat.

It is likely that anglers who target deepwater species would be supportive of a tag program and would not feel that obtaining a tag before a trip or reporting the catch would be a burden. The tag program would also provide more information about these species and more accurate catch data than the current Marine Recreational Information Program (MRIP) estimates.

At two meetings, the discussion on harvest tags led to comments and suggestions about using tags for red snapper to extend the season length and provide flexibility to anglers. Some participants did not support tags for red snapper due to the additional burden on anglers (to obtain the tags and to report) and concern about allocation of a small number of tags to a large number of anglers. The Gulf Angler Focus Group investigated tags in detail for the Gulf of Mexico region and found a number of issues with tags for highly sought species such as red snapper including fairness in access to tags. It will be important that pilot programs for tags for deepwater or other Snapper Grouper species, including red snapper, include consideration of the negative effects on anglers who cannot obtain a tag for the species due to the low number of available tags.

4. Recreational Registration/Stamp and Electronic Reporting

Each group discussed benefits and obstacles for a registration or stamp, and electronic reporting. The discussion questions included:

- Would anglers in your area be willing to comply with a registration requirement or recreational stamp?
- What are the obstacles for anglers to register or get a recreational stamp for federal Snapper Grouper species and how could these be addressed?
- Would anglers in your area be willing to report on Snapper Grouper trips?
- What are the obstacles for anglers to participate in reporting and how could these be addressed?

Key Points

- Anglers were primarily supportive of registration or a stamp to define the “universe” targeting snapper grouper species.
- Anglers were primarily supportive of recreational reporting.
- Registration or a recreational stamp should be a fairly simple process, but also require some kind of effort (e.g., a small fee) to improve the accuracy in the number of anglers targeting snapper grouper species.
- Registration through a state recreational license would be the most straight-forward way to get an estimated number of snapper grouper anglers.
- Most anglers will be more likely to report if they understand how the data will be used and they do not feel that the data will result in more restrictions.
- Anglers may be more likely to comply with reporting for popular species, but complicated and lengthy reporting may be too much of a burden for most anglers and could result in inaccurate data.
- Acceptance of reporting will take time as anglers become familiar with the process and the benefits of additional data on recreational effort and catch.

Registration or Recreational Stamp

In general, meeting participants were supportive of registration or a stamp to count the number of anglers targeting snapper grouper species. The process should be simple and could be included on applications for state recreational licenses, although this may provide an inaccurate count if anglers only had to check a box. A small fee or other effort such as having to call to register may improve the accuracy by narrowing down the number to only the anglers actively targeting snapper grouper species. There was some opposition of the additional burden or fee for anglers to provide the information, and concern about how information could be used. For maximum efficiency and accuracy, any registration or stamp should be consistent between states.

Recreational Reporting

Overall, meeting participants were generally supportive of recreational reporting but also noted that it may be difficult for many anglers to fully embrace reporting unless they are sufficiently educated on the benefits of doing so. The primary concerns were additional burden of having to report after a trip, particularly if the requirement included all fish for all trips, and anglers feeling that providing catch data will result in additional restrictions. Outreach on how the data will be used and the benefits for the angler will be necessary to launch a recreational reporting program, but acceptance will still take time.

It may work best to require reporting for high value species first, and then add species as anglers become familiar with reporting. Many anglers may be more willing to participate in a reporting program if there is an incentive, such as a longer season for red snapper. Reporting should not be complicated and require so much information that the angler is overwhelmed, which could result in inaccurate or incomplete data. In addition, some participants suggested collecting information from small groups of anglers, such as an informal panel discussion.

At all meetings, the participants noted that any reporting requirements for anglers would be a significant change and will likely be met with opposition at first, but eventually anglers would become comfortable and more accepting of reporting. Most meeting participants had concerns about the current recreational catch estimates through MRIP and agreed that recreational reporting could help to improve accuracy of the recreational data.

5. Reducing Release Mortality

Each group reviewed methods to reduce release mortality, including venting tools, descending devices and other best practices. Discussion questions included:

- In your area, are fish released intentionally (catch and release) or due to regulatory requirements (closed season, size limits, bag limits, etc.)?
- What are the general methods in your area that anglers improve survival of released fish?
- What are the obstacles for anglers to learn about and use best practices to improve survival of released fish?

Key Points

- Anglers were supportive of methods and tools to reduce barotrauma.
- Many anglers do not use venting tools or descending devices, but the number is increasing as anglers become more aware.
- Venting tools may not be used correctly by some anglers, even though these tools are easier and quicker to use than a descending device.
- Manufactured descending devices may be too expensive for some anglers, which may reduce compliance.
- A regulatory requirement may be beneficial to increase use of venting tools or descending devices, but education and outreach may be the best way to improve acceptance and voluntary use.
- Using tools and methods to reduce barotrauma will take time to become common practice for all anglers.

In general, meeting participants were supportive of methods and tools to reduce barotrauma and actively used the methods and tools on fishing trips. However, they noted that although the number of anglers using venting tools and descending devices has increased, they did not feel that enough anglers make an effort to improve survival of a released fish.

Venting tools are likely more commonly used than descending devices due to the low cost and ease of use, but many anglers may be using venting tools incorrectly. Some anglers are not familiar with descending devices or feel that some manufactured descending devices are too expensive, although lower cost options are available. In addition, it is challenging to use a descending device if the boat is catching a lot of fish at once due to the time required to properly employ the device on each fish. Anglers should be allowed to use the tool that they are most comfortable using.

Most discussions about ways to increase use of barotrauma reduction methods focused on outreach and instruction on proper use of venting tools and descending devices, and providing information on the potential benefits of reducing discard mortality to the fishery and the anglers. When asked specifically at the Georgia meeting about a regulatory requirement to improve compliance, some participants commented that a regulation may be the necessary first step, but a others suggested that efforts should be focused on education and outreach to allow for voluntary use. Most groups agreed that acceptance and compliance will take time. However, most participants were optimistic that anglers will come to understand the benefits of barotrauma reduction and these tools will eventually become standard practice.

Recommendations to the South Atlantic Fishery Management Council

- Because regional variation in important target species and seasonality of species abundance affect trip satisfaction for anglers, the Council should consider regional regulations for appropriate species. Tailored regulations will allow the greatest flexibility for anglers to select the best days for fishing.
- The Council should continue to explore harvest rate management for high value snapper grouper species with red snapper as the priority, and communicate with the public on how harvest rate management could improve consistency and stability of recreational seasons. Although this approach would be integrated with the current requirements for annual catch limits (ACLs), a system that provides predictable seasons and minimal regulatory changes would be expected to increase recreational fishing opportunities and improve angler satisfaction.
- The Council could consider submitting an application for an Exempted Fishing Permit (EFP) to NOAA Fisheries for a pilot program to test harvest tags for certain deepwater species, such as those with low ACLs or low abundance, to get a more accurate estimate of recreational catch and collect information on these species. If the Council pursues this option, the program should include both private and for-hire vessels. It will be important that exploration of a pilot program for tags for deepwater or other Snapper Grouper species include consideration of the negative effects on anglers who may be restricted from catching the designated species due to the low number of available tags. Harvest tags should not be considered for species that are popular and easily accessible to most anglers.
- The Council should work with state partners to establish a registration for anglers targeting snapper grouper species, with consistency across all states. A small fee may be necessary to offset administrative costs and to help ensure only anglers participating in the fishery enter into the program. As an initial step, the Council may consider asking NOAA Fisheries if it is possible to generate an estimate of the number of anglers fishing in the South Atlantic exclusive economic zone (EEZ). This would help guide the state partners in their design of a permit system.
- The Council should continue development of Snapper Grouper Amendment 46 to implement required or selective reporting (i.e., a small number of anglers selected to report, using information from registration or recreational stamp) for recreational anglers, and continue outreach on benefits of providing data. Reporting for high value or low ACL species may be an appropriate first step, with requirements for additional species added later as anglers

become comfortable with reporting. If reporting is established through state programs, all requirements and protocol should be consistent throughout the region.

- The Council should continue development of Snapper Grouper Regulatory Amendment 29 to require use of descending devices or venting tools, along with other best fishing practices, to reduce release mortality. The Council should consider a broad definition of descending devices to allow multiple options for anglers. Outreach on benefits and proper use of these tools should be expanded through partnerships with states and local organizations.

Appendix: Meeting Summaries

1. Important Species, Seasonality and Angler Preferences

South Carolina

The characteristics of a good fishing trip varies by angler, with some anglers being satisfied with being able to take home at least a few fish, while others who fish less frequently may want to maximize the bag limit for as many species as possible. Most meeting participants felt that taking home some small fish and at least one large fish made a good fishing trip. It was also noted that a good trip included being able to go fishing when you want to go, such as when there is good weather and you have time to go. Restrictions on open seasons negatively impact angler satisfaction, specifically for red snapper. Additionally, complexity of regulations can hamper a good fishing trip.

Important species in this area include red snapper, gag, scamp, black sea bass, gray triggerfish, vermilion, and porgy. Regulatory discards, particularly for red snapper, not only affect trip satisfaction but also lead to pressure on other species when anglers have to switch the target species. Meeting participants also noted that it is frustrating to release species with closed seasons when you are trying to catch species that are open to harvest.

The economic effect of recreational access on fishing associated businesses is demonstrated by the open seasons for red snapper. When there is no predictability or consistency in seasons, some businesses focus on gear for other species. For example, some tackle shops have reduced inventory for bottom fishing due to the lack of access. However, when there is an open season for a popular species like red snapper, all businesses associated with recreational fishing (tackle shops, boats, hospitality) have increased revenue. Limited seasons for popular species result in foregone economic benefits for the communities and businesses, with some long term effects.

The meeting participants felt that Florida could be managed differently than the rest of the region, due to seasonality and also angler characteristics (e.g., South Carolina anglers are more conservation-minded).

St Augustine, Florida

A good fishing trip includes having some fish to take home, at least enough the trip worth the time and money. Travel to fishing spots is usually further out than in South Florida so a trip should include fish to take home. Angler satisfaction is affected by regulatory discards, and it was also noted that releasing species that are closed, specifically red snapper, also leads to increased pressure on other species such as gag and scamp. Complexity of regulations, including state and federal regulations, impacts some angler satisfaction.

One participant pointed out that a good trip includes bringing home fish that are kept legally. There are so many restrictions and so little enforcement that adhering to regulations is voluntary. Some anglers have likely resorted to keeping fish illegally just to make a trip worthwhile.

Recreational fishing occurs year-round but meeting participants felt that April through July was the most important time of year. For open red snapper seasons, there is a large increase in

revenue for fishing associated businesses, and one participant pointed out that even the grocery stores benefit from the red snapper season. With red snapper as the focus, more consistent and longer seasons would benefit the communities and businesses.

West Palm, Florida

South Florida is different from other areas in that snapper grouper species are less of the focus for recreational anglers. Meeting participants consider most of their trips to be satisfactory because there are so many species to target, and that it is easy to have a successful trip. A good trip can be characterized by catching a lot and keeping a few fish, and to have a good fight during the trip. There is a shifting baseline for trip satisfaction, as although many people find this area to be great fishing but some meeting participants feel that it used to be better. Catch and release is common in this area, although most anglers would like to take home a few fish to make the time and fuel costs worthwhile.

Fishing occurs year-round in this area and the primary snapper grouper species are in shallow water, including yellowtail, mutton, mangrove and lane snappers. Grouper used to be more available but are now generally not caught as often. There are some anglers that target deepwater species, but this requires more specialized gear and knowledge to catch these species ('deep-dropping'). There has been increase in the population and the number of private boats, which has increased fishing pressure. Additionally, technology has added to anglers having more successful trips.

Businesses associated with fishing are thriving in the area because of the popularity of recreational fishing and the variety of fish available to catch, including pelagics and billfish. Some small businesses have been impacted by internet sales and bigger stores. One participant pointed out that if there are fish, people will spend.

North Carolina

Meeting participants emphasized the importance in being able to interact with the species that you are targeting, which is linked to good weather, abundance and open season for the species. It is good to be able to take home enough fish to make the trip worth the money, time and planning, but there are many anglers in this area that are more conservation minded and not wanting to fill the cooler. However, it is not worth a trip to only be able to bring home two fish.

Fishing grounds in this area are about 70 miles out, and there are not as many fishable days in this area. Anglers will fish all year, but the most important time of year is about May through September, maybe into October if weather permits. There are probably less anglers bottom-fishing in this area than other areas, but there has been growth in spearfishing. The popular species are black sea bass, red snapper, porgy, gag grouper, and triggerfish. Hogfish are becoming more popular with rec divers.

Reduced access and abundance will affect anglers who may want to get into the fishery. There seems to be an increase in the number of interested anglers over the years, but the investment (boat, gear, etc.) may not be worth it if the fish are not accessible.

This area is different in the distance to good fishing spots, and the impact of weather—flexibility in regulations would be beneficial for NC anglers. There are some species in which the fish are larger in NC than in the rest of the region, which should be considered in management decisions. One example is hogfish, in that divers will travel to NC to spear trophy hogfish, because they are larger than in other areas.

Georgia

For this area, a good trip includes catching the species that you want and being able to take home a few to eat. A good trip is relaxing and fun, but still worth the time and money for the trip. At least one fish with a good fight adds to the enjoyment of a trip. Anglers want to catch at least one big fish that is legal to keep. It was noted that even though filling a cooler is not always the goal, in order for the trip to be worthwhile, some anglers will max out the bag limits of open species because of the closed species that they cannot keep.

Anglers fish all year in this area but the best time is late spring or early summer before the predators (sharks) arrive, and in the early fall. In the summer there are more fishable days but it can be too hot and there are too many predators affecting catch.

Bottom-fishing in this area usually requires a trip of 40-50 miles in order to catch a variety of species, and also be able to move off red snapper sites to other places with fish that can be kept. The popular species are red snapper, vermilion, triggerfish and black sea bass. Black sea bass is also accessible to inshore anglers.

There are a limited number of anglers targeting snapper grouper (except for inshore black sea bass) because of the need to have to travel so far. People are not investing in boats, gear, etc. to participate in the snapper grouper fishery if they cannot access the species that they want to fish for (specifically red snapper for many anglers). The general idea among local folks is that they are not going to fish because they cannot keep anything due to the restrictions. Anglers would prefer consistency in regulations so that they can make the decision to go or not.

The group noted the economic impact from the red snapper seasons as an indicator of the potential economic benefits from fishing. During the open red snapper seasons, there was ten times more revenue for fishing-associated businesses. The rest of the year, the inshore fishery sustains the local businesses.

Meeting participants pointed out that boat purchases are an indicator of economic impact, and that some boat manufacturers are reducing inventory because of regulatory changes and reduced participation in the fishery. There is a lot of money required to purchase a boat, and they often have to be special ordered due to limited onsite inventory. Some manufacturers are aware that there may be a market for less expensive boats.

This area is different than other regions because of the travel time to fishing grounds and the dependence on weather. Additionally, there are a small number of anglers in Georgia compared to the other states, and the catch in Georgia has little impact on the regional catch of any species.

2. Harvest Rate Management for Key Snapper Grouper Species

South Carolina

Meeting participants felt that this approach may be appropriate for fast-growing smaller species, but not for most long-lived snapper grouper species, as changes in the stock would take longer to become apparent. The group pointed out that potential species for a revised system of monitoring and response may be species in which catch and effort in one area of the region affecting access in other parts of the region, such as hogfish or red snapper.

St Augustine, Florida

The group felt that a different approach for catch limits and monitoring may be best for red snapper, black sea bass, gray triggerfish, red porgy, gag and vermilion. Some participants did not feel that an approach used for striped bass would be appropriate for snapper grouper species due to the differences in the species and fisheries. Meeting participants noted that fuel prices, weather, and environmental conditions affecting juveniles may help understand changes in catch and effort for some fisheries. Other than red snapper, most participants felt that the regulations in place were appropriate for snapper grouper species.

West Palm, Florida

This group did not go into detailed discussion for harvest rate management and did not offer any particular species for this approach. In general, there are so many options of species to target in this area, there are no key species that the group felt needed more frequent review and regulatory changes.

North Carolina

Possible species for harvest rate management include red snapper, because in general the science and management do not align with anglers' experiences on the water. Large grouper may also be good for this approach, as the science and management seem to be behind and more access should be possible with more updated information.

There was some concern about this approach due to negative experiences in the striped bass fishery. It was pointed out that the ASMFC striped bass management has its challenges, but it does result in more stable management, which helps businesses associated with the striped bass fishery. The group was in general supportive of an approach that will provide more consistency and stability.

Georgia

The discussion on harvest rate management was minimal and mostly focused on anglers' confidence in the data, particularly due to the current red snapper situation. There is a lot of distrust of management for anglers in this area. The group pointed out that a consistent and fair red snapper season was desirable.

3. Harvest Tags for Certain Deepwater Species

South Carolina

The discussion focused primarily on red snapper tags but general feedback on harvest tags included concerns about additional burdens on anglers to obtain tags and report. Frequent anglers

would be more likely to support harvest tags, especially if there are were more available fishing days in exchange for the additional burden.

St Augustine, Florida

The group was primarily supportive of harvest tags for red snapper and deepwater species. The discussion generated ideas to have tags open to anyone, but with tags must be requested only 24 hours prior to a trip to improve the tags going to anglers that will use them. Reporting should be required within a certain time period, with a reminder. If the tag is reported as not being used on the trip, the tag goes back into the pool. When the maximum number of tags have been obtained and reports submitted, the season is closed for the species.

West Palm, Florida

The group was supportive of tags for deepwater species, and felt that the number of anglers targeting these species is small enough to narrow down potential applicants. Some participants pointed out that they would not be interested in applying for deepwater tags because they do not fish for those species. It was noted that it would need to be clear if tags and the reporting requirements applied to fish caught in state or federal waters

North Carolina

The group was supportive of exploring tags for deepwater species and thought that people who target these species would be willing to make an effort to get the tag and report. It was noted that the current boat limit for snowy grouper (1/boat/day) will need to be considered, as this may affect how many people can get a tag.

Georgia

The group mostly ambivalent about deepwater tags, and felt that compliance and enforcement would be challenging for a successful program. There were not many anglers in this area that target deepwater species who would be interested in a pilot tag program. Meeting participants were more interested in tags for red snapper, and this could be a way to extend the red snapper season.

4. Recreational Registration/Stamp and Electronic Reporting

South Carolina

Meeting participants had different perspectives on angler registration and reporting. Some participants strongly supported a way to measure the number of anglers targeting snapper grouper species and felt this was important information that is currently not available. The primary concern with registration was the additional burden on anglers, specifically those who do not fish frequently, and questions about the need for personal information on anglers. Overall, the group agreed that the process should be simple, such as checking a box on a state license application.

The main concerns about reporting also focused on the additional burden for anglers, and that having to report after a trip would affect satisfaction. There may also be challenges for anglers to be able to properly report on an app or website, and they may not report at all. It is also important that information is clear about how reporting data will be used. If anglers feel that the data will

be used for more restrictions, they will be less likely to provide accurate data. Some participants supported recreational reporting to help improve recreational catch estimates.

St Augustine, Florida

Participants were primarily supporting of registration or a stamp, but noted that if all that was required was to check a box at no charge, it may not be an accurate representation of the number of anglers targeting snapper grouper species because everyone would just check the box. Some participants felt that at least some kind of fee should be necessary to narrow down the number of registrants closer to the actual number of anglers targeting snapper grouper. Additionally, information about how the data would be used would be helpful for anglers.

The group pointed out that registration should be a simple process, such as including registration on state recreational licenses. Participants supported letting the states be in charge of registration because their systems are less complex than the federal recreational license applications, with the HMS system as an example.

Some participants felt that there would be better ways to estimate the number of anglers targeting snapper grouper species, such as surveys that could collect data on both anglers and recreational catch. Resources should be allocated to the states to conduct the surveys, since the states do a better job with data and have established relationships with the anglers.

Recreational reporting should be as simple as possible, and participants pointed out that the MyFishCount app was too complicated to use for more anglers. Additionally, as anglers become accustomed to reporting, it would be necessary to provide reminders along with general outreach on why reporting is necessary and how the data will be used. If possible, an incentive such as a reward at the end of the year may help to boost support for reporting.

The group suggested that reporting could start out with important species first, such as red snapper and grouper, and add more species over time as anglers get used to reporting. One possible incentive could be a longer season (e.g., red snapper) as a trade-off for required reporting to gain support from anglers.

West Palm, Florida

This group also pointed out that registration or stamp may not be the most accurate way to count the number of snapper grouper anglers, but may be useful to identify species-specific anglers (e.g., deepwater species). Some participants felt that surveys or boat counts at inlets and ramps would be a better way to get information about the number of anglers. There have been county-level surveys in this area that provide angler information. Creel surveys already being conducted by the state could also incorporate data collection about anglers to estimate recreational participation.

Some participants felt that reporting may be burdensome and negatively affect trip satisfaction if anglers knew they would have to invest time after a trip. A survey could request data by month instead of by trip to reduce the burden. It would be important for anglers to understand how data will be used in order to get accurate data. High value species, such as red snapper, may be more accepted to launch a reporting system.

The reporting system in some of the Pacific recreational fisheries was recommended as a potential model. This program requires a punch card for each fish, but with no limit on the number of fish. Failure to have an up-to-date punch card or to report results in a penalty when applying for the subsequent year's recreational license.

The group pointed out that acceptance of recreational reporting will take some time. Active fishermen and younger anglers will be more likely to support reporting but other anglers may be less likely to support reporting programs.

North Carolina

Meeting participants were generally supportive of registration/stamp for anglers, and for recreational reporting. The group noted that at least some effort should be required for registration to get a more accurate number of anglers. This could be a small fee or having to call to get the rec registration instead of just clicking a box on state licenses. A small penalty, such as not being able to get a stamp the following year, may be helpful.

The meeting participants were supportive of reporting and noted that more timely data may help to extend seasons and better management. Reporting should not be required for shore or pier fishing, only for boats. They did point out that anglers may be distrustful of how the data will be used. Education and outreach about the benefits of reporting and exactly how the data will be used is necessary. The group noted that people are resistant to change but that anglers will get used to reporting, as with hunting. There may be anglers who oppose reporting but the group did not feel that it would be too much of a burden on anglers.

The group thought that an app would be a good way for anglers to report, and they could also access their own yearly records of catch. The key species (gag, hogfish, etc.) have fewer people able to target these species, but more accessible species such as black sea bass, vermilion and triggerfish would place the requirement on more people.

The group noted the importance in being able to validate self-reported data, and also how to understand the level of compliance (a survey?) and also how to account for non-reporting and unsuccessful trips. Last, Steve Poland (NC DMF) noted that the state would need to have registration to be able to require reporting due to their statutory process.

Georgia

This group also pointed out that a checked box on a license application may not provide an accurate count without some kind of small fee. For reporting, the meeting participants were clear that anglers would not support reporting if there was not a clear benefit to the anglers, as many people feel that if reporting would result in more restrictions.

Reporting may be acceptable for some species, but not all fish on all trips. An app would be a good way to report. There was a good discussion about starting recreational reporting so that the process of validating the data and figuring out how to use the data in management (e.g., MRIP certification process), and that the system cannot move away from MRIP without self-reported

data to start with. Some participants were supportive of reporting to provide more timely and accurate information.

5. Reducing Release Mortality

South Carolina

Meeting participants were supportive of improving use of methods to reduce release mortality, but felt that anglers should be able to use the method they are most comfortable using. Outreach will be important to educating anglers, and can include workshops at local tackle shops and organizations. Information that is already available (e.g., online videos) can be shared through local organizations.

St Augustine, Florida

This group was supportive of methods to reduce barotrauma but noted that outreach with clear benefits to anglers is necessary to gain support. Additionally, information about how these methods can help the stock will be imperative, as anglers will be less likely to comply if they do not feel that it helps the stock. Meeting participants pointed out that some methods, such as descending devices, may be cost-prohibitive for some anglers, and economical options should be available.

An incentive may be helpful to improve use of these methods, such as increased access (longer seasons) as a trade-off for anglers to obtain tools and learn how to use them. Some participants felt that venting tools are more difficult to learn than using descending devices.

West Palm, Florida

Meeting participants noted that acceptance of methods to reduce release mortality may take some time and will be a culture change for most anglers. They were optimistic, using the increase in catch-and-release for some species as examples of successful changes in the fishery. Education about methods could be incorporated into tournaments to improve compliance and to gain public support over time. It will be important to get organizations involved with outreach and education.

Methods should be promoted as simple to use and necessary. Some participants felt that venting tools were not suitable for many anglers, because it is only successful if the angler has experience to correctly use the tool. Descending devices should be cost-effective and easy to use so to not increase burden on anglers when they are enjoying a fishing trip. Supportive anglers will be useful in spreading the word (e.g., ambassadors) by always having the tools on board and educating other anglers on trips. Additionally, outreach should include social media, online videos, fishing publications, and local organizations, and will have to be repetitive as anglers learn about the benefits of using these methods.

North Carolina

Anglers in this area sometimes use venting tools, but the group was not confident that most anglers were using them correctly. Descending devices are becoming more popular, including homemade devices. Any requirement for a descending device should be clear on what qualifies (manufactured, homemade, etc.). The group did not feel that manufactured devices should be cost-prohibitive for most anglers, since they already have invested in the boat, gear, etc.

Acceptance of barotrauma reduction methods will take some time and will be a learning process for any anglers. The benefits of these methods will take time so it may be better to put a requirement in place soon. Some participants felt that there should be more responsibility on the angler to help reduce barotrauma, and also that there may be enforcement challenges. The group was most interested in how using these methods could help to reduce release mortality and how that will be measured, and were optimistic that this could help extend seasons for popular species.

Education and outreach on how to use the methods, in addition to the benefits to anglers and the fish, will be necessary. A flyer could be included with state licenses and online resources will be helpful. If homemade devices are acceptable, information can be provided on how to properly construct a DIY descending device. Last, anglers themselves will be very important in spreading the word to friends about why and how to use the methods.

Georgia

The group pointed out that it is common for venting tools to be used incorrectly, although they are faster to use when you are on a good spot and catching a lot of fish. Some anglers use descending devices but they are a burden for a lot of fish at one time. The group felt that some anglers may not yet understand the importance of barotrauma reduction.

To improve use of these methods, meeting participants suggested online resources, teaching kids to start them at a young age, incentives (e.g., extra fish in bag limit), and having states provide educational information. One participant noted that it would need to become 'cool', in that it will take time to catch on for all anglers. It was also important that in outreach, there would be evaluation of the effectiveness of the methods in reducing barotrauma. Last, the group felt that education and voluntary compliance would be better than a regulatory requirement.