

# Amendment 52

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

Catch Level Adjustments and Allocations for Golden Tilefish; Management and Accountability Measures for Golden Tilefish and Blueline Tilefish





**Environmental Assessment, Regulatory Flexibility Act Analysis, and Regulatory Impact Review** 

# DRAFT June 2022

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# Amendment 52 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region

**Proposed actions:** The actions in Amendment 52 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region would modify management of South Atlantic golden tilefish and blueline tilefish. Actions would: Revise the golden tilefish acceptable biological catch, total annual catch limit, and annual optimum yield; Revise sector allocations and sector annual catch limits for golden tilefish; Modify the fishing year for the commercial hook and line fishery for golden tilefish; Establish an incidental trip limit allowance for the longline sector once the longline quota is caught; Modify postseason recreational accountability; Modify blueline tilefish recreational bag limit; Modify blueline tilefish recreational season; and Modify postseason recreational accountability measures for blueline tilefish.

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This Environmental Assessment (EA) is being prepared using the 2020 CEQ NEPA Regulations. The effective date of the 2020 CEQ NEPA Regulations was September 14, 2020, and reviews begun after this date are required to apply the 2020 regulations unless there is a clear and fundamental conflict with an applicable statute. 85 Fed. Reg. at 43372-73 (§§ 1506.13, 1507.3(a)). This EA began on [DATE] and accordingly proceeds under the 2020 regulations.

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# **Summary**

# Why is the South Atlantic Fishery Management Council considering action?

#### Golden Tilefish

Current management of South Atlantic golden tilefish is based on an update of SEDAR 25 completed in 2016 with an assessment period of 1962-2014 (SEDAR 2016). This amendment addresses the SEDAR 66 operational assessment for golden tilefish, which was completed in 2020, and includes recreational landings estimates using the Marine Recreational Information Program (MRIP) Fishing Effort Survey (FES). Revised catch levels would be specified based on the Scientific and Statistical Committee (SSC)'s recommended acceptable biological catch (ABC) and this most recent assessment.

The Council received the results of the assessment and the SSC's recommendations for the overfishing limit (OFL) and ABC at their June 2021 meeting. The SSC determined the stock is no longer experiencing overfishing, but there is a high degree of uncertainty in the stock status determination since the stock is being fished at or close to maximum sustainable yield (MSY). The Council directed staff to begin work on a plan amendment to adjust catch levels based on the SSC recommendations and SEDAR 66.

An application providing an overview of the golden tilefish fishery, including management history, landings, and assessment information, can be found here: <a href="https://safmc-shinyapps.io/SA">https://safmc-shinyapps.io/SA</a> FisheryDataTilefish/.

#### **Blueline Tilefish**

In the last six years, landings of blueline tilefish in the South Atlantic region have often exceeded the sector and total ACL, and the National Standard Guidelines contain the following language: If the catch exceeds the ACL for a given stock, or stock complex, more than once in the last four years, the system of ACLs and AMs should be reevaluated and modified if necessary to improve its performance and effectiveness.

The recreational sector has a four-month season, May 1 through August 31, that was established in 2015 through Amendment 32. The amendment also established a 1 fish per vessel limit during the open season. The bag limit was increased to the current 3 fish per person per day through implementation of Regulatory Amendment 25 in 2016.

The in-season recreational accountability measure currently in place is triggered when recreational landings meet, or are projected to meet, the recreational ACL. The post-season accountability measure is triggered by an overage of the recreational ACL, an overage of the total (commercial and recreational) ACL, and an overfished determination for the stock. If those criteria are met, a payback of the overage and a reduction in next year's fishing season are implemented. These accountability measures have not been triggered for blueline tilefish despite overages of the recreational ACL. The in-season AM has not been triggered due to landings

estimates not being available until after the season closes. Overages of the recreational ACL have not been corrected because blueline tilefish are currently not overfished. Hence, the Council intends to re-evaluate the system of accountability measures for the recreational sector and consider modification to recreational management measures.

An application providing an overview of the blueline tilefish fishery, including management history, landings, and assessment information, can be found here: <a href="https://safmc-shinyapps.io/SA">https://safmc-shinyapps.io/SA</a> FisheryDataBluelineTilefish/

### **Purpose and Need**

**Purpose:** The purpose is to revise the acceptable biological catch, annual optimum yield, total annual catch limit, sector allocations, and sector ACLs for golden tilefish based on the most recent stock assessment. Additionally, the purpose is to consider modifications to management measures and accountability measures for golden tilefish and blueline tilefish.

**Need:** The need is to base conservation and management measures on the best scientific information available and achieve optimum yield, consistent with the Magnuson-Stevens Act and its National Standards.

## What actions are being proposed in this plan amendment?

Amendment 52 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region proposes eight actions. Below are the Council's preferred alternatives for Actions 1 and Action 2 and Alternatives for Actions 3-8.

# Action 1: Revise the golden tilefish acceptable biological catch, total annual catch limit, and annual optimum yield

**Purpose of Action:** The SSC recommended a new ABC based on results of SEDAR 66 (2020), and the ABC, total ACL and annual OY must be adjusted accordingly. The ABC cannot be set above the SSC's recommended ABC.

**Preferred Alternative 2.** Revise the acceptable biological catch and set it equal to the most recent recommendation from the Scientific and Statistical Committee. Revise the total annual catch limit and annual optimum yield for golden tilefish and set them equal to the recommended acceptable biological catch. The 2026 acceptable biological catch, total annual catch limit, and annual optimum yield would remain in place after 2026 until modified. The recommended acceptable biological catch is inclusive of recreational estimates from the Marine Recreational Information Program's Fishing Effort Survey.

### Action 2: Revise sector allocations and sector annual catch limits for golden tilefish

**Purpose of Action:** Sector allocations need to be revised due to the updated total ACL and the change to MRIP FES data.

**Preferred Alternative 2.** Allocate 96.70% of the revised total annual catch limit for golden tilefish to the commercial sector and 3.30% of the revised total annual catch limit for golden tilefish to the recreational sector. Within the commercial sector 25% is allocated to hook and line (HL) sector and 75% to the longline (LL) sector. Recreational ACL in numbers of fish is based on conversion (4.430052 lbs/fish) used in Regulatory Amendment 28 (2012).

# Action 3. Modify the fishing year for the commercial golden tilefish hook and line and longline components

Note: Council may choose more than one alternative.

### **Purpose of Action:**

**Alternative 1 (No Action).** Do not modify the fishing year for the commercial hook and line or commercial longline components. Current fishing year for both sectors is January 1- December 31.

**Alternative 2.** Modify the fishing year for the commercial hook and line component. **Sub-Alternative 2a.** Modify the fishing year to start January 15.

**Sub-Alternative 2b.** Modify the fishing year to start January 22.

**Sub-Alternative 2c.** Modify the fishing year to start February 1.

Alternative 3. Modify the fishing year for the commercial longline component.

**Sub-Alternative 3a.** Modify the fishing year to start January 15. **Sub-Alternative 3b.** Modify the fishing year to start January 22.

**Sub-Alternative 3c.** Modify the fishing year to start February 1.

Action 4. Establish an incidental trip limit allowance for the longline component once the longline quota is caught.

Purpose of Action: Note: Add rationale from March meeting minutes to explain consideration of this action

Alternative 1 (No Action). Do not establish an incidental trip allowance for the longline component once the longline quota of golden tilefish is caught. After the commercial ACL for the longline component is reached or projected to be reached, golden tilefish may not be fished for or possessed by a vessel with a golden tilefish longline endorsement.

**Alternative 2.** Establish a 100 lbs. incidental trip limit allowance of golden tilefish for the longline endorsement holders using hook and line gear once the longline quota is caught.

**Alternative 3.** Establish a 150 lbs. incidental trip limit allowance of golden tilefish for the longline endorsement holders using hook and line gear once the longline quota is caught.

**Alternative 4.** Establish a 250 lbs. incidental trip limit allowance of golden tilefish for the longline endorsement holders using hook and line gear once the longline quota is caught.

Action 5. Modify postseason recreational accountability measures for golden tilefish.

### **Purpose of Action:**

	Post Season AMs		
	Trigger	Accountability Measure	
Alternative 1 (No action)	<ul> <li>Recreational landings exceed the recreational ACL</li> <li>Golden tilefish is identified as overfished;</li> <li>The combined commercial and recreational ACL is exceeded in the same calendar year.</li> <li>All triggers must be met.</li> </ul>	Recreational landings will be monitored for a persistence in increased landings and <i>if deemed necessary</i> , reduce the length of the recreational fishing season and the recreational ACL by the amount of the recreational ACL overage	
Alternative 2	Recreational landings exceed the recreational ACL	Recreational landings will be monitored for a persistence in increased landings and <i>if deemed necessary</i> , reduce the length of the recreational fishing season and the recreational ACL by the amount of the recreational ACL overage	
Alternative 3	NMFS will annually announce the recreational fishing season start and end. The fishing season will start on (date) and end on the date National Marine Fisheries Service projects the recreational annual catch limit will be met.		

### Action 6. Modify blueline tilefish recreational bag limit.

Note: Council can select more than one alternative to address bag limit modification as well as retention of blueline tilefish by captain and crew.

**Purpose of Action**: In the last six years, landings of blueline tilefish in the South Atlantic region have often exceeded the sector and total ACL, and the National Standard Guidelines contain the following language: *If the catch exceeds the ACL for a given stock, or stock complex, more than once in the last four years, the system of ACLs and AMs should be reevaluated and modified if necessary to improve its performance and effectiveness.* The Council is considering lowering the recreational bag limit to lower the chance of the sector having overages and exceeding the ACL.

**Alternative 1 (No Action).** The current recreational blueline tilefish bag limit is 3 per person per day. Captains and crew of for-hire vessels with valid Federal South Atlantic Charter/Headboat Snapper Grouper Permits are allowed to retain bag limit quantities of all snapper grouper species during the open recreational season.

Alternative 2. Reduce recreational blueline tilefish bag limit to 2 fish per person per day.

**Alternative 3.** Reduce recreational blueline tilefish bag limit to 1 fish per person per day.

**Alternative 4.** Do not allow retention of blueline tilefish by captain and crew.

### Action 7. Modify blueline tilefish recreational season.

**Purpose of Action:** In the last six years, landings of blueline tilefish in the South Atlantic region have often exceeded the sector and total ACL, and the National Standard Guidelines contain the following language: *If the catch exceeds the ACL for a given stock, or stock complex, more than once in the last four years, the system of ACLs and AMs should be reevaluated and modified if necessary to improve its performance and effectiveness.* The Council is considering modifying the recreational season to lower the chance of the sector having overages and exceeding the ACL.

**Alternative 1 (No Action).** Do not modify the blueline tilefish recreational season. The current recreational season is May 1-August 31.

Alternative 2. Modify blueline tilefish recreational season to May 1 through July 30.

**Alternative 3.** Modify blueline tilefish recreational season to June 1 through August 31.

**Alternative 4.** Modify blueline tilefish recreational season to May 1 through June 30.

**Alternative 5.** Modify blueline tilefish recreational season to July 1 through August 31.

### Action 8. Modify postseason recreational accountability measures for blueline tilefish.

**Purpose of Action:** In the last six years, landings of blueline tilefish in the South Atlantic region have often exceeded the sector and total ACL, and the National Standard Guidelines contain the following language: *If the catch exceeds the ACL for a given stock, or stock complex, more than once in the last four years, the system of ACLs and AMs should be reevaluated and modified if necessary to improve its performance and effectiveness.* The Council is considering modifying the postseason recreational accountability measures to increase the ability to ensure the sector stays within the recreational ACL and has the ability to address overages regardless of whether the stock is overfished or the total ACL was exceeded.

Post Season AMs	
Trigger	Accountability Measure

Alternative 1 (No action)	<ul> <li>Recreational landings exceed the recreational ACL</li> <li>Blueline tilefish is identified as overfished;</li> <li>The combined commercial and recreational ACL is exceeded in the same calendar year.</li> <li>All triggers must be met.</li> </ul>	Recreational landings will be monitored for a persistence in increased landings and <i>if deemed necessary</i> , reduce the length of the recreational fishing season and the recreational ACL by the amount of the recreational ACL overage	
Alternative 2	Recreational landings exceed the recreational ACL	Recreational landings will be monitored for a persistence in increased landings and <i>if deemed necessary</i> , reduce the length of the recreational fishing season and the recreational ACL by the amount of the recreational ACL overage	
Alternative 3	NMFS will annually announce the recreational fishing season start and end. The fishing season will start on (date) and end on the date National Marine Fisheries Service projects the recreational annual catch limit will be met.		

# **Chapter 1. Introduction**

### 1.1 What actions are being proposed in this plan amendment?

The actions in Amendment 52 to the Fishery Management Plan (FMP) for the Snapper Grouper Fishery of the South Atlantic Region (Snapper Grouper FMP) would modify management of South Atlantic golden tilefish and blueline tilefish. For golden tilefish, actions include revising the acceptable biological catch (ABC), total annual catch limit (ACL), annual optimum yield, sector allocations, sector ACLs, post season accountability measures (AM), and management measures for the commercial sector. Additionally, Amendment 52 includes actions to modify recreational bag limits and/or seasons and adjust post-season accountability measures for blueline tilefish.

# 1.2 Who is proposing the amendment?

The South Atlantic Fishery Management Council (Council) is responsible for managing snapper grouper species in the South Atlantic region. The Council develops the amendment and submits it to the National Marine Fisheries Service (NMFS) who determines whether to publish a rule to implement the amendment on behalf of the Secretary of Commerce. NMFS is an agency of the National Oceanic and Atmospheric Administration within the Department of Commerce. Guided by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), the Council works with NMFS and other partners to sustainably manage fishery resources in the South Atlantic.

The Council and NMFS are also responsible for making this document available for public comment. The draft environmental

# South Atlantic Fishery Management Council

- Responsible for conservation and management of fish stocks in the South Atlantic Region.
- Consists of 13 voting members who are appointed by the Secretary of Commerce, 1 representative from each of the 4 South Atlantic states, the Southeast Regional Administrator of NMFS, and 4 non-voting members.
- Responsible for developing fishery management plans and amendments under the Magnuson-Stevens Act; recommends actions to NMFS for implementation.
- Management area is from 3 to 200 nautical miles off the coasts of North Carolina, South Carolina, Georgia, and east Florida through Key West, except for Mackerel which is from New York to Florida, and Dolphin-Wahoo, which is from Maine to Florida.

assessment (EA) was made available to the public during the scoping process, public hearings, and Council meetings. The EA/amendment will be made available for comment during the rulemaking process.

# 1.3 Where is the project located?

Management of the federal snapper grouper fishery located off the southeastern United States (South Atlantic) in the 3-200 nautical miles U.S. exclusive economic zone (EEZ) is conducted under the Snapper Grouper FMP (SAFMC 1983) (Figure 1.3.1). There are 55 species managed by the Council under the Snapper Grouper FMP.

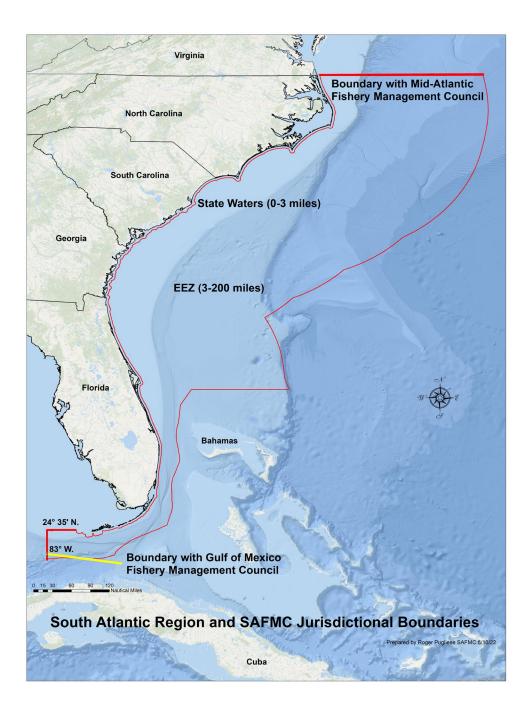


Figure 1.3.1. Jurisdictional boundaries of the Council.

# 1.4 Why is the Council considering action (Purpose and need statement)?

#### Golden Tilefish

Current management of South Atlantic golden tilefish is based on an update of SEDAR 25 completed in 2016 with an assessment period of 1962-2014 (SEDAR 2016). This amendment addresses the SEDAR 66 operational assessment for golden tilefish, which was completed in 2020, and includes recreational landings estimates using the Marine Recreational Information Program (MRIP) Fishing Effort Survey (FES). Revised catch levels would be specified based on the Scientific and Statistical Committee (SSC)'s recommended acceptable biological catch (ABC) and this most recent assessment.

The Council received the results of the assessment and the SSC's recommendations for the overfishing limit (OFL) and ABC at their June 2021 meeting. The SSC determined the stock is no longer experiencing overfishing, but there is a high degree of uncertainty in the stock status determination since the stock is being fished at or close to maximum sustainable yield (MSY). The Council directed staff to begin work on a plan amendment to adjust catch levels based on the SSC recommendations and SEDAR 66.

An application providing an overview of the golden tilefish fishery, including management history, landings, and assessment information, can be found here: <a href="https://safmc-shinyapps.io/SA">https://safmc-shinyapps.io/SA</a> FisheryDataTilefish/.

#### **Blueline Tilefish**

In the last six years, landings of blueline tilefish in the South Atlantic region have often exceeded the sector and total ACL, and the National Standard Guidelines contain the following language: If the catch exceeds the ACL for a given stock, or stock complex, more than once in the last four years, the system of ACLs and AMs should be reevaluated and modified if necessary to improve its performance and effectiveness.

The recreational sector has a four-month season, May 1 through August 31, that was established in 2015 through Amendment 32. The amendment also established a 1 fish per vessel limit during the open season. The bag limit was increased to the current 3 fish per person per day through implementation of Regulatory Amendment 25 in 2016.

The in-season recreational accountability measure currently in place is triggered when recreational landings meet, or are projected to meet, the recreational ACL. The post-season accountability measure is triggered by an overage of the recreational ACL, an overage of the total (commercial and recreational) ACL, and an overfished determination for the stock. If those criteria are met, a payback of the overage and a reduction in next year's fishing season are implemented. These accountability measures have not been triggered for blueline tilefish despite overages of the recreational ACL. The in-season AM has not been triggered due to landings estimates not being available until after the season closes. Overages of the recreational ACL have not been corrected because blueline tilefish are currently not overfished. Hence, the Council

intends to re-evaluate the system of accountability measures for the recreational sector and consider modification to recreational management measures.

An application providing an overview of the blueline tilefish fishery, including management history, landings, and assessment information, can be found here: <a href="https://safmc-shinyapps.io/SA">https://safmc-shinyapps.io/SA</a> FisheryDataBluelineTilefish/

**Purpose:** The purpose is to revise the acceptable biological catch, annual optimum yield, total annual catch limit, sector allocations, and sector ACLs for golden tilefish based on the most recent stock assessment. Additionally, the purpose is to consider modifications to management measures and accountability measures for golden tilefish and blueline tilefish.

**Need:** The need is to base conservation and management measures on the best scientific information available and achieve optimum yield, consistent with the Magnuson-Stevens Act and its National Standards.

# 1.5 What are the Acceptable Biological Catch and Overfishing Limit recommendations for golden tilefish?

The SSC reviewed the golden tilefish stock assessment (SEDAR 66 2020) at their April/May 2021 meeting. The SSC found that the assessment addressed the terms of reference appropriately, was conducted using the best scientific information available, was adequate for determining stock status and supporting fishing level recommendations and addressed uncertainty consistent with expectations and available information. The SSC applied the ABC Control Rule and recommended ABCs and OFLs for golden tilefish (Table 1.5.1).

Recommendations were in total removals and were adjusted for discards so they are expressed in landings.

**Table 1.5.1**. South Atlantic golden tilefish OFL and ABC recommendations in pounds gutted weight (lbs gw) and numbers of fish (Source: SSC Report May 2021). Note: Any changes to catch levels would be effective in 2023 and the 2026 level would remain in place until modified.

OFL RECOMMENDATIONS					
Year	Landings (lbs gw)	Landings (numbers of fish)			
2022	573,000	70,000			
2023	562,000	69,000			
2024	552,000	68,000			
2025	543,000	67,000			
2026+	535,000	66,000			
ABC RECOMMENDATIONS					
Year Landings Landings					

	(lbs gw)	(numbers of fish)
2022	418,000	51,000
2023	435,000	53,000
2024	448,000	54,000
2025	458,000	55,000
2026+	466,000	56,000

The SSC reviewed the golden tilefish stock assessment (SEDAR 66 2020) at their April/May 2021 meeting. The SSC found that the assessment addressed the terms of reference appropriately, was conducted using the best scientific information available, was adequate for determining stock status and supporting fishing level recommendations and addressed uncertainty consistent with expectations and available information. The SSC applied the ABC Control Rule and recommended the following ABCs and OFLs for golden tilefish (Table 1). Recommendations are based on landings and expressed in total removals.

The Council is not exploring options for adjusting the stock status criteria or formulas for determining the associated stock status values in this FMP amendment. This FMP amendment would adopt the values as determined by the SEDAR 66 assessment and recommended by the SSC (Deterministic value in Table 1.5.2).

**Table 1.5.2**. South Atlantic golden tilefish status criteria recommendations based on the results of SEDAR 66 2020 (SSC Meeting Report, April 2020).

Criteria	Deterministic	Probabilistic
Overfished evaluation	0.927	0.803
(SSB/SSB <sub>msy</sub> )	0.927	0.803
Overfishing evaluation	.947	1.122
MFMT (F <sub>msy</sub> )	.282	0.249
SSB <sub>MSY</sub> (mt)	19.9	22.4
MSST (mt)	14.9	16.8
MSY (1000 lbs.)	541.6	531.6
Y at 75% F <sub>MSY</sub> (1000 lbs.)	534	522.7

# 1.6 How has recreational data collection changed in the southeast?

The Marine Recreational Fisheries Statistics Survey (MRFSS) was created in 1979 by the National Marine Fisheries Service (NMFS). The program included the Access Point Angler Intercept Survey (APAIS), which consists of onsite interviews at marinas and other points where recreational anglers fish, to determine catch. MRFSS also included Coastal Household Telephone Survey (CHTS), which used random-digit dialing of homes in coastal counties to contact anglers to determine fishing effort. In 2000, the For-Hire Survey (FHS) was implemented to incorporate for-hire effort due to lack of coverage of charter boat anglers by the CHTS. The FHS used a directory of all known charter boats and a weekly telephone sample of the charter boat operators to obtain effort information.

The Marine Recreational Information Program (MRIP)<sup>1</sup> replaced MRFSS in 2013 to meet increasing demand for more precise, accurate, and timely recreational catch estimates. MRIP is a more scientifically sound methodology for estimating catch because it reduces some sources of potential bias as compared to MRFSS resulting in more accurate catch estimates. Specifically, CHTS was improved to better estimate private angling effort. Instead of random telephone calls, MRIP-CHTS used targeted calls to anglers registered with a federal or state saltwater fishing registry. The MRIP also incorporated a new survey design for APAIS in 2013. This new design addressed concerns regarding the validity of the survey approach, specifically that trips recorded during a given time period are representative of trips for a full day (Foster et al. 2018). The more complete temporal coverage with the new survey design provides for consistent increases or decreases in APAIS angler catch rate statistics, which are used in stock assessments and management, for at least some species (NMFS 2021).

MRIP also transitioned from the legacy CHTS to a new mail survey (FES) beginning in 2015, and in 2018, the FES replaced the CHTS.

A detailed explanation and description of the changes may be found at https://www.fisheries.noaa.gov/recreational-fishing-data/effort-survey-improvements.

Both survey methods collect data needed to estimate marine recreational fishing effort (number of fishing trips) by shore and private/rental boat anglers on the Atlantic and Gulf coasts. The new mail-based FES uses angler license and registration information as one way to identify and contact anglers (supplemented with data from the U.S. Postal Service, which includes virtually all U.S. households). Because the FES and CHTS are substantially different, the catch estimates produced from the data obtained through the two methods are not directly comparable, i.e., an estimated number of fish harvested by one method is not equivalent to the same estimated number of fish harvested by the other method. Consequently, NMFS conducted side-by side testing of the two methods from 2015 to 2018 and developed calibration procedures to convert the historical catch estimates (MRFSS, MRIP-CHTS, MRIP-APAIS [collectively MRFSS]) into MRIP-FES. In general, landings estimates are higher using the MRIP-FES as compared to the MRFSS estimates. This is because the FES is designed to more accurately measure fishing activity than the CHTS, not because there was a sudden rise in fishing effort. NMFS developed a calibration model to adjust historic effort estimates so that they can be accurately compared to new estimates from the FES. The new effort estimates alone do not lead to definitive conclusions about stock size or status in the past or at current. NMFS determined that the MRIP-FES data, when fully calibrated to ensure comparability among years and across states, produced the best available data for use in stock assessments and management (NMFS 2021)

# 1.7 What is the history of management for golden and blueline tilefish?

Snapper grouper regulations in the South Atlantic were first implemented in 1983. The reader is referred to Appendix H for the management history of the species in the Snapper Grouper FMP.

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<sup>&</sup>lt;sup>1</sup> A description of MRIP may be found https://www.fisheries.noaa.gov/recreational-fishing-data/about-marine-recreational-information-program.

# **Chapter 2. Proposed Actions and Alternatives**

# 2.1 Action 1. Revise the golden tilefish acceptable biological catch, total annual catch limit, and annual optimum yield

**Alternative 1 (No Action).** The total annual catch limit and annual optimum yield for golden tilefish are equal to the current acceptable biological catch (342,000 lbs gutted weight). The current acceptable biological catch is inclusive of recreational estimates from the Marine Recreational Information Program's Coastal Household Telephone Survey.

**Preferred Alternative 2.** Revise the acceptable biological catch and set it equal to the most recent recommendation from the Scientific and Statistical Committee. Revise the total annual catch limit and annual optimum yield for golden tilefish and set them equal to the recommended acceptable biological catch. The 2026 acceptable biological catch, total annual catch limit, and annual optimum yield would remain in place after 2026 until modified. The recommended acceptable biological catch is inclusive of recreational estimates from the Marine Recreational Information Program's Fishing Effort Survey.

	ABC (lbs	Annual OY	Total ACL
Year	gw)	(lbs gw)	(lbs gw)
2023	435,000	435,000	435,000
2024	448,000	448,000	448,000
2025	458,000	458,000	458,000
2026+	466,000	466,000	466,000

Alternative 3: Revise the acceptable biological catch and set it equal to the most recent recommendation from the Scientific and Statistical Committee. Revise the total annual catch limit and annual optimum yield for golden tilefish and set them equal to 95% of the recommended acceptable biological catch. The 2026 acceptable biological catch, total annual catch limit, and annual optimum yield would remain in place after 2026 until modified. The recommended acceptable biological catch is inclusive of recreational estimates from the Marine Recreational Information Program's Fishing Effort Survey.

	ABC (lbs	Annual OY	Total ACL
Year	gw)	(lbs gw)	(lbs gw)
2023	435,000	413,250	413,250
2024	448,000	425,600	425,600
2025	458,000	435,100	435,100
2026+	466,000	442,700	442,700

Alternative 4. Revise the acceptable biological catch and set it equal to the most recent recommendation from the Scientific and Statistical Committee. Revise the total annual catch limit and annual optimum yield for golden tilefish and set them equal to 90% of the recommended acceptable biological catch. The 2026 acceptable biological catch, total annual catch limit, and annual optimum yield would remain in place after 2026 until modified. The

recommended acceptable biological catch is inclusive of recreational estimates from the Marine Recreational Information Program's Fishing Effort Survey.

	ABC (lbs	Annual OY	Total ACL
Year	gw)	(lbs gw)	(lbs gw)
2023	435,000	391,500	391,500
2024	448,000	403,200	403,200
2025	458,000	412,200	412,200
2026+	466,000	419,400	419,400

### Discussion:

- Per the guidance provided at 50 CFR §600.310(f)(4)(iv), the Council has chosen to specify optimum yield (OY) for golden tilefish on an annual basis and set it equal to the total ACL.
- SEDAR 66 included landings data using the Marine Recreational Information Program (MRIP) Fishing Effort Survey (FES). A new ACL would be specified based on the SSC's recommended ABCs and the most recent assessment.

### 2.1.2 Comparison of Alternatives:

# 2.2 Action 2. Revise sector allocations and sector annual catch limits for golden tilefish

Note: The revised sector annual catch limits in Alternatives 1 (No Action) through 2 reflect the revised total annual catch limit in Preferred Alternative 2 of Action 1. The revised total annual catch limit includes recreational landings from the Marine Recreational Information Program using the Fishing Effort Survey method where appropriate, as well as updates to commercial and headboat landings used in the latest assessment (SEDAR 66).

Alternative 1 (No Action). Retain the current recreational sector and commercial sector allocations as 3.00% and 97.00%, respectively, of the revised total annual catch limit for golden tilefish. Within the commercial sector 25% is allocated to hook and line (HL) component and 75% to the longline (LL) component. Recreational ACL in numbers of fish is based on conversion (4.430052 lbs/fish) used in Regulatory Amendment 28 (2012).

Year	Total ACL=	Commercial ACL (lbs gw) (97% of Total ACL)			Recreational ACL (numbers of fish)
	ABC	Total	HL (25%)	LL (75%)	(3% of Total ACL)
2023	435,000	421,950	105488	316,462	2,946
2024	448,000	434,560	108,640	325,920	3,034
2025	458,000	444,260	111,065	333,195	3,102
2026+	466,000	452,020	113,005	339,015	3,156

**Preferred Alternative 2.** Allocate 96.70% of the revised total annual catch limit for golden tilefish to the commercial sector and 3.30% of the revised total annual catch limit for golden tilefish to the recreational sector. Within the commercial sector 25% is allocated to hook and line (HL) component and 75% to the longline (LL) component. Recreational ACL in numbers of fish is based on conversion (4.430052 lbs/fish) used in Regulatory Amendment 28 (2012).

Year	Total ACL=	Commercial ACL (lbs gw) (96.7% of Total ACL)		Recreational ACL (numbers of fish)	
	ABC	Total	HL (25%)	LL (75%)	(3.3% of Total ACL)
2023	435,000	420,645	105,161	315,484	3,240
2024	448,000	433,216	108,304	324,912	3,337
2025	458,000	442,886	110,722	332,165	3,412
2026+	466,000	450,622	112,656	337,967	3,471

### **Discussion:**

The current commercial ACL is 331,740 lbs gw, and the current recreational ACL is 2,316 fish. The commercial annual catch limit is allocated between two gear sectors: 25% is allocated to the hook and line sector and 75% to the longline sector. The recreational ACL in numbers of fish is based on weight conversion (4.430052 lbs/fish) used in Regulatory Amendment 28 (2018).

Amendment 18B (2012) allocated 25% of the commercial ACL to the hook-and line component and 75% to the longline component. Such an allocation restored access to the resource for hook-and-line fishermen to proportions observed prior to 2006, and during periods when they have historically harvested golden tilefish (late summer to early fall). It was noted that, if the hook-and-line component regularly reached its ACL in the future, the Council would consider increasing the allocation.

The Council is only considering two allocation scenarios for golden tilefish. The update to the recreational landings stream did not substantially change the historical landings ratio between sectors.

The current allocations for the recreational and commercial sectors are 3% and 97%, respectively. These allocation percentages were based on applying the formula of sector annual catch limit = ((mean landings 2006-2008)\*0.5)) + ((mean landings 1986-2008)\*0.5) to the landings dataset used in Snapper Grouper Amendment 17B that included recreational estimates from the Marine Recreational Information Program's Coastal Household Telephone Survey. Applying the same allocation method to data used in SEDAR 66, including recreational FES data where applicable, would result in allocations of 96.70% and 3.30% for the commercial and recreational sectors, respectively.

### **2.2.2** Comparison of Alternatives:

# 2.3 Action 3. Modify the fishing year for commercial golden tilefish hook and line and longline components

Note: Council may choose more than one alternative.

Alternative 1 (No Action). Do not modify the fishing year for the commercial hook and line or commercial longline components. Current fishing year for both sectors is January 1- December 31.

Alternative 2. Modify the fishing year for the commercial hook and line component.

**Sub-Alternative 2a**. Modify the fishing year to start January 15.

**Sub-Alternative 2b**. Modify the fishing year to start January 22.

**Sub-Alternative 2c.** Modify the fishing year to start February 1.

Alternative 3. Modify the fishing year for the commercial longline component.

**Sub-Alternative 3a.** Modify the fishing year to start January 15.

**Sub-Alternative 3b**. Modify the fishing year to start January 22.

**Sub-Alternative 3c.** Modify the fishing year to start February 1.

### **Discussion:**

• The alternatives are based on the Council's discussion at the March 2022 meeting. During their October 2021 meeting, the AP discussed changing the start season for hook and line to be different from longline. The suggestion was to change the fishing year for the hook-and-line component to September or October, or after longline closes.

## 2.3.2 Comparison of Alternatives:

# 2.4 Action 4. Establish an incidental trip limit allowance for the golden tilefish longline once the longline quota is caught.

**Alternative 1 (No Action).** Do not establish an incidental trip allowance for the longline component once the longline quota of golden tilefish is caught. Vessels that have a golden tilefish longline endorsement may not fish for golden tilefish using hook-and-line gear under the 500-lb gutted weight, trip limit.

**Alternative 2.** Establish a 100 lb gutted weight. incidental trip limit allowance of golden tilefish for the longline endorsement holders using hook and line gear once the longline quota is caught.

**Alternative 3.** Establish a 150 lb gutted weight. incidental trip limit allowance of golden tilefish for the longline endorsement holders using hook and line gear once the longline quota is caught. **Alternative 4.** Establish a 250 lb gutted weight incidental trip limit allowance of golden tilefish for the longline endorsement holders using hook and line gear once the longline quota is caught.

### Discussion:

[Note: Add rationale from March meeting minutes to explain consideration of this action.]

### **2.4.2** Comparison of Alternatives:

# 2.5 Action 5. Modify post-season recreational accountability measures for golden tilefish.

	Post Season AMs			
	Trigger	Accountability Measure		
Alternative 1 (No action)	<ul> <li>Recreational landings exceed the recreational ACL</li> <li>Golden tilefish is identified as overfished;</li> <li>The combined commercial and recreational ACL is exceeded in the same calendar year.</li> <li>All triggers must be met.</li> </ul>	Recreational landings will be monitored for a persistence in increased landings and <i>if deemed necessary</i> , reduce the length of the recreational fishing season and the recreational ACL by the amount of the recreational ACL overage		
Alternative 2	Recreational landings exceed the recreational ACL	Recreational landings will be monitored for a persistence in increased landings and <i>if deemed necessary</i> , reduce the length of the recreational fishing season and the recreational ACL by the amount of the recreational ACL overage		
Alternative 3	NMFS will annually announce the recreational fishing season start and end. The fishing season will start on (date) and end on the date National Marine Fisheries Service projects the recreational annual catch limit will be met.			

### Discussion:

- The intent is that in season accountability measures for golden tilefish would stay in place under all alternatives being considered.
- This action only applies to post season AM. In-season AM's would remain
- Alternative 3 may be difficult due to the limited recreational landings. Projections are not likely to be very accurate if monthly landings over time are highly variable

### 2.5.2 Comparison of Alternatives:

## 2.6 Action 6. Modify blueline tilefish recreational bag limit.

Note: Council can select more than one alternative to address bag limit modification as well as retention of blueline tilefish by captain and crew.

Alternative 1 (No Action). The current recreational blueline tilefish bag limit is 3 per person per day. Captains and crew of for-hire vessels with valid Federal South Atlantic Charter/Headboat Snapper Grouper Permits are allowed to retain bag limit quantities of all snapper grouper species during the open recreational season.

Alternative 2. Reduce recreational blueline tilefish bag limit to 2 fish per person per day.

Alternative 3. Reduce recreational blueline tilefish bag limit to 1 fish per person per day.

Alternative 4. Do not allow retention of blueline tilefish by captain and crew.

### Discussion:

### 2.6.2 Comparison of Alternatives:

## 2.7 Action 7. Modify blueline tilefish recreational season.

**Alternative 1 (No Action).** Do not modify the blueline tilefish recreational season. The current recreational season is May 1-August 31.

Alternative 2. Modify blueline tilefish recreational season to May 1 through July 30.

Alternative 3. Modify blueline tilefish recreational season to June 1 through August 31.

**Alternative 4.** Modify blueline tilefish recreational season to May 1 through June 30.

**Alternative 5.** Modify blueline tilefish recreational season to July 1 through August 31.

**Alternative X.** Establish regional fishing seasons for the recreational blueline tilefish fishery. IPT NOTE: This was an action that brought up during the Council meeting. The Council will be reviewing the data at the June meeting to determine whether or not this action is feasible.

### Discussion:

### 2.7.2 Comparison of Alternatives:

# 2.8 Action 8. Modify post-season recreational accountability measures for blueline tilefish.

	Post Season AMs		
	Trigger	Accountability Measure	
Alternative 1 (No action)	<ul> <li>Recreational landings exceed the recreational ACL</li> <li>Blueline tilefish is identified as overfished;</li> <li>The combined commercial and recreational ACL is exceeded in the same calendar year.</li> <li>All triggers must be met.</li> </ul>	Recreational landings will be monitored for a persistence in increased landings and <i>if deemed necessary</i> , reduce the length of the recreational fishing season and the recreational ACL by the amount of the recreational ACL overage	
Alternative 2	Recreational landings exceed the recreational ACL	Recreational landings will be monitored for a persistence in increased landings and <i>if deemed necessary</i> , reduce the length of the recreational fishing season and the recreational ACL by the amount of the recreational ACL overage	
Alternative 3	NMFS will annually announce the recreational fishing season start and end. The fishing season will start on (date) and end on the date National Marine Fisheries Service projects the recreational annual catch limit will be met.		

### Discussion:

• The intent is that in season accountability measures for blueline tilefish would stay in place under all alternatives being considered.

## **2.8.2** Comparison of Alternatives:

# **Chapter 3. Affected Environment**

This section describes the affected environment in the proposed project area. The affected environment is divided into four major components:

- **Habitat environment** (Section 3.1)
- Biological and Ecological environment (Section 3.2)
- Economic environment (Sections 3.3)
- Social environment (Sections 3.4)
- Administrative environment (Section 3.5)

### 3.1 Habitat Environment

Information on the habitat utilized by species in the snapper grouper fishery management unit (Snapper Grouper FMU) and managed through the Fishery Management Plan (FMP) for the Snapper Grouper Fishery of the South Atlantic Region (Snapper Grouper FMP) is included in Volume II of the Fishery Ecosystem Plan (FEP; SAFMC 2009). South Atlantic Fishery Management Council (Council) designated essential fish habitat (EFH) and EFH-Habitat Areas of Particular Concern (HAPC) are presented in the <u>SAFMC User Guide and</u> spatial representations of EFH and other habitat related layers are in the Council's <u>SAFMC Atlas</u>.

### 3.1.1 Essential Fish Habitat

EFH is defined in the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) as "those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity" (16 U.S. C. 1802(10)). EFH for species in the Snapper Grouper FMU includes coral reefs, live/hard bottom, submerged aquatic vegetation, artificial reefs and medium to high profile outcroppings on and around the shelf break zone from shore to at least 600 ft (but to at least 2000 ft for wreckfish) where the annual water temperature range is sufficiently warm to maintain adult populations of members of this largely tropical complex. EFH includes the spawning area in the water column above the adult habitat and the additional pelagic environment, including *Sargassum*, required for larval survival and growth up to and including settlement. In addition, the Gulf Stream is an EFH because it provides a mechanism to disperse snapper grouper larvae.

For specific life stages of estuarine dependent and nearshore snapper grouper species, EFH includes areas inshore of the 100-foot contour, such as attached macroalgae; submerged rooted vascular plants (seagrasses); estuarine emergent vegetated wetlands (saltmarshes, brackish

marsh); tidal creeks; estuarine scrub/shrub (mangrove fringe); oyster reefs and shell banks; unconsolidated bottom (soft sediments); artificial reefs; and coral reefs and live/hard bottom.

### 3.1.2 Habitat Areas of Particular Concern

EFH-Habitat Areas of Particular Concern (EFH-HAPCs) for species in the snapper-grouper management unit include medium to high profile offshore hard bottoms where spawning normally occurs; localities of known or likely periodic spawning aggregations; nearshore hard bottom areas; The Point, The Ten Fathom Ledge, and Big Rock (North Carolina); The Charleston Bump (South Carolina); mangrove habitat; seagrass habitat; oyster/shell habitat; all coastal inlets; all state-designated nursery habitats of particular importance to snapper grouper (e.g., Primary and Secondary Nursery Areas designated in North Carolina); pelagic and benthic Sargassum; Hoyt Hills for wreckfish; the Oculina Bank Habitat Area of Particular Concern; all hermatypic coral habitats and reefs; manganese outcroppings on the Blake Plateau; and Council-designated Artificial Reef Special Management Zones (SMZs). Areas that meet the criteria for EFH-HAPCs include habitats required during each life stage (including egg, larval, post-larval, juvenile, and adult stages).

EFH-HAPCs for golden tilefish includes irregular bottom comprised of troughs and terraces inter-mingled with sand, mud, or shell hash bottom. Mud-clay bottoms in depths of 150-300 meters are HAPC. Golden tilefish are generally found in 80-540 meters, but most commonly found in 200-meter depths.

EFH-HAPC for blueline tilefish includes irregular bottom habitats along the shelf edge in 45-65 meters depth; shelf break; or upper slope along the 100-fathom contour (150-225 meters); hardbottom habitats characterized as rock overhangs, rock outcrops, manganese-phosphorite rock slab formations, or rocky reefs in the South Atlantic Bight; and the Georgetown Hole (Charleston Lumps) off Georgetown, SC.

EFH-HAPCs for the snapper grouper complex include the following deepwater marine protected areas (MPAs) as designated in Snapper Grouper Amendment 14: • Snowy Grouper Wreck MPA • Northern South Carolina MPA • Edisto MPA • Charleston Deep Artificial Reef MPA • Georgia MPA • North Florida MPA • St. Lucie Hump MPA • East Hump MPA

The Council established the special management zone (SMZ) designation process in 1983 in the Snapper Grouper FMP, and SMZs have been designated in federal waters off North Carolina, South Carolina, Georgia, and Florida since that time. The purpose of the original SMZ designation process, and the subsequent specification of SMZs, was to protect snapper grouper populations at the relatively small, permitted artificial reef sites and "create fishing opportunities that would not otherwise exist." Thus, the SMZ designation process was centered around protecting the relatively small habitats, which are known to attract desirable snapper grouper species.

Similarly, in the Comprehensive Ecosystem-Based Amendment 1 (CE-BA 1; SAFMC 2010), the Council designated EFH areas and EFH-HAPCs under the Snapper Grouper FMP. Under the Magnuson-Stevens Act, FMPs are required to describe and identify EFH and to minimize the adverse effects of fishing on such habitat to the extent practicable. An EFH-HAPC designation

adds an additional layer to the EFH designation. Under the Snapper Grouper FMP, EFH-HAPCs are designated based upon ecological importance, susceptibility to human-induced environmental degradation, susceptibility to stress from development, or rarity of habitat type. The Council determined in CE-BA 1 that the Council-designated SMZs met the criteria to be EFH-HAPCs for species included in the Snapper Grouper FMP. Since CE-BA 1, the Council has designated additional SMZs in the Snapper Grouper FMP. The SMZ and EFH-HAPC designations serve similar purposes in pursuit of identifying and protecting valuable and unique habitat for the benefit of fish populations, which are important to both fish and fishers. Therefore, the Council determined that a designated SMZ meets the criteria for an EFH-HAPC designation, and the Council intends that all SMZs designated under the Snapper Grouper FMP also be designated as EFH-HAPCs under the Snapper Grouper FMP.

### 3.2 Biological and Ecological Environment

The waters off the South Atlantic coast are home to a diverse population of fish. The Snapper Grouper FMU contains 55 species of fish, many of them neither "snappers" nor "groupers." These species live in depths from a few feet (typically as juveniles) to hundreds of feet. As far as north/south distribution, the more temperate species tend to live in the upper reaches of the South Atlantic management area (e.g., black sea bass, red porgy) while the tropical variety's core residence is in the waters off south Florida, Caribbean Islands, and northern South America (e.g., black grouper, mutton snapper). These are reef-dwelling species that live amongst each other. These species rely on the reef environment for protection and food. There are several reef tracts that follow the southeastern coast. The fact that these fish populations congregate dictates the nature of the fishery (multi-species) and further forms the type of management regulations proposed in this amendment. The specific components of the ecological environment affected by actions in this amendment include red porgy, other affected species, and protected species. These components are described in detail in the following sections.

### 3.2.1 Golden Tilefish

### 3.2.2.1 Life History

Life history, biological characteristics, and stock status information for golden tilefish may be found the Southeast Data, Assessment, and Review (SEDAR) report, SEDAR 66 Update (2021), which is available on the SEDAR web site http://www.sefsc.noaa.gov/sedar/ and is hereby incorporated by reference (see Section 3.2.3 for more information on the SEDAR process). Golden tilefish are distributed throughout the Western Atlantic, occurring as far north as Nova Scotia, to southern Florida, and in the eastern Gulf of Mexico (Robins and Ray 1986). According to Dooley (1978), golden tilefish occurs at depths of 80-540 meters (263-1,772 feet). Robins and Ray (1986) report a depth range of 82-275 meters (270-900 feet) for golden tilefish. It is most commonly found at about 200 meters (656 feet), usually over mud or sand bottom but, occasionally, over rough bottom (Dooley 1978). Maximum reported size is 125 centimeters (50 inches) total length and 30 kilograms (66 pounds) (Dooley 1978; Robins and Ray 1986). Maximum reported age is 40 years (Harris et al. 2001). Radiocarbon aging indicates golden tilefish may live for at least 50 years (Harris, South Carolina Department of Natural Resources, personal communication). Golden tilefish spawn off the southeast coast of the United States (U.S.) from March through late July, with a peak in April (Harris et al. 2001). Grimes et al. (1988) indicate peak spawning occurs from May through September in waters north of Cape

Canaveral. Golden tilefish primarily prey upon shrimp and crabs, but also eat fishes, squid, bivalves, and holothurians (Dooley 1978).

# 3.2.2.2 Stock Status

The South Atlantic stock of golden tilefish was first assessed through the Southeast Data, Assessment, and Review (SEDAR) in 2004. The benchmark assessment for golden tilefish, SEDAR 4, was completed in 2004 with an assessment period 1961-2002 (SEDAR 2004). SEDAR 25 was a standard assessment completed in 2011 with an assessment period spanning 1962-2010 (SEDAR 2011) and several important changes to input parameters (e.g., natural mortality (M), catchability or efficiency of the fishery (h), SSB units). Current management of South Atlantic golden tilefish is based on an update of SEDAR 25 completed in 2016 with an assessment period of 1962-2014 (SEDAR 2016).

The SSC reviewed the golden tilefish stock assessment (SEDAR 66 2020) at their April/May 2021 meeting. The SSC found that the assessment addressed the terms of reference appropriately, was conducted using the best scientific information available, was adequate for determining stock status and supporting fishing level recommendations and addressed uncertainty consistent with expectations and available information. The SSC applied the ABC Control Rule and recommended the following ABCs and OFLs for golden tilefish. Recommendations are based on landings and expressed in total removals. Landings recommendations have been calculated to account for dead discards.

This amendment addresses the SEDAR 66 operational assessment for golden tilefish, which was completed in 2020, and includes recreational landings estimates using the Marine Recreational Information Program (MRIP) Fishing Effort Survey (FES). Revised catch levels are specified based on the Scientific and Statistical Committee (SSC)'s recommended acceptable biological catch (ABC) and this most recent assessment.

The Council received the results of the assessment and the SSC's recommendations for the overfishing limit (OFL) and ABC at their June 2021 meeting. The SSC determined the stock is no longer experiencing overfishing, but there is a high degree of uncertainty in the stock status determination since the stock is being fished at or close to maximum sustainable yield (MSY). The Council directed staff to begin work on a plan amendment to adjust catch levels based on the SSC recommendations and SEDAR 66.

# **3.2.1.3 Landings**

# Commercial

Commercial landings of South Atlantic golden tilefish have consistently declined since 2015 (Table 3.2.1).

**Table 3.2.1**. South Atlantic golden tilefish commercial landings and ACLs in lbs ww, 2015-2020.

Year	Commercial Longline Landings	Commerci al Hook and Line Landings	Total Landings (lbs ww)	Total ACL	% ACL
2020	273,570	70,552	344,122	314,310	109%
2019	306,409	61,407	367,817	314,310	117%
2018	247,349	54,649	301,998	314,310	96%
2017	427,586	110,045	537,631	541,295	99%
2016	421,513	111,816	533,329	541,295	99%
2015	389,244	143,872	533,116	541,295	98.4%

Sources: SEFSC Commercial ACL Database [April 5, 2021]

#### Recreational

Recreational landings of South Atlantic golden tilefish have exceed the ACL in all of the years reviewed over the time series (Table 3.2.2). Landings are monitored in numbers of fish.

Table 3.2.2. South Atlantic golden tilefish recreational landings and ACLs in numbers of fish.

Year	Landings (fish)	ACL	% of ACL
2015	3,791	3,019	123%
2016	8,678	3,019	287%
2017	2,030	3,019	67%
2018	3,112	2,316	134%
2019	15,638	2,316	675%
2020	2,920	2,316	126%
2021	2,883	2,316	124%

Sources: SEFSC MRIP CHTS Recreational ACL Database [April 2022]

# 3.2.2 Blueline Tilefish

# 3.2.2.1 Life History

Blueline tilefish, *Caulolatilus microps*, occurs in the Western Atlantic Ocean, North Carolina to southern Florida and Mexico, including the northern (and probably eastern) Gulf of Mexico

(Dooley 1978). Blueline tilefish are found along the outer continental shelf, shelf break, and upper slope on irregular bottom with ledges or crevices, and around boulders or rubble piles in depths of 30-236 m (98-774 ft) and temperatures ranging from 15 to 23° C (59-73.4° F) (Ross 1978; Ross and Huntsman 1982; Robins and Ray 1986; Parker and Mays 1998). Maximum reported size is 90 cm (35.4 in) FL (SEDAR 32 2013) and 7 kg (15 pounds [lbs]) (Dooley 1978). Maximum reported age is 43 years (SEDAR 32 2013). The SEDAR group estimated the natural mortality rate to be 0.1 (SEDAR 32 2013). Spawning occurs at night, from March to October, with a peak in May (SEDAR 32 (2013) using information from Harris et al. (2004)). Blueline tilefish primarily feeds on benthic invertebrates and fishes (Dooley 1978).

# Blueline Tilefish Life History An Overview



- Extend from North Carolina to southern Florida and Mexico, including the Gulf of Mexico
- Waters ranging from 98-774 feet
- The spawning season extends from March to October, peaking May.
- Age for oldest fish discovered is 43 years.

Several species in the snapper grouper fishery management unit, though they occupy the same time and space in the reef environment, occupy different trophic niches. For example, blueline tilefish consume a higher diversity of organisms and prey that is more closely associated with the bottom (Bielsa and Labinski 1987). In contrast, the diet of snowy grouper is more specialized and prey items are found higher in the water column. It has been suggested that the different trophic niches reduces the interspecific competition for food items between these two species (Bielsa and Labinski 1987).

Snapper grouper species that reside in deepwater could be affected by the action. In addition to blueline tilefish, snapper grouper species most likely to be affected by the proposed actions includes many species that

occupy the same habitat at the same time. Therefore, snapper grouper species are likely to be caught when regulated since they will be incidentally caught when fishermen target other cooccurring species.

#### 3.2.2.2 Stock Status

Blueline Tilefish was assessed in November 2013 SEDAR 32, and the National Marine Fisheries Service (NMFS) determined blueline tilefish was undergoing overfishing and overfished. The management area in the stock assessment was defined such that landings from Rhode Island to Florida were used.

In April 2014 an Emergency rule was effective for one year to reduce overfishing. Regulatory Amendment 21 changed the minimum stock size threshold and blueline tilefish was no longer overfished. Actions in Amendment 32 decreased the ACLs to end overfishing. The ACL equaled 98% of acceptable biological catch (ABC) to account for landings north of North Carolina. At the time, an examination of the landings indicated that approximately 2% of blueline tilefish landings originated in the Mid-Atlantic region, north of the North Carolina/Virginia border. The amendment established a commercial trip limit of 100 pounds (lbs) gutted weight (gw), and a

vessel limit of 1/vessel/day during the May through August recreational open season. The South Atlantic Fishery Management Council's (South Atlantic Council) goal was to align the recreational season with that for snowy grouper since the two species are frequently caught together and compatible seasons would reduce regulatory discards and associated release mortality, while maximizing access to the fishery for fishermen in the region.

Actions in Regulatory Amendment 25 increased the ACLs based on a revised ABC recommendation from the South Atlantic Council's Scientific and Statistical Committee (SSC). The ACL equaled 78% of the ABC to account for landings from the Greater Atlantic Region. This percent was based on the ratio of landings between the South Atlantic and the Greater Atlantic region from 2011-2014. The framework amendment increased the commercial trip limit to 300 lbs gw and recreational bag limit to 3/fish/person/day in a May through August recreational open season.

Following SEDAR 50, NMFS determined that blueline tilefish south of Cape Hatteras, North Carolina, was not undergoing overfishing and was not overfished. The status of the stock was unknown north of Cape Hatteras due to insufficient data. SEDAR 50 used the conclusion from a stock ID workshop that blueline tilefish constitute a single population throughout the U.S. geographic range and concluded that the main stock assessment effort proceed with models including removals restricted to areas between the Council/Gulf of Mexico Fishery Management Council boundary and Cape Hatteras, North Carolina. The Assessment Panel also proceeded with separate efforts to investigate the available data for the region north of Cape Hatteras, North Carolina, to provide advice for management of blueline tilefish in that region.

In December 2017 the Mid-Atlantic Fishery Management Council incorporated blueline tilefish as a managed species in the Tilefish Fishery Management Plan and established blueline tilefish management measures, including an ACL setting process, sector allocations, possession limits, fishing season, permitting, and reporting requirements.

In February 2020, the final rule for Regulatory Amendment 27 implemented a commercial trip limit of 100 lbs gw from January 1 through April 30 and 300 lbs gw from May 1 through December 31. The Council reasoned that a 100 lbs gw trip limit of blueline tilefish from January through April would help reduce snowy grouper discards while an increase to a 300 lbs gw trip limit at the beginning of May would allow fishermen in the northern portion of the South Atlantic Council's area of jurisdiction to have greater access to the resource and optimize their harvest. In August 2020, the final rule for Abbreviated Framework Amendment 3 increased the ACL. The ACL equaled the ABC. The ABC was based on the sum of the ABC from areas south and north of Cape Hatteras, North Carolina. The abbreviated framework amendment includes the following discussion on the choice of ACL equal to ABC: "Setting the ACL below the ABC in Amendment 32 and Regulatory Amendment 25 were intended as a temporary measure to account for landings outside the South Atlantic Council's jurisdiction; hence, the purpose was not to account for management uncertainty related to fishing activity within the South Atlantic Council's area of jurisdiction. Furthermore, blueline tilefish landings that occurred north of the North Carolina/Virginia border prior to 2017 were accounted for in the recommended catch levels from SEDAR 50 (2017)."

An application providing an overview of the blueline tilefish fishery, including management history, landings, and assessment information, can be found here: <a href="https://safmc-shinyapps.io/SA">https://safmc-shinyapps.io/SA</a> FisheryDataBluelineTilefish/

In the last six years, landings of blueline tilefish in the South Atlantic region have often exceeded the sector and total ACL. The National Standard Guidelines contain the following language: "If catch exceeds the ACL for a given stock or stock complex more than once in the last four years, the system of ACLs and AMs should be reevaluated, and modified if necessary, to improve its performance and effectiveness." 50 C.F.R. § 310(g)(7).

# **3.2.1.3 Landings**

#### Recreational

Recreational landings of South Atlantic blueline tilefish have exceed the ACL in all of the years reviewed over the time series (Table 3.2.2).

**Table 3.2.3**. South Atlantic blueline tilefish recreational landings and ACLs in whole weight.

Year	Landings (lbs	ACL	% of ACL	<b>Date of Closure</b>
	ww)			
2015	40,888	17,291	254.8	June 10, 2015
2016	185,998	87,277	197.4	
2017	171,455	87,277	176.4	
2018	110,463	87,277	134	
2019	110,116	87,277	126	
2020	402,789	116,820	336	

Sources: SEFSC MRIP CHTS Recreational ACL Database [April 2022]

# 3.2.3 Bycatch

See the Bycatch Practicability Analysis (**Appendix G**) for detailed descriptions of bycatch when fishing for golden tilefish or blueline tilefish. A detailed description of the life history of these species is provided in the snapper grouper SAFE report (NMFS 2005) and the Fishery Ecosystem Plan (SAFMC 2017).

# **3.2.5 Protected Species**

NMFS manages marine protected species in the Southeast region under the Endangered Species Act (ESA) and the Marine Mammal Protection Act (MMPA). There are 29 ESA-listed species or distinct population segments (DPS) of marine mammals, sea turtles, fish, and corals managed by NMFS that may occur in federal waters of the South Atlantic or Gulf of Mexico. There are 91 stocks of marine mammals managed within the Southeast region plus the addition of the

stocks such as North Atlantic right whales (NARW), and humpback, sei, fin, minke, and blue whales that regularly or sometimes occur in Southeast region managed waters for a portion of the year (Hayes et al. 2017). All marine mammals in U.S. waters are protected under the MMPA. The MMPA requires that each commercial fishery be classified by the number of marine mammals they seriously injure or kill. NMFS's List of Fisheries (LOF)<sup>2</sup> classifies U.S. commercial fisheries into three categories based on the number of incidental mortality or serious injury they cause to marine mammals.

Five of the marine mammal species (sperm, sei, fin, blue, and NARW) protected by the MMPA, are also listed as endangered under the ESA. In addition to those five marine mammals, six species or DPSs of sea turtles [green (the North Atlantic DPS and the South Atlantic DPS), hawksbill, Kemp's ridley, leatherback, and the Northwest Atlantic DPS of loggerhead]; nine species or DPSs of fish (the smalltooth sawfish; five DPSs of Atlantic sturgeon; Nassau grouper; oceanic whitetip shark, and giant manta ray); and seven species of coral (elkhorn coral, staghorn coral, rough cactus coral, pillar coral, lobed star coral, mountainous star coral, and boulder coral) are also protected under the ESA and occur within the action area of the snapper grouper fishery. Portions of designated critical habitat for NARW, the Northwest Atlantic DPS of loggerhead sea turtles, and *Acropora* corals occur within the Council's jurisdiction.

NMFS completed a formal consultation and resulting biological opinion (Bi-Op) on the conservation regulations under the ESA and the authorization of the South Atlantic snapper grouper fishery in federal waters under the Magnuson-Stevens Act, including the fishery managed by the Snapper Grouper FMP, on threatened and endangered species and designated critical habitat dated December 1, 2016. NMFS concluded that the activities addressed in the consultation are not likely to jeopardize the continued existence of any threatened or endangered species.

Since completing the December 2016 Bi-Op, NMFS published several final rules that listed additional species and designated critical habitat. NMFS has reinitiated formal consultation to address these listings and concluded the authorization of the South Atlantic snapper grouper fishery in federal waters during the re-initiation period will not violate ESA Sections 7(a)(2) or 7(d). For summary information on the protected species that may be adversely affected by the snapper grouper fishery and how they are affected refer to Section 3.2.5 in <u>Vision Blueprint</u> <u>Regulatory Amendment 27</u> to the Snapper Grouper FMP (SAFMC 2019a).

<sup>&</sup>lt;sup>2</sup> https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-protection-act-list-fisheries/

# 3.3 Economic Environment

# 3.3.1 Economic Description of the Fisheries for Golden Tilefish

(Note: The following descriptions were taken from Regulatory Amendment 28 and will be updated with new analysis in the next version of this document.)

#### **Permits**

Any fishing vessel that harvests and sells any of the snapper grouper species from the South Atlantic EEZ must have a valid South Atlantic commercial snapper grouper permit, which is a limited access permit. In addition, any fishing vessel that harvests golden tilefish using longline gear and sells golden tilefish from the South Atlantic EEZ must have a valid golden tilefish longline endorsement. This endorsement is also a form of limited access permit. As of July 25, 2017, there were 544 valid or renewable South Atlantic Snapper Grouper Unlimited Permits and 114 valid or renewable 225-Pound Trip-limited Permits. After a permit expires, it can be renewed or transferred up to one year after the date of expiration. The number of valid or renewable snapper grouper permits declined steadily from 2012 through 2016, partly due to the requirement that two permits are required when purchasing one permit. The total number of golden tilefish longline endorsements has remained at 22. Florida is the dominant state in both permits and endorsements in the South Atlantic region (**Table 3.3.1**).

Table 3.3.1. South Atlantic Snapper Grouper Permits and Golden Tilefish Longline Endorsements, 2012-2016.

2012-2010.	FL	GA	SC	NC	OTHERS	TOTAL						
	Unlimited Snapper Grouper Permits											
2012	416	6	53	117	12	604						
2013	416	6	50	112	8	592						
2014	409	6	51	112	6	584						
2015	399	7	50	108	7	571						
2016	391	8	51	107	8	565						
Average	406	7	51	111	8	583						
	225-Pc	ound Trip Li	mited Snappe	er Grouper P	ermits							
2012	119		2	9	2	132						
2013	117		2	8	2	129						
2014	113		2	8	2	125						
2015	109		2	8	2	121						
2016	105		1	8	2	116						
Average	113		2	8	2	125						
	(	Golden Tilefis	h Longline E	ndorsements	*							
2013	18		4			22						
2014	18		4			22						
2015	18		4			22						
2016	17	`	4	1		22						

Source: NMFS Southeast Regional Office (SERO) Permits Dataset, 2017.

<sup>\*</sup>Golden tilefish longline endorsement system started in 2013.

Table 3.3.2 and Table 3.3.3 contain information on vessel performance for commercial vessels that harvested golden tilefish in the South Atlantic in 2012-2016 using longline gear and Table 3.3.4 and Table 3.3.5 provide similar information for vessels that landed golden tilefish using other gear, primarily hook-and-line. The tables contain vessel counts from the NMFS SEFSC logbook data (vessel count, trips, and landings). Dockside values were generated using landings information from logbook data and price information from the NMFS SEFSC Accumulated Landings System (ALS) data. The data in Tables 3.3.2 - 3.3.5 cover all vessels that harvested golden tilefish anywhere in the South Atlantic, regardless of trip length or species target intent.

Landings shown in **Tables 3.3.2-3.3.5** are based on logbook information for landings and NMFS ALS for prices (SEFSC-SSRG Economic Panel Data). Thus, these landings would not exactly match with golden tilefish landings shown in **Tables 4.1.2**, which are based on SEFSC ACL database. Federally permitted vessels required to submit logbooks generally report their harvest of most species regardless of whether the fish were caught in state or federal waters.

From 2012 through 2016, an average of 23 longline vessels per year landed golden tilefish in the South Atlantic (**Table 3.3.2**). The golden tilefish longline endorsement system started only in 2013. These vessels, combined, averaged 255 trips per year in the South Atlantic on which golden tilefish were landed and 182 other trips (**Table 3.3.2**). The average annual total dockside revenue (2016 dollars) for these vessels combined was approximately \$1.56 million from golden tilefish, approximately \$0.10 million from other species co-harvested with golden tilefish (on the same trips), and approximately \$0.43 million from other trips by these vessels on trips in the South Atlantic on which no golden tilefish were harvested or occurred in other areas (**Table 3.3.3**). Total average annual revenue from all species harvested by longline vessels harvesting golden tilefish in the South Atlantic was approximately \$2.10 million, or approximately \$92,000 per vessel (**Table 3.3.3**). Longline vessels generated approximately 74 percent of their total revenues from golden tilefish.

Table 3.3.2. Summary of vessel counts, trips, and logbook landings (pounds gutted weight (lbs gw)) for vessels landing at least one pound of golden tilefish using longlines, 2012-2016.

Year	Number of Vessels	Number of South Atlantic Trips that Caught Golden Tilefish	Golden Tilefish Landings (lbs gw)	"Other Species" Landings Jointly Caught with Golden Tilefish (lbs gw)	Number of Other Trips*	Landings on Other Trips (lbs gw)
2012	28	410	440,553	10,732	154	10,732
2013	23	279	476,908	71,264	195	71,264
2014	22	231	534,156	23,443	248	23,443
2015	20	145	361,237	30,661	177	30,661
2016	23	209	397,437	40,985	136	40,985
Average	23	255	442,058	35,417	182	35,417

Source: SEFSC-SSRG Socioeconomic Panel v.4 July 2017.

\*Includes South Atlantic trips on which golden tilefish were not harvested as well as trips in other areas regardless of what species were harvested, including golden tilefish.

Table 3.3.3. Summary of vessel counts and revenue (2016 dollars) for vessels landing at least one

pound of golden tilefish using longlines, 2012-2016.

Year	Number of Vessels	Dockside Revenue from Golden Tilefish	Dockside Revenue from "Other Species" Jointly Caught with Golden Tilefish	Dockside Revenue on Other Trips	Total Dockside Revenue	Average Total Dockside Revenue per Vessel
2012	28	\$1,402,426	\$25,961	\$312,494	\$1,740,881	\$62,174
2013	23	\$1,565,698	\$195,085	\$365,763	\$2,126,546	\$92,459
2014	22	\$1,725,400	\$73,918	\$682,921	\$2,482,239	\$112,829
2015	20	\$1,417,835	\$106,667	\$627,046	\$2,151,548	\$107,577
2016	23	\$1,701,642	\$147,830	\$172,315	\$2,021,787	\$87,904
Average	23	\$1,562,600	\$109,892	\$432,108	\$2,104,600	\$92,589

Source: SEFSC-SSRG Socioeconomic Panel v.4 July 2017.

An average of 82 vessels per year landed golden tilefish using other gear types in the South Atlantic (**Table 3.3.4**). These vessels, combined, averaged 483 trips per year in the South Atlantic on which golden tilefish were landed and 2,862 trips taken in the South Atlantic on which golden tilefish were not harvested or in other areas (**Table 3.3.4**). The average annual total dockside revenue (2016 dollars) for these 82 vessels was approximately \$0.36 million from golden tilefish, approximately \$0.66 million from other species co-harvested with golden tilefish (on the same trips in the South Atlantic), and approximately \$4.13 million from the other trips taken by these vessels (**Table 3.3.5**). The total average annual revenue from all species harvested by these 82 vessels was approximately \$5.16 million, or approximately \$62,000 per vessel (**Table 3.3.5**). Approximately 7 percent of these vessels' total revenues came from golden tilefish.

Table 3.3.4. Summary of vessel counts, trips, and logbook landings (pounds gutted weight (lbs gw)) or vessels landing at least one pound of golden tilefish using other gears, 2012-2016.

Golden Year Number Number of "Other Species" Number of Landings on **South Atlantic** Landings **Other Trips** of Tilefish Other Jointly Caught Trips\* Vessels Trips that Landing (lbs gw) Caught Golden s (lbs with Golden Tilefish gw) Tilefish (lbs gw) 2012 53 277 50,715 39,483 2,357 1,143,181 2013 60 249 38,579 76,220 2,350 1,086,488 92 2014 574 123,323 264,876 3,178 1,574,656 2015 106 721 126,014 323,159 3,098 1,720,532 97 2016 596 117,810 332,683 3,326 1,758,565 82 483 91,288 207,284 1,456,684 2,862 Average

Source: SEFSC-SSRG Socioeconomic Panel v.4 July 2017.

Table 3.3.5. Summary of vessel counts and revenue (2016 dollars) for vessels landing at least one

pound of golden tilefish using other gears, 2012-2016.

Year	Number of Vessels	Dockside Revenue from Golden Tilefish	Dockside Revenue from "Other Species" Jointly Caught with Golden Tilefish	Dockside Revenue on Other Trips	Total Dockside Revenue	Average Total Dockside Revenue per Vessel
2012	53	\$179,148	\$92,235	\$2,548,417	\$2,819,800	\$53,204
2013	60	\$136,950	\$207,538	\$3,148,956	\$3,493,444	\$58,224
2014	92	\$470,279	\$807,280	\$5,321,174	\$6,598,733	\$71,725
2015	106	\$515,490	\$1,066,187	\$4,409,540	\$5,991,217	\$56,521
2016	97	\$536,710	\$1,139,089	\$5,243,463	\$6,919,262	\$71,333
Average	82	\$367,715	\$662,466	\$4,134,310	\$5,164,491	\$62,201

Source: SEFSC-SSRG Socioeconomic Panel v.4 July 2017.

#### **Ex-vessel Prices**

The dockside or ex-vessel price is the price the vessel receives at the first sale of harvest. Over the period 2012-2016, the average annual ex-vessel price per pound for golden tilefish harvested by longline vessels in the South Atlantic was \$3.53 (2016 dollars), and ranged from \$3.18 in 2012 to \$4.28 in 2016. For vessels using other gear types in harvesting golden tilefish, the average price per pound was \$4.03 and ranged from \$3.53 in 2012 to \$4.56 in 2016.

# **Commercial Sector Business Activity**

Estimates of the business activity (economic impacts) in the U.S. associated with the South Atlantic golden tilefish commercial harvests were derived using the model developed for and applied in NMFS (2015) and are provided in **Table 3.3.6.** Business activity for the commercial sector is characterized in the form of full-time equivalent jobs, output (sales) impacts (gross business sales), income impacts (wages, salaries, and self-employed income), and value added impacts (difference between the sales price of a good and the cost of the goods and services needed to produce it). Income impacts should not be added to output (sales) impacts because this would result in double counting. The estimates of economic activity include the direct effects (effects in the sector where an expenditure is actually made), indirect effects (effects in sectors providing goods and services to directly affected sectors), and induced effects (effects induced by the personal consumption expenditures of employees in the direct and indirectly affected sectors).

Table 3.3.6. Average annual business activity (thousand 2016 dollars) associated with the harvests of vessels that harvested golden tilefish in the South Atlantic, 2012-2016.

	Average Annual		Output		
	Dockside		(Sales)	Income	Value Added
Species	Revenue	Jobs	Impacts	Impacts	Impacts

<sup>\*</sup>Includes South Atlantic trips on which golden tilefish were not harvested as well as trips in other areas regardless of what species were harvested, including golden tilefish.

Golden Tilefish	\$1,930	258	\$19,143	\$7,030	\$9,932
All species*	\$7,661	1,023	\$75,977	\$27,901	\$39,421

<sup>\*</sup>Includes dockside revenues and economic activity associated with the average annual harvest of all species, including golden tilefish, harvested by vessels that harvested golden tilefish in the South Atlantic. Source: Revenue data from SEFSC-SSRG Socioeconomic Panel v.4 July 2017; economic impact results calculated by NMFS SERO using the model developed for NMFS (2015).

In addition to the business activities generated by commercial vessel landings of golden tilefish, business activities associated with commercial vessel landings of all other species landed by commercial vessels are also presented in the tables above. Vessels that harvested golden tilefish also harvested other species on trips where golden tilefish were harvested, and some took other trips in other areas on which no golden tilefish were harvested, as well as trips in areas outside the South Atlantic. All revenues from all species harvested on all of these trips contributed towards making these vessels economically viable and contribute to the economic activity associated with these vessels.

#### **Dealers**

Commercial vessels landing golden tilefish can only sell their catch to seafood dealers with valid Gulf and South Atlantic Dealer (GSAD) permit. On July 25, 2017, there were 432 dealers with a valid GSAD permit. There are no income or sales requirements to acquire a GSAD permit. As a result, the total number of dealers can vary over the course of the year and from year to year.

# **Imports**

Information on the imports of all snapper and grouper species, either fresh or frozen, are available at: <a href="http://www.st.nmfs.noaa.gov/st1/trade/cumulative\_data/TradeDataProduct.html">http://www.st.nmfs.noaa.gov/st1/trade/cumulative\_data/TradeDataProduct.html</a>. Information on the imports of individual snapper or grouper species, including golden tilefish, is not available. In 2016, imports of all snapper and grouper species (fresh and frozen) were approximately 57.20 million pounds valued at approximately \$176.86 million.

# 3.3.2 Economic Description of the Golden Tilefish Recreational Sector

# Landings

Recreational landings of golden tilefish are shown in **Table 4.1.3.** In summary from 2012 through 2016, recreational anglers landed an average of 5,146 fish with a range of 1,357 fish in 2014 to 13,011 fish in 2016. On average, private/rental mode anglers (2,749 fish) landed slightly more fish than charter anglers (2,294 fish). Headboat landings of golden tilefish were relatively small (104 fish).

# **Angler Effort**

Recreational effort derived from the Marine Recreational Information Program (MRIP) database can be characterized in terms of the number of trips as follows:

- Target effort The number of individual angler trips, regardless of duration, where the intercepted angler indicated that the species or a species in the species group was targeted as either the first or second primary target for the trip. The species did not have to be caught.
- Catch effort The number of individual angler trips, regardless of duration and target intent, where the individual species or a species in the species group was caught. The fish did not have to be kept.
- Total recreational trips The total estimated number of recreational trips in the South Atlantic, regardless of target intent or catch success.

Other measures of effort are possible, such as directed trips (the number of individual angler trips that either targeted or caught a particular species). Estimates of the number of golden tilefish target trips and catch trips for the charter and private or rental boat modes in the South Atlantic for 2012-2016 are provided in **Table 3.3.7**. The shore mode shows no recorded target or catch trips. Only Florida and North Carolina recorded target and catch trips for golden tilefish. In addition, both target and catch trips for golden tilefish are generally sparse, so only the averages for 2012-2016 are shown. Averages are calculated only for positive trip records. Over the period examined, golden tilefish were targeted only by anglers with private or rental boats with an average of 2,732 trips per year (**Table 3.3.7**). Catch effort averaged 1,899 trips and 2,440 trips for the charter, and private or rental modes, respectively. Florida was the dominant state for both target and catch trips.

Table 3.3.7. Average number of golden tilefish recreational target and catch trips, by mode, by state, 2012-2016\*.

	Charter Mode	Private/Rental Mode	All Modes
	Targ	et Trips	
Florida	nr	2,388	2,388
North Carolina	nr	344	344
Total		2,732	2,732
	Catc	h Trips	
Florida	1,726	2,268	3,994
North Carolina	173	172	345
Total	1,899	2,440	4,339

<sup>\* &</sup>quot;nr" = none recorded. Averages based on positive entries; "nr" entries are not assumed equivalent to "0" trips; no recorded target or catch trips in Georgia and South Carolina; no recorded target or catch trips for the shore mode for all states.

Source: MRIP database, NMFS, SERO.

Similar analysis of recreational effort is not possible for the headboat mode because headboat data are not collected at the angler level. Estimates of effort by the headboat mode are provided in terms of angler days, or the number of standardized 12-hour fishing days that account for the different half-, three-quarter-, and full-day fishing trips by headboats. The stationary "fishing for demersal (bottom-dwelling) species" nature of headboat fishing, as opposed to trolling, suggests that most, if not all, headboat trips and, hence, angler days, are demersal or reef fish trips by

intent. Estimates of headboat effort (angler days) are provided in **Table 3.3.8.** Headboat data are collected by the NMFS Southeast Region Headboat Survey (SRHS).

Table 3.3.8. Headboat angler days and percent distribution, by state, 2011-2015.

	Ang	ler Days		Percent Distribution				
	Florida/Georgia	North Carolina	South Carolina	Florida/Georgia	North Carolina	South Carolina		
2012	123,662	20,766	41,003	69.30%	10.30%	20.40%		
2013	124,041	20,547	40,963	72.90%	9.00%	18.00%		
2014	139,623	22,691	42,025	75.20%	8.70%	16.10%		
2015	194,979	22,716	39,702	75.75%	8.83%	15.42%		
2016	196,660	21,565	42207	75.51%	8.28%	16.21%		
Average	155,793	21,657	41,180	71.26%	9.91%	18.84%		

Source: NMFS Southeast Region Headboat Survey (SRHS).

#### **Permits**

The for-hire sector is comprised of charter vessels and headboats (party boats). Although charter vessels tend to be smaller, on average, than headboats, the key distinction between the two types of operations is how the fee is determined. On a charter boat trip, the fee charged is for the entire vessel, regardless of how many passengers are carried, whereas the fee charged for a headboat trip is paid per individual angler.

A federal charter/headboat (for-hire) vessel permit is required for fishing in federal waters for South Atlantic snapper grouper. On July 26, 2017, there were 1,695 vessels with a valid (non-expired) or renewable South Atlantic for-hire permits. A renewable permit is an expired limited access permit that may not be actively fished but is renewable for up to one year after expiration. The South Atlantic snapper grouper for-hire permits are open access permits. Most for-hire vessels possess more than one for-hire permit. The number of for-hire vessel permits fluctuated from a low of 1,727 in 2014 to 1,867 in 2016, averaging 1,794 for the years 2012-2016 (**Table 3.3.9**). Florida accounted for more permits than any other states, with North Carolina also registering a fair number of for-hire vessel permits.

Table 3.3.9. South Atlantic for-hire vessel permits, by homeport state, 2012-2016.

	Florida	Georgia	South Car.	North Car.	Others	Total
2012	1,121	26	138	313	199	1,797
2013	1,120	30	150	308	191	1,799
2014	1,062	34	160	294	177	1,727
2015	1,071	45	188	308	167	1,779
2016	1,100	53	212	331	171	1,867
Average	1,095	38	170	311	181	1,794

Source: NMFS SERO Permits Dataset, 2017.

Although the for-hire permit application collects information on the primary method of operation, the permit itself does not identify the permitted vessel as either a headboat or a charter vessel and vessels may operate in both capacities. However, if a vessel meets certain selection

criteria used by the SRHS and is selected to report by the Science Research Director of the Southeast Fisheries Science Center, it is determined to operate primarily as a headboat and is required to submit harvest and effort information to the SRHS. As of February 2017, 63 South Atlantic headboats were registered in the SRHS (K. Fitzpatrick, NMFS SEFSC, pers. comm.).

There are no specific federal permitting requirements for recreational anglers to fish for or harvest reef fish. Instead, anglers are required to possess either a state recreational fishing permit that authorizes saltwater fishing in general or be registered in the federal National Saltwater Angler Registry system, subject to appropriate exemptions. For the for-hire sector, customers are authorized to fish under the charter or headboat vessel license and are not required to hold their own fishing licenses. As a result, it is not possible to identify with available data how many individual anglers would be expected to be affected by this amendment.

#### **Economic Value**

Economic value can be measured in the form of consumer surplus (CS) per additional fish kept on a trip for anglers (the amount of money that an angler would be willing to pay for a fish in excess of the cost to harvest the fish). The CS value per fish for golden tilefish is unknown but some proxies, such as the CS for snapper and the CS for grouper, may be used. The estimated value of the CS per fish for a second snapper kept on a trip is approximately \$12.25, with bounds of \$8.17 and \$17.69 at the 95 percent confidence interval (Haab et al. 2012; values updated to 2016 dollars using GDP implicit price index), and that for grouper is approximately \$133.37, with bounds of \$119.76 and \$149.71 at the 95 percent confidence interval.

Economic value for for-hire vessels can be measured by producer surplus (PS) per passenger trip (the amount of money that a vessel owner earns in excess of the cost of providing the trip). Estimates of the PS per for-hire passenger trip are not available. Instead, net operating revenue (NOR), which is the return used to pay all labor wages, returns to capital, and owner profits, is used as a proxy for PS. For the South Atlantic region, estimated NOR values are \$165 (2016 dollars using GDP implicit price index) per charter angler trip and \$45 per headboat angler trip (C. Liese, NMFS SEFSC, pers. comm.). Estimates of NOR per golden tilefish target trip are not available.

# **Business Activity**

Recreational fishing generates economic activity as consumers spend their income on various goods and services needed for recreational fishing. This spurs economic activity in the region where recreational fishing occurs. It should be clearly noted that, in the absence of the opportunity to fish, the income would presumably be spent on other goods and services and these expenditures would similarly generate economic activity in the region where the expenditure occurs. As such, the analysis below represents a distributional analysis only.

Estimates of the business activity (economic impacts) associated with recreational angling for golden tilefish were derived using average impact coefficients for recreational angling for all species, as derived from an add-on survey to the Marine Recreational Fisheries Statistics Survey (MRFSS) to collect economic expenditure information, as described and utilized in NMFS (2015). Estimates of the average expenditures by recreational anglers are also provided in NMFS (2015) and are incorporated herein by reference.

Recreational fishing generates business activity (economic impacts). Business activity for the recreational sector is characterized in the form of full-time equivalent jobs, output (sales) impacts (gross business sales), income impacts, and value-added impacts (difference between the value of goods and the cost of materials or supplies). Estimates of the average golden tilefish target effort (2012-2016) and associated business activity (2016 dollars) are provided in **Table 3.3.10.** Because golden tilefish directed effort during this time period was only recorded in Florida and North Carolina (see **Table 3.3.7**), estimates of business activity for the other South Atlantic states are not provided. Because of relatively few reported target trips for golden tilefish, the associated economic activities are relatively small.

Estimates of the business activity associated with headboat effort are not available. Headboat vessels are not covered in the MRFSS/MRIP so, in addition to the absence of estimates of target effort, estimation of the appropriate business activity coefficients for headboat effort has not been conducted.

Table 3.3.10. Summary of golden tilefish target trips (2012-2016 average) and associated business activity (thousand 2016 dollars). Output, value added, and income impacts are not additive.

State	Target Trips	Jobs	Output (Sales) Impacts	Income Impacts	Value Added Impacts
Florida	2,388	1	\$84	\$28	\$49
North Carolina	344	0	\$23	\$8	\$13

Source: Effort data from the MRIP; economic impact results calculated by NMFS SERO using the model developed for NMFS (2015).

# 3.3.3 Economic Description of the Recreational Sector for Blueline Tilefish

(NOTE: The following description was taken from Regulatory Amendment 25 and will be updated in the next version of this document.)

From 2010 through 2014, an average of 24,171 blueline tilefish were harvested annually by anglers in the South Atlantic Region, and 927 (approximately 4%) of those caught were released (**Table 3.3.34**). The numbers of blueline tilefish harvested by anglers in the region and from the South Atlantic EEZ represent less than one percent of all fish harvested annually in the region and EEZ (**Tables 3.3.35** and **3.3.36**). However, 55% (13,324) of the average annual recreational harvest of blueline tilefish in the region (24,171) is from the EEZ.

**Table 3.3.34.** Recreational catch of blueline tilefish, 2010 – 2014 (all modes and all areas).

Year	Number of Blueline Tilefish Caught in South Atlantic Region					
1 cai	Harvested	Released	Total Caught			
2010	8,688	1,814	10,502			
2011	8,225	271	8,496			
2012	23,853	1,345	25,198			
2013	66,186	1,200	67,386			
2014	13,905	7	13,912			

Average	24 171	027	25,099
Average	44.1 / I	741	43.077

Source: Personal communication from the National Marine Fisheries Service. Fisheries Statistics Division, October 16, 2015 (online recreational fisheries statistics query).

**Table 3.3.35.** Comparison of numbers of blueline tilefish and all fish harvested in South Atlantic Region, 2010 – 2014 (all modes and all areas).

	Number of Fish Harvested in South Atlantic Region						
Year	Blueline Tilefish	All	Percent Blueline Tilefish				
2010	8,688	27,713,524	0.03%				
2011	8,225	32,913,253	0.02%				
2012	23,853	29,670,213	0.08%				
2013	66,186	36,254,780	0.18%				
2014	13,905	35,353,927	0.04%				
Average	24,171	32,381,139	0.07%				

Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division, October 16, 2015 (online recreational fisheries statistics query).

Table 3.3.36. Comparison of numbers of blueline tilefish and all fish harvested from South Atlantic EEZ, 2010 – 2014 (all modes).

Year	Number of Fish Harvested from South Atlantic EEZ						
1 ear	Blueline Tilefish	All	Percent Blueline Tilefish				
2010	6,954	2,894,996	0.24%				
2011	5,267	2,807,719	0.19%				
2012	15,631	2,810,048	0.56%				
2013	27,034	3,179,062	0.85%				
2014	11,736	3,601,769	0.33%				
Average	13,324	3,058,719	0.43%				

Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division, October 16, 2015 (online recreational fisheries statistics query).

Recreational harvest of blueline tilefish from the South Atlantic EEZ from 2010 through 2014 was landed in East Florida and North Carolina (Table 3.3.37). Whereas most of the blueline tilefish landed in Florida were harvested by anglers aboard private/rental vessels, most of those landed in North Carolina are taken by anglers aboard for-hire fishing vessels.

**Table 3.3.37.** Numbers of blueline tilefish harvested from South Atlantic EEZ by state and mode, 2010 - 2014.

	Number of Blueline Tilefish Harvested from South Atlantic EEZ										
Year		Florida			North Carolina						
1 Cui	For- Hire	Private/Rental	Total	For- Hire	Private/Rental	Total	Total				
2010	61	1,820	1,881	3,779	1,294	5,073	6,954				
2011	345	0	345	4,514	408	4,922	5,267				
2012	3,896	3,909	7,805	6,339	1,486	7,825	15,630				
2013	0	21,125	21,125	5,908	0	5,908	27,033				
2014	0	1,578	1,578	7,914	2,244	10,158	11,736				
Average	860	5,686	6,547	5,691	1,086	6,777	13,324				

Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division, October 16, 2015 (online recreational fisheries statistics query).

Up until 2014, blueline tilefish was part of the Deepwater Complex. In 2012 and 2013, the recreational ACL for the complex was 332,039 lbs ww and 334,556 lbs ww, respectively. Annual recreational landings of the complex for those years were less than the ACL: 107,849 lbs ww in 2012 and 325,129 lbs ww in 2013.

In 2014, anglers landed a total of 95,712 lbs ww of blueline tilefish in the region, which was less than the recreational ACL at the time (**Table 3.3.38**). However, in 2015, the recreational season closed on June 10, when landings of blueline tilefish reached and exceeded the recreational ACL that was established through Amendment 32 to the Snapper Grouper FMP, which substantially reduced the catch levels for blueline tilefish. Effective March 30, 2015, the final rule for Amendment 32 reduced the blueline tilefish recreational ACL from 111,893 lbs ww to 17,791 lbs ww. Preliminary data indicate that approximately 269% (47,838 lbs ww) of the new recreational ACL (17,791 lbs ww) was landed in 2015. Presently, the 2016 recreational ACL is set to be 26,691 lbs ww, then increase to 35,685 lbs ww in 2017 and 43,925 lbs ww in 2018 and thereafter. From 2010 through 2014, average annual recreational landings of blueline tilefish in the region were 129,480 lbs ww (NMFS SERO). From that average, it is expected landings in 2016 and thereafter would reach the ACL and the season would close early.

**Table 3.3.38.** Recreational landings (lbs ww) of blueline tilefish in South Atlantic Region, 2014 and 2015.

Year	Jan/Feb	Mar/Apr	May/Jun	Jul/Aug	Sep/Oct	Nov/Dec	Total	ACL
2014	6,908	19,804	23,914	30,817	12,833	1,436	95,712	111,893
2015	32,600	1,950	13,288	0	0	0	47,838	17,791

Source: NMFS SERO ACL.

The bag limit since March 2015 is one blueline tilefish per vessel per day in the South Atlantic EEZ when the federal season is open. Prior to that date, the bag limit had been the aggregate grouper/tilefish bag limit of 3-fish per person per day. Recreational harvest data for 2015 are preliminary; however, a comparison of the numbers of blueline tilefish harvested from the South Atlantic EEZ during the two waves of March/April and May/June from 2010 through 2015 is provided by **Table 3.3.39**. The harvest in May/June 2015 is within the range of the

May/June harvest from 2010 through 2014, whereas the lack of harvest of blueline tilefish in March/April of 2015 falls outside the range from 2010 through 2014.

**Table 3.3.39.** Numbers of blueline tilefish harvested from South Atlantic EEZ in March/April and May/June, 2010 – 2014.

Year	Number of Blueline Tilefish Harvested in South Atlantic EEZ				
i car	March/April	May/June			
2010	793	2,595			
2011	54	487			
2012	602	55			
2013	1,245	849			
2014	1,041	2,679			
2015*	0	739			

<sup>\*:</sup> Preliminary estimates

Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division, October 16, 2015 (online recreational fisheries statistics query).

Up through 2015, the recreational fishing season opened on January 1 and remained open through December 31, unless it was closed when landings reached or were projected to reach the ACL. In 2015, for example, the season closed on June 10<sup>th</sup>. Starting in 2016, current regulations specify that the recreational season will be closed from January through April, will be open from May 1 through August 31 unless landings reach or exceed the recreational ACL, and then be closed from September 1 through December 31.

In 2014, anglers made an estimated 3,642 trips by for-hire fishing vessels and 3,390 trips by private/rental vessels that caught blueline tilefish in the South Atlantic Region. No shore-line trips caught the species. These for-hire and private/rental trips are estimated to generate 20 and 2 jobs, respectively, and other economic impacts to the nation (**Table 3.3.40**). The catch trips occurred in Eastern Florida and North Carolina, and the economic impacts of these trips are summarized in **Table 3.3.41**.

**Table 3.3.40.** Number of recreational trips that caught blueline tilefish in South Atlantic Region in 2014 (all areas) and estimates of economic impacts of those trips.

Mode	Trips	Jobs	Sales (2014 \$)	Income (2014 \$)	Value Added (2014 \$)
For-Hire	3,642	20	\$2,813,000	\$1,099,000	\$2,813,000
Private/Rental	3,390	2	\$442,000	\$127,000	\$442,000

**Table 3.3.41.** Number of recreational trips that caught blueline tilefish in South Atlantic Region in 2014 by mode (all areas) by state and estimates of economic impacts of those trips to the state.

State	Mode	Trips	Jobs	Sales	Income	Value Added
	For-Hire	365	2	\$245,127	\$104,570	\$161,300
Eastern	Private/Rental	2,194	1	\$102,153	\$33,198	\$57,559
Florida	Shore	0	0	\$0	\$0	\$0
	Total	2,559	3	\$347,280	\$137,768	\$218,859
	For-Hire	3,277	15	\$1,534,823	\$702,715	\$1,051,099
North	Private/Rental	1,196	1	\$93,976	\$30,491	\$53,239
Carolina	Shore	0	0	\$0	\$0	\$0
	Total	4,473	16	1,628,799	733,206	1,104,338

# 3.4 Social Environment

# 3.4.1 Social Environment for Golden Tilefish

(NOTE: The following description was copied from Regulatory Amendment 28 and will be updated in the next version of this document.)

This amendment affects commercial and recreational management of golden tilefish. This section provides the background for the proposed actions, which is evaluated in **Chapter 4**. Commercial and recreational landings and permits by state are included to provide information on the geographic distribution of fishing involvement. Descriptions of the top communities involved in commercial golden tilefish are included along with the top recreational fishing communities based on recreational engagement. Community level data are presented in order to meet the requirements of National Standard 8 of the Magnuson-Stevens Act, which requires the consideration of the importance of fishery resources to human communities when changes to fishing regulations are considered. Lastly, social vulnerability data are presented to assess the potential for environmental justice concerns. Additional information on the South Atlantic recreational and commercial golden tilefish fishery is provided in the Economic Environment in **Section 3.3**.

# 3.4.1.1 Landings by State

# Commercial

The majority of commercial golden tilefish landings come from waters adjacent to Florida and Georgia (80.9% on average for years 2002-2016, SEFSC ACL dataset), followed by South Carolina and North Carolina (average of approximately 19%). Data for Florida are combined with Georgia in order to maintain confidentiality, but the majority; if not all of the landings reported for the combined category occurred in Florida. Data for South Carolina and North

Carolina are combined in order to maintain confidentiality and the majority of the landings reported for the combined category occurred in South Carolina. Within the commercial sector, the greatest proportion of landings are from longline fishermen (82% on average for years 2002-2016, SEFSC ACL dataset), followed by hook-and-line (18% on average). From 2002 to 2016, commercial landings ranged from 218,124 lbs gw to 686,296 lbs gw (SEFSC ACL dataset).

#### Recreational

The distribution of recreational golden tilefish landings by state has varied over time and the majority of landings come from waters adjacent to Florida and Georgia in the more recent past (range of 83.3% to 100% from 2009-2016, SEFSC ACL dataset); whereas the majority of landings come from waters adjacent to North Carolina in the more distant past (range of 56% to 100% from 2002-2007, SEFSC ACL dataset). Data for Florida are combined with Georgia in order to maintain confidentiality, but the majority of the landings reported for the combined category occurred in Florida waters. Within the recreational sector, the distribution of landings has varied over time with the greatest proportion of landings from charter vessels (range of 19% to 86% from 2013 to 2016, SEFSC ACL dataset) or private anglers (range of 10% to 67%), followed by headboats (average of 5%). From 2002 to 2016, recreational landings ranged from zero fish to 70,304 fish (SEFSC ACL dataset).

# 3.4.2.1 Permits by State

#### Commercial

South Atlantic golden tilefish endorsements, unlimited snapper grouper permits, and 225pound trip limit snapper grouper permits are issued to individuals residing in the South Atlantic and in other states and provinces (Table 3.4.1). Golden tilefish endorsements, which is a commercial endorsement attached to an unlimited snapper grouper permit, are issued to individuals residing in Florida (approximately 77%, **Table 3.4.1**), followed by South Carolina (18%) and North Carolina (4.5%). The largest number of commercial unlimited snapper grouper permits are issued to individuals residing in Florida (approximately 67%), followed by North Carolina (19%), South Carolina (9%), and Georgia (approximately 1%). Individuals in other states and provinces (Illinois, Louisiana, Michigan, Minnesota, New Jersey, New York, Ohio, Ontario, Oregon, Texas, and Virginia) also hold commercial unlimited snapper grouper permits, but these states represent a smaller percentage of the total number of issued permits. The largest number of commercial 225-pound trip limited snapper grouper permits are issued to individuals residing in Florida (86%), followed by North Carolina (9%) and South Carolina (2%). Individuals in other states (New Jersey, Texas, and Virginia) also hold commercial 225-pound trip limited snapper grouper permits, but these states represent a smaller percentage of the total number of issued permits. Endorsement and permit numbers vary from those reported in Section 3.3.1 because of the date accessed.

Table 3.4.1. Number of South Atlantic golden tilefish endorsements, unlimited snapper grouper permits, and 225-pound trip limit snapper grouper permits by state.

State	Golden Tilefish	Unlimited	225-lb Trip Limit
	Endorsement	Snapper	Snapper Grouper (SG2)
	(GTFE)	Grouper (SG1)	

NC	1	102	10
SC	4	47	2
GA	0	8	0
FL	17	362	98
Other States	0	24	4
Total	22	543	114

Source: SERO permit office, July 20, 2017.

#### Recreational

South Atlantic charter/headboat for snapper grouper permits are issued to individuals residing in the South Atlantic and in other states (**Table 3.4.2**). The largest number of charter/headboat for snapper grouper permits are issued to individuals residing in Florida (approximately 58%), followed by North Carolina (19%), South Carolina (10%), and Georgia (4%). Individuals in other states (Alabama, Delaware, Iowa, Illinois, Louisiana, Massachusetts, Maryland, Maine, Missouri, Mississippi, New Jersey, New York, Pennsylvania, Rhode Island, Tennessee, Texas, Virginia, and Wisconsin) also hold charter/headboat for snapper grouper permits, but these states represent a smaller percentage of the total number of issued permits. Permit numbers vary from those reported in Section 3.3.2 because of the date accessed.

Table 3.4.2. Number of South Atlantic charter/headboat for snapper grouper permits by state.

State	Charter/Headboat for Snapper Grouper (SC)
NC	313
SC	172
GA	63
FL	975
Other States	163
Total	1,686

Source: SERO permit office, July 20, 2017.

# 3.4.2 Social Environment for Blueline Tilefish

(NOTE: The following description was copied from Regulatory Amendment 25 and will be updated in the next version of this document.)

# **Fishing Communities**

In terms of where permit holders are landing blueline tilefish, **Figure 3.3.18** provides a ranking of the top fifteen communities with blueline tilefish landings and their regional quotient (RQ) in the South Atlantic for 2011 and 2013. Regional quotient is the amount of blueline tilefish landed by a community out of all blueline tilefish landed within the South Atlantic

region<sup>3</sup>. Landings for 2011 and 2013 are included here to demonstrate a recent shift in landings of blueline tilefish for certain communities and the subsequent change in both regional quotient and local quotient for communities.

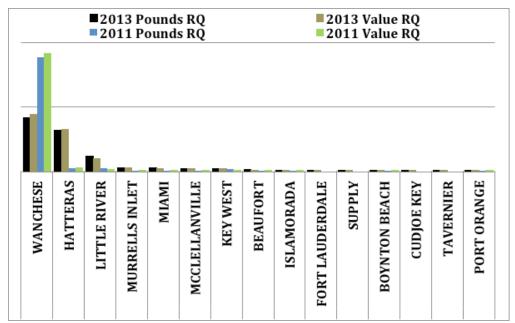


Figure 3.3.18. Blueline Tilefish Pounds and Value Regional Quotient (RQ) for Top 15 South Atlantic Communities in 2011 and 2013.

Source: NMFS: ALS

As evident in **Figure 3.3.18**, there has been a recent shift in where blueline tilefish have been landed. Wanchese, North Carolina dominated landings in 2011, but more recently landings have increased in both Hatteras, North Carolina and Little River, South Carolina. Overall, many communities saw their landings of blueline tilefish increase in recent years while Wanchese, NC has seen a decline in its RQ.

Because Wanchese still has the majority of blueline landings, it is useful to look at how blueline tilefish landings and value rank compared to other species landed in the community. **Figure 3.3.19** provides the local quotient for value and landings for the community of Wanchese. The local quotient is the percentage of value and landings of a particular species out of the total for all species landed at dealers within a community. Blueline tilefish represents 3% of value and less than 2% in terms of landings local quotient for Wanchese in 2013 and is ranked 7th out of the top 15. This is slightly higher than in 2011 where blueline tilefish were ranked 11<sup>th</sup> and had slightly lower percentages.

With Hatteras seeing an increase in blueline tilefish landings, the local quotient value can be instructive as to how important that species has become to that community also. With the recent increase in RQ, there may also be a corresponding change in its LQ for the community.

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<sup>&</sup>lt;sup>3</sup> The values on the y axis are not provided to protect confidentiality.

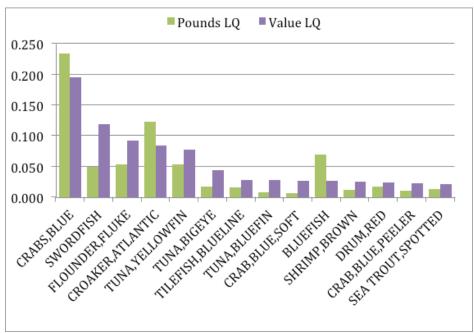


Figure 3.3.19. Top 15 species landed in Wanchese, North Carolina by local quotient (LQ) value for 2013.

Source: NMFS: ALS (2013).

Hatteras, North Carolina has an LQ value for blueline tilefish that is just above 3% and ranks 11<sup>th</sup> overall in **Figure 3.3.20.** Therefore, its importance within that community is slightly less than it is for Wanchese, but has increased in recent years in terms of RQ.

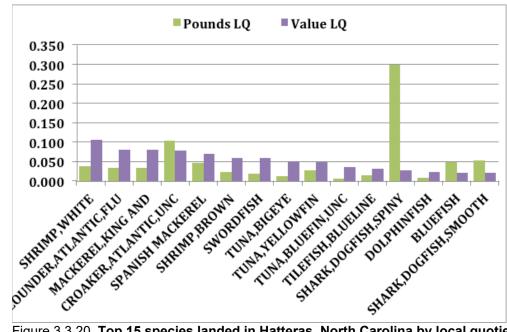


Figure 3.3.20. Top 15 species landed in Hatteras, North Carolina by local quotient (LQ) value for 2013.

Source: NMFS: ALS (2013).

The third community with a relatively high RQ is Little River, South Carolina (**Figure 3.3.21**). The LQ for blueline tilefish in that community is higher than that for Wanchese or Hatteras at slightly over 6% for value and ranks 6th in terms of value of all species landed.

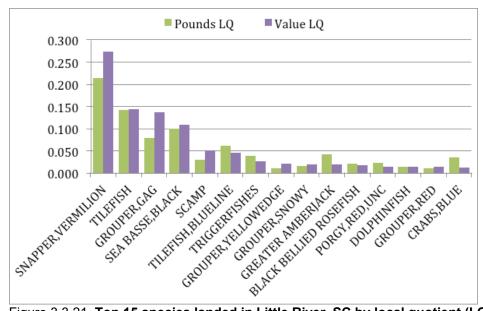


Figure 3.3.21. **Top 15 species landed in Little River, SC by local quotient (LQ) value for 2013.** Source: NMFS: ALS (2013).

While the LQ for value at the community level provides some measure of importance of that species for a community, it does not offer a view of that importance for an individual vessel. It is obvious that there has been some species substitution at the vessel level.

# 3.4.3.1 Environmental Justice

Executive Order 12898 requires federal agencies conduct their programs, policies, and activities in a manner to ensure individuals or populations are not excluded from participation in, or denied the benefits of, or subjected to discrimination because of their race, color, or national origin. In addition, and specifically with respect to subsistence consumption of fish and wildlife, federal agencies are required to collect, maintain, and analyze information on the consumption patterns of populations who principally rely on fish and/or wildlife for subsistence. The main focus of Executive Order 12898 is to consider "the disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the U.S. and its territories..." This executive order is generally referred to as environmental justice (EJ).

Commercial and recreational fishermen and associated industries could be impacted by the proposed actions. However, information on the race and income status for groups at the different participation levels (individual fishermen and crew) is not available. Although information is available concerning communities' overall status with regard to minorities and poverty (e.g., census data), such information is not available specific to fishermen and those involved in the industries and activities, themselves. To help assess whether any environmental justice concerns arise from the actions in this interim measure, a suite of indices were created to examine the social vulnerability of coastal communities. These indices rely on data from the U.S. Census

ACS 2010 through 2014 five-year estimates. The three indices are poverty, population composition, and personal disruptions. The variables included in each of these indices have been identified through the literature as being important components that contribute to a community's vulnerability. Indicators such as increased poverty rates for different groups, more single female-headed households and households with children under the age of five, disruptions such as higher separation rates, higher crime rates, and unemployment all are signs of populations experiencing vulnerabilities. Again, for those communities that exceed the threshold it would be expected that they would exhibit vulnerabilities to sudden changes or social disruption that might accrue from regulatory change.

**Figure 3.4.4** and **Figure 3.4.5** provide the social vulnerability of the top commercial and recreational communities. Several South Atlantic communities exceed the threshold of 0.5 standard deviation for at least one of the social vulnerability indices: Cocoa, Miami, Fort Pierce, Marathon, St. Augustine, and Fort Lauderdale, Florida; Savannah, Georgia; and Manteo and Morehead City, North Carolina. The communities of Cocoa, Florida; Miami, Florida; Fort Pierce, Florida; and Savannah, Georgia exceed the threshold for all three social vulnerability indices. These communities have substantial vulnerabilities and may be susceptible to further effects from any regulatory changes depending upon the direction and extent of that change.

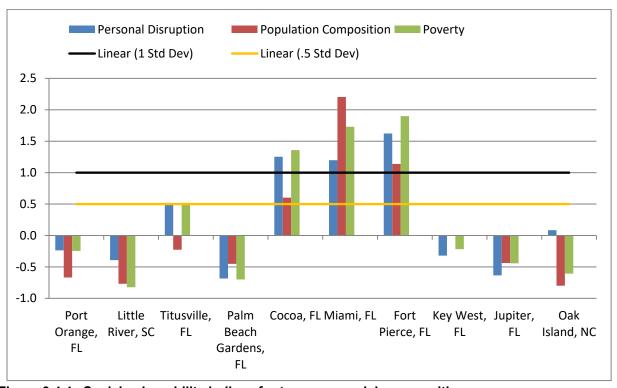


Figure 3.4.4. Social vulnerability indices for top commercial communities. Source: SERO, Community Social Vulnerability Indicators Database 2014 (ACS 2010-2014).

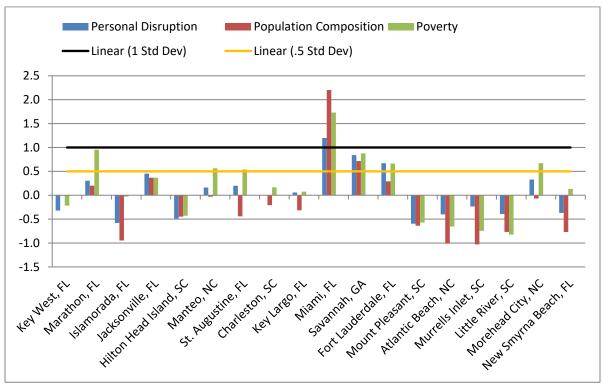


Figure 3.4.5. Social vulnerability indices for top recreational communities.

Source: SERO, Community Social Vulnerability Indicators Database 2014 (ACS 2010-2014).

People in these communities may be affected by fishing regulations in two ways: participation and employment. Although these communities may have the greatest potential for EJ concerns, no data are available on the race and income status for those involved in the local fishing industry (employment), or for their dependence on golden tilefish specifically (participation). Although no EJ issues have been identified, the absence of potential EJ concerns cannot be assumed.

# 3.5 Administrative Environment

# 3.5.1 Federal Fishery Management

Federal fishery management is conducted under the authority of the Magnuson-Stevens Act (16 U.S.C. 1801 et seq.), originally enacted in 1976 as the Fishery Conservation and Management Act. The Magnuson-Stevens Act claims sovereign rights and exclusive fishery management authority over most fishery resources within the EEZ, an area extending 200 nm from the seaward boundary of each of the coastal states, and authority over U.S. anadromous species and continental shelf resources that occur beyond the U.S. EEZ.

Responsibility for federal fishery management decision-making is divided between the U.S. Secretary of Commerce (Secretary) and eight regional fishery management councils that represent the expertise and interests of constituent states. Regional councils are responsible for preparing, monitoring, and revising management plans for fisheries needing management within their jurisdiction. The Secretary is responsible for collecting and providing the data necessary for the councils to prepare fishery management plans and for promulgating regulations to

implement proposed plans and amendments after ensuring that management measures are consistent with the Magnuson-Stevens Act and with other applicable laws. In most cases, the Secretary has delegated this authority to NMFS.

The Council is responsible for conservation and management of fishery resources in federal waters of the U.S. South Atlantic. These waters extend from 3 to 200 mi offshore from the seaward boundary of North Carolina, South Carolina, Georgia, and east Florida to Key West. The Council has thirteen voting members: one from NMFS; one each from the state fishery agencies of North Carolina, South Carolina, Georgia, and Florida; and eight public members appointed by the Secretary. On the Council, there are two public members from each of the four South Atlantic States. Non-voting members include representatives of the U.S. Fish and Wildlife Service, U.S. Coast Guard (USCG), State Department, and Atlantic States Marine Fisheries Commission (ASMFC). The Council has adopted procedures whereby the non-voting members serving on the Council Committees have full voting rights at the Committee level but not at the full Council level. The Council also established two voting seats for the Mid-Atlantic Council on the South Atlantic Mackerel Committee. Council members serve three-year terms and are recommended by state governors and appointed by the Secretary from lists of nominees submitted by state governors. Appointed members may serve a maximum of three consecutive terms.

Public interests also are involved in the fishery management process through participation on Advisory Panels and through council meetings, which, with few exceptions for discussing personnel and legal matters, are open to the public. The Council uses its Scientific and Statistical Committee (SSC) to review the data and science being used in assessments and fishery management plans/amendments. In addition, the regulatory process is in accordance with the Administrative Procedure Act, in the form of "notice and comment" rulemaking.

# 3.5.2 State Fishery Management

The state governments of North Carolina, South Carolina, Georgia, and Florida have the authority to manage fisheries that occur in waters extending three nautical miles from their respective shorelines. North Carolina's marine fisheries are managed by the Marine Fisheries Division of the North Carolina Department of Environmental Quality. The Marine Resources Division of the South Carolina Department of Natural Resources manages South Carolina's marine fisheries. Georgia's marine fisheries are managed by the Coastal Resources Division of the Department of Natural Resources. The Division of Marine Fisheries Management of the Florida Fish and Wildlife Conservation Commission is responsible for managing Florida's marine fisheries. Each state fishery management agency has a designated seat on the South Atlantic Council. The purpose of state representation at the Council level is to ensure state participation in federal fishery management decision-making and to promote the development of compatible regulations in state and federal waters.

The South Atlantic states are also involved through ASMFC in management of marine fisheries. This commission was created to coordinate state regulations and develop management plans for interstate fisheries. It has significant authority, through the Atlantic Striped Bass Conservation Act and the Atlantic Coastal Fisheries Cooperative Management Act, to compel adoption of complementary state regulations to conserve coastal species. The ASFMC is also represented at the Council but does not have voting authority at the Council level.

NMFS's State-Federal Fisheries Division is responsible for building cooperative partnerships to strengthen marine fisheries management and conservation at the state, inter-regional, and national levels. This division implements and oversees the distribution of grants for two national (Inter-jurisdictional Fisheries Act and Anadromous Fish Conservation Act) and two regional (Atlantic Coastal Fisheries Cooperative Management Act and Atlantic Striped Bass Conservation Act) programs. Additionally, it works with the ASMFC to develop and implement cooperative State-Federal fisheries regulations.

# 3.5.3 Enforcement

Both the NMFS Office for Law Enforcement (NOAA/OLE) and the USCG have the authority and the responsibility to enforce Council regulations. NOAA/OLE agents, who specialize in living marine resource violations, provide fisheries expertise and investigative support for the overall fisheries mission. The USCG is a multi-mission agency, which provides at sea patrol services for the fisheries mission.

Neither NOAA/OLE nor the USCG can provide a continuous law enforcement presence in all areas due to the limited resources of NOAA/OLE and the priority tasking of the USCG. To supplement at sea and dockside inspections of fishing vessels, NOAA entered into Cooperative Enforcement Agreements with all but one of the states in the Southeast Region (North Carolina), which granted authority to state officers to enforce the laws for which NOAA/OLE has jurisdiction. In recent years, the level of involvement by the states has increased through Joint Enforcement Agreements, whereby states conduct patrols that focus on federal priorities and, in some circumstances, prosecute resultant violators through the state when a state violation has occurred.

The NOAA Office of General Counsel Penalty Policy and Penalty Schedule is available online at <a href="http://www.gc.noaa.gov/enforce-office3.html">http://www.gc.noaa.gov/enforce-office3.html</a>.

# **Chapter 4. Environmental Effects and Comparison of Alternatives**

# 4.1 Action 1. Revise the golden tilefish acceptable biological catch, total annual catch limit, and annual optimum yield

# 4.1.1 Biological Effects

Expected effects to golden tilefish and co-occurring species

Alternative 1 (No Action) would ignore the acceptable biological catch (ABC) and overfishing limit (OFL) recommendations of the Scientific and Statistical Committee (SSC) and the most recent stock assessment; and in doing so would no longer be based on best scientific information available (BSIA) and, therefore, is not a viable alternative.

Relative to Alternative 1 (No Action), Alternative 2 through Alternative 4 are viable alternatives because they do not exceed the SSC recommended ABCs and would be expected to result in neutral to positive biological effects to the golden tilefish stock.

All of the action alternatives will result in higher ACLs than the status quo. The acceptable biological catch, total annual catch limit, and annual optimum yield would increase annually until 2026 and remain in place after 2026 until modified. The recommended acceptable biological catch includes recreational estimates from the Marine Recreational Information Program's Fishing Effort Survey.

The NMFS March 2022 Quarterly Update on the Report to Congress on the Status of U.S. Fisheries indicates that golden tilefish in the South Atlantic is

#### Alternatives\*

- 1 (No Action). The total annual catch limit and annual optimum yield for golden tilefish are equal to the current acceptable biological catch.
- 2. Revise the total annual catch limit and annual optimum yield for golden tilefish and set them equal to the recommended acceptable biological catch.
- 3. Revise the total annual catch limit and annual optimum yield for golden tilefish and set them equal to 95% of the recommended acceptable biological catch.
- 4. Revise the total annual catch limit and annual optimum yield for golden tilefish and set them equal to 90% of the recommended acceptable biological catch.
- \*See Chapter 2 for detailed language of alternatives. Preferred indicated in bold.

not undergoing overfishing and is not overfished. Increasing golden tilefish catch levels as proposed in this amendment would not be expected to result in negative biological impacts since overall catch would be constrained to the ACL and accountability measures (AMs) would prevent the ACL and OFL from being exceeded, correct for overages if they occur (if the stock is in an overfished condition), and prevent overfishing. In addition, the proposed increase in the total ACL for golden tilefish is based on the SSC's recommended ABC for golden tilefish in the South Atlantic region. BSIA from SEDAR 66 (2018) indicates that the golden tilefish ACL can be increased without having negative effects on the sustainability of the stock. Furthermore,

since the magnitude of the proposed increase in the ACL is relatively small a substantial increase in fishing effort is not expected.

**Preferred Alternative 2** would result in the least biological benefit to the golden tilefish as there would be no buffer between the ABCs and the total ACLs. Biological benefits resulting from **Alternatives 3** and **4** would increase as the buffer increases. Although **Preferred Alternative 2** would allow the greatest amount of harvest of the action alternatives considered, it is based on the SSC's ABC recommendation and BSIA, and represents a catch level that does not result in overfishing.

Substantial changes in fishing effort or behavior are not expected as a result of this action, thus the modifications to ACL and OY proposed ACLs under this action would not be expected to result in any biological effects, positive or negative, on co-occurring species or protected species in the area (refer to BPA in Appendix G).

# 4.1.2 Economic Effects

In general, ACLs that allow for more fish to be landed can result in increased positive economic effects if harvest increases without notable long-term effects on the health of a stock. The ACL does not directly impact the fishery for a species unless harvest changes, fishing behavior changes, or the ACL is exceeded, thereby potentially triggering AMs such as harvest closures or other restrictive measures. As such, ACLs that are set above the observed landings in the fishery for a species and do not change harvest or fishing behavior may not have realized economic effects each year. Nevertheless, ACLs set above observed harvest levels do create a gap between the ACL and typical landings that may be utilized in years of exceptional abundance or accessibility to a species, thus providing the opportunity for increased landings and a reduced likelihood of triggering restrictive AMs. As such, there are potential economic benefits from ACLs that allow for such a gap. The opposite is true for ACLs that constrain harvest or fishing effort within a fishery or reduce the previously described gap between average landings and the ACL. Alternative 1 (No Action) is not a viable alternative since it does not implement BSIA. Among the viable alternatives, Alternative 2 would allow for the highest potential economic benefits followed by Alternative 3 and Alternative 4.

# 4.1.3 Social Effects

The ACL for any stock does not directly affect resource users unless the ACL is met or exceeded, in which case AMs that restrict, or close harvest could negatively impact the commercial, for-hire, and private recreational sectors. AMs can have significant direct and indirect social effects because, when triggered, can restrict harvest in the current season or subsequent seasons. While the negative effects are usually short-term, they may at times induce other indirect effects through changes in fishing behavior or business operations that could have long-term social effects, such as increased pressure on another species, or fishermen having to stop fishing altogether due to regulatory closures. However, restrictions on harvest contribute to sustainable management goals, and are expected to be beneficial to fishermen and communities in the long term. Generally, the higher the ACL the greater the short-term social benefits that would be expected to accrue if harvest is sustainable.

Under Alternative 2, Alternative 3, and Alternative 4 the ACL for golden tilefish would be based on the most recent stock assessment and updated MRIP estimates. Adjustments in an ACL based on updated information are necessary to ensure continuous social benefits over time, Alternative 1 (No Action) would not update the golden tilefish ACL based on current information and would not provide the social benefits associated with up-to-date scientific information.

In general, a higher ACL would lower the chance of triggering a recreational or commercial AM and result in the lowest level of negative effects on the recreational and commercial sectors. Additionally, higher ACLs may provide opportunity for commercial and recreational fishermen to expand their harvest providing social benefits associated with increased income to fishing businesses within the community and higher trip satisfaction. Among the action alternatives, **Alternative 2** would be the most beneficial for fishermen, followed by **Alternative 3**, and **Alternative 4**.

# **4.1.4** Administrative Effects

Modifying the total ACL and annual OY for golden tilefish through **Preferred Alternative 2** through **4** would not have effects on the administrative environment, outside of the requisite public notices. Under all of the action alternatives, the ACL will increase so the likelihood of exceeding the ACL and requiring in-season (if overfished) or post season AMs will be reduced from the status quo. The overall administrative effects are likely going to be minimal and the same across the viable alternatives.

# 4.2 Action 2. Revise sector allocations and sector annual catch limits for golden tilefish

# **4.2.1** Biological Effects

Biological effects are not expected to be substantially different between Alternative 1 (No Action) and Preferred Alternative 2, since the allocation percentages would be similar and do not affect the total ACL specified in Action 1. The commercial sector has effective in-season AMs in place to prevent the commercial ACL from being exceeded.

Golden tilefish are most likely to be captured with species such as yellowedge grouper, warsaw grouper, snowy grouper, silk snapper, and wreckfish. However, many of the overlapping occurrences for these species with golden tilefish were minimal except for yellowedge grouper. Substantial changes in fishing effort or behavior are not expected as a result of this action, thus the proposed sector and gear type allocations under this action would not be expected to result in any biological effects, positive or negative, on co-occurring species (refer to BPA in Appendix G).

#### Alternatives\*

- 1 (No Action) Retain the current recreational sector and commercial sector allocations as 3.00% and 97.00%, respectively, of the revised total annual catch limit for golden tilefish.
- 2. Allocate 96.70% of the revised total annual catch limit for golden tilefish to the commercial sector and 3.30% of the revised total annual catch limit for golden tilefish to the recreational sector.

Note: Within the commercial sector 25% is allocated to hook and line (HL) component and 75% to the longline (LL) component.

\*See Chapter 2 for detailed language of alternatives. Preferred indicated in bold.

# 4.2.2 Economic Effects

In general, sector ACLs that allow for more fish to be landed can result in increased positive economic effects if harvest increases without notable long-term effects on the health of a stock. The sector ACL does not directly impact the fishery for a species unless harvest changes, fishing behavior changes, or the sector ACL is exceeded, thereby potentially triggering AMs such as harvest closures or other restrictive measures. As such, sector ACLs that are set above observed landings in a fishery for a species and do not change harvest or fishing behavior may not have realized economic effects each year. Nevertheless, sector ACLs set above observed average harvest levels do create a gap between the sector ACL and typical landings that may be utilized in years of exceptional abundance or accessibility of a species, thus providing the opportunity for increased landings and a reduced likelihood of triggering restrictive AMs. As such there are potential economic benefits from sector ACLs that allow for such a gap. Under this notion, Alternative 1 (No Action) would allow for comparatively higher potential economic benefits than Alternative 2 for the commercial sector. The opposite would be true for the recreational sector, where Alternative 2 would have comparatively higher economic benefits than Alternative 1 (No Action).

# 4.2.3 Social Effects

Sector allocations exist for the recreational and commercial sectors already, **Alternative 1 (No Action)** would maintain the current allocation percentages and may have few social effects.

With Alternative 2 there would be a less than 1% decrease in the commercial percentage compared to Alternative 1 (No Action). While this change in percentage is negligible, some negative social effects may occur if commercial fishermen have a negative perception of this change. In the past there has been some resistance to further decreasing a given sector's percentage allocation.

It is difficult to predict the social effects with any allocation scheme as it would depend upon other actions in conjunction with this one. A reduction in allocation for one sector may be compounded by a restrictive choice of ABC or ACL (**Action 1**) and may have further effects that could be either negative or positive depending upon the combination of management actions. Therefore, the choice of an allocation would need to be assessed with other actions within this amendment to determine the overall social effects and whether short-term losses are offset by any long-term biological gains.

# 4.2.4 Administrative Effects

Administrative effects would not vary between **Alternative 1 (No Action)** and **Preferred Alternative 2**. The overall administrative effects are likely going to be minimal and the same across the viable alternatives. Administrative burdens would relate to data monitoring, outreach, and enforcement of a short fishing season. Other administrative burdens that may result would take the form of development and dissemination of outreach and education materials for fishery participants and law enforcement.

# 4.3 Action 3. Modify the fishing year for commercial golden tilefish hook and line and longline components

# 4.3.1 Biological Effects

The actions proposed would have a minimal biological effect to the golden tilefish stock because they do not significantly change the fishing year. Alternative 2 and Alternative 3 and associated sub-alternatives would shift the start date of the fishing year for the commercial hook and line component by two, three or four weeks. Fishery participants indicated that with a staggered start between the longline and hook and line component, they will be better able to meet market demand.

Regardless of the alternative selected, this action is not anticipated to have negative biological impacts on golden tilefish. The commercial sectors are constrained by ACLs (as determined in Action 1 and sector allocations as set in Action 2) and AMs. There is not expected to be any difference in the biological impacts of Alternative 1 and Alternative 2 and Alternative 3 and associated sub-actions. None of the alternatives would modify the fishery in such a way that it would result in impacts to protected species.

#### Alternatives\*

- 1. (No Action). Do not modify the fishing year for the commercial hook and line or commercial longline components. Current fishing year for both sectors is January 1- December 31.
- **2.** Modify the fishing year for the commercial hook and line component.
  - **2a**. to start January 15.
  - 2b. to start January 22.
  - 2c. to start February 1.
- **3.** Modify the fishing year for the commercial longline component.
  - 3a. to start January 15.
  - 3b. to start January 22.
  - **3c.** to start February 1.

# 4.3.2 Economic Effects

From a total harvest perspective, all of the alternatives in Action 3 would likely result in all of the commercial sector ACL being landed. There may be some economic benefits for both the commercial hook and line component (Alternative 2) starting at a different time than the commercial longline component (Alternative 3) if the start times vary which would presumably reduce the amount of golden tilefish being landed at any single time, thereby potentially avoiding oversupplying the market and leading to improved prices. Improved prices would lead to higher net operating revenue for commercial vessels. Additionally, a later start time for the commercial longline component would allow harvest to remain open later in the year which would allow vessels harvesting under the component to remain fishing for golden tilefish during Lent when prices tend to be relatively high. Under this notion, Sub-alternative 3c may offer the highest economic benefits followed by Sub-alternative 3b, and Sub-alternative 3c in comparison to Alternative 1 (No Action).

# 4.3.3 Social Effects

Golden tilefish is an important commercial species in Florida, particularly in southern Florida. Changes to the fishing year for the commercial hook-and-line or the commercial longline

<sup>\*</sup>See Chapter 2 for detailed language of alternatives. Preferred indicated in bold.

components could change the level of access to the golden tilefish stock during periods when golden tilefish are available. However, long-term biological benefits of maintaining a healthy stock would contribute to future fishing opportunities for both the commercial and recreational sectors.

The effects on commercial fishermen and related businesses would be associated with access to golden tilefish stock during periods when the dockside value is highest, and if the commercial ACL is met and an early closure occurs.

# 4.3.4 Administrative Effects

Administrative burdens for Alternative 1 (No Action), Alternative 2, and Alternative 3 would be similar and are expected to be minimal. Administrative burden would be associated with rule-making, education and outreach and enforcement.

# 4.4 Action 4. Establish an incidental trip limit allowance for the golden tilefish longline component once the longline quota is caught.

# 4.4.1 Biological Effects

An incidental trip allowance for longline endorsement holders to harvest using hook and line gear once the longline quota is met, would result in the hook and line quota to be met sooner than under Alternative 1 (No Action). This would result in a shorter fishing season for the hook and line sector. Alternative 2, Alternative 3, and Alternative 4 would vary in the amount of the trip allowance. It is to be expected that the hook and line quota would be met sooner under Alternative 4, then Alternative 3 and Alternative 2. Regardless of the alternative selected, this action is not anticipated to have negative biological impacts on golden tilefish. The biological effects of the proposed incidental trip limit allowance alternatives would be expected to be neutral compared to Alternative 1 (No Action), because annual catch limits and accountability measures are in place to cap harvest and trigger corrective action if the annual catch limit is exceeded. None of the alternatives would modify the fishery in such a way that it would result in impacts to protected species.

# 4.4.2 Economic Effects

From a total harvest perspective, all of the alternatives in **Action 4** would likely result in all of the commercial sector ACL being landed. There would be some economic benefits for vessels with a longline endorsement from allowing some level of harvest of golden tilefish when such harvest would otherwise be prohibited (**Alternatives 2-4**) however this

#### Alternatives\*

- 1 (No Action). Do not establish an incidental trip allowance for the longline component once the longline quota of golden tilefish is caught. Vessels that have a golden tilefish longline endorsement may not fish for golden tilefish using hook-and-line gear under the 500-lb gutted weight, trip limit.
- **2.** Establish a 100 lb gutted weight. incidental trip limit allowance of golden tilefish for the longline endorsement holders using hook and line gear once the longline quota is caught.
- **3.** Establish a 150 lb gutted weight. incidental trip limit allowance of golden tilefish for the longline endorsement holders using hook and line gear once the longline quota is caught.
- 4. Establish a 250 lb gutted weight incidental trip limit allowance of golden tilefish for the longline endorsement holders using hook and line gear once the longline quota is caught.
- \*See Chapter 2 for detailed language of alternatives. Preferred indicated in bold.

would come at the expense of harvest for vessels without such endorsement, thereby likely resulting in a transfer of economic benefits between fishery participants. From the perspective of potential benefits to vessels that have a golden tilefish longline endorsement, Alternative 4 would provide the highest potential economic benefits followed by Alternative 3, Alternative 2, and Alternative 1 (No Action). From the perspective of vessels within the commercial fishery without a longline endorsement, the economic ranking would be the opposite.

# 4.4.3 Social Effects

In general, management measures that increase the number of fish an angler can land are expected to be more beneficial to fishermen and fishing communities by increasing access to the resource, so long as overharvest is not occurring to negatively affect the stock in the long term. Once the ACL is met or exceeded, triggering AMs that restrict, or close harvest could negatively

affect the commercial fleet. Golden tilefish is expected to reach its commercial ACL which would trigger the AMs, closing harvest, resulting in negative social effects due to restricted access to the resource.

Allowing incidental harvest via hook and line **Alternative 2**, **Alternative 3**, and **Alternative 4**) would increase access for vessels that have a golden tilefish longline endorsement and is anticipated to result in direct social benefits to longline commercial fishing businesses in the form of increased revenue and indirect social benefits to fishing communities in the form of increased fish available to the market or for personal consumption. Alternatively, allowing incidental harvest via hook and line for the longline component of the fishery may result in conflict with vessels that do not hold a longline endorsement and have historically been provided exclusive access to the hook and line ACL. This would be especially true if the additional landings result in the hook and line ACL being met or exceeded, triggering AMs, resulting in negative social effects associated with loss of access to the resource for fishing communities.

#### 4.4.4 Administrative Effects

Administrative burdens for Alternative 2, Alternative 3, and Alternative 4 would be similar and are expected to be minimal. Administrative burden would be associated with rule-making, education and outreach and enforcement.

# 4.5 Action 5. Modify post-season recreational accountability measures for golden tilefish.

#### 4.5.1 Biological Effects

#### Expected effects to golden tilefish and co-occurring species

Biological benefits would be expected to be greater for the alternative that provides the most timely and realistic option chosen to trigger and implement an AM.

Under Alternative 1 (No Action), an in-season closure would likely not be triggered due to need for both the total and recreational ACL to be exceeded AND for the stock to be overfished. Golden tilefish are not overfished and as such the AM would not be triggered unless this status determination changes.

Alternative 2 would correct for recreational overages of the ACL in the following fishing season. There is no mechanism to prevent the recreational ACL from being exceeded in-season since the current in-season AM requires the stock to be overfished. As such, Alternative 2 could have negative biological effects to the golden tilefish stock.

Alternative 3 would result in biological benefit to the stock in that it is likely to prevent overages of the recreational ACL. However, this alternative would not correct for an overage if it were to occur due to an unforeseen increase in recreational effort.

#### Alternatives\*

Alternative (No Action). If, recreational landings exceed the recreational ACL; golden tilefish is identified as overfished; AND the combined commercial and recreational ACL is exceeded in the same calendar year, recreational landings will be monitored for a persistence in increased landings and *if deemed necessary*, reduce the length of the recreational fishing season and the recreational ACL by the amount of the recreational ACL overage.

Alternative 2. If recreational landings exceed the recreational ACL, recreational landings will be monitored for a persistence in increased landings and *if deemed necessary*, reduce the length of the recreational fishing season and the recreational ACL by the amount of the recreational ACL overage.

Alternative 3. NMFS will annually announce the recreational fishing season start and end. The fishing season will start on (date) and end on the date National Marine Fisheries Service projects the recreational annual catch limit will be met

Biological benefits to the golden tilefish stock would be greatest under Alternative 3, followed by **Alternative 2** and **Alternative 1** (No Action).

#### 4.5.2 Economic Effects

Recreational AMs typically consist of corrective measures that create short-term indirect negative economic effects by curtailing harvest and fishing activity when harvest has exceeded the sector ACL, thus potentially affecting net revenues of for-hire operations and CS on recreational fishing trips. In the long-term, these measures also help reduce the risk of overfishing a stock to the point of depletion, which results long-term economic benefits through

sustained harvest and fishing activity as well as the for-gone need for more stringent restrictive management measures that may be needed to rebuild a depleted stock.

Alternative 1 (No Action) would retain a post-season shortening of the season and a potential payback provision for an overage of the sector ACL that would reduce the sector ACL by the amount of the overage as long as blueline tilefish are overfished. There would continue to be no safeguard in place outside of the existing season to prevent the total ACL from being exceeded. This could result in short-term economic benefits for the recreational sector due to increased harvest and long-term potential economic costs to fishery participants. If a reduced fishing season is implemented in Action 7, these potential economic effects would be largely mitigated. This alternative would not occur if the species is not overfished, therefore the economic effects are dependent on the status of the golden tilefish stock.

The economic effects of Alternative 2 would likely be similar to those of Alternative 1 (No Action), but the AM would occur regardless of the stock status, thus has a higher likelihood of occurring. Alternative 3 would result in a fishing season that is announced annually with set start and end dates. This AM would limit overall long-term harvest of blueline tilefish but could result in economic benefits that mitigate the short-term cost of the AM itself by allowing more time to adjust to the changing harvest regulations through a consistent announcement of the season length.

#### 4.5.3 Social Effects

AMs can have direct and indirect social effects because, when triggered, can restrict harvest in the current season or subsequent seasons. While the negative effects are usually short-term, they may at times induce other indirect effects through changes in fishing behavior or business operations that could have long-term social effects. Some of those effects are similar to other thresholds being met and may involve switching to other species or discontinuing fishing altogether. Those restrictions usually translate into reduced opportunity for harvest, which in turn can change fishing behaviors. Those behaviors can increase pressure on other stocks or amplify conflict. While these negative effects are usually short term, they may at times induce other indirect effects that can have a lasting effect on a community.

Alternative 1 (No Action) would not modify the current post-season recreational AMs for golden tilefish (a season length reduction provision if overfished and stock ACL is exceeded). Inconsistent closure dates may make it challenging for for-hire businesses to plan their fishing activities. Overall, longer seasons result in increased fishing opportunities for the recreational sector and increased revenue opportunities for the for-hire sector. Reducing the season length is anticipated to result in direct negative social effects associated with loss of access to the resource.

Alternative 2, would reduce the following fishing season in response to landings exceeding the recreational ACL, but it does not include qualifying language stating that golden tilefish must identified as overfished; AND the combined commercial and recreational ACL must be exceeded in the same calendar year. As such, the fishing season may vary significantly from year to year due to changes in fishing behavior or environmental conditions. Inconsistent fishing seasons can

make it challenging for private anglers and for-hire business to plan their fishing activities through the long-term.

Alternatively, **Alternative 3** would have NMFS announce the length of the recreational season for golden tilefish in the *Federal Register* prior to the start date each year, with an end date corresponding to when the recreational ACL is projected to be met for that year. While the end date for golden tilefish may shift each year, announcing at the beginning of the season would allow private anglers and for-hire businesses to plan their activities around the closure in advance.

#### 4.5.4 Administrative Effects

Administrative burdens such as data monitoring, rulemaking, outreach, and enforcement would be similar for **Alternative 1** (**No Action**), **Alternative 2**, and **Alternative 3**. If triggered, **Alternative 2** would require a season announcement notice for a reduced season length. **Alternative 3** would also require a season announcement notice in the *Federal Register* annually prior to the season start date.

#### 4.6 Action 6. Modify blueline tilefish recreational bag limit.

#### 4.6.1 Biological Effects

Reduction of the recreational bag limit under Alternative 2 and Alternative 3 would be expected to have a positive biological effect on the stock with less recreational pressure on the stock. Alternative 4 would also lead to less recreational harvest if captain and crew are not allowed to retain bag limit quantities on each fishing trip. All of the action alternatives (Alternative 2, Alternative 3 and Alternative 4) could result in a lengthened recreational fishing season due to this reduction in recreational harvest. This action would not change how or where the fishery is conducted and is not expected to have any impacts on protected species.

#### 4.6.2 Economic Effects

Generally, angler satisfaction increases with the number of fish that can be harvested and the size of the fish. The smaller the bag limit the greater the probability that the satisfaction from an angler trip could be affected. Anglers tend to land two or fewer

#### Alternatives\*

- 1 (No Action). The current recreational blueline tilefish bag limit is 3 per person per day. Captains and crew of for-hire vessels with valid Federal South Atlantic Charter/Headboat Snapper Grouper Permits are allowed to retain bag limit quantities of all snapper grouper species during the open recreational season.
- **2.** Reduce recreational blueline tilefish bag limit to 2 fish per person per day.
- **3.** Reduce recreational blueline tilefish bag limit to 1 fish per person per day.
- 4. Do not allow retention of blueline tilefish by captain and crew.
- \*See Chapter 2 for detailed language of alternatives. Preferred indicated in bold.

blueline tilefish on a single trip. Setting the bag limit at 2 fish (Alternative 2) or 1 fish per person (Alternative 2) would have greater negative economic effects on a trip-level due to constraining harvest and related CS. Removing a captain and crew bag limit (Alternative 4) may also constrain harvest leading to similar effects in comparison to Alternative 1 (No Action). Conversely, more restrictive retention limits would allow for longer open harvest seasons.

#### 4.6.3 Social Effects

In general, a reduction in the recreational bag limit (Alternative 2 and Alternative 3) or prohibiting retention of fish by captain and crew (Alternative 4) may help slow the rate of harvest, lengthen a season, and prevent the ACL from being exceeded. However, bag and vessel limits that are too low may make fishing trips inefficient and lower angler satisfaction.

The higher bag limit under **Alternative 1 (No Action)** would likely have little effect on recreational fishermen in the short-term but could result in negative effects in the future if the recreational ACL is regularly exceeded. Slowing the rate of harvest and ensuring sustainable of harvest of the blueline tilefish stock would provide for long-term social benefits.

#### **4.6.4** Administrative Effects

Administrative burdens for Alternative 1 (No Action), Alternative 2, and Alternative 3 would be similar and are expected to be minimal. Administrative burden would be associated with rule-making, education and outreach and enforcement.

#### 4.7 Modify blueline tilefish recreational season.

#### 4.7.1 Biological Effects

The actions proposed would have a positive biological effect to the blueline tilefish stock because all of the action alterantives would result in a shortened recreational fishing season for blueline tilefish.

Alternative 2 and Alternative 3 would reduce the length of the season from four months to three.

Alternative 4 and Alternative 5 would reduce the fishing season to two months. Alternative 2 and Alternative 4 would keep the current start date of May 1, but the season would end eariler. Alternative 3 and Alternative 5 would shift the start dates a bit later but would have the same end date. Without a month by month analysis of landings, it is difficult to predict which alternatives would have the most positive impact on the stock.

Regardless of the alternative selected, this action is not anticipated to have negative biological impacts on

#### Alternatives\*

- 1 (No Action). Do not modify the blueline tilefish recreational season. The current recreational season is May 1-August 31.
- **2.** Modify blueline tilefish recreational season to May 1 through July 30.
- **3.** Modify blueline tilefish recreational season to June 1 through August 31.
- **4.** Modify blueline tilefish recreational season to May 1 through June 30.
- **5.** Modify blueline tilefish recreational season to July 1 through August 31.

\*See Chapter 2 for detailed language of alternatives. Preferred indicated in bold.

blueline tilefish. The biological effects of the proposed trip limit alternatives would be expected to be neutral compared to **Alternative 1** (No Action), because annual catch limits and accountability measures are in place to cap harvest and trigger corrective action if the annual catch limit is exceeded. None of the alternatives would modify the fishery in such a way that it would result in impacts to protected species.

#### 4.7.2 Economic Effects

Generally, prolonged time periods when recreational harvest is allowed can result in increased economic benefits. Allowing the recreational harvest to be open for longer periods of time can help ensure that the ACL is harvested each year and all associate economic benefits from that harvest to recreational anglers is incurred. Conversely, this also creates unpredictability in season length and when harvest will close if the accountability measure is triggered.

If the ACL is not fully harvested during the established season, it can lead to fewer short-term economic benefits, thus there is the potential for Alternative 2, Alternative 3, Alternative 4, and Alternative 5 to have lower economic benefits than Alternative 1 (No Action).

Alternative 1 (No Action) provides the longest fishing season (4 months), thus the greatest opportunity to fully harvest the ACL and the highest potential short-term economic benefits, followed by Alternative 2 and Alternative 3 (three months), and Alternative 3 and Alternative 4 (two months).

#### 4.7.3 Social Effects

Imposing a recreational season could change the level of access to blueline tilefish during periods when they are available and when participation in the blueline tilefish portion of the

snapper grouper fishery is highest. However, long-term biological benefits of maintaining a healthy stock would contribute to future fishing opportunities for both the commercial and recreational sectors.

The social effects of Alternative 2, Alternative 3, Alternative 4, and Alternative 5 compared to Alternative 1 (No Action) would depend on when recreational effort is the highest for blueline tilefish. Generally, access to blueline tilefish for recreational participants will depend on the season length specified. Social benefits for individual communities highly engaged in the recreational blueline tilefish fishery (Section 3.4) will vary based on when participation in the fishery is the highest in that community.

#### 4.7.4 Administrative Effects

Alternative 2, Alternative 3, Alternative 4 and Alternative 5 may cause temporary administrative burdens in the form of cost, time, or law enforcement efforts to react to the changes. However, since a recreational season is already in place, the effects to the administrative environment are not expected to be significant.

## 4.8 Action 8. Modify post-season recreational accountability measures for blueline tilefish.

#### 4.8.1 Biological Effects

#### Expected effects to blueline tilefish and cooccurring species

Biological benefits would be expected to be greater for the alternative that provides the most timely and realistic option chosen to trigger and implement an AM.

Under Alternative 1 (No Action), the many triggers (recreational ACL and total ACL exceeded and the stock being overfished) would likely result in the post-season AM not being triggered. Based on SEDAR 50 (SAFMC 2017), Blueline tilefish are not overfished but are undergoing overfishing. As such the post-season AM would not be triggered unless this status determination changes.

Alternative 2 would allow for the correction of recreational overages of the ACL in the following fishing season. There is no mechanism to prevent the recreational ACL from being exceeded in-season since the current in-season AM requires the stock to be overfished. As such, the recreational ACL may

#### Alternatives\*

Alternative (No Action). If, recreational landings exceed the recreational ACL; blueline tilefish is identified as overfished; AND the combined commercial and recreational ACL is exceeded in the same calendar year, recreational landings will be monitored for a persistence in increased landings and if deemed necessary, reduce the length of the recreational fishing season and the recreational ACL by the amount of the recreational ACL overage.

Alternative 2. If recreational landings exceed the recreational ACL, recreational landings will be monitored for a persistence in increased landings and *if deemed necessary*, reduce the length of the recreational fishing season and the recreational ACL by the amount of the recreational ACL overage

Alternative 3. NMFS will annually announce the recreational fishing season start and end. The fishing season will start on (date) and end on the date National Marine Fisheries Service projects the recreational annual catch limit will be met

be exceeded during the season and could result in a large season reduction from the previous year. Alternative 2 could have negative biological effects to the blueline tilefish stock.

Alternative 3 would result in biological benefit to the stock in that it is likely to prevent overages of the recreational ACL. However, this alternative would not correct for an overage if it were to occur due to an unforeseen increase in recreational effort.

Biological benefits to blueline tilefish would be greatest under Alternative 3, followed by Alternative 2 and Alternative 1 (No Action).

#### 4.8.2 Economic Effects

Recreational AMs typically consist of corrective measures that create short-term indirect negative economic effects by curtailing harvest and fishing activity when harvest has exceeded the sector ACL, thus potentially affecting net revenues of for-hire operations and CS on recreational fishing trips. In the long-term, these measures also help reduce the risk of overfishing a stock to the point of depletion, which results long-term economic benefits through sustained harvest and fishing activity as well as the for-gone need for more stringent restrictive management measures that may be needed to rebuild a depleted stock.

Alternative 1 (No Action) would retain a post-season shortening of the season and a potential payback provision for an overage of the sector ACL that would reduce the sector ACL by the amount of the overage as long as blueline tilefish are overfished. There would continue to be no safeguard in place outside of the existing season to prevent the total ACL from being exceeded. This could result in short-term economic benefits for the recreational sector due to increased harvest and long-term potential economic costs to fishery participants. If a reduced fishing season is implemented in Action 7, these potential economic effects would be largely mitigated. This alternative would not occur if the species is not overfished, therefore the economic effects are dependent on the status of the blueline tilefish stock.

The economic effects of Alternative 2 would likely be similar to those of Alternative 1 (No Action), but the AM would occur regardless of the stock status, thus has a higher likelihood of occurring. Alternative 3 would result in a fishing season that is announced annually with set start and end dates. This AM would limit overall long-term harvest of blueline tilefish but could result in economic benefits that mitigate the short-term cost of the AM itself by allowing more time to adjust to the changing harvest regulations through a consistent announcement of the season length.

#### 4.8.3 Social Effects

AMs can have direct and indirect social effects because, when triggered, can restrict harvest in the current season or subsequent seasons. While the negative effects are usually short-term, they may at times induce other indirect effects through changes in fishing behavior or business operations that could have long-term social effects. Some of those effects are similar to other thresholds being met and may involve switching to other species or discontinuing fishing altogether. Those restrictions usually translate into reduced opportunity for harvest, which in turn can change fishing behaviors. Those behaviors can increase pressure on other stocks or amplify conflict. While these negative effects are usually short term, they may at times induce other indirect effects that can have a lasting effect on a community.

Alternative 1 (No Action) would not modify the current post-season recreational AMs for blueline tilefish (a season length reduction provision if overfished and stock ACL is exceeded). Inconsistent closure dates may make it challenging for for-hire businesses to plan their fishing activities. Overall, longer seasons result in increased fishing opportunities for the recreational sector and increased revenue opportunities for the for-hire sector. Reducing the season length is anticipated to result in direct negative social effects associated with loss of access to the resource.

Alternative 2, would reduce the following fishing season in response to landings exceeding the recreational and total ACL, but it does include qualifying language stating that blueline tilefish must identified as overfished; AND the combined commercial and recreational ACL must be exceeded in the same calendar year. As such, the fishing season may vary significantly from year to year due to changes in fishing behavior or environmental conditions. Inconsistent fishing seasons can make it challenging for private anglers and for-hire business to plan their fishing activities through the long-term.

Alternatively, **Alternative 3** would have NMFS announce the length of the recreational season for blueline tilefish in the *Federal Register* prior to the start date each year, with an end date corresponding to when the recreational ACL is projected to be met for that year. While the end date for blueline tilefish may shift each year, announcing at the beginning of the season would

allow private anglers and for-hire businesses to plan their activities around the closure in advance.

#### **4.8.4** Administrative Effects

Administrative burdens such as data monitoring, rulemaking, outreach, and enforcement would be similar for **Alternative 1** (**No Action**), **Alternative 2**, and **Alternative 3**. If triggered, **Alternative 2** would require a season announcement notice for a reduced season length. **Alternative 3** would also require a season announcement notice in the *Federal Register* annually prior to the season start date.

# Chapter 5. DRAFT Council's Rationale for the Preferred Alternatives

# 5.1 Action 1. Revise the golden tilefish acceptable biological catch, total annual catch limit, and annual optimum yield

### **5.1.1 Snapper Grouper Advisory Panel Comments and Recommendations**

- Clarify that catch levels are dependent on when the amendment is implemented.
- Continued concern about uncertainty of recreational data, especially for deepwater species, and improving technology that allows more people to access them.

### **5.1.2** Law Enforcement AP Comments and Recommendations

The Law Enforcement AP discussed Amendment 52 during their February 10, 2022 meeting. They had no comments or recommendations on this particular action.

### **5.1.3** Scientific and Statistical Committee Comments and Recommendations

The SSC during their April 2022 meeting received an update on the amendment currently being considered by the Council. They had no comments or recommendations on this particular action.

### **5.1.4** Public Comments and Recommendations

#### **5.1.5 DRAFT Council's Rationale**

# **5.1.6** How is this Action Addressing the Vision Blueprint for the Snapper Grouper Fishery?

#### Alternatives\*

- 1 (No Action). The total annual catch limit and annual optimum yield for golden tilefish are equal to the current acceptable biological catch.
- 2. Revise the total annual catch limit and annual optimum yield for golden tilefish and set them equal to the recommended acceptable biological catch.
- 3. Revise the total annual catch limit and annual optimum yield for golden tilefish and set them equal to 95% of the recommended acceptable biological catch.
- 4. Revise the total annual catch limit and annual optimum yield for golden tilefish and set them equal to 90% of the recommended acceptable biological catch.
- \*See Chapter 2 for detailed language of alternatives. Preferred indicated in bold.

# 5.2 Action 2. Revise sector allocations and sector annual catch limits for golden tilefish

### **5.2.1** Snapper Grouper AP Comments and Recommendations

### **5.2.2** Law Enforcement AP Comments and Recommendations

The Law Enforcement AP discussed Amendment 52 during their February 10, 2022 meeting. They had no comments or recommendations on this particular action.

#### **5.2.3** SSC Comments and Recommendations

The SSC during their April 2022 meeting received an update on the amendment currently being considered by the Council. They had no comments or recommendations on this particular action.

### **5.2.4** Public Comments and Recommendations

#### Alternatives\*

- 1 (No Action) Retain the current recreational sector and commercial sector allocations as 3.00% and 97.00%, respectively, of the revised total annual catch limit for golden tilefish.
- 2. Allocate 96.70% of the revised total annual catch limit for golden tilefish to the commercial sector and 3.30% of the revised total annual catch limit for golden tilefish to the recreational sector.

Note: Within the commercial sector 25% is allocated to hook and line (HL) component and 75% to the longline (LL) component.

\*See Chapter 2 for detailed language of alternatives. Preferred indicated in bold.

#### **5.2.5** DRAFT South Atlantic Council's Rationale

### 5.2.6 How is this Action Addressing the Vision Blueprint for the Snapper Grouper Fishery?

# 5.3 Action 3. Modify the fishing year for commercial golden tilefish hook and line and longline components

#### 5.3.1 Snapper Grouper AP Comments and Recommendations

- Golden tilefish is important for the market when SWG are closed.
- Longline endorsement holders may benefit from a January 15 opening.
- Social benefits to families at the start of the year
- Extend fishing closer to Easter
- Retain the January 1 start date for the HL sector to allow them a "head start" for the year before the LL sector begins fishing.
- More and more participation in the HL fishery (also buoy gear in recent years) is rationale for consideration of a HL endorsement.

The Snapper Grouper AP made the following motions:

MOTION: RECOMMEND THAT THE COMMERCIAL LONGLINE SECTOR OPEN ON JANUARY 15.
APPROVED BY AP (unanimous)

MOTION: CONSIDER A GOLDEN TILEFISH HOOK-AND-LINE ENDORSEMENT AND BRING BACK TO THE AP AT A LATER DATE APPROVED BY AP (2 OPPOSED, 1 ABSTENTION)

MOTION: CONVENE A MEETING OF THE LONGLINE ENDORSEMENT HOLDERS TO DISCUSS WAYS TO MANAGE THEIR FISHERY APPROVED BY AP (UNANIMOUS)

#### Alternatives\*

- 1. (No Action). Do not modify the fishing year for the commercial hook and line or commercial longline components. Current fishing year for both sectors is January 1- December 31
- **2.** Modify the fishing year for the commercial hook and line component.
  - 2a. to start January 15.
  - 2b. to start January 22.
  - **2c.** to start February 1.
- **3.** Modify the fishing year for the commercial longline component.
  - **3a**. to start January 15.
  - **3b**. to start January 22.
  - **3c.** to start February 1.
- \*See Chapter 2 for detailed language of alternatives. Preferred indicated in bold.

#### 5.3.2 Law Enforcement AP Comments and Recommendations

The Law Enforcement AP discussed Amendment 52 during their February 10, 2022 meeting. They had no comments or recommendations on this particular action.

#### **5.3.3** SSC Comments and Recommendations

The SSC during their April 2022 meeting received an update on the amendment currently being considered by the Council. They had no comments or recommendations on this particular action.

#### 5.3.4 Public Comments and Recommendations

#### 5.3.5 DRAFT South Atlantic Council's Rationale

5.3.6 How is this Action Addressing the Vision Blueprint for the Snapper Grouper Fishery?

# 5.4 Action 4. Establish an incidental trip limit allowance for the golden tilefish longline component once the longline quota is caught.

#### 5.4.1 Snapper Grouper AP Comments and Recommendations

- Public comments provided to AP members:
  - incidental allowance for the LL sector is not acceptable
  - LL fishermen would like consideration of a bycatch allowance
- After LL fishing is over, there is bycatch of golden tilefish and a bycatch allowance would reduce unnecessary mortality and allow for the fish to enter the market
- Some vessels with LL endorsements continue to fish for yellow-edge grouper after the golden tilefish LL quota is caught. Also target sharks and wreckfish.
- Consider a hook and line endorsement to allow vessels that use longline to be allowed to retain golden tilefish after the LL quota is harvested
- Consider subtracting the bycatch allowance from the following year's LL quota
- Consider possible regional inequality in access (NC vs. FL)

MOTION: RECOMMEND THAT THE COUNCIL CONSIDER CONVENING A MEETING OF THE LONGLINE ENDORSMENT HOLDERS TO EXPLORE WAYS TO ADDRESS THE BYCATCH ISSUE

APPROVED BY AP

#### Alternatives\*

- 1 (No Action). Do not establish an incidental trip allowance for the longline component once the longline quota of golden tilefish is caught. Vessels that have a golden tilefish longline endorsement may not fish for golden tilefish using hook-and-line gear under the 500-lb gutted weight, trip limit.
- 2. Establish a 100 lb gutted weight. incidental trip limit allowance of golden tilefish for the longline endorsement holders using hook and line gear once the longline quota is caught.
- **3.** Establish a 150 lb gutted weight. incidental trip limit allowance of golden tilefish for the longline endorsement holders using hook and line gear once the longline quota is caught.
- 4. Establish a 250 lb gutted weight incidental trip limit allowance of golden tilefish for the longline endorsement holders using hook and line gear once the longline quota is caught.
- \*See Chapter 2 for detailed language of alternatives. Preferred indicated in bold.

#### 5.4.2 Law Enforcement AP Comments and Recommendations

The Law Enforcement AP discussed Amendment 52 during their February 10, 2022 meeting. They had no comments or recommendations on this particular action.

#### **5.4.3** SSC Comments and Recommendations

The SSC during their April 2022 meeting received an update on the amendment currently being considered by the Council. They had no comments or recommendations on this particular action.

#### 5.4.4 Public Comments and Recommendations

#### 5.4.5 DRAFT South Atlantic Council's Rationale

### 5.4.6 How is this Action Addressing the Vision Blueprint for the Snapper Grouper Fishery?

# 5.5 Action 5. Modify postseason recreational accountability measures for golden tilefish.

#### **5.5.1** Snapper Grouper AP Comments and Recommendations

### **5.5.2** Law Enforcement AP Comments and Recommendations

The Law Enforcement AP discussed Amendment 52 during their February 10, 2022 meeting. They had no comments or recommendations on this particular action.

### 5.5.3 SSC Comments and Recommendations

The SSC during their April 2022 meeting received an update on the amendment currently being considered by the Council. They had no comments or recommendations on this particular action.

#### Alternatives\*

Alternative (No Action). If, recreational landings exceed the recreational ACL; golden tilefish is identified as overfished; AND the combined commercial and recreational ACL is exceeded in the same calendar year, recreational landings will be monitored for a persistence in increased landings and if deemed necessary, reduce the length of the recreational fishing season and the recreational ACL by the amount of the recreational ACL overage.

Alternative 2. If recreational landings exceed the recreational ACL, recreational landings will be monitored for a persistence in increased landings and if deemed necessary, reduce the length of the recreational fishing season and the recreational ACL by the amount of the recreational ACL overage.

Alternative 3. NMFS will annually announce the recreational fishing season start and end. The fishing season will start on (date) and end on the date National Marine Fisheries Service projects the recreational annual catch limit will be met

#### **5.5.4** Public Comments and Recommendations

#### 5.5.5 DRAFT South Atlantic Council's Rationale

### 5.5.6 How is this Action Addressing the Vision Blueprint for the Snapper Grouper Fishery?

#### 5.6 Action 6. Modify blueline tilefish recreational bag limit

#### **5.6.1** Snapper Grouper AP Comments and Recommendations

- North of Cape Hatteras, blueline tilefish are abundant in shallow water
- Eliminating possession by captain and crew would be appropriate if needed; however, the Council could consider waiting until after the stock assessment is completed to consider changes to management measures
- Blueline tilefish is an important species for the for-hire sector in northeastern NC. When dolphin or tuna are not available, blueline tilefish fill that gap.
- 3 per person with a maximum of 18?
- Consideration of current economic conditions to make changes to the possession limit for captain and crew.

### **5.6.2** Law Enforcement AP Comments and Recommendations

The Law Enforcement AP discussed Amendment 52 during their February 10, 2022 meeting. They had no comments or recommendations on this particular action.

#### Alternatives\*

- 1 (No Action). The current recreational blueline tilefish bag limit is 3 per person per day. Captains and crew of for-hire vessels with valid Federal South Atlantic Charter/Headboat Snapper Grouper Permits are allowed to retain bag limit quantities of all snapper grouper species during the open recreational season.
- **2.** Reduce recreational blueline tilefish bag limit to 2 fish per person per day.
- **3.** Reduce recreational blueline tilefish bag limit to 1 fish per person per day.
- **4.** Do not allow retention of blueline tilefish by captain and crew.
- \*See Chapter 2 for detailed language of alternatives. Preferred indicated in bold.

### 5.6.3 SSC Comments and Recommendations

The SSC during their April 2022 meeting received an update on the amendment currently being considered by the Council. They had no comments or recommendations on this particular action.

- **5.6.4** Public Comments and Recommendations
- 5.6.5 DRAFT South Atlantic Council's Rationale
- 5.6.6 How is this Action Addressing the Vision Blueprint for the Snapper **Grouper Fishery?**

#### 5.7 Action 7. Modify blueline tilefish recreational season

#### 5.7.1 Snapper Grouper AP Comments and Recommendations

• Consider making the season coincide with the snowy grouper recreational season (alternative 4: May 1-June 30)

MOTION: RECOMMEND THE COUNCIL **SELECT ALTERNATIVE 2 (MAY 1-JULY 31) AS PREFERRED** MOTION WITHDRAWN

MOTION: RECOMMEND THE COUNCIL SELECT ALTERNATIVE 1 AS PREFERRED **APPROVED BY AP (UNANIMOUS)** 

#### 5.7.2 Law Enforcement AP Comments and Recommendations

The Law Enforcement AP discussed Amendment 52 during their February 10, 2022 meeting. They had no comments or recommendations on this particular action.

#### 5.7.3 SSC Comments and Recommendations

The SSC during their April 2022 meeting received an update on the amendment currently being considered by the Council. They had no comments or recommendations on this particular action.

#### 5.7.4 Public Comments and Recommendations

- 5.7.5 DRAFT South Atlantic Council's Rationale
- 5.7.6 How is this Action Addressing the Vision Blueprint for the Snapper **Grouper Fishery?**

#### Alternatives\*

- 1 (No Action). Do not modify the blueline tilefish recreational season. The current recreational season is May 1-August 31.
- 2. Modify blueline tilefish recreational season to May 1 through July 30.
- **3.** Modify blueline tilefish recreational season to June 1 through August 31.
- **4.** Modify blueline tilefish recreational season to May 1 through June 30.
- **5.** Modify blueline tilefish recreational season to July 1 through August 31.
- \*See Chapter 2 for detailed language of alternatives. Preferred indicated in bold.

### 5.8 Action 8. Modify postseason recreational accountability measures for blueline tilefish.

#### 5.8.1 Snapper Grouper AP Comments and Recommendations

MOTION: RECOMMEND THE COUNCIL SELECT ALTERNATIVE 2 AS PREFERRED

**APPROVE BY AP (UNANIMOUS)** 

# 5.8.2 Law Enforcement AP Comments and Recommendations

The Law Enforcement AP discussed Amendment 52 during their February 10, 2022 meeting. They had no comments or recommendations on this particular action.

### **5.8.3** SSC Comments and Recommendations

The SSC during their April 2022 meeting received an update on the amendment currently being considered by the Council. They had no comments or recommendations on this particular action.

### **5.8.4 Public Comments and Recommendations**

#### Alternatives\*

Alternative (No Action). If, Recreational landings exceed the recreational ACL; blueline tilefish is identified as overfished; AND the combined commercial and recreational ACL is exceeded in the same calendar year, recreational landings will be monitored for a persistence in increased landings and if deemed necessary, reduce the length of the recreational fishing season and the recreational ACL by the amount of the recreational ACL overage.

Alternative 2. If Recreational landings exceed the recreational ACL, recreational landings will be monitored for a persistence in increased landings and if deemed necessary, reduce the length of the recreational fishing season and the recreational ACL by the amount of the recreational ACL overage

Alternative 3. NMFS will annually announce the recreational fishing season start and end. The fishing season will start on (date) and end on the date National Marine Fisheries Service projects the recreational annual catch limit will be met

- 5.8.5 DRAFT South Atlantic Council's Rationale
- 5.8.6 How is this Action Addressing the Vision Blueprint for the Snapper Grouper Fishery?

#### Chapter 6. Cumulative Effects--UPDATE

While this environmental assessment (EA) is being prepared using the 2020 Council on Environmental Quality (CEQ) National Environmental Policy Act (NEPA) Regulations, the cumulative effects discussed in this section meet the two-part standard for "reasonable foreseeability" and "reasonably close causal connection" required by the new definition of effects or impacts. Below is the five-step cumulative effects analysis that identifies criteria that must be considered in an EA.

#### 6.1 Affected Area

The immediate impact area would be the federal 200-mile limit of the Atlantic off the coasts of North Carolina, South Carolina, Georgia, and east Florida to Key West, which is also the South Atlantic Fishery Management Council's (Council) area of jurisdiction. In light of the available information, the extent of the boundaries would depend upon the degree of fish immigration/emigration and larval transport, whichever has the greatest geographical range. The ranges of affected species are described in Volume II of the Fishery Ecosystem Plan. For the proposed actions found in Amendment 50 to the Fishery Management Plan (FMP) for the Snapper Grouper Fishery of the South Atlantic Region (Snapper Grouper FMP), the cumulative effects analysis includes an analysis of data from 2017 through the present.

### 6.2 Past, Present, and Reasonably Foreseeable Actions Impacting the Affected Area

Fishery managers implemented the first significant regulations pertaining to snapper grouper species in 1983 through the Snapper Grouper FMP (SAFMC 1983). Listed below are other past, present, and reasonably foreseeable actions occurring in the South Atlantic Region. These actions, when added to the proposed management measures, may result in cumulative effects on the biophysical and socio-economic environment. The complete history of management of the snapper grouper fishery can be found in Appendix I (History of Management).

#### Past Actions

Amendment 36 to the Snapper Grouper FMP, effective on July 31, 2017, was implemented to establish new spawning special management zones (SMZ) to protect spawning areas for snapper grouper species.

Amendment 37 to the Snapper Grouper FMP, effective on August 24, 2017, modified the hogfish fishery management unit in response to genetically different stocks along the South Atlantic, specified fishing levels for the two stocks, established a rebuilding plan for the Florida Keys/East Florida stock, and established or revised management measures for both hogfish stocks such as size limits, recreational bag limits, and commercial trip limits.

<sup>&</sup>lt;sup>4</sup> http://safmc.net/ecosystem-management/fishery-ecosystem-plan/

Amendment 43 to the Snapper Grouper FMP, effective on July 26, 2017, specified recreational and commercial annual catch limits (ACL) for red snapper beginning in 2018.

Abbreviated Framework 1 to the Snapper Grouper FMP, effective on August 27, 2018, was implemented to address overfishing of red grouper, and reduced the commercial and recreational ACLs for red grouper in the South Atlantic exclusive economic zone (EEZ).

Abbreviated Framework 2 to the Snapper Grouper FMP, effective on May 9, 2019, revised fishing levels for black sea bass and vermilion snapper in response to the latest stock assessments for those species in the South Atlantic.

Amendment 42 to the Snapper Grouper FMP, effective on January 8, 2020, added three newly approved sea turtle release devices and updated the regulations to simplify and clarify the specifications for other release gear requirements. The new devices and updates provide more options to fulfill the requirements for sea turtle release gear on board vessels with commercial and charter/for-hire snapper grouper permits in the South Atlantic. The amendment also streamlines the procedure to implement newly approved devices and handling procedures in the future.

Regulatory Amendment 27 (Vision Blueprint Regulatory Amendment 27) to the Snapper Grouper FMP, effective on February 26, 2020, addresses specific action items in the 2016-2020 Vision Blueprint for the commercial sector of the snapper grouper fishery. The framework amendment revised commercial regulations for blueline tilefish, snowy grouper, greater amberjack, red porgy, vermilion snapper, almaco jack, Other Jacks Complex (lesser amberjack, almaco jack, and banded rudderfish), queen snapper, silk snapper, blackfin snapper, and gray triggerfish. Actions include modifying fishing seasons, trip limits, and minimum size limits.

Regulatory Amendment 30 to the Snapper Grouper FMP, effective on March 9, 2020, revised the rebuilding plan for red grouper, extended the annual spawning closure for that species off North and South Carolina, and established a commercial trip limit.

Regulatory Amendment 26 (Vision Blueprint Regulatory Amendment 26) to the Snapper Grouper FMP, effective on March 30, 2020, addresses specific action items in the 2016-2020 Vision Blueprint for the recreational sector of the snapper grouper fishery. The framework amendment modified the 20-fish aggregate bag limits, and minimum size limits for certain species.

Regulatory Amendment 29 to the Snapper Grouper FMP, effective July 15, 2020, modified gear requirements for South Atlantic snapper grouper species. Actions included requirements for descending and venting devices, and modifications to requirements for circle hooks and powerheads.

Abbreviated Framework 3 to the Snapper Grouper FMP, effective August 17, 2020, revised fishing levels for blueline tilefish in the South Atlantic region.

Regulatory Amendment 33 to the Snapper Grouper FMP, effective August 17, 2020, removed the requirement that if projections indicate the South Atlantic red snapper season (commercial or

recreational) would be three days or fewer, the commercial and/or recreational seasons would not open for that fishing year. If this requirement is removed, red snapper harvest could be open for either recreational or commercial harvest for fewer than four days.

Regulatory Amendment 34 to the Snapper Grouper FMP, effective May 3, 2021, created 34 special management zones around artificial reefs off North Carolina and South Carolina.

#### Present Actions

Amendment 44 to the Snapper Grouper FMP will address the results of the latest stock assessment for the yellowtail snapper stock in the southeast.

Comprehensive Acceptable Biological Catch (ABC) Control Rule Amendment (Amendment 45 to the Snapper Grouper FMP) would modify the ABC control rule, specify an approach for determining the acceptable risk of overfishing and the probability of rebuilding success for overfished stocks, allow phase-in of ABC changes, and allow carry-over of unharvested catch. This amendment will continue being developed in 2021.

Amendment 49 to the Snapper Grouper FMP would address the results of the latest stock assessment for the greater amberjack stock in the South Atlantic region.

Amendment 51 to the Snapper Grouper FMP would address the results of the latest stock assessment for the snowy grouper stock in the South Atlantic region. Snowy grouper was determined to be overfished and undergoing overfishing.

Amendment 53 to the Snapper Grouper FMP would address the results of the latest stock assessment for the gag stock in the South Atlantic region. Gag was determined to be overfished and undergoing overfishing.

Reasonably Foreseeable Future Actions

Expected Impacts from Past, Present, and Future Actions

### **6.3** Consideration of Climate Change and Other Non-Fishery Related Issues

#### Climate Change

Global climate changes could have significant effects on South Atlantic fisheries, though the extent of these effects on the snapper grouper fishery is not known at this time. The Environmental Protection Agency's climate change webpage (<a href="https://www.epa.gov/climate-indicators/marine-species-distribution">https://www.epa.gov/climate-indicators/marine-species-distribution</a>), and NOAA's Office of Science and Technology climate webpage (<a href="https://www.fisheries.noaa.gov/topic/climate">https://www.fisheries.noaa.gov/topic/climate</a>), provides background information on climate change, including indicators which measure or anticipate effects on oceans, weather and climate, ecosystems, health and society, and greenhouse gases. The United Nations Intergovernmental Panel on Climate Change's Fifth Assessment Report also provides a

compilation of scientific information on climate change (November 2, 2014). Those findings are summarized below.

Ocean acidification, or a decrease in surface ocean pH due to absorption of anthropogenic carbon dioxide emissions, affects the chemistry and temperature of the water. Increased thermal stratification alters ocean circulation patterns, and causes a loss of sea ice, sea level rise, increased wave height and frequency, reduced upwelling, and changes in precipitation and wind patterns. Changes in coastal and marine ecosystems can influence organism metabolism and alter ecological processes such as productivity, species interactions, migration, range and distribution, larval and juvenile survival, prey availability, and susceptibility to predators. The "center of biomass," a geographical representation of each species' weight distribution, is being used to identify the shifting of fish populations. Warming sea temperature trends in the southeast have been documented, and animals must migrate to cooler waters, if possible, if water temperatures exceed survivable ranges (Needham et al. 2012). Harvesting and habitat changes also cause geographic population shifts. Changes in water temperatures may also affect the distribution of native and exotic species, allowing invasive species to establish communities in areas they may not have been able to survive previously. The combination of warmer water and expansion of salt marshes inland with sea-level rise may increase productivity of estuarinedependent species in the short term. However, in the long term, this increased productivity may be temporary because of loss of fishery habitats due to wetland loss (Kennedy et al. 2002). The numerous changes to the marine ecosystem may cause an increased risk of disease in marine biota. An increase in the occurrence and intensity of toxic algae blooms will negatively influence the productivity of keystone animals, such as corals, and critical coastal ecosystems such as wetlands, estuaries, and coral reefs (Kennedy et al. 2002; IPCC 2014).

Climate change may impact snapper grouper species in the future, but the level of impacts cannot be quantified at this time, nor is the time frame known in which these impacts will occur. In the near term, it is unlikely that the management measures contained in Amendment 52 would compound or exacerbate the ongoing effects of climate change on snapper grouper species.

#### Weather Variables

Hurricane season is from June 1 to November 30, and accounts for 97% of all tropical activity affecting the Atlantic basin. These storms, although unpredictable in their annual occurrence, can devastate areas when they occur. Although these effects may be temporary, those fishing-related businesses whose profitability is marginal may go out of business if a hurricane strikes.

#### 6.4 Overall Impacts Expected from Past, Present, and Future Actions

The proposed management actions are summarized in Chapter 2 of this document. Detailed discussions of the magnitude and significance of the impacts of the alternatives on the human environment appear in Chapter 4 of this document. None of the impacts of the actions in this amendment, in combination with past, present, and future actions have been determined to be significant. Although several other management actions, in addition to this amendment, are expected to affect snapper grouper species, any additive effects, beneficial and adverse, are not expected to result in a significant level of cumulative impacts.

The proposed actions would not adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places as these are not in the South Atlantic EEZ. These actions are not likely to result in direct, indirect, or cumulative effects to unique areas, such as significant scientific, cultural, or historical resources, park land, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas as the proposed action is not expected to substantially increase fishing effort or the spatial and/or temporal distribution of current fishing effort within the South Atlantic region. The U.S. Monitor, Gray's Reef, and Florida Keys National Marine Sanctuaries are within the boundaries of the South Atlantic EEZ. The proposed actions are not likely to cause loss or destruction of these national marine sanctuaries because the actions are not expected to result in appreciable changes to current fishing practices. Additionally, the proposed actions are not likely to change the way in which the snapper grouper fishery is prosecuted; therefore, the actions are not expected to result in adverse impacts on health or human safety beyond the status quo.

#### 6.5 Monitoring and Mitigation

Fishery-independent and fishery-dependent data comprise a significant portion of information used in stock assessments. Fishery-independent data are being collected through the Southeast Fishery Information Survey and the Marine Resources Monitoring Assessment and Prediction Program. The effects of the proposed actions are, and would continue to be, monitored through collection of recreational landings data by all the four states in the South Atlantic Region (Florida, Georgia, South Carolina, and North Carolina). The National Marine Fisheries Service would continue to monitor and collect information on snapper grouper species for stock assessments and stock assessment updates, life history studies, economic and social analyses, and other scientific observations. The proposed actions relate to the harvest of indigenous species in the Atlantic, and the activities/regulations being altered do not introduce non-indigenous species, and are not reasonably expected to facilitate the spread of such species through depressing the populations of native species. Additionally, these alternatives do not propose any activity, such as increased ballast water discharge from foreign vessels, which is associated with the introduction or spread on non-indigenous species.

### Chapter 7. List of Interdisciplinary Plan Team Members

Name	Agency/Division	Title
Myra Brouwer	SAFMC	Deputy Director for Management/IPT Lead
Scott Crosson	SEFSC	Economist
Rick DeVictor	SERO/SF	South Atlantic Branch Chief
Joelle Godwin	SERO/SF	Technical Writer and Editor
Karla Gore	SERO/SF	Fishery Biologist/IPT Lead
Ed Glazier	SERO/SF	Anthropologist
Shepherd Grimes	NOAA GC	General Counsel
John Hadley	SAFMC	Economist
Nikolai Klibansky	SEFSC	Fishery Biologist
Mike Larkin	SERO/SF	Data Analyst
Jennifer Lee	SERO/PR	Fishery Biologist
Christina Package-Ward	SERO/SF	Social Scientist
Roger Pugliese	SAFMC	Habitat and Ecosystem Scientist/IPT Lead
Mike Schmidtke	SAFMC	Fishery Scientist
Monica Smit-Brunello	NOAA GC	General Counsel
Adam Stemle	SERO/SF	Economist
Mike Travis	SERO/SF	Social Science Branch Chief
Matthew Walia	SERO/OLE	Compliance Liaison Analyst
Christina Wiegand	SAFMC	Social Scientist

NOAA=National Oceanic and Atmospheric Administration, NMFS = National Marine Fisheries Service, SERO = Southeast Regional Office, SF = Sustainable Fisheries Division, PR = Protected Resources Division, HC = Habitat Conservation Division, SEFSC=Southeast Fisheries Science Center, GC = General Counsel

#### **Chapter 8. Agencies and Persons Consulted**

#### Responsible Agencies

South Atlantic Fishery Management Council (Administrative Lead) 4055 Faber Place Drive, Suite 201 N. Charleston, South Carolina 29405 843-571-4366/ 866-SAFMC-10 (TEL) 843-769-4520 (FAX) www.safmc.net

NMFS, Southeast Region 263 13<sup>th</sup> Avenue South St. Petersburg, Florida 33701 727- 824-5301 (TEL) 727-824-5320 (FAX)

#### List of Agencies, Organizations, and Persons Consulted

SAFMC Law Enforcement Advisory Panel

SAFMC Snapper Grouper Advisory Panel

SAFMC Scientific and Statistical Committee

North Carolina Coastal Zone Management Program

South Carolina Coastal Zone Management Program

Georgia Coastal Zone Management Program

Florida Coastal Zone Management Program

Florida Fish and Wildlife Conservation Commission

Georgia Department of Natural Resources

South Carolina Department of Natural Resources

North Carolina Division of Marine Fisheries

North Carolina Sea Grant

South Carolina Sea Grant

Georgia Sea Grant

Florida Sea Grant

Atlantic States Marine Fisheries Commission

National Marine Fisheries Service

- Washington Office
- Office of Ecology and Conservation
- Southeast Regional Office
- Southeast Fisheries Science Center

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#### Appendix A. Other Applicable Laws

#### 1.1 Administrative Procedure Act (APA)

All federal rulemaking is governed under the provisions of the APA (5 U.S.C. Subchapter II), which establishes a "notice and comment" procedure to enable public participation in the rulemaking process. Among other things under the APA, the National Marine Fisheries Service (NMFS) is required to publish notification of proposed rules in the *Federal Register* and to solicit, consider and respond to public comment on those rules before they are finalized. The APA also establishes a 30-day wait period from the time a final rule is published until it takes effect, with some exceptions. Amendment 52 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (Amendment 52) complies with the provisions of the APA through the South Atlantic Fishery Management Council's (Council) extensive use of public meetings, requests for comments and consideration of comments. The proposed rule associated with this plan amendment will have a request for public comments, which complies with the APA, and upon publication of the final rule, unless the rule falls within an APA exception, there will be a 30-day wait period before the regulations are effective.

#### 1.2 Information Quality Act (IQA)

The IQA (Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-443)) which took effect October 1, 2002, directed the Office of Management and Budget (OMB) to issue government-wide guidelines that "provide policy and procedural guidelines to federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information disseminated by federal agencies." OMB directed each federal agency to issue its own guidelines, establish administrative mechanisms allowing affected persons to seek and obtain correction of information that does not comply with OMB guidelines, and report periodically to OMB on the number and nature of complaints. The NOAA Section 515 Information Quality Guidelines require a series of actions for each new information product subject to the IQA. Amendment 52 uses the best available information and made a broad presentation thereof. The information contained in this document was developed using best available scientific information. Therefore, this document is in compliance with the IQA.

#### 1.3 Coastal Zone Management Act (CZMA)

Section 307(c)(1) of the federal CZMA of 1972 requires that all federal activities that directly affect the coastal zone be consistent with approved state coastal zone management programs to the maximum extent practicable. While it is the goal of the Council to have management measures that complement those of the states, federal and state administrative procedures vary and regulatory changes are unlikely to be fully instituted at the same time. The Council believes the actions in this plan amendment are consistent to the maximum extent practicable with the Coastal Zone Management Plans of Florida, Georgia, South Carolina, and North Carolina. Pursuant to Section 307 of the CZMA, this determination will be submitted to the responsible state agencies who administer the approved Coastal Zone Management Programs in the States of Florida, South Carolina, Georgia, and North Carolina.

#### 1.4 Executive Order 12612: Federalism

Executive Order (E.O.) 12612 requires agencies to be guided by the fundamental federalism principles when formulating and implementing policies that have federalism implications. The purpose of the Order is to guarantee the division of governmental responsibilities between the federal government and the states, as intended by the framers of the Constitution. No federalism issues have been identified relative to the actions proposed in this document and associated regulations. Therefore, preparation of a Federalism assessment under E.O. 12612 is not necessary.

#### 1.5 Executive Order 12962: Recreational Fisheries

E.O. 12962 requires federal agencies, in cooperation with states and tribes, to improve the quantity, function, sustainable productivity, and distribution of U.S. aquatic resources for increased recreational fishing opportunities through a variety of methods. Additionally, the Order establishes a seven-member National Recreational Fisheries Coordination Council responsible for, among other things, ensuring that social and economic values of healthy aquatic systems that support recreational fisheries are considered by federal agencies in the course of their actions, sharing the latest resource information and management technologies, and reducing duplicative and cost-inefficient programs among federal agencies involved in conserving or managing recreational fisheries. The National Recreational Fisheries Coordination Council also is responsible for developing, in cooperation with federal agencies, states and tribes, a Recreational Fishery Resource Conservation Plan to include a five-year agenda. Finally, the Order requires NMFS and the U.S. Fish and Wildlife Service to develop a joint agency policy for administering the ESA.

The alternatives considered in this document are consistent with the directives of E.O. 12962.

#### 1.6 Executive Order 13089: Coral Reef Protection

E.O. 13089, signed by President William Clinton on June 11, 1998, recognizes the ecological, social, and economic values provided by the Nation's coral reefs and ensures that federal agencies are protecting these ecosystems. More specifically, the Order requires federal agencies to identify actions that may harm U.S. coral reef ecosystems, to utilize their program and authorities to protect and enhance the conditions of such ecosystems, and to ensure that their actions do not degrade the condition of the coral reef ecosystem.

The alternatives considered in this document are consistent with the directives of E.O. 13089.

#### 1.7 Executive Order 13158: Marine Protected Areas (MPAs)

E.O. 13158 was signed on May 26, 2000, to strengthen the protection of U.S. ocean and coastal resources through the use of MPAs. The E.O. defined MPAs as "any area of the marine environment that has been reserved by federal, state, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources

therein." It directs federal agencies to work closely with state, local and non-governmental partners to create a comprehensive network of MPAs "representing diverse U.S. marine ecosystems, and the Nation's natural and cultural resources."

The alternatives considered in this document are consistent with the directives of E.O. 13158.

#### 1.8 National Marine Sanctuaries Act (NMSA)

Under the NMSA (also known as Title III of the Marine Protection, Research and Sanctuaries Act of 1972), as amended, the U.S. Secretary of Commerce is authorized to designate National Marine Sanctuaries to protect distinctive natural and cultural resources whose protection and beneficial use requires comprehensive planning and management. The National Marine Sanctuary Program is administered by the Sanctuaries and Reserves Division of NOAA. The NMSA provides authority for comprehensive and coordinated conservation and management of these marine areas. The National Marine Sanctuary Program currently comprises 13 sanctuaries around the country, including sites in American Samoa and Hawaii. These sites include significant coral reef and kelp forest habitats, and breeding and feeding grounds of whales, sea lions, sharks, and sea turtles. The three sanctuaries in the South Atlantic exclusive economic zone are the USS Monitor, Gray's Reef, and Florida Keys National Marine Sanctuaries.

The alternatives considered in this document are not expected to have any adverse impacts on the resources managed by the National Marine Sanctuaries.

#### 1.9 Paperwork Reduction Act (PRA)

The purpose of the PRA is to minimize the burden on the public. The PRA is intended to ensure that the information collected under the proposed action is needed and is collected in an efficient manner (44 U.S.C. 3501 (1)). The authority to manage information collection and record keeping requirements is vested with the Director of the Office of Management and Budget (OMB). This authority encompasses establishment of guidelines and policies, approval of information collection requests, and reduction of paperwork burdens and duplications. The PRA requires NMFS to obtain approval from the OMB before requesting most types of fishery information from the public. Actions in this document are not expected to affect PRA.

#### 1.10 Small Business Act (SBA)

Enacted in 1953, the SBA requires that agencies assist and protect small-business interests to the extent possible to preserve free competitive enterprise. The objectives of the SBA are to foster business ownership by individuals who are both socially and economically disadvantaged; and to promote the competitive viability of such firms by providing business development assistance including, but not limited to, management and technical assistance, access to capital and other forms of financial assistance, business training, and counseling, and access to sole source and limited competition federal contract opportunities, to help firms achieve competitive viability. Because most businesses associated with fishing are considered small businesses, NMFS, in implementing regulations, must make an assessment of how those regulations will affect small businesses.

#### 1.11 Public Law 99-659: Vessel Safety

Public Law 99-659 amended the Magnuson-Stevens Fishery Conservation and Management Act to require that a FMP or FMP amendment must consider, and may provide for, temporary adjustments (after consultation with the U.S. Coast Guard and persons utilizing the fishery) regarding access to a fishery for vessels that would be otherwise prevented from participating in the fishery because of safety concerns related to weather or to other ocean conditions. No vessel would be forced to participate in South Atlantic fisheries under adverse weather or ocean conditions as a result of the imposition of management regulations proposed in this amendment. No concerns have been raised by South Atlantic fishermen or by the U.S. Coast Guard that the proposed management measures directly or indirectly pose a hazard to crew or vessel safety under adverse weather or ocean conditions.

### **Appendix B. Regulatory Impact Review**

Appendix C. Regulatory Flexibility Analysis - UPDATE

# Appendix D. Essential Fish Habitat and Ecosystem Based Fishery Management

### I. EFH and EFH-HAPC Designations and Cooperative Habitat Policy Development and Protection

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) requires federal fishery management Councils and the National Marine Fisheries Service (NMFS) to designate essential fish habitat (EFH) for species managed under federal fishery management plans (FMP). Federal regulations that implement the EFH program encourage fishery management Councils and NMFS also to designate subsets of EFH to highlight priority areas within EFH for conservation and management. These subsets of EFH are called EFH-Habitat Areas of Particular Concern (EFH-HAPCs or HAPCs) and are designated based on ecological importance, susceptibility to human-induced environmental degradation, susceptibility to stress from development, or rarity of the habitat type. Information supporting EFH and EFH-HAPC designations was updated (pursuant to the EFH Final Rule) in Fishery Ecosystem Plan (FEP) II.

#### a. South Atlantic Council EFH User Guide

The EFH Users Guide developed during the FEP II development process is available through the FEP II Dashboard and provides a comprehensive list of the designations of EFH and EFH-HAPCs for all species managed by the South Atlantic Fishery Management Council (South Atlantic Council) and the clarifications identified during FEP II development. As noted above, additional detailed information supporting the EFH designations appears in FEP, FEP II, and in individual FMPs, and general information on the EFH provisions of the Magnuson-Stevens Act and its implementing regulations (50 CFR 900 Subparts J and K). These sources should be reviewed for information on the components of EFH assessments, steps to EFH consultations, and other aspects of EFH program operation.

# b. South Atlantic Council EFH Policy and EFH Policy Statements Policy for Protection and Restoration of EFH South Atlantic Council Habitat and Environmental Protection Policy

In recognizing that species are dependent on the quantity and quality of their essential habitats, it is the policy of the South Atlantic Council to protect, restore, and develop habitats upon which fisheries species depend; to increase the extent of their distribution and abundance; and to improve their productive capacity for the benefit of present and future generations. For purposes of this policy, "habitat" is defined as the physical, chemical, and biological parameters that are necessary for continued productivity of the species that is being managed. The objectives of the South Atlantic Council policy will be accomplished through the recommendation of no net loss or significant environmental degradation of existing habitat. A long-term objective is to support and promote a net-gain of fisheries habitat through the restoration and rehabilitation of the productive capacity of habitats that have been degraded, and the creation and development of productive habitats where increased fishery production is probable. The South Atlantic Council will pursue these goals

at state, Federal, and local levels. The South Atlantic Council shall assume an aggressive role in the protection and enhancement of habitats important to fishery species and shall actively enter Federal decision-making processes where proposed actions may otherwise compromise the productivity of fishery resources of concern to the South Atlantic Council.

### South Atlantic Council EFH Policy Statements

Considerations to Reduce or Eliminate the Impacts of Non-Fishing Activities on EFH In addition to implementing regulations to protect habitat from degradation due to fishing activities, the South Atlantic Council in cooperation with NMFS, actively comments on non-fishing projects or policies that may impact fish habitat. The South Atlantic Council established a Habitat Protection and Ecosystem Based Management Advisory Panel (AP) and adopted a comment and policy development process. Members of the AP serve as the South Atlantic Council's habitat contacts and professionals in the field and have guided the South Atlantic Council's development of the following Policy Statements:

- EFH Policy Statement on South Atlantic Climate Variability and Fisheries (December 2016)
- EFH Policy Statement on South Atlantic Food Webs and Connectivity (December 2016)
- Protection and Restoration of EFH from Marine Aquaculture (June 2014)
- Protection and Enhancement of Marine Submerged Aquatic Vegetation (June 2014)
- Protection and Restoration of EFH from Beach Dredging and Filling, Beach Renourishment and Large Scale Coastal Engineering (March 2015)
- Protection and Restoration of EFH from Energy Exploration, Development, Transportation and Hydropower Re-Licensing (December 2015)
- Protection and Restoration of EFH from Alterations to Riverine, Estuarine and Nearshore Flows (June 2014)
- Policies for the Protection of South Atlantic Marine & Estuarine Ecosystems from Non-Native and Invasive Species (June 2014)
- Policy Considerations for Development of Artificial Reefs in the South Atlantic Region and Protection of Essential Fish Habitat (September 2017)

## II. Habitat Conservation and Fishery Ecosystem Plans

The South Atlantic Council, views habitat conservation as the foundation in the move to Ecosystem Based Fishery Management (EBFM) in the region. The South Atlantic Council has been proactive in advancing habitat conservation through extensive gear restrictions in all South Atlantic Council FMPs and by directly managing habitat and fisheries affecting those habitats through two FMPs, the FMP for Coral, Coral Reefs and Live/Hard Bottom Habitat of the South Atlantic Region (Coral FMP) and the FMP for the Sargassum Fishery of the South Atlantic Region. The FMP for the Dolphin and Wahoo Fishery in the Atlantic represents a proactive FMP which established fishery measures and identified EFH in advance of overfishing or habitat impacts from the fisheries.

Building on the long-term conservation approach, the South Atlantic Council facilitated the evolution of the Habitat Plan into the first FEP to provide a clear description and understanding of the fundamental physical, biological, and human/institutional context of ecosystems within which fisheries are managed and identify information needed and how that information should be used in the context of FMPs. Developing a South Atlantic FEP required a greater

understanding of the South Atlantic ecosystem, including both the complex relationships among humans, marine life, the environment and essential fish habitat and a more comprehensive understanding of the biological, social, and economic impacts of management necessary to initiate the transition from single species management to EBFM in the region. To support the move towards EBFM, the South Atlantic Council adopted broad goals: (1) maintaining or improving ecosystem structure and function; (2) maintaining or improving economic, (3) social, and cultural benefits from resources; and (4) maintaining or improving biological, economic, and cultural diversity.

## III. Ecosystem Approach to Conservation and Management of Deep-water Ecosystems

Through Comprehensive Ecosystem-Based Amendment 1, Comprehensive Ecosystem-Based Amendment 2, and Coral Amendment 8, the South Atlantic Council established and expanded deep-water coral HAPCs (CHAPCs) and co-designated them as EFH-HAPCs to protect the largest continuous distribution (>23,000 square miles) of pristine deep-water coral ecosystems in the world from fishing and non-fishing activities.

#### IV. FEP II Development

The South Atlantic Council developed FEP II in cooperation with NMFS, as a mechanism to incorporate ecosystem principles, goals, and policies into the fishery management process, including consideration of potential indirect effects of fisheries on food web linkages when developing harvest strategies and management plans. South Atlantic Council policies developed through the process support data collection, model and supporting tool development, and implementation of FEP II. FEP II and the FEP II Implementation Plan provide a system to incorporate of ecosystem considerations into the management process.

FEP II was developed employing writing and review teams established from the South Atlantic Council's Habitat Protection and Ecosystem Based Management AP, and experts from state, federal, NGOs, academia and other regional organizations and associations. Unlike the original Plan, FEP II is a living continually developing online information system presenting core sections and sections with links to documents or other online systems with detailed updated information on species, habitat, fisheries and research. A core part of the FEP II development process involved engaging the South Atlantic Council's Habitat Protection and Ecosystem Based Management AP and regional experts in developing new sections and ecosystem-specific policy statements to address South Atlantic food webs and connectivity and South Atlantic climate variability and fisheries. In addition, standing essential fish habitat policy statements were updated and a new artificial reef habitat policy statement was approved. In combination, these statements advance habitat conservation and the move to EBFM in the region. They also serve as the basis for further policy development, consideration in habitat and fish stock assessments and future management of fisheries and habitat. They also support a more comprehensive view of conservation and management in the South Atlantic and identify long-term information needs, available models, tools, and capabilities that will advance EBFM in the region.

#### FEP II Dashboard

The FEP II Dashboard and associated online tools provide a clear description of the fundamental physical, biological, human, and institutional context of South Atlantic ecosystems within which fisheries are managed. The FEP II Dashboard layout and online links follow are below:

- Introduction
- South Atlantic Ecosystem
- South Atlantic Habitats
- Managed Species
- Social and Economic
- Essential Fish Habitat
- SAFMC Managed Areas
- Research & Monitoring
- SAFMC Tools

### V. NOAA EBFM Activities Supporting FEP II

#### a. NOAA EBFM Policy and Road Map

To support the move to EBFM, NMFS developed an agency-wide EBFM Policy and Road Map (available through Ecosystem page of the FEP II Dashboard that outlines a set of principles to guide actions and decisions over the long-term to: implement ecosystem-level planning; advance our understanding of ecosystem processes; prioritize vulnerabilities and risks of ecosystems and their components; explore and address trade-offs within an ecosystem; incorporate ecosystem considerations into management advice; and maintain resilient ecosystems.

#### b. FEP II Implementation Plan Structure and Framework

The <u>Implementation Plan</u> is structured to translate approved policy statements of the South Atlantic Council into actionable items. The plan encompasses chapters beginning with an introduction to the policy statement, a link to the complete policy statement, and a table which translates policies and policy components into potential action items. The actions within the plan are recommendations for activities that could support the South Atlantic Council's FEP II policies and objectives.

#### c. FEP II Two Year Roadmap

The <u>FEP II Two Year Roadmap</u> draws from the Implementation Plan and presents three to five priority actions for each of the nine approved policy statements of the South Atlantic Council which would be initiated or completed over the next two years (2019-2020). The Roadmap provides "Potential Partners" and other potential regional collaborators, a focused list of priority actions they could cooperate with the South Atlantic Council on to advance policies supporting the move to EBFM in the South Atlantic region.

#### d. Monitoring/Revisions to FEP II Implementation Plan

FEP II and this supporting Implementation Plan are considered active and living documents. The Implementation Plan will be reviewed and updated periodically. During their spring meeting in 2021 and every three years following, the Habitat Protection and Ecosystem Based Management AP will engage regional experts as needed, to determine whether additional actions addressing council policies should be added to the implementation plan. The South Atlantic Council's Habitat Protection and Ecosystem Based Management Committee will review, revise and refine those recommendations for South Atlantic Council consideration and approval for inclusion into the implementation plan.

#### VI. Regional Habitat and Ecosystem Partners

The South Atlantic Council, with the Habitat Protection and Ecosystem Based Management AP as the foundation, collaborates with regional partners to create a comprehensive habitat and ecosystem network in the region to enhance habitat conservation and EBFM.

Detailed information and links to partners are highlighted online:

<a href="https://ocean.floridamarine.org/safmc\_dashboard/partners.html">https://ocean.floridamarine.org/safmc\_dashboard/partners.html</a>.

#### VII.Regional Ecosystem Modeling in the South Atlantic

#### a. South Atlantic Ecopath with Ecosim Model

The South Atlantic Council worked cooperatively with the University of British Columbia and the Sea Around Us project to develop a straw-man and preliminary food web models (Ecopath with Ecosim) to characterize the ecological relationships of South Atlantic species, including those managed by the South Atlantic Council. This effort helped the South Atlantic Council and cooperators identify available information and data gaps while providing insight into ecosystem function. More importantly, the model development process provided a vehicle to identify research necessary to better define populations, fisheries, and their interrelationships. While individual efforts were underway in the South Atlantic, only with significant investment of resources through other programs was a comprehensive regional model further developed.

The current South Atlantic EwE model provides a more complete view of the system and supports potential future evaluations that may be possible with the model. With the model complete and tuned to the available data it can be used to address broad strategic issues and explore "what if" scenarios that could then be used to address tactical decision-making questions such as provide ecosystem context for single species management, address species assemblage questions, and address spatial questions using Ecospace.

A modeling team comprised of FWRI staff, South Atlantic Council staff and other technical experts as needed, will coordinate with members of the original Ecosystem Modeling Workgroup to maintain and further refine the South Atlantic Model.

## VIII. Tools supporting Habitat Conservation and EBFM in the South Atlantic Region

The South Atlantic Council developed a <u>Habitat Conservation and Ecosystem Management</u>
<u>Section</u> which provides access to the FEP II Digital Dashboard and associated tools. Florida's FWRI maintains and distributes GIS data, imagery, and documents relevant to habitat

conservation and ecosystem-based fishery management in their jurisdiction. Web Services provided through the regional South Atlantic <u>Habitat and Ecosystem Atlas</u> and the <u>South</u> Atlantic <u>Digital Dashboard</u>. The online systems provide access to the following Services:

- i. <u>South Atlantic Fisheries Webservice</u>: Provides access to species distribution and spatial presentation of regional fishery independent data from the Southeast Area Monitoring and Assessment Program (South Atlantic) SEAMAP-SA, the Marine Resources Monitoring, Assessment, and Prediction program (MARMAP), and NOAA Southeast Fishery-Independent Survey (SEFIS).
- ii. <u>South Atlantic EFH Webservice</u>: Provides access to spatial representation of EFH and EFH-HAPCs for South Atlantic Council-managed species and Highly Migratory Species.
- iii. <u>South Atlantic Managed Areas Service</u>: Provides access to spatial presentations of South Atlantic Council and other managed areas in the region.
- iv. <u>South Atlantic Artificial Reefs Web Application</u>: Provides a regional view of artificial reefs locations, contents and imagery associated with programs in the southeastern U.S. overseen by individual states (Florida, Georgia, South Carolina, North Carolina).
- v. South Atlantic ACCSP Web Map and Application: The web map displays Atlantic Coastal Cooperative Statistics Program (ACCSP) Statistical Areas representing catch and values of Council-managed species across time with the application displaying charts of landings and values for ACCSP Statistical Areas

#### IX.Ecosystem-Based Action, Future Challenges and Needs

One of the greatest challenges to enhance habitat conservation and EBFM in the region is funding high priority research, including comprehensive benthic mapping and ecosystem model and management tool development. In addition, collecting detailed information on fishing fleet dynamics including defining fishing operation areas by species, species complex, and season, as well as catch relative to habitat is critical for assessment of fishery, community, and habitat impacts and for South Atlantic Council use in place-based management measures. Additional resources need to be dedicated to expanding regional coordination of modeling, mapping, characterization of species use of habitats, and full funding of regional fishery independent surveys (e.g., MARMAP, SEAMAP, and SEFIS) which are linking directly to addressing high priority management needs. The FEP II Implementation Plan includes Appendix A to highlight research and data needs excerpted from the SEAMAP 5 Year Plan because they represent short and long-term research and data needs that support EBFM and habitat conservation in the South Atlantic Region.

Development of ecosystem information systems to support South Atlantic Council management should build on existing tools (e.g., Regional Habitat and Ecosystem GIS and Arc Services) and provide resources to regional cooperating partners for expansion to address long-term South Atlantic Council needs. NOAA should support and build on the regional coordination efforts of the South Atlantic Council as it transitions to a broader management approach. Resources need to be provided to collect information necessary to update information supporting FEP II, which support refinement of EFH designations and spatial representations and future EBFM actions. These are the highest priority needs to support habitat conservation and EBFM, the completion of mapping of near-shore, mid-shelf, shelf edge, and deep-water habitats in the South Atlantic region and refinement in the characterization of species use of habitats.

# Appendix E. Actions and Alternatives Removed from Consideration-UPDATE

## **Appendix F. Data Analyses-UPDATE**

## South Atlantic Golden Tilefish Commercial Sector Season Length Analyses for Snapper-Grouper Amendment 52

The South Atlantic Fishery Management Council's Snapper-Grouper Amendment 52 (Amendment 52) is considering changes to management regulations for the golden tilefish stock. Amendment 52 is considering changes to the commercial sector's Annual Catch Limit (ACL). The South Atlantic golden tilefish commercial sector is separated into two gear specific components with individual ACLs: 1) hook and line and 2) long line. This amendment analysis was conducted to make predictions of the commercial landings for both of these gear components.

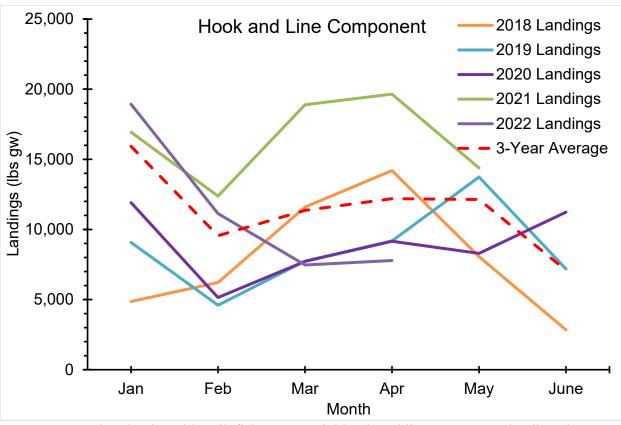
#### Hook and Line Component

Commercial landings data for South Atlantic golden tilefish were obtained from the Southeast Fisheries Science Center (SEFSC) on May 13, 2022. All of the South Atlantic golden tilefish commercial landings are in pounds gutted weight (lbs gw). Future commercial landings were determined from reviewing recent commercial landings data, however, the recent commercial landings data is limited due to numerous closures of the hook and line component. Table 1 provides the past closure dates for the golden tilefish hook and line component from 2015 to 2021. A three-year average of landings by month was assumed to reflect future landings. Due to the numerous closures of the hook and line component different years were used to determine the average monthly landings. Average monthly landings for January through April came from 2020, 2021, and 2022. Average monthly landings for May came from 2019, 2020, and 2021. Average monthly landings for June came from 2018, 2019, and 2020. No predicted landings were done from July through December because this time period was frequently closed due to the commercial ACL being met in the past 10 years. Figure 1 shows the landings used in this analysis, and Table 2 provides the predicted landings for each month.

**Table 1.** Past closure dates for the South Atlantic golden tilefish hook and line component from 2015 to 2021. The commercial hook and line component was closed because the hook and line ACL was met.

#### Closure Date

December 8, 2015 None November 29, 2017 August 14, 2018 July 23, 2019 July 23, 2020 June 1, 2021



**Figure 1.** South Atlantic golden tilefish commercial hook and line component landings by month from 2018 to 2022, and a three-year average of available monthly landings. All the landings are in pounds gutted weight.

**Table 2.** Predicted South Atlantic golden tilefish hook and line component commercial landings by month. The landings are in pounds gutted weight.

<u> Month</u>	Landings
January	15,925
February	9,552
March	11,359
April	12,197
May	12,139
June	7,087
Total	68,259

Amendment 52 is considering a range of commercial Annual Catch Limits (ACLs) for the hook and line component. Season lengths were projected by cumulatively summing the hook and line component 3-year average landings and compare the results to the ACLs show in Table 3. Closure dates were determined if the landings reached the ACL. Table 3 provides the predicted closure dates and none of the commercial hook and line ACLs were being met with the predicted landings. However, the 3-year average landings (which total 68,259 lbs gw) were only available for the time period of January 1 through June 30. Therefore, the analysis shows that no closures are expected with any of the ACLs for the time period of January 1 through June 30.

**Table 3.** The projected closure dates for the golden tilefish commercial hook and line component for a range of commercial ACLs in Amendment 52. The closure dates came from comparing the 3-year average landings against the ACLs. However, the 3-year average landings are only available from January 1 through June 30.

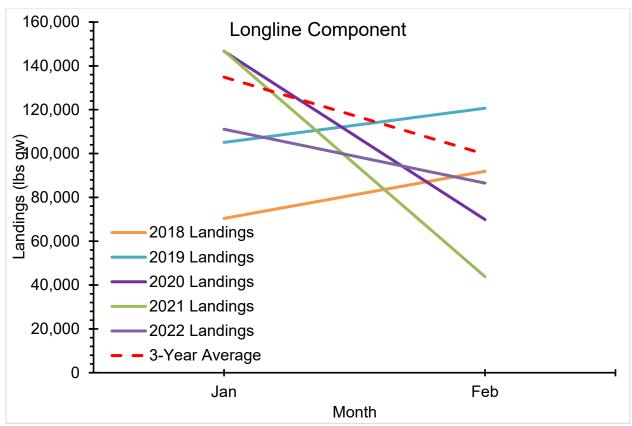
ACL	Closure Date
82,935	None
101,052	None
105,161	None
108,304	None
110,722	None
112,656	None

#### Longline Component

As stated earlier, commercial landings data for South Atlantic golden tilefish were obtained from the SEFSC on May 13, 2022. All of the South Atlantic golden tilefish commercial landings are in pounds gutted weight (lbs gw). Future commercial landings were determined from reviewing recent commercial landings data, however the recent commercial landings data is limited due to numerous closures of the longline component. Table 4 provides the past closure dates for the golden tilefish longline component from 2015 to 2022. A three-year average of longline component landings by month were assumed to reflect future landings. Due to the closures different years were used to determine the average monthly landings. Average monthly landings for January came from 2020, 2021, and 2022. Average monthly landings for February came from 2018, 2019, and 2022. No predicted landings were done from March through December because this time period was frequently closed due to the commercial ACL being met in the past years. Figure 2 shows the landings used in this analysis, and Table 5 provides the predicted landings for each month.

**Table 4.** Past closure dates for the South Atlantic golden tilefish longline component from 2015 to 2022. The commercial longline component was closed because the longline ACL was met.

Closure Date
February 19, 2015
None
May 9, 2017
March 25, 2018
March 14, 2019
February 18, 2020
February 10, 2021
March 16, 2022



**Figure 2.** South Atlantic golden tilefish commercial longline component landings by month from 2018 to 2022 and a three-year average of available monthly landings. The landings are in pounds gutted weight.

**Table 5.** Predicted South Atlantic golden tilefish longline component commercial landings by month. The landings are in pounds gutted weight.

Month	Landings
January	134,866
February	99,701
Total	234,567

Amendment 52 is considering a range of commercial ACLs for the longline component. Season lengths were projected by cumulatively summing the commercial 3-year average landings and compare the results to the ACLs show in Table 6. Closure dates were determined if the landings reached the ACL. Table 6 provides the predicted closure dates and none of the commercial longline ACLs were predicted to be met. However, the 3-year average landings (totaling 234,567 lbs gw) were only available for the time period of January 1 through February 28. Therefore, the analysis shows that no closures are expected for the commercial longline ACLs for the time period of January 1 through February 28.

**Table 6.** The projected closure dates for the golden tilefish commercial longline component for a range of commercial ACLs in Amendment 52. The closure dates came from comparing the 3-year average landings against the ACLs. However, the 3-year average commercial longline landings are only available from January 1 through February 28.

ACL	Closure Date
248,805	None
303,155	None
315,484	None
324,912	None
332,165	None
337,967	None

#### South Atlantic Blueline Tilefish Recreational Closure and Bag Limit Analysis

Predicted Recreational Landings and Closure Analysis

In March of 2015 Amendment 32 closed recreational harvest of blueline tilefish from January through April then also from September through December. Therefore the blueline tilefish recreational sector is only open for harvest from May 1 through August 31. Action 7 of Amendment 52 considers modifying the blueline tilefish recreational season by shorting the recreational season in the open months of May through August. A prediction of future landings is needed to evaluate the impact of the Action 7 alternatives. The first step is a review of recent South Atlantic blueline tilefish recreational landings. The recreational landings were provided from the Southeast Fisheries Science Center on April 28, 2022. The recreational landings are a combination of the Southeast Region Headboat Survey (Headboat) and the Marine Recreational Information Program (MRIP). MRIP has had survey changes over the last decade and, as a result, there are different MRIP datasets. This blueline tilefish recreational analysis used the MRIP Coastal Household Telephone Survey (CHTS) landings. Table 1 provides the blueline tilefish recreational landings (Headboat and MRIP CHTS landings) from 2016 through 2021 by two-month wave. Since March of 2015 Amendment 32 implemented the blueline tilefish recreational sector to only be open from May 1 through August 31, and Table 1 has this open season time period shaded in green. The summary recent recreational landings (Table 1) reveals that there is blueline tilefish harvest occurring outside of the open season. Table 2 provides the percentage of recreational landings by year from landings outside of the open season (January through April, September through December) and from inside the open season (May through August). The amount of blueline tilefish recreational landings harvested outside of the open season ranges from 1% to 38% per year (Table 2). From 2016 through 2021 about 9.8% of the blueline tilefish recreational landings occurred outside of the open season. One step to preventing the recreational landings from exceeding the ACL would be to stop the illegal blueline tilefish recreational harvest occurring during the closed season.

**Table 1.** South Atlantic blueline tilefish recreational landings by two-month wave from 2016 through 2021. The green shaded area is the open season when blueline tilefish harvest is legal. The landings are in pounds whole weight.

Year	Wave						
real	Jan/Feb	Mar/Apr	May/Jun	July/Aug	Sep/Oct	Nov/Dec	Total
2016	10,376	2,919	15,336	156,976	391	0	185,998
2017	2,940	50,666	50,030	56,908	1,547	9,364	171,455
2018	268	4,133	34,173	71,544	346	0	110,463
2019	10,450	1,855	38,299	58,662	169	681	110,116
2020	0	1,020	46,893	340,258	0	14,631	402,802
2021	116	256	57,164	109,403	227	0	167,165

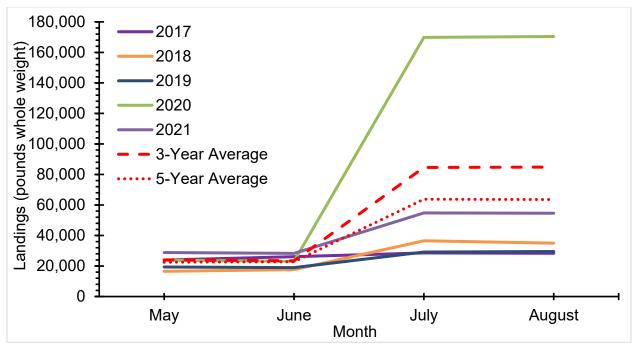
**Table 2.** Comparison of the South Atlantic blueline tilefish recreational landings that occur outside the open season against percentage of recreational landings from inside the open season by year. The open season is May 1 through August 31. The "2016-2021" results is from summing the recreational landings from 2016 to 2021 and calculating the percentages.

Year	% Landings Outside Open Season	% Landings from Open Season
2016	7.4%	92.6%
2017	37.6%	62.4%
2018	4.3%	95.7%
2019	11.9%	88.1%
2020	3.9%	96.1%
2021	0.4%	99.6%
2016-2021	9.8%	90.2%

Action 7 of Amendment 52 proposes changing the months the blueline tilefish recreational season is open. The recreational landings are a combination of the Headboat and the MRIP CHTS landings. The Headboat landings can be separated by month, however, the MRIP landings are collected and summarized in two-month waves. The MRIP CHTS landings were split into months assuming uniform distribution of landings for each month inside the two-month waves. The monthly landings were used to generate three potential future recreational landings scenarios: 1) three year average of the most recent years of complete data (2019, 2020, and 2021), 2) five year average of the most recent years of complete data (2017 through 2021), and 3) the maximum landings in the last five years of complete data. The year with the maximum recreational landings in the last five years is 2020. The monthly landings are shown in Table 3 and plotted in Figure 1.

**Table 3.** South Atlantic blueline tilefish recreational landings by month from 2017 through 2021 for the open season. The "3-Year Average" are average monthly landings from 2019, 2020, and 2021. The "5-Year Average" are average monthly landings from 2017,2018,2019,2020, and 2021. The "Max Landings" are the landings from 2020.

Year	May	June	July	August	Total
2017	23,923	26,108	28,576	28,332	106,939
2018	16,531	17,642	36,536	35,009	105,717
2019	19,347	18,953	29,151	29,511	96,962
2020	23,811	23,082	169,839	170,421	387,152
2021	28,877	28,286	54,792	54,611	166,566
Scenario 1: 3-Year Average	24,012	23,440	84,594	84,848	216,893
Scenario 2: 5-Year Average	22,498	22,814	63,779	63,577	172,667
Scenario 3: Max Landings	23,811	23,082	169,839	170,421	387,152



**Figure 1.** South Atlantic blueline tilefish recreational landings by month from 2017 through 2021, three-year average, and five-year average for the open season.

Season lengths were projected by cumulatively summing the open season recreational landings for the three landings scenarios, and compare the results to the Action 7 open season alternatives. The landings were cumulatively summed by day and compared to the recreational ACL. The recreational ACL is 116,820 pounds whole weight (lbs ww). Closure dates were determined when the recreational landings reached the ACL. Table 4 provides the results of the closure analysis.

**Table 4.** The projected closure dates for the South Atlantic blueline tilefish recreational sector for the Amendment 52 Action 7 open season alternatives. The closure dates were generated from the three different landings scenarios of 1) three-year average of the most recent years of complete data, 2) five-year average of the most recent years of complete data, and 3) the maximum landings in the last five years of complete data. The closure dates were determined with cumulatively summing the recreational landings and comparing them to the ACL (116,820 lbs ww).

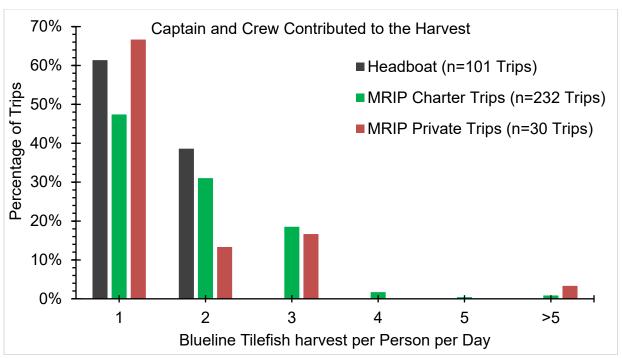
·	Closure Date		
Open Season Alternatives	Scenario 1: 3-Year Average	Scenario 2: 5-Year Average	Scenario 3: Max Landings
1. May 1- August 31	26-Jul	4-Aug	13-Jul
2. May 1-July 30	26-Jul	None	13-Jul
3. June 1- August 31	4-Aug	15-Aug	18-Jul
4. May 1-June 30	None	None	None

5. July 1-			
August 31	12-Aug	26-Aug	22-Jul

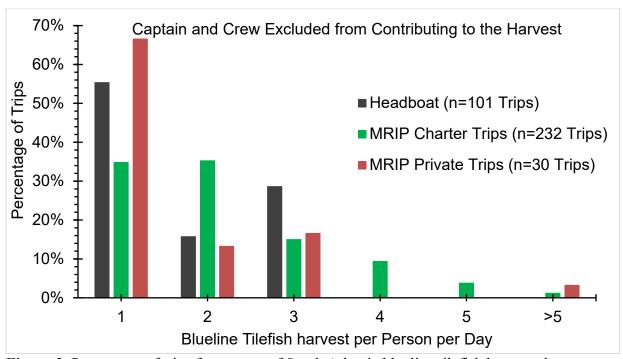
#### Bag Limit Analysis

Action 6 of Amendment 52 considers reducing the blueline tilefish bag limit with the goal of reducing recreational harvest. As stated earlier, South Atlantic blueline tilefish recreational landings data is collected from two different recreational surveys: Headboat and MRIP. Headboat data was provided from the Southeast Fisheries Science Center in May of 2022, and catch per person came from using the Headboat ANGLERS and CAUGHT variables. MRIP data came from the trip and catch files from downloaded from the NOAA fisheries recreational landings website (fisheries.noaa.go) in May of 2022. The MRIP trip and catch files were merged and a trip was defined as data coming from the same party identification code (defined as the PRT\_CODE variable in the data). Blueline tilefish harvest for each party was calculated by summing all blueline tilefish harvest (harvest data came from the LANDING variable) from each party (defining each party from the distinct party identification code: PRT\_CODE). Both the Headboat and MRIP data were explored and appropriate fish per person per day bins were chosen.

Currently captains and crew of for-hire vessels with valid Federal South Atlantic Charter/Headboat Snapper Grouper Permits are allowed to retain bag limit quantities of all snapper grouper species during the open recreational season. Action 6 Alternative 4 of Amendment 52 removes the option of allowing the retention of blueline tilefish by captain and crew. To analyze the impact of not allowing the retention of blueline tilefish by captain and crew the number of participating anglers that contributed to the harvest were modified. The Headboat and MRIP datasets have the number of anglers but these surveys do not collect the number of captain and crew on a trip. This was analyzed by assuming Headboat trips had two crew members (one captain and one crew), and MRIP charter trips had one crew member (captain) and modifying the number of anglers in the fish per person calculations. MRIP private trips were not modified. The harvest per person was calculated two ways: including crew members and also without crew members. The percentage of trips by blueline tilefish harvest per person per day and by mode (Headboat, charter, and private) are shown in two figures: including the crew members in Figure 2, and excluding the crew members in Figure 3.



**Figure 2.** Percentage of trips for a range of South Atlantic blueline tilefish harvested per person by dataset and by mode. The harvest per person includes captain and crew to the contribution of the fish per person per day harvest. Data is from 2017 through 2021, and data from both Headboat and MRIP are provided.



**Figure 3.** Percentage of trips for a range of South Atlantic blueline tilefish harvested per person by dataset and by mode. The harvest per person excludes captain and crew from contributing to the fish per person per day harvest. Data is from 2017 through 2021, and data from both Headboat and MRIP are provided.

Percent reductions for the bag limit alternatives of Action 6 were calculated by modifying trips that harvested blueline tilefish. Data from 2017 through 2021 were used and any trips that harvested less than the bag limit being considered were not modified. Trips that met or exceeded the bag limit being considered were changed to meet the Action 6 alternative bag limit under consideration. For example if a bag limit of 2 blueline tilefish per person is being analyzed then a trip that landed 3 blueline tilefish per person would be changed to a harvest of 2 blueline tilefish per person. Trips that harvested above the current bag limit of 3 per person were not modified since these trips exceeded the current bag limit and it was assumed in the future there will still be a similar proportion of trips that exceed the bag limit. The unmodified data was compared to the new bag limit modified data to determine percent reduction in landings. Also, Amendment 52 Action 6 has an alternative that only impacts the charter and headboat modes so the bag limit analysis was done for each mode. Action 6 Alternative 4 assumes no retention of harvest for the captain and crew so Alternatives 1, 2, and 3 included captain and crew in the fish per person harvest calculations. However, Alterative 4 did not include captain and crew in the fish per person harvest calculations. The results of the percent reduction in landings are shown in Table 5.

**Table 5.** Percent reduction in South Atlantic blueline tilefish recreational landings for Amendment 52 Action 6 Alternatives. Data comes from the recreational data from Headboat and MRIP from 2017 to 2021. "NA" is listed under MRIP Private for Alternative 4 because there were no captain and crew included in the private mode calculations.

Alternative	Headboat	MRIP Charter	MRIP Private
Alternative 1: 3 Fish per Person	0.0%	0.0%	0.0%
Alternative 2: 2 Fish per Person	0.0%	11.5%	10.2%
Alternative 3: 1 Fish per Person	27.9%	38.0%	28.6%
Alternative 4: No Retention for Captain and Crew	4.3%	3.6%	NA

Since the recreational landings are a combination of Headboat, MRIP Charter, and MRIP Private landings a percent reduction was calculated for each Amendment 52 Action 6 alternative by weighting the percent reductions in Table 5 by the recreational landings for each mode. Table 6 provided the percentage of recreational landings by mode from 2017 to 2021 during the open season (May 1 through August 31). In recent years the majority (about 72%) of the South Atlantic recreational blueline tilefish landings came from MRIP charter mode (Table 6). Therefore by weighting the percent reduction by the landing by mode the percent reductions generated from the MRIP charter mode data will have a greater impact then the Headboat and MRIP private percent reductions. Table 7 provides the percent reductions from Table 5 that were weighted by each mode's contribution to the landings.

**Table 6.** Percent of South Atlantic blueline tilefish recreational landings by mode during the open season from 2017 to 2021. The open season is May 1 through August 31. Percentages were based on the recreational landings in pounds whole weight.

Mode	Percentage of Landings
MRIP Charter	71.6%
MRIP Private	1.9%
Headboat	26.6%

**Table 7.** Adjusted percent reductions of South Atlantic blueline tilefish recreational landings. The percent reductions were adjusted by weighting the percent reductions by mode (Table 5) by the recreational landings for each mode during the open season from 2017 to 2021. Percentages were based on the recreational landings by mode in pounds whole weight.

Alternative	Adjusted Reductions
Alternative 1: 3 Fish per Person	0.0%
Alternative 2: 2 Fish per Person	8.5%
Alternative 3: 1 Fish per Person	35.1%
Alternative 4: No Retention for Captain and Crew	3.7%

Season lengths were projected by cumulatively summing the open season recreational landings that were reduced by the adjusted percent reductions (Table 7) for the three landings scenarios, and compare the results to the Action 7 open season alternatives. The landings were cumulatively summed by day and compared to the recreational ACL. The recreational ACL is 116,820 pounds whole weight (lbs ww). Closure dates were determined when the recreational landings reached the ACL. Table 8 provides the results of the closure analysis.

**Table 8.** The projected closure dates for the South Atlantic blueline tilefish recreational sector for the Amendment 52 Action 7 open season alternatives with the impact of the Action 6 bag limit Alternatives. The closure dates were generated from the three different landings scenarios of 1) three-year average of the most recent years of complete data, 2) five-year average of the most recent years of complete data, and 3) the maximum landings in the last five years of complete data. The closure dates were determined with cumulatively summing the recreational landings and comparing them to the ACL (116,820 lbs ww).

Open Season Alternatives	Closure Date					
Alternatives	Scenario 1: 3-Year Average	Scenario 2: 5-Year Average	Scenario 3: Max Landings			
,	Alternative 1: 3 Fish per Person per Day (Status Quo)					
1. May 1- August 31	26-Jul	4-Aug	13-Jul			
2. May 1-July 30	26-Jul	None	13-Jul			
3. June 1- August 31	4-Aug	15-Aug	18-Jul			

4. May 1-June 30	None	None	None			
5. July 1- August 31	12-Aug	26-Aug	22-Jul			
Alternative 2: 2 Fish per Person per Day						
1. May 1- August 31	30-Jul	10-Aug	15-Jul			
2. May 1-July 30	30-Jul	None	15-Jul			
3. June 1- August 31	8-Aug	20-Aug	20-Jul			
4. May 1-June 30	None	None	None			
5. July 1- August 31	16-Aug	None	24-Jul			
	Alternative 3: 1 Fi	sh per Person per Day				
1. May 1- August 31	18-Aug	None	25-Jul			
2. May 1-July 30	None	None	25-Jul			
3. June 1- August 31	I 27-AIIO I NONE		29-Jul			
4. May 1-June 30	None None		None			
5. July 1- August 31	None	None	2-Aug			
	Alternative 4: No Rete	ntion for Captain and Cr	ew			
1. May 1- August 31	28-Jul	6-Aug	14-Jul			
2. May 1-July 30	28-Jul	None	14-Jul			
3. June 1- August 31	5-Aug	17-Aug	18-Jul			
4. May 1-June 30	None	None	None			
5. July 1- August 31	14-Aug	29-Aug	23-Jul			

## **Appendix G. Bycatch Practicability Analysis-UPDATE**

## **Background**

Amendment 52 to the Fishery Management Plan (FMP) for the Snapper Grouper Fishery of the South Atlantic Region (Snapper Grouper FMP) would modify management of South Atlantic golden tilefish and blueline tilefish. Actions include revising annual catch limits (ACL), sector allocations, recreational accountability measures (AM), and management measures for the commercial and recreational sectors. Development of Amendment 52 is a response to the most recent stock assessment for South Atlantic golden tilefish (SEDAR 62 2020) as well as a need for continuing management for blueline tilefish. National Marine Fisheries Service (NMFS) outlines at 50 CFR §600.350(d) (3) (i) ten factors that should be considered in determining whether a management measure minimizes bycatch or bycatch mortality to the extent practicable.

- 1. Population effects for the bycatch species.
- 2. Ecological effects due to changes in the bycatch of that species (effects on other species in the ecosystem).
- 3. Changes in the bycatch of other species of fish and the resulting population and ecosystem effects.
- 4. Effects on marine mammals and birds.
- 5. Changes in fishing, processing, disposal, and marketing costs.
- 6. Changes in fishing practices and behavior of fishermen.
- 7. Changes in research, administration, and enforcement costs and management effectiveness.
- 8. Changes in the economic, social, or cultural value of fishing activities and non-consumptive uses of fishery resources.
- 9. Changes in the distribution of benefits and costs.
- 10. Social effects.

#### Bycatch Reporting Requirements and Methodology

For the commercial sector, the vessel reporting requirement is achieved through logbooks. Fishermen with Commercial South Atlantic Unlimited Snapper Grouper or 225-lb Trip Limit Snapper Grouper Permits, who are selected by the Science and Research Director, are required to maintain and submit fishing records through the National Marine Fisheries Service (NMFS) Southeast Fisheries Science Center (SEFSC) Commercial Logbook. Discard data are collected using the Supplemental Discard Logbook that is sent to a 20% stratified random sample of the active commercial permit holders in the fishery. In addition to the number of self-reported discards per trip and gear, the SEFSC Supplemental Discard Logbook attempts to quantify the reason why discarding occurs using four codes.<sup>5</sup> Fishermen can specify multiple reasons for a species discarded on the same trip and gear.

1) Regulation – Not legal size: Animals that would have been sold, however local or federal size limits forbid it.

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<sup>&</sup>lt;sup>5</sup> More information on the discard logbook is available here <a href="https://www.fisheries.noaa.gov/about/southeast-fisheries-science-center">https://www.fisheries.noaa.gov/about/southeast-fisheries-science-center</a>.

- 2) Regulation Out of season: Animals that would have been sold, however the local or federal fishing season is closed.
- 3) Regulation Other: Animals that would have been sold, however a local or federal regulation other than size or season, forbids it (Other than size or season; i.e., protected species, not properly permitted).
- 4) Market conditions: Animals that have no market value (rotten, damaged).

For the recreational sector, estimates of discards from private recreational and charter fishermen are collected through the Marine Recreational Information Program (MRIP)/Fishing Effort Survey (FES). MRIP/FES replaced the Marine Recreational Fishery Statistics Survey. The Southeast Region Headboat Survey, which includes limited headboat observer sampling, collects discard information from headboat vessels. In addition, in January 2021, NMFS implemented the Southeast For-Hire Electronic Reporting Program, which implemented mandatory electronic reporting of for-hire vessel catch data for over 3,000 vessels in the Gulf of Mexico and South Atlantic. The purpose of this program is to provide more accurate and reliable fisheries information about for-hire catch, effort, and discards.

## 1. Population Effects for the Bycatch Species

### 1.1 Amount and Type of Bycatch and Discards

#### Commercial Sector

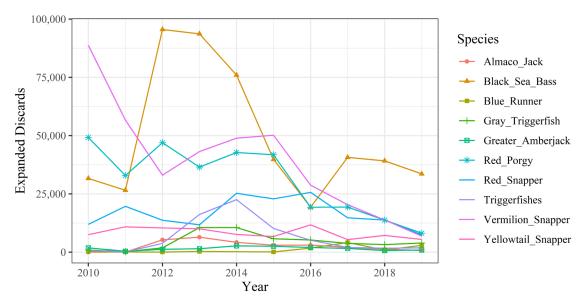
The South Atlantic snapper grouper fishery is characterized by moderately high discards, especially of black sea bass, vermilion snapper, and red porgy (Table G.1.1.1 and Figure G.1.1.1). Most discards originate from handline/electric rig and trap gear, with some discards from trolling gear and relatively low discards from longline and diving gear. Trap/pot gear show high levels of discarded black sea bass, which is the targeted species of this gear type, but low levels of bycatch for other species. It is possible that trip-level reporting leads to the relatively high discard estimates from trolling gear; these may be sets using another gear type (i.e., handline/electric rig) on a trip declared as a trolling gear trip. The ratio of commercial landings to commercial discards is not compared because commercial landings are reported in pounds and discards are reported in numbers of fish.

**Table G.1.1.1**. Top ten species with mean estimated South Atlantic commercial discards (number of fish) during snapper grouper trips (defined as trips with >50% of landings from

snapper grouper stocks), sorted from largest to smallest, by gear, for the 2015-2019 period.

Stock	Diver	Stock	Handline / Electric	Stock	Longline	Stock	Trap / Pot	Stock	Troll
		Vermilion				Black Sea		Black Sea	
Gray Snapper	133	Snapper	23,324	Red Grouper	176	Bass	25,581	Bass	1,114
				Snowy		Trigger-			
Hogfish	57	Red Porgy	20,337	Grouper	157	fishes	1,507	Grunts	66
		Red		Blueline		Vermilion		King	
Black Grouper	28	Snapper	16,805	Tilefish	32	Snapper	662	Mackerel	34
Ocean		Black Sea		Greater		Gray		White	
Triggerfish	10	Bass	7,797	Amberjack	26	Triggerfish	407	Grunt	24
Mutton		Yellowtail				White			
Snapper	8	Snapper	7,278	Red Snapper	20	Grunt	207	Gag	19
		Gray							
Red Grouper	5	Triggerfish	3,966	Red Porgy	18	Grunts	161	Dolphin	16
		Trigger-		Trigger-				Black	
Yellow Jack	2	fishes	2,652	fishes	5	Red Porgy	94	Grouper	13
Yellowtail		Almaco		Golden		Red		Rock Sea	
Snapper	2	Jack	2,004	Tilefish	2	Snapper	65	Bass	6
		Blue						Trigger-	
Groupers	1	Runner	1,956	Amberjacks	1	Gag	23	fishes	5
		Greater		Blackfin		Red		Greater	
King Mackerel	1	Amberjack	1,510	Snapper	1	Grouper	6	Amberjack	3

*Source*: SEFSC Coastal Logbook (accessed May 2020) and Discard Logbook (accessed May 2020). Note: Commercial gray triggerfish includes the "triggerfishes, unclassified" category.



**Figure G.1.1.1**. Expanded self-reported commercial discards (numbers of fish) for the top ten species discarded during snapper grouper trips (defined as trips with >50% of landings from snapper grouper stocks) from 2010-2019 for all gear types.

Source: SEFSC Coastal Logbook (accessed May 2020) and Discard Logbook (accessed May 2020).

Of the four discard codes, regulations (i.e., not legal size and out of season) was the most common reason selected for the most commonly discarded snapper grouper species based on

self-reported discards (Table G.1.1.2). The minimum size limit appears to be the primary driver of commercial discards for black sea bass, gag, gray snapper, gray triggerfish, greater amberjack, and yellowtail snapper. Out of season appears to be the primary driver of discards for almaco jack, red porgy, red snapper, and vermilion snapper. Red porgy has the second highest amount of discards in the commercial vertical line component of the snapper grouper fishery, with 78% of discards attributed to "out of season."

**Table G.1.1.2**. The percentage of unexpanded discards for each discard reason out of the total number of self-reported discards reported to the Supplemental Discard Logbook for the top ten snapper grouper species discarded in the South Atlantic from 2015 through 2019. Some

percentages may not sum to 100% due to rounding.

Species	Not Legal Size	Out of Season	Other Regulations	Market Conditions
Almaco Jack	4%	72%	7%	17%
Black Sea Bass	99%	0%	0%	0%
Gag	78%	20%	0%	2%
Gray Snapper	91%	0%	0%	8%
Gray Triggerfish	59%	39%	1%	0%
Greater Amberjack	77%	20%	3%	1%
Red Porgy	19%	78%	2%	0%
Red Snapper	2%	78%	20%	0%
Vermilion Snapper	43%	50%	7%	0%
Yellowtail Snapper	92%	6%	2%	0%

Sources: SEFSC Supplemental Commercial Discard Logbook (May 2020).

#### Recreational Sector

From 2015 through 2019, the most discarded species on trips capturing a snapper grouper species was black sea bass for all three modes (Table G.1.1.3). Red snapper, tomtate, yellowtail snapper, and grunt species were in the top ten for all modes.

**Table G.1.1.3**. From 2015 through 2019, the top ten species with discards reported on trips capturing a snapper grouper species by recreational mode. Species are sorted by number of total discards for each mode from 2015-2019.

	HEADBOAT		CHARTE	ER	PRIVATE	
Rank	Species	Discards (N)	Species	Discards (N)	Species	Discards (N)
1	Black Sea Bass	2,362,007	Black Sea Bass	1,464,909	Black Sea Bass	40,129,026
2	Vermilion Snapper	461,562	Red Snapper	601,973	Gray Snapper	21,989,786
3	Tomtate	327,379	Yellowtail Snapper	529,770	Pinfish	10,632,466
4	White Grunt	294,025	Tomtate	472,005	Red Snapper	9,907,110
5	Yellowtail Snapper	278,821	Vermilion Snapper	416,724	Yellowtail Snapper	6,926,752
6	Red Snapper	258,627	Gray Snapper	275,171	Tomtate	6,619,263
7	Gray Triggerfish	183,024	Mutton Snapper	149,472	Hardhead Catfish	5,036,604
8	Blue Runner	121,476	Blue Runner	133,872	Grunt (family)	4,961,629
9	Grunts (unidentified)	99,496	Grunt (family)	128,757	Atlantic Croaker	4,675,997
10	Atlantic Sharpnose Shark	90,504	Greater Amberjack	112,017	Gray Triggerfish	3,828,858

Sources: MRIP FES data from SEFSC Recreational ACL Dataset (September 2020); Headboat data from SEFSC Headboat Logbook CRNF files (expanded; July 2020).

Recreational discards of several snapper grouper species are higher than the landings for certain modes of fishing (Table G.1.1.4). Red snapper, black sea bass, red grouper, and tomtate discards are many times higher than their landings across all modes. Across most of the snapper grouper species, the magnitude of private mode discards is much higher compared to the headboat or charter modes. Red porgy recreational discards to landings ratios are 106% in the headboat component, 63% in the charter component, and 77% in the private recreational component.

**Table G.1.1.4**. South Atlantic snapper grouper headboat, charter, and private mean annual estimates of landings and discards (2015-2019). Headboat and MRIP (charter and private) landings and discards are in numbers of fish.

	HEADBOAT			CHARTER			PRIVATE		
Species	Landings	Discards	Ratio	Landings	Discards	Ratio	Landings	Discards	Ratio
	(N)	(N)	(D:L)	(N)	(N)	(D:L)	(N)	(N)	(D:L)
Almaco Jack	8,345	1,683	20%	12,752	2,921	23%	70,012	237,235	339%
Black Sea Bass	48,095	472,401	982%	37,817	288,186	762%	484,547	7,953,343	1,641%
Gag	679	805	118%	2,387	2,257	95%	21,664	57,088	264%
Gray Triggerfish	39,606	36,605	92%	53,395	19,237	36%	306,482	765,772	250%
Greater Amberjack	3,757	3,555	95%	24,570	22,404	91%	69,007	128,035	186%
Mutton Snapper	15,939	15,516	97%	24,579	29,894	122%	208,691	576,812	276%
Red Grouper	2,577	8,675	337%	3,282	8,902	271%	53,718	142,866	266%
Red Porgy	12,095	12,765	106%	14,248	8,922	63%	109,050	83,622	77%
Red Snapper	2,461	51,725	2,102%	6,033	120,395	1,996%	211,833	1,981,423	935%
Scamp	1,554	1,044	67%	3,174	193	6%	2,775	1,458	53%
Snowy Grouper	501	4	1%	1,936	165	9%	2,536	599	24%
Tomtate	44,536	65,476	147%	13,456	94,401	702%	439,869	1,323,853	301%
Vermilion Snapper	128,029	92,312	72%	73,407	83,345	114%	435,534	661,292	152%
White Grunt	149,852	58,805	39%	26,450	8,944	34%	517,265	350,516	68%
Whitebone Porgy	5,083	1,720	34%	3,475	325	9%	25,948	3,740	14%
Yellowtail Snapper	134,139	55,764	42%	239,421	105,954	44%	1,002,876	1,385,351	138%

Sources: MRIP FES data from SEFSC Recreational ACL Dataset (September 2020); Headboat data from SEFSC Headboat Logbook CRNF files (expanded; July 2020).

## 1.2 Practicability of Management Measures in Directed Fisheries Relative to their Impact on Bycatch and Bycatch Mortality

#### Expected Impacts on Bycatch for the Subject Amendment Actions

Action 1 would establish a rebuilding plan for South Atlantic red porgy. The Council selected **Alternative 5** as the preferred alternative, which proposes a rebuilding timeframe that would end in 2047. Establishing a rebuilding plan does not directly affect bycatch; thus, no changes in bycatch are expected for Action 1.

Action 2 would revise the total acceptable biological catch (ABC), annual catch limit (ACL) and annual optimum yield (OY) for red porgy to reflect the updated ABC level recommended by the Council's SSC. All of the proposed ABCs, ACLs, and OYs would lead to a reduction in harvest of red porgy. The Council selected **Alternative 2** as the preferred alternative, which proposes a total ABC, ACL, and OY that is equal to the ABC level recommended by the Council's SSC. Lower catch levels than what is currently allowed, as proposed by **Preferred Alternative 2**, could result in increased regulatory discards of red porgy. However, fishing effort or behavior is not expected to change for the snapper grouper fishery; thus, no changes in bycatch are expected for Action 2.

Action 3 would revise the sector allocations for red porgy and sector ACLs to reflect the updated ABC level recommended by the Council's SSC and chosen by the Council. The Council selected **Alternative 2** as the preferred alternative, which proposes an allocation of 51.43% of the red porgy total annual catch limit to the commercial sector and 48.57% to the recreational sector. This allocation scenario modestly increases the commercial sector allocation from the status quo. The proposed allocations are not expected to result in changes to fishing activity or behavior; thus, no changes in bycatch are expected for Action 3.

Action 4 would modify commercial management measures for red porgy. The Council selected **Sub-alternative 2a** and **3a** as the preferred alternatives, which propose a 15 fish per trip limit for each split season. These trip limits would constrain harvest and could lead to increased regulatory discards. However, this action essentially creates a "bycatch allowance" so commercial fishermen could retain small numbers of red porgy over the longest amount of time and could minimize discards of incidentally harvested red porgy when targeting other species such as gray triggerfish and vermilion snapper. Red porgy have a moderate estimated release mortality rate so some negative population effects would be expected if the fishery experiences an increase in discards. While increased discards of red porgy are expected, there is no anticipated change to fishing activity or behavior in the snapper grouper commercial sector and thus no changes in bycatch are expected for Action 4.

Action 5 would modify recreational management measures for red porgy. The Council selected **Alternative 2** as the preferred option for Sub-Action 5a, which would reduce the recreational bag limit to 1 fish per person per day or trip. This bag limit could result in increased regulatory discards, however, most recreational fishing trips harvest one or less red porgy per person. The Council also selected **Alternative 2** as the preferred option for Sub-Action 5b, which would establish a recreational fishing season of May through June. The preferred alternative would

allow fishing during months of highest recreational fishing effort, highest predicted red porgy landings, and could reduce regulatory discards. The truncated fishing season could increase regulatory discards in the other months of the year, however, fishing activity or behavior in the snapper grouper recreational sector is not expected to substantially change, thus no changes in bycatch are expected for Action 5.

Action 6 would revise the recreational AMs for red porgy. The proposed AMs range from implementing an in-season closure to announcing the length of the season. If a recreational fishing season is shortened as a result of a triggered AM, this action could increase regulatory discards in the fishery. The Council selected **Alternative 3** as the preferred option. Because red porgy are incidentally harvested while recreational fishers target snapper grouper species and no anticipated change to fishing activity or behavior are expected; thus no changes in bycatch are expected for Action 6.

## <u>Past, Current, and Future Actions to Prevent Bycatch and Improve Monitoring of Harvest, Discards, and Discard Mortality</u>

Actions taken in the Snapper Grouper FMP related to management of red porgy, including actions that could reduce bycatch and bycatch mortality of red porgy and other snapper grouper species, are outlined in Section 1.6 of this amendment. Other past, current, and future actions that could prevent bycatch and/or improve monitoring of harvest, discards, and discard mortality are included below.

Amendment 16 to the Snapper Grouper FMP (SAFMC 2009) required the use of dehooking devices, which could help reduce bycatch mortality of snapper grouper species. Dehooking devices can allow fishermen to remove hooks with greater ease and more quickly without removing the fish from the water. If a fish does need to be removed from the water, dehookers reduce handling time thus increasing survival (Cooke et al. 2001).

Amendment 17A to the Snapper Grouper FMP (SAFMC 2010) required circle hooks for snapper grouper species north of 28 degrees latitude, which has likely reduced bycatch mortality of some snapper grouper species.

The Comprehensive Ecosystem-Based Amendment 2 (CE-BA 2; SAFMC 2011a) included actions that modified management of special management zones (SMZ) off South Carolina; revised sea turtle release gear requirements for the snapper grouper fishery that were established in Amendment 15B to the Snapper Grouper FMP (SAFMC 2008); and designated new essential fish habitat (EFH) and EFH-Habitat Areas of Particular Concern in the South Atlantic. CE-BA 2 also included an action that limited harvest and possession of snapper grouper and coastal migratory pelagic (CMP) species to the bag limit in SMZs off South Carolina. This action likely reduced bycatch around SMZs by restricting commercial harvest in the area, but has probably had limited effect on the magnitude of overall bycatch of snapper grouper species in the South Atlantic.

The Comprehensive ACL Amendment (SAFMC 2011b) implemented ACLs and AMs for species not undergoing overfishing in the FMPs for snapper grouper, dolphin and wahoo, golden crab, and *Sargassum*, in addition to other actions such as allocations and establishing annual

catch targets for the recreational sector. ACLs and AMs have likely reduced bycatch of target species as well as incidentally caught species.

The Council's Headboat Electronic Reporting Amendment (SAFMC 2013) changed the reporting frequency by headboats from monthly to weekly, and required that reports be submitted electronically. The action is expected to provide more timely information on landings and discards. Improved information on landings would help ensure ACLs are not exceeded. Furthermore, more timely and accurate information would be expected to provide a better understanding of the composition and magnitude of catch and bycatch, enhance the quality of data provided for stock assessments, increase the quality of assessment output, and lead to better decisions regarding additional measures to reduce bycatch.

Amendment 36 to the Snapper Grouper FMP (SAFMC 2016) established SMZs and is expected to reduce bycatch of many snapper grouper species, especially speckled hind and warsaw grouper.

The Council developed a joint For-Hire Reporting Amendment (SAFMC 2017) with the Gulf of Mexico Fishery Management Council that requires all federally permitted charter vessels report landings information weekly to the SEFSC electronically. Additionally, the Councils will also begin development of a joint amendment to require that all federally permitted commercial fishing vessels in the southeast also report their logbook landings information electronically. These future actions will help to improve estimates on the composition and magnitude of catch and bycatch of species affected by this amendment, as well as all other federally managed species in the southeast region.

Amendment 42 to the Snapper Grouper FMP (SAFMC 2019c) modified sea turtle release gear regulations for the commercial snapper grouper fishery and modified the snapper grouper framework so the Council may more quickly modify sea turtle and other protected resources release gear and handling requirements in the future.

Regulatory Amendment 29 to the Snapper Grouper FMP (SAFMC 2020) required descending devices be on board all commercial, for-hire, and private recreational vessels while fishing for or possessing snapper grouper species; the use of non-offset, non-stainless steel circle hooks when fishing for snapper grouper species with hook-and-line gear and natural baits north of 28° N latitude; and all hooks be non-stainless steel when fishing for snapper grouper species with hook-and-line gear and natural baits throughout South Atlantic federal waters. The Council has also implemented an extensive outreach and public education program, which along with its citizen science initiative is promoting best fishing practices for all the species it manages.

Regulatory Amendment 31 to the Snapper Grouper FMP (included in the Comprehensive Recreational AMs Amendment) could include actions to revise recreational AMs to allow more flexibility in managing recreational fisheries.

Amendment 46 to the Snapper Grouper FMP proposes actions to focus on private recreational permit and reporting. Work on this amendment is currently on hold.

These past, current, and potential future actions will help to improve estimates on the composition and magnitude of catch and bycatch of federally managed species in the southeast region and minimize discard mortality. Additional information on fishery related actions from the past, present, and future considerations can be found in Chapter 6 (Cumulative Effects) of the amendment.

## 2. Ecological Effects Due to Changes in Bycatch

Release mortality rates for the snapper grouper fishery are widely variable species to species and sector to sector, and are dependent on fishing mode (Table G.2.2.1). For instance, recreational discards of red snapper in the South Atlantic are a main driver in the overfishing determination for the stock (SEDAR 41 2017). However, discard mortality estimates for snapper grouper species are variable and highly uncertain. Generally, release mortality is highly correlated with depth for snapper grouper species, with highest mortality among fish captured in deep water (Campbell et al. 2014; Pulver 2017; Rudershausen et al. 2014; Stephen and Harris 2010; Wilson and Burns 1996). Red porgy can be captured over a broad depth range or transition to different depth zones throughout their life history, so release mortality rates can be variable.

**Table G.2.2.1.** Release mortality rates of select recreationally and commercially important snapper-grouper species from recent stock assessments.

Species	Fishery	Release mortality	Data Source
Black Sea Bass	Recreational	13.7%	SEDAR 56 (2018)
Black Sea Bass	Commercial Trap/Pot (2007- present)	48.3%	SEDAR 56 (2018)
Black Sea Bass	Commercial Vertical Line	19%	SEDAR 56 (2018)
Gag	Recreational	25%	SEDAR 10 Update (2014)
Gag	Commercial	40%	SEDAR 10 Update (2014)
Gray Triggerfish	Recreational & Commercial	12.5%	SEDAR 41 (2016)
Greater Amberjack	Recreational & Commercial	20%	SEDAR 59 (2020)
Red Porgy	Recreational	41%	SEDAR 60 (2020)
Red Porgy	Commercial	53%	SEDAR 60 (2020)
Red Snapper	Recreational - Private	23%	SEDAR 73 (2021)
Red Snapper	Recreational - Charter & Headboat	22%	SEDAR 73 (2021)
Red Snapper	Commercial		SEDAR 73 (2021)
Vermilion snapper	Recreational	38%	SEDAR 55 (2018)
Vermilion snapper	ion snapper   Commercial		SEDAR 55 (2018)
Yellowtail snapper	Recreational	15%	SEDAR 64 (2020)
Yellowtail snapper	Commercial	12.5%	SEDAR 64 (2020)

It is likely that most mortality is a function of hooking and handling of the fish when the hook is being removed. Regulatory Amendment 29 to the Snapper Grouper FMP (SAFMC 2020) required descending devices be on board all commercial, for-hire, and private recreational

vessels while fishing for or possessing snapper grouper species; the use of non-offset, non-stainless steel circle hooks when fishing for snapper grouper species with hook-and-line gear and natural baits north of 28° N latitude; and all hooks be non-stainless steel when fishing for snapper grouper species with hook-and-line gear and natural baits throughout South Atlantic federal waters. The Council also implemented an extensive outreach and public education program, which along with its citizen science initiative is promoting best fishing practices for all the species it manages. The goal of these regulations is to reduce discard mortality for snapper grouper species.

The actions contained in this amendment are not expected to result in substantial changes to bycatch in the snapper grouper fishery; thus, ecological effects due to changes in bycatch in this fishery are expected to be negligible. For more details on ecological effects, see Chapters 3 and 4 of this amendment.

# 3. Changes in the Bycatch of Other Fish Species and Resulting Population and Ecosystem Effects

Amendment 50 is not expected to result in substantial changes in bycatch of other fish species. The snapper grouper fishery is characterized by a high amount of discards for all species and sectors (Table G.1.1.1 and G.1.1.3). Both sectors likely target a wide range of species, including dolphin wahoo, snapper grouper, and coastal migratory pelagic species during each trip. This results in a varied amount and type of bycatch of species. However, the actions in this amendment are not expected to alter fishing activity or behavior; thus no changes in bycatch of other species are expected.

### 4. Effects on Marine Mammals and Birds

#### Marine Mammals

Under Section 118 of the Marine Mammal Protection Act (MMPA), the NMFS must publish, at least annually, a List of Fisheries (LOF) that places all U.S. commercial fisheries into one of three categories based on the level of incidental serious injury and mortality of marine mammals that occurs in each fishery. The longline and hook-and-line gear components of the snapper grouper fishery are determined to have remote likelihood of / no known interactions with marine mammals (Category III, LOF, 86 FR 43491; August 9, 2021).

#### Sea Birds

The Bermuda petrel and roseate tern occur within the action area. Bermuda petrels are occasionally seen in the waters of the Gulf Stream off the coasts of North Carolina and South Carolina during the summer. Sightings are considered rare and only occurring in low numbers (Alsop 2001). Roseate terns occur widely along the Atlantic coast during the summer but in the southeast region, they are found mainly off the Florida Keys (unpublished US Fish and Wildlife Service data). Interaction with fisheries has not been reported as a concern for either of these species. Although, the Bermuda petrel and roseate tern occur within the action area, these species are not commonly found and neither has been described as associating with vessels or

having had interactions with the dolphin wahoo fishery. Thus, the fishery is not likely to adversely affect the Bermuda petrel and the roseate tern.

## 5. Changes in Fishing, Processing, Disposal, and Marketing Costs

The actions proposed in Amendment 52 are not expected to substantially alter fishing practices, processing, disposal, or marketing costs in the near or short term in relation to bycatch or discards in the dolphin wahoo fishery. As shown in the analyses in Chapter 4 of the preferred alternatives for actions potentially affecting catch, costs are not expected to change. Similarly in the long term, it is more likely that current fishing, processing, disposal, and marketing costs would be maintained at or near their status quo levels, thus leading to no anticipated changes.

## 6. Changes in Fishing Practices and Behavior of Fishermen

As discussed above, the actions proposed in Amendment 52 are not expected to change fishing practices or fishing behavior, and are likely to have little effect on the overall magnitude of discards. Also, any changes to fishing behavior and subsequent changes in the level of discards or discard mortality that may result from the actions in the amendment are expected to be small, and would not jeopardize the sustainability of any target or non-target species.

# 7. Changes in Research, Administration, and Enforcement Costs and Management Effectiveness

#### Research

Research and monitoring is ongoing to understand the effectiveness of implemented management measures and their effect on bycatch. The SEFSC is developing electronic logbooks, which could be used to enable fishery managers to obtain information on species composition, size distribution, geographic range, disposition, and depth of fishes that are released. Further, a joint Commercial Logbook Reporting Amendment is being developed by the Council and the Gulf of Mexico Fishery Management Council, which would require electronic reporting of landings information by federally permitted commercial vessels to increase the timeliness and accuracy of landings and discard data. The For-Hire Reporting Amendment should improve timeliness and quality of data for the charter and headboat components of the recreational sector.

Cooperative research projects between science and industry are available each year in the form of grants from Marine Fisheries Initiative, Saltonstall-Kennedy program, and the Cooperative Research Prom. These programs can provide research funds for observer programs, as well as gear testing and testing of electronic devices. A condition of funding for these projects is that data are made available to the Councils and NMFS upon completion of a study.

#### Administration

The proposed actions are not expected to significantly impact administrative costs.

#### Enforcement

The proposed actions are not expected to significantly impact enforcement costs.

# 8. Changes in the Economic, Social, or Cultural Value of Fishing Activities and Non-Consumptive Uses of Fishery Resources

Changes in economic, social, or cultural values are discussed in Chapter 4. None of the actions and alternatives in Amendment 52 are likely to change the current level of bycatch of target or non-target species in the South Atlantic and thus are unlikely to change the social, economic, or cultural value of fishing activities and non-consumptive uses of the snapper grouper fishery.

## 9. Changes in the Distribution of Benefits and Costs

The distribution of benefits and costs expected from the proposed actions in Amendment 50 are discussed in the economic and social effects analysis in Chapter 4. These effects are discussed in relation to the baseline economic and social conditions of the fishery and fishing communities outlined in Chapter 3 of the document. Additionally, the Regulatory Impact Review (Appendix B) and Regulatory Flexibility Act Analysis (Appendix C) provide additional information on changes in the distribution of benefits and costs. Overall, almost no such alterations would be caused by changes to bycatch resulting from this amendment.

#### 10. Social Effects

The baseline social environment and social effects of the proposed actions are described in Chapters 3 and 4 of Amendment 52, respectively. In general, fishermen become frustrated as waste of the resource due to regulatory bycatch of target and non-target species increases. This often results in a distrust of science in that regulations are intended to protect stocks and rebuild overfished stocks by reducing such bycatch. However, none of the actions and alternatives in Amendment 50 are likely to change the current level of bycatch of target or non-target species in the South Atlantic and thus are unlikely to result in the negative social effects described.

### 11. Conclusion

This BPA evaluates the practicability of taking additional action to minimize bycatch and bycatch mortality using the ten factors provided at 50 CFR section 600.350(d)(3)(i). In summary, the proposed actions in Amendment 52 are not likely to significantly contribute or detract from the current level of bycatch in the snapper grouper fishery. The Council, NMFS, and the SEFSC have implemented and plan to implement numerous management measures and reporting requirements that have improved, or are likely to improve monitoring efforts of discards and discard mortality.

## 12. References UPDATE

South Atlantic Fishery Management Council (SAFMC). 2009. Amendment 16 to the FMP for the Snapper Grouper Fishery of the South Atlantic Region. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Ste 201, Charleston, S.C. 29405. 608 pp. plus appendices.

SAFMC. 2010. Amendment 17A for the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Ste 201, Charleston, S.C. 29405.

SAFMC. 2011a. Comprehensive Ecosystem Based Amendment 2 for the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region. (Amendment 23 to the Snapper Grouper FMP). South Atlantic Fishery Management Council, 4055 Faber Place, Ste 201, North Charleston, S.C. 29405.

SAFMC. 2011b. Comprehensive Annual Catch Limit Amendment for the South Atlantic Region. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Ste 201, Charleston, S.C. 29405. 755 pp. plus appendices.

SAFMC. 2013. Amendment 31 to the FMP for the Snapper Grouper Fishery of the South Atlantic Region, Amendment 6 to the FMP for the Dolphin and Wahoo Fishery of the Atlantic, and Amendment 22 to the FMP for Coastal Migratory Pelagic Resources in the Gulf of Mexico and Atlantic Region. Joint South Atlantic/Gulf of Mexico Generic Charter/Headboat Reporting in the South Atlantic Amendment. South Atlantic Fishery Management Council, 4055 Faber Place, Ste 201, North Charleston, S.C. 29405. 207 pp.

SAFMC. 2016. Amendment 36 to the FMP for the Snapper Grouper Fishery of the South Atlantic Region. South Atlantic Fishery Management Council, 4055 Faber Place, Ste 201, North Charleston, S.C. 29405. 148 pp.

SAFMC. 2017. Amendment 39 to the FMP for the Snapper Grouper Fishery of the South Atlantic Region, Amendment 9 to the FMP for the Dolphin and Wahoo Fishery of the Atlantic, and Amendment 27 to the FMP for the Coastal Migratory Pelagics Fishery of the Gulf of Mexico and Atlantic Region. South Atlantic Fishery Management Council, 4055 Faber Place, Ste 201, North Charleston, S.C. 29405. 221 pp.

SAFMC. 2019. Amendment 42 to the FMP for the Snapper Grouper Fishery of the South Atlantic Region. South Atlantic Fishery Management Council, 4055 Faber Place, Ste 201, North Charleston, S.C. 29405. 148 pp.

SAFMC. 2020. Regulatory Amendment 29 to the FMP for the Snapper Grouper Fishery of the South Atlantic Region. South Atlantic Fishery Management Council, 4055 Faber Place, Ste 201, North Charleston, S.C. 29405. 148 pp.

## Appendix H. Fishery Impact Statement-UPDATE

The Magnuson-Stevens Fishery Conservation and Management Act requires a Fishery Impact Statement (FIS) be prepared for all amendments to fishery management plans (FMP). The FIS contains an assessment of the expected and potential biological, economic, and social effects of the conservation and management measures on: 1) fishery participants and their communities; 2) participants in the fisheries conducted in adjacent areas under the authority of another Council; and 3) the safety of human life at sea. Detailed discussion of the expected effects for all proposed changes is provided in Chapters 1 and 2. The FIS provides a summary of these effects.

## Actions Contained in Amendment 52 to the FMP for the Snapper Grouper Fishery of the South Atlantic Region (Amendment 52)

- Action 1. .
  - o Preferred Alternative.
- Action 2. ..
  - o Preferred Alternative.

**Assessment of Biological Effects** 

**Assessment of Economic Effects** 

**Assessment of the Social Effects** 

Assessment of Effects on Safety at Sea

Amendment 52 is not expected to result in direct impacts to safety at sea.

## Appendix I. History of Management-UPDATE

The snapper grouper fishery is highly regulated; some of the species included in this amendment have been regulated since 1983. The following table summarizes actions in each of the amendments to the original Snapper Grouper Fishery Management Plan (FMP), as well as some events not covered in amendment actions.

\*Shaded rows indicate FMP Amendments

Shaded fows in			
Document	All Actions Effective By:	Proposed Rule Final Rule	Major Actions.  Note that not all details are provided here. Please refer to Proposed and Final Rules for all impacts of listed documents.
FMP (1983)	08/31/83	PR: 48 FR 26843 FR: 48 FR 39463	-12" total length (TL) limit – red snapper, yellowtail snapper, red grouper, Nassau grouper; -8" limit – black sea bass; -4" trawl mesh size; -Gear limitations – poisons, explosives, fish traps, trawls; -Designated modified habitats or artificial reefs as Special Management Zones (SMZs).
Regulatory Amendment #1 (1987)	03/27/87	PR: 51 FR 43937 FR: 52 FR 9864	-Prohibited fishing in SMZs except with hand-held hook-and-line and spearfishing gear; -Prohibited harvest of goliath grouper in SMZs.
Amendment #1 (1988a)	01/12/89	PR: 53 FR 42985 FR: 54 FR 1720	-Prohibited trawl gear to harvest fish south of Cape Hatteras, NC and north of Cape Canaveral, FL; -Directed fishery defined as vessel with trawl gear and ≥200 lb s-g on board; -Established rebuttable assumption that vessel with s-g on board had harvested such fish in the exclusive economic zone (EEZ).
Regulatory Amendment #2 (1988b)	03/30/89	PR: 53 FR 32412 FR: 54 FR 8342	-Established 2 artificial reefs off Ft. Pierce, FL as SMZs.
Emergency Rule	8/3/90	55 FR 32257	-Added wreckfish to the fishery management unit (FMU); -Fishing year beginning 4/16/90; -Commercial quota of 2 million pounds; -Commercial trip limit of 10,000 pounds per trip.
Fishery Closure Notice	8/8/90	55 FR 32635	- Fishery closed because the commercial quota of 2 million pounds was reached.
Notice of Control Date	09/24/90	55 FR 39039	-Anyone entering federal wreckfish fishery in the EEZ off S. Atlantic states after 09/24/90 was not assured of future access if limited entry program developed.
Regulatory Amendment #3 (1989)	11/02/90	PR: 55 FR 28066 FR: 55 FR 40394	-Established artificial reef at Key Biscayne, FL as SMZ; -Fish trapping, bottom longlining, spear fishing, and harvesting of Goliath grouper prohibited in SMZ.
Amendment #2 (1990a)	10/30/90	PR: 55 FR 31406 FR: 55 FR 46213	<ul><li>-Prohibited harvest/possession of goliath grouper in or from the EEZ;</li><li>-Defined overfishing for goliath grouper and other species.</li></ul>

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Emergency Rule Extension	11/1/90	55 FR 40181	-Extended the measures implemented via emergency rule on 8/3/90.
Amendment #3 (1990b)	01/31/91	PR: 55 FR 39023 FR: 56 FR 2443	-Added wreckfish to the FMU; -Defined optimum yield (OY) and overfishing; -Required permit to fish for, land or sell wreckfish; -Required catch and effort reports from selected, permitted vessel; -Established control date of 03/28/90; -Established a fishing year for wreckfish starting April 16; -Established a process to set annual quota, with initial quota of 2 million pounds; provisions for closure; -Established 10,000 pound trip limit; -Established a spawning season closure for wreckfish from January 15 to April 15; -Provided for annual adjustments of wreckfish management measures.
Notice of Control Date	07/30/91	56 FR 36052	-Anyone entering federal snapper grouper fishery (other than for wreckfish) in the EEZ off S. Atlantic states after 07/30/91 was not assured of future access if limited entry program developed.
Amendment #4 (1991)	01/01/92	PR: 56 FR 29922 FR: 56 FR 56016	-Prohibited gear: fish traps except black sea bass traps north of Cape Canaveral, FL; entanglement nets; longline gear inside 50 fathoms; bottom longlines to harvest wreckfish; powerheads and bangsticks in designated SMZs off S. Carolina.  -Defined overfishing/overfished and established rebuilding timeframe: red snapper and groupers ≤ 15 years (year 1 = 1991); other snappers, greater amberjack, black sea bass, red porgy ≤ 10 years (year 1 = 1991);  -Required permits (commercial & for-hire) and specified data collection regulations;  -Established an assessment group and annual adjustment procedure (framework);  -Permit, gear, and vessel id requirements specified for black sea bass traps;  -No retention of snapper grouper spp. caught in other fisheries with gear prohibited in snapper grouper fishery if captured snapper grouper had no bag limit or harvest was prohibited. If had a bag limit, could retain only the bag limit;  -8" TL limit − lane snapper;  -10" TL limit − vermilion snapper (recreational only);  -12" TL limit − red porgy, vermilion snapper (commercial only), gray, yellowtail, mutton, schoolmaster, queen, blackfin, cubera, dog, mahogany, and silk snappers;  -20" TL limit − red snapper, gag, and red, black, scamp, yellowfin, and yellowmouth groupers;  -28" fork length (FL) limit − greater amberjack (recreational only);

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			-36" FL or 28" core length – greater amberjack (commercial only); -Bag limits – 10 vermilion snapper, 3 greater amberjack -Aggregate snapper bag limit – 10/person/day, excluding vermilion snapper and allowing no more than 2 red snappers; -Aggregate grouper bag limit – 5/person/day, excluding Nassau and goliath grouper, for which no retention (recreational & commercial) is allowed; -Spawning season closure – commercial harvest greater amberjack > 3 fish bag prohibited in April; -Spawning season closure – commercial harvest mutton snapper >snapper aggregate prohibited during May and June;
Amendment #5 (1992a)	04/06/92	PR: 56 FR 57302 FR: 57 FR 7886	-Charter/headboats and excursion boat possession limits extended.  For wreckfish: -Established limited entry system with individual transferable quotas (ITQs); -Required dealer to have permit; -Rescinded 10,000 lb. trip limit; -Required off-loading between 8 am and 5 pm; -Reduced occasions when 24-hour advance notice of offloading required for off-loading; -Established procedure for initial distribution of percentage shares of total allowable catch (TAC).
Emergency Rule	8/31/92	57 FR 39365	For Black Sea Bass (bsb): -Modified definition of bsb pot; -Allowed multi-gear trips for bsb; -Allowed retention of incidentally-caught fish on bsb trips.
Emergency Rule Extension	11/30/92	57 FR 56522	For Black Sea Bass: -Modified definition of bsb pot; -Allowed multi-gear trips for bsb; -Allowed retention of incidentally-caught fish on bsb trips.
Regulatory Amendment #4 (1992b)	07/06/93	FR: 58 FR 36155	-For Black Sea Bass: -Modified definition of bsb pot; -Allowed multi-gear trips for bsb; -Allowed retention of incidentally-caught fish on bsb trips.
Regulatory Amendment #5 (1992c)	07/31/93	PR: 58 FR 13732 FR: 58 FR 35895	-Established 8 SMZs off South Carolina, where only hand-held, hook-and-line gear and spearfishing (excluding powerheads) was allowed.

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Amendment #6 (1993)	06/27/94	PR: 59 FR 9721 FR: 59 FR 27242	-Set up separate commercial TAC levels for golden tilefish and snowy grouper; -Established commercial trip limits for snowy grouper, golden tilefish, speckled hind, and warsaw grouper; -Included golden tilefish in grouper recreational aggregate bag limits; -Prohibited sale of warsaw grouper and speckled hind; -100% logbook coverage upon renewal of permit; -Creation of the Oculina Experimental Closed Area; -Data collection needs specified for evaluation of possible future individual fishing quota system.
Amendment #7 (1994a)	01/23/95	PR: 59 FR 47833 FR: 59 FR 66270	-12" FL – hogfish; -16" TL – mutton snapper; -Required dealer, charter and headboat federal permits; -Allowed sale under specified conditions; -Specified allowable gear and made allowance for experimental gear; -Allowed multi-gear trips in NC; -Added localized overfishing to list of problems and objectives; -Adjusted bag limit and crew specs. for charter and head boats; -Modified management unit for scup to apply south of Cape Hatteras, NC;
Regulatory Amendment #6 (1994b)	05/22/95	PR: 60 FR 8620 FR: 60 FR 19683	-Modified framework procedure.  -Established actions which applied only to EEZ off Atlantic coast of FL: Bag limits – 5 hogfish/person/day (recreational only), 2 cubera snapper/person/day > 30" TL; 12" TL – gray triggerfish.
Notice of Control Date	04/23/97	62 FR 22995	-Anyone entering federal black sea bass pot fishery off South Atlantic states after 04/23/97 was not assured of future access if limited entry program developed.
Interim Rule Request	1/16/98		-The South Atlantic Fishery Management Council (Council) requested all Amendment 9 measures except black sea bass pot construction changes be implemented as an interim request under the Magnuson-Stevens Act.
Action Suspended	5/14/98		-NMFS informed the Council that action on the
Emergency Rule Request	9/24/98		interim rule request was suspended.  -Council requested Amendment 9 be implemented via emergency rule.
Amendment #8 (1997)	12/14/98	PR: 63 FR 1813 FR: 63 FR 38298	-Established program to limit initial eligibility for snapper grouper fishery: -Must have demonstrated landings of any species in the snapper grouper FMU in 1993, 1994, 1995 or 1996; and have held valid snapper grouper permit between 02/11/96 and 02/11/97; -Granted transferable permit with unlimited landings if vessel landed ≥ 1,000 pounds (lb) of snapper grouper species in any of the years;

			Major Actions.
Document	All Actions	Proposed Rule	Note that not all details are provided here. Please
Document	Effective By:	Final Rule	refer to Proposed and Final Rules for all impacts of
			listed documents.
			-Granted non-transferable permit with 225 lb trip limit
			to all other vessels;
			-Modified problems, objectives, OY, and overfishing
			definitions;
			-Expanded the Council's habitat responsibility;
			-Allowed retention of snapper grouper species in
			excess of bag limit on permitted vessel with a single
			bait net or cast nets on board;
			-Allowed permitted vessels to possess filleted fish
			harvested in the Bahamas under certain conditions.
Request not			-NMFS informed the Council that the final rule for
Implemented	1/22/99		Amendment 9 would be effective 2/24/99; therefore
-			they did not implement the emergency rule.
Regulatory		PR: 63 FR 43656	-Established 10 SMZs at artificial reefs off South
Amendment #7	01/29/99	FR: 63 FR 71793	Carolina.
(1998a)		110 00 110 /1/20	
			-Red porgy: 14" TL (recreational and commercial); 5
			fish rec. bag limit; no harvest or possession > bag
			limit, and no purchase or sale, in March and April;
			-Black sea bass: 10" TL (recreational and commercial); 20 fish rec. bag limit; required escape
			vents and escape panels with degradable fasteners in
			bsb pots;
			-Greater amberjack: 1 fish rec. bag limit; no harvest or
			possession > bag limit, and no purchase or sale, during
			April; quota = 1,169,931 lb; began fishing year May 1;
			prohibited coring;
			-Vermilion snapper: 11" TL (recreational), 12" TL
			commercial;
Amendment #9	2/24/99	PR: 63 FR 63276	-Gag: 24" TL (recreational); no commercial harvest or
(1998b)	2/24/99	FR: 64 FR 3624	possession > bag limit, and no purchase or sale, during
			March and April;
			-Black grouper: 24" TL (recreational and
			commercial); no harvest or possession > bag limit, and
			no purchase or sale, during March and April;
			-Gag and Black grouper: within 5 fish aggregate
			grouper bag limit, no more than 2 fish may be gag or
			black grouper (individually or in combination);
			-All snapper grouper without a bag limit: aggregate
			recreational bag limit 20 fish/person/day, excluding tomtate and blue runner;
			-Vessels with longline gear aboard may only possess
			snowy, warsaw, yellowedge, and misty grouper, and
			golden, blueline and sand tilefish.
Emergency	0.10.10.0	(4.77.40	-Reopened the Amendment 8 permit application
Action	9/3/99	64 FR 48326	process.
	09/08/99,	(4 ED 40224 1	-Prohibited harvest or possession of red porgy.
Emergency	expired	64 FR 48324 and	1 [8]
Interim Rule	08/28/00	65 FR 10040	

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Amendment #10  Comprehensive Essential Fish Habitat Amendment (1998c)	07/14/00	PR: 64 FR 37082 and 64 FR 59152 FR: 65 FR 37292	-Identified essential fish habitat (EFH) and established habitat areas of particular concern (HAPC) for species in the snapper grouper FMU.
Amendment #11 Comprehensive Sustainable Fisheries Act Amendment (1998d)	12/02/99	PR: 64 FR 27952 FR: 64 FR 59126	-Maximum sustainable yield (MSY) proxy: goliath and Nassau grouper = 40% static spawning potential ratio (SPR); all other species = 30% static SPR; -OY: hermaphroditic groupers = 45% static SPR; goliath and Nassau grouper = 50% static SPR; all other species = 40% static SPR -Overfished/overfishing evaluations:  BSB: overfished (minimum stock size threshold (MSST)=3.72 mp, 1995 biomass=1.33 mp); undergoing overfishing (maximum fishing mortality threshold (MFMT)=0.72, F1991-1995=0.95)  -Vermilion snapper: overfished (static SPR = 21-27%) -Red porgy: overfished (static SPR = 14-19%)Red snapper: overfished (static SPR = 24-32%) -Gag: overfished (static SPR = 27%) -Scamp: no longer overfished (static SPR = 8-13%) -Warsaw grouper: overfished (static SPR = 6-14%) -Snowy grouper: overfished (static SPR = 5-15%) -White grunt: no longer overfished (static SPR = 29-39%)  -Golden tilefish: overfished (couldn't estimate static SPR) -Nassau grouper: overfished (couldn't estimate static SPR) -Ooliath grouper: overfished (couldn't estimate static SPR) -Overfishing level: goliath and Nassau grouper = F>F40% static SPR; all other species: = F>F30% static SPR  Approved definitions for overfished and overfishing. MSST = [(1-M) or 0.5 whichever is greater]*BMSY. MFMT = FMSY.
Amendment #12 (2000a)	09/22/00	PR: 65 FR 35877 FR: 65 FR 51248	For Red porgy: -MSY=4.38 mp; OY=45% static SPR; MFMT=0.43; MSST =7.34 mp; rebuilding timeframe=18 years (1999=year 1); -no sale of red porgy during Jan-April; -1 fish bag limit; -50 lb. bycatch commercial trip limit May-December; -Modified management options and list of possible framework actions.

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Regulatory Amendment #8 (2000b)	11/15/00	PR: 65 FR 41041 FR: 65 FR 61114	-Established 12 SMZs at artificial reefs off Georgia; revised boundaries of 7 existing SMZs off Georgia to meet CG permit specs; restricted fishing in new and revised SMZs.
Amendment #9 (1998b) resubmitted	10/13/00	PR: 63 FR 63276 FR: 65 FR 55203	-Commercial trip limit for greater amberjack.
Amendment #13A (2003)	04/26/04	PR: 68 FR 66069 FR: 69 FR 15731	-Extended for an indefinite period the regulation prohibiting fishing for and possessing snapper grouper species within the Oculina Experimental Closed Area.
Notice of Control Date	10/14/05	70 FR 60058	-Considered management measures to further limit participation or effort in the commercial fishery for snapper grouper species (excluding wreckfish).
Amendment #13C (2006)	10/23/06	PR: 71 FR 28841 FR: 71 FR 55096	-End overfishing of snowy grouper, vermilion snapper, black sea bass, and golden tilefish. Increase allowable catch of red porgy. Year 1 = 2006;  1. Snowy Grouper Commercial: -Quota = 151,000 lb gutted weight (gw) in year 1, 118,000 lb gw in year 2, and 84,000 lb gw in year 3 onwardsTrip limit = 275 lb gw in year 1, 175 lb gw in year 2, and 100 lb gw in year 3 onwards; Recreational: -Limit possession to one snowy grouper in 5 grouper per person/day aggregate bag limit;  2. Golden Tilefish Commercial: Quota of 295,000 lb gw, 4,000 lb gw trip limit until 75% of the quota is taken when the trip limit is reduced to 300 lb gw. Do not adjust the trip limit downwards unless 75% is captured on or before September 1; Recreational: Limited possession to 1 golden tilefish in 5 grouper per person/day aggregate bag limit;  3. Vermilion Snapper Commercial: Quota of 1,100,000 lb gw; Recreational: 12" TL size limit. 4. Black Sea Bass Commercial: Quota of 477,000 lb gw in year 1, 423,000 lb gw in year 2, and 309,000 lb gw in year 3 onwards; -Required use of at least 2" mesh for the entire back panel of black sea bass pots effective 6 months after publication of the final rule; -Required black sea bass pots be removed from the water when the quota is met; -Changed fishing year from calendar year to June 1 – May 31;

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			Recreational: Recreational allocation of 633,000 lb gw in year 1, 560,000 lb gw in year 2, and 409,000 lb gw in year 3 onwards. Increased the minimum size limit from 10" to 11" in year 1 and to 12" in year 2; -Reduced recreational bag limit from 20 to 15 per person per day; -Changed fishing year from the calendar year to June 1 through May 31.
			5. Red Porgy Commercial and recreational: -Retained 14" TL size limit and seasonal closure (retention limited to the bag limit); -Specified a commercial quota of 127,000 lb gw and prohibit sale/purchase and prohibit harvest and/or possession beyond the bag limit when quota is taken and/or during January through April; -Increased commercial trip limit from 50 lb ww to 120 red porgy (210 lb gw) during May through December; -Increased recreational bag limit from one to three red porgy per person per day.
Notice of Control Date	3/8/07	72 FR 60794	-Considered measures to limit participation in the snapper grouper for-hire sector.
Amendment #14 (2007)	2/12/09	PR: 73 FR 32281 FR: 74 FR 1621	-Established eight deepwater Type II marine protected areas (MPAs) to protect a portion of the population and habitat of long-lived deepwater snapper grouper species.
Amendment #15A (2008a)	3/14/08	73 FR 14942	- Established rebuilding plans and status determination criteria for snowy grouper, black sea bass, and red porgy.
Notice of Control Date	12/4/08	74 FR 7849	-Established a control date for the golden tilefish portion of the snapper grouper fishery in the South Atlantic.
Notice of Control Date	12/4/08	74 FR 7849	-Established control date for black sea bass pot sector in the South Atlantic.
	12/16/09, except for the amendments to § 622.18(c) was effective 11/16/2009; the		-Prohibited the sale of snapper-grouper harvested or possessed in the EEZ under the bag limits and prohibited the sale of snapper-grouper harvested or possessed under the bag limits by vessels with a Federal charter vessel/headboat permit for South Atlantic snapper-grouper regardless of where harvested;
Amendment #15B (2008b)	amendment to § 622.10(c) was effective 2/16/2010; and §§ 622.5, 622.8, and 622.18(b)(1)(i i) required OMB approval.	PR: 74 FR 30569 FR: 74 FR 58902	-Reduced the effects of incidental hooking on sea turtles and smalltooth sawfish; -Adjusted commercial permit renewal periods and transferability requirements; -Revised the management reference points for golden tilefish; -Implemented plan to monitor and assess bycatch; -Required a vessel that fished in the EEZ, if selected by NMFS, to carry an observer and install electronic

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			logbook and/or video monitoring equipment provided by NMFS; -Established allocations for snowy grouper (95% commercial & 5% recreational); -Established allocations for red porgy (50% commercial & 50% recreational)Specified status determination criteria for gag and vermilion snapper;
Amendment #16 (2009a)	7/29/09	PR: 74 FR 6297 FR: 74 FR 30964	For gag: -Specified interim allocations 51% commercial & 49% recreational; -Recreational and commercial shallow water grouper spawning closure January through April; -Directed commercial quota= 352,940 lb gw; -Reduced 5-fish aggregate grouper bag limit, including tilefish species, to a 3-fish aggregate; -Captain and crew on for-hire trips cannot retain the bag limit of vermilion snapper and species within the 3-fish grouper aggregate; For vermilion snapper: -Specified interim allocations 68% commercial & 32% recreational; -Directed commercial quota split Jan-June=315,523 lb gw and 302,523 lb gw July-Dec; -Reduced bag limit from 10 to 4 and a recreational closed season November through March; -Required possession of dehooking tools when catching snapper grouper species to reduce recreational and commercial bycatch mortality.
Amendment #19  Comprehensive Ecosystem-Based Amendment 1 (CE-BA1) (2009b)	7/22/10	PR: 75 FR 14548 FR: 75 FR 35330	-Amended coral, coral reefs, and live/hardbottom habitat FMP to establish deepwater coral HAPCs; -Created a "shrimp fishery access area" (SFAA) within the Stetson-Miami Terrace CHAPC boundaries; -Created allowable "golden crab fishing areas" with the Stetson-Miami Terrace CHAPC and Pourtales Terrace CHAPC boundaries.
Amendment #17A (2010a)	12/3/10 red snapper closure; circle hooks 3/3/2011	PR: 75 FR 49447 FR: 75 FR 76874	-Required use of non-stainless steel circle hooks when fishing for snapper grouper species with hook-and-line gear and natural bait north of 28 deg. N latitude in the South Atlantic EEZ; -Specified an annual catch limit (ACL) and an accountability measure (AM) for red snapper with management measures to reduce the probability that catches will exceed the stocks' ACL; -Specified a rebuilding plan for red snapper; -Specified status determination criteria for red snapper; -Specified a fishery-independent monitoring program for red snapperImplemented an area closure for snapper-grouper species.

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Emergency Rule	12/3/10	75 FR 76890	-Delayed the effective date of the area closure for snapper grouper species implemented through Amendment 17A.
Amendment #17B (2010b)	1/31/11	PR: 75 FR 62488 FR: 75 FR 82280	-Specify ACL of 0 and prohibit fishing for speckled hind and warsaw grouper; -Prohibited harvest of 6 deepwater species seaward of 240 feet to curb bycatch of speckled hind and warsaw grouper (snowy grouper, blueline tilefish, yellowedge grouper, misty grouper, queen snapper, silk snapper)Specify allocations (97% commercial, 3% recreational), ACLs and AMs for golden tilefish; -Modified management measures as needed to limit harvest to the ACL or ACT; -Updated the framework procedure for specification of total allowable catch; -Specified ACLs, ACTs, and AMs, where necessary, for 9 species undergoing overfishing (snowy grouper, black grouper, black sea bass, red grouper, vermilion snapper, gag, speckled hind, warsaw grouper, golden tilefish);
Notice of control date	1/31/11	76 FR 5325	Anyone entering federal snapper grouper fishery off S. Atlantic states after 09/17/10 was not assured of future access if limited entry program developed.
Regulatory Amendment #9 (2010a)	Bag limit: 6/22/11 Trip limits: 7/15/11	PR: 76 FR 23930 FR: 76 FR 34892	-Established trip limits for vermilion snapper and gag; -Increased trip limit for greater amberjack; - Set black sea bass recreational bag limit at 5 fish per person per day
Regulatory Amendment #10 (2010b)	5/31/11	PR: 76 FR 9530 FR: 76 FR 23728	-Eliminated closed area for snapper grouper species approved in Amendment 17A.
Regulatory Amendment #11 (2011c)	5/10/12	PR: 76 FR 78879 FR: 77 FR 27374	-Eliminated 240 ft harvest prohibition for six deepwater species (snowy grouper, blueline tilefish, yellowedge grouper, queen snapper, silk snapper, misty grouper);
Amendment # 25  Comprehensive Annual Catch Limit Amendment (2011d)	4/16/12	PR: 76 FR 74757 Amended PR: 76 FR 82264 FR: 77 FR 15916	-Reorganize FMUs to 6 complexes (deepwater, jacks, snappers, grunts, shallow-water groupers, porgies) (see final rule for species list); -Established acceptable biological catch (ABC) control rules and established ABCs, ACLs, and AMs for species not undergoing overfishing; -Established jurisdictional ABC allocations between the SAFMC and GMFMC for yellowtail snapper, mutton snapper, and black grouper; -Removed some species from South Atlantic FMU (Tiger grouper, black margate, blue-striped grunt, French grunt, porkfish, smallmouth grunt, queen triggerfish, crevalle, yellow jack, grass porgy, sheepshead, puddingwife);

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			-Designated species as ecosystem component species (schoolmaster, ocean triggerfish, bank triggerfish, rock triggerfish, longspine porgy); -Specified allocations between the commercial and, recreational sectors for species not undergoing overfishing; -Limited the total mortality for federally managed species in the South Atlantic to the ACLs.
Amendment #24 (2011e)	7/11/12	PR: 77 FR 19169 FR: 77 FR 34254	-Rebuilding plan (including MSY, ACLs, AMs, and OY, and allocations) for red grouper
Amendment #23  Comprehensive Ecosystem-based Amendment 2 (CE-BA2) (2011f)	1/30/12	PR: 76 FR 69230 FR: 76 FR 82183	-Designated the Deepwater MPAs as EFH-HAPCs; -Modify management measures for Octocoral; -Limit harvest of snapper grouper species in SC SMZs to the bag limit; -Modify sea turtle release gear; -Designated new EFP for pelagic Sargassum habitat.
Amendment #18A (2012a)	7/1/12	PR: 77 FR 16991 FR: 77FR3 2408	-Modified the rebuilding strategy, ABC, ACL, ACT for black sea bass; -Limited participation and effort in the black sea bass sector; -Modifications to management of the black sea bass pot sector; -Improved data reporting (accuracy, timing, and quantity of fisheries statistics).
Amendment #20A (2012b)	10/26/12	PR: 77 FR 19165 FR: 77 FR 59129	- Individual transfer quota (ITQ) program for wreckfish: -Defined and reverted inactive shares; -Redistributed reverted shares; -Established a share cap; -Established an appeals process.
Regulatory Amendment #12 (2012c)	10/9/12	PR: 77 FR 42688 FR: 77 FR 61295	-Revised the ACL and OY for golden tilefish; -Revised recreational AMs for golden tilefish;
Yellowtail snapper Emergency Rule	11/7/2012, through 5/6/2013	77 FR 66744	-Increased the commercial ACL for yellowtail snapper from 1,142,589 lb to 1,596,510 lb.
Amendment #18B (2013a)	5/23/13	PR: 77 FR 75093 FR: 77 FR 23858	For Golden Tilefish: -Limited participation and effort in the commercial sector through establishment of a longline endorsement; -Established eligibility requirements and allowed transferability of longline endorsement; -Established an appeals process; -Modified trip limits; -Specified allocations and ACLs for gear groups (longline:7 % and hook-and-line:25%);

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Amendment #28 (2013b)	8/23/13	PR: 78 FR 25047 FR: 78 FR 44461	-Established regulations to allow harvest of red snapper in the South Atlantic (formula used to compute ACLs, AMs, fishing seasons).
Regulatory Amendment #13 (2013c)	7/17/13	PR: 78 FR 17336 FR: 78 FR 36113	-Revised the ABCs, ACLs (including sector ACLs), and ACTs for 37 species implemented by the Comprehensive ACL Amendment (see final rule for list of species). The revisions may prevent a disjunction between the established ACLs and the landings used to determine if AMs are triggered.
Regulatory Amendment #15 (2013d)	9/12/13	PR: 78 FR 31511 FR: 78 FR 49183	-Modified ACLs and OY for yellowtail snapper; -Modified the gag commercial ACL and AM to remove the requirement that all other shallow water groupers (black grouper, red grouper, scamp, red hind, rock hind, graysby, coney, yellowmouth grouper, and yellowfin grouper) are prohibited from harvest in the South Atlantic when the gag commercial ACL is met or projected to be met.
Regulatory Amendment #18 (2013e)	9/5/13	PR: 78 FR 26740 FR: 78 FR 47574	-Revised ACLs and OY for vermilion snapper; -Modified commercial trip limit for vermilion snapper; -Modified commercial fishing season and recreational closed season for vermilion snapper; -Revised ACLs and OY for red porgy.
Regulatory Amendment #19 (2013f)	ACL: 9/23/13 Pot closure: 10/23/13	PR: 78 FR 39700 FR: 78 FR 58249	-Specified ABC, and adjusted the ACL, recreational ACT and OY for black sea bass; -Implemented an annual closure on the use of black sea bass pots from November 1 to April 30.
Amendment #27 (2013g)	1/27/2014	PR:78 FR 78770 FR: 78 FR 57337	-Established the South Atlantic Council as the responsible entity for managing Nassau grouper throughout its range including federal waters of the Gulf of Mexico; -Modified the crew member limit on dual-permitted snapper grouper vessels; -Modified the restriction on retention of bag limit quantities of some snapper grouper species by captain and crew of for-hire vessels; -Minimized regulatory delay when adjustments to snapper grouper species' ABC, ACLs, and ACTs are needed as a result of new stock assessments; -Removed blue runner from snapper grouper FMP; -Addressed harvest of blue runner by commercial fishermen who do not possess a South Atlantic Snapper Grouper Permit.
Amendment #31 Joint South Atlantic and Gulf of Mexico Generic Headboat Reporting Amendment (2013h)	1/27/2014	PR: 78 FR 59641 FR: 78 FR 78779	-Required electronic reporting for headboat vessels at weekly intervals.

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Blueline Tilefish Emergency Rule	4/17/2014 through 10/10/2014 or 4/18/2015	PR: 79 FR 21636 FR:79 FR 61262	-Removed the blueline tilefish portion from the deepwater complex ACL; -Established separate commercial and recreational ACLs and AMs for blueline tilefish.
Generic Dealer Amendment (2013i)	8/7/2014	PR: 79 FR 81 FR: 79 FR 19490	- Modified permitting and reporting requirements for seafood dealers who first receive fish managed by the SA and Gulf through eight FMPs.
Regulatory Amendment #14 (2014a)	12/8/2014	PR: 79 FR 22936 FR: 79 FR 66316	-Modified the commercial and recreational fishing year for greater amberjack; -Modified the commercial and recreational sector fishing years for black sea bass; -Modified the recreational AM for black sea bass; -Modified the recreational AM for vermilion snapper; -Modify the commercial trip limit for gag.
Regulatory Amendment #21 (2014b)	11/6/2014	PR: 79 FR 44735 FR: 79 FR 60379	-Modified the definition of the overfished threshold (MSST) for red snapper, blueline tilefish, gag, black grouper, yellowtail snapper, vermilion snapper, red porgy, and greater amberjack.
Amendment #29 (2014c)	7/1/2015	NOA: 79 FR 69819 PR: 79 FR 72567 FR: 80 FR 30947	-Updated the ABC control rule to incorporate methodology for determining the ABC of unassessed species; -Adjusted the ABCs for fourteen unassessed snapper-grouper species (see final rule); -Adjusted the ACLs and ACTs for three species complexes and four snapper-grouper species based on revised ABCs; -Established ACLs for unassessed species; -Modified gray triggerfish minimum size limits; -Established a commercial split season and commercial trip limits for gray triggerfish.
Regulatory Amendment #20 (2014d)	8/20/2015	PR: 80 FR 18797 FR: 80 FR 43033	-Adjusted the recreational and commercial ACLs for snowy grouper; -Adjusted the rebuilding strategy; -Modified the commercial trip limit; -Modified recreational bag limit; -Modified the recreational fishing season.
Amendment #32 (2014e)	3/30/2015	PR: 80 FR 3207 FR: 80 FR 16583	-End overfishing of blueline tilefish; -Removed blueline tilefish from the deepwater complex; -Specified AMs, ACLs, recreational ACLs, commercial trip limit, adjust recreational bag limit for blueline tilefish; -Specified ACLs and revised the AMs for the recreational section of the deepwater complex (yellowedge grouper, silk snapper, misty grouper, queen snapper, sand tilefish, black snapper, and blackfin snapper)

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Regulatory Amendment #22 (2015a)	9/11/2015, except for the amendments to §§ 622.190(b) and 622.193(r)(1) which were effective 8/12/2015	PR: 80 FR 31880 FR: 80 FR 48277	-Adjusted ACLs and OY for gag and wreckfish;
Amendment # 33  Dolphin Wahoo Amendment 7 and Snapper Grouper Amendment 33 (2015b)	12/28/2015	NOA:80 FR 55819 PR:80 FR 60601 FR:80 FR 80686	-Allowed dolphin and wahoo fillets to enter the U.S. EEZ after lawful harvest in The Bahamas; -Specified the condition of any dolphin, wahoo, and snapper-grouper fillets; -Described how the recreational bag limit is determined for any fillets; -Prohibited the sale or purchase of any dolphin, wahoo, or snapper-grouper recreationally harvested in The Bahamas; -Specified the required documentation to be onboard any vessels that have these fillets; -Specified transit and stowage provisions for any vessels with fillets.
Amendment #34  Generic Accountability Measures and Dolphin Allocation Amendment (2015c)	2/22/2016	NOA:80 FR 41472 PR:80 FR 58448 FR:81 FR 3731	-Modified AMs for snapper-grouper species (golden tilefish, snowy grouper, gag, red grouper, black grouper, scamp, the shallow-water grouper complex (SASWG: red hind, rock hind, yellowmouth grouper, yellowfin grouper, coney, and graysby), greater amberjack, the jacks complex (lesser amberjack, almaco jack, and banded rudderfish), bar jack, yellowtail snapper, mutton snapper, the snappers complex (cubera snapper, gray snapper, lane snapper, dog snapper, and mahogany snapper), gray triggerfish, wreckfish (recreational sector), Atlantic spadefish, hogfish, red porgy, the porgies complex (jolthead porgy, knobbed porgy, whitebone porgy, scup, and saucereye porgy); -Modified the AM for commercial golden crab fishery; -Adjusted sector allocations for dolphin.
Notice of Control Date	6/15/16	76 FR 66244	-Fishermen entering the federal for-hire recreational sector for the Snapper Grouper fishery after June 15, 2016, will not be assured of future access should a management regime that limits participation in the sector be prepared and implemented.
Amendment #35 (2015d)	6/22/2016	NOA:81 FR 6222 PR:81 FR 11502 FR:81 FR 32249	-Removed black snapper, dog snapper, mahogany snapper, and schoolmaster from the Snapper-Grouper FMP; -Clarified regulations governing the use of Golden Tilefish Longline Endorsements.

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Regulatory Amendment #16 (2016a)	12/29/2016 (closure) 1/30/2017 (gear markings)	NOI: 78 FR 72868 PR: 81 FR 53109 FR: 81 FR 95893	-Revise the area where fishing with black sea bass pots is prohibited from Nov.1-April 30Add additional gear marking requirements for black sea bass pot gear.
Regulatory Amendment #25 (2016b)	8/12/2016 except changes to blueline tilefish, effective 7/13/2016.	PR: 81 FR 34944 FR: 81 FR 45245	-Revised commercial and recreational ACL for blueline tilefish; -Revised the recreational bag limit for black sea bass; -Revised the commercial and recreational fishing year for yellowtail snapper.
Amendment #36 (2016d)	7/31/17	NOI: 82 FR 810 PR: 82 FR 5512 FR:82 FR 29772	-Established SMZs to enhance protection for snapper- grouper species in spawning condition including speckled hind and warsaw grouper.
Amendment #37 (2016c)	8/24/17	NOI: 80 FR 45641 NOA: 81 FR 69774 PR: 81 FR 91104 FR:82 FR 34584	-Modified the hogfish fishery management unit; -Specified fishing levels for the two South Atlantic hogfish stocks; -Established a rebuilding plan for the Florida Keys/East Florida stock; -Established/revised management measures for both hogfish stocks in the South Atlantic Region, such as size limits, recreational bag limits, and commercial trip limits.
Red Snapper Emergency Rule (2017a)	Effective 11/2/2017, through 11/31/2017. The recreational red snapper season opened on 11/3/2017, and closed on 11/6/2017; then reopened on 11/10/2017, and closed on 11/13/2017. The commercial red snapper season opened on 11/2/2017.	FR: 82 FR 50839	-Allowed for the limited harvest and possession of red snapper in 2017 by changing the process used to set the ACL, as requested by the Council; -These rules also announced the opening and closing dates of the 2017 recreational fishing season and the opening date for the 2017 commercial fishing season for red snapper

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Golden Tilefish Interim Rule (2017b)	1/2/2018 through 7/1/2018 and 7/2/2018 through 1/3/2019	PR: 82 FR 50101 FR: 83 FR 65 FR EXT: 83 FR 28387	-Reduced the golden tilefish total ACL, the commercial and recreational sector ACLs, and the quotas for the hook-and-line and longline components of the commercial sector.
Amendment #41 (2017c)	2/10/2018	NOA:82 FR 44756 PR:82 FR 49167 FR:83 FR 1305	-Updated the MSY, ABC, ACL, OY, MSST; -Designated spawning months of April through June for regulatory purposes; -Revised management measures for mutton snapper including the minimum size limit (18 inches total length), recreational bag limit (five mutton snapper per person per day within the ten-snapper aggregate), and commercial trip limit (500 pounds whole weight during January through March and July through December; and during the April through June spawning season, of five mutton snapper per person per day, or five mutton snapper per person per trip, whichever is more restrictive).
Amendment #43 (2017d)	7/26/2018	NOI:82 FR 1720 NOA: 83 FR 16282 PR:83 FR 22939 FR:83 FR35428	-Actions addressed overfishing of red snapper by specifying recreational and commercial ACLs beginning in 2018;
Abbreviated Framework Amendment 1: Red Grouper (2017e)	8/27/2018	PR:83 FR 14234 FR:83 FR35435	-Adjust the ACLs for South Atlantic red grouper in response to the results of the latest stock assessment.
Regulatory Amendment #28 (2018a)	1/4/2019	PR: 83 FR 48788 FR: 83 FR 62508	-End overfishing of golden tilefish by reducing the ACL based on the most recent stock assessment.
Abbreviated Framework Amendment 2 (2018b)	Effective 5/9/2019. The black sea bass recreational season notification is effective from 4/9/2019, until 12:01 a.m., local time, 4/1/2020, unless changed by subsequent notification in the Federal Register.	PR:84 FR 4758 FR:84 FR 14021	-Adjust the ACLs for South Atlantic vermilion snapper and black sea bass in response to the results of the latest stock assessments.

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Amendment #42 (2019a)	1/8/2020	NOA:84 FR 27576 PR: 84 FR 48890 FR: 84 FR 67236	-Modified sea turtle release gear and SG framework
Regulatory Amendment #27 (Vision Blueprint Commercial - 2018c)	2/26/2020	PR: 84 FR 55531 FR 85 FR 4588	Modified: -Commercial split seasons (snowy grouper, greater amberjack, red porgy); -Commercial trip limits (blueline tilefish, vermilion snapper); Implemented: -Commercial trip limit for Other Jacks Complex, -Minimum size limit (commercial only) for almaco jack; -Reduced the minimum size limit for gray triggerfish off east FL; -Removed the minimum size (commercial) limit for deep-water snappers (silk, queen, blackfin)
Regulatory Amendment #30 (2018d)	3/9/2020	PR: 84 FR 57840 FR: 85 FR 6825	-Revised the rebuilding schedule for red grouper -Extended the seasonal prohibition on recreational and commercial harvest of red grouper in the EEZ off South Carolina and North Carolina through May; -Established a commercial trip limit for red grouper harvested in the South Atlantic federal waters of 200 lbs gw
Regulatory Amendment #26 (Vision Blueprint Recreational - 2018e)	3/30/2020	PR: 84 FR 57378 FR: 85 FR 11307	-Modified the 20-fish aggregate to limit the harvest of any one species within the aggregate bag limit to 10 fish; -Reduced the minimum size limit for gray triggerfish off east FL (recreational) (12 inches); -Removed the minimum size limit (recreational) for deep-water snappers (silk, queen, blackfin).
Regulatory Amendment #29 (2020a)	7/15/2020	PR: 85 FR 22118 FR: 85 FR 36166	-Modified gear requirements for South Atlantic snapper-grouper species, including requirement modifications to requirements for circle hooks and powerheads.
Abbreviated Framework Amendment #3 (2019b)	8/17/2020	PR: 85 FR 20970 FR: 85 FR 43145	-Increased the total and sector ACLs and recreational ACT for South Atlantic blueline tilefish in response to the results of the latest stock assessments.
Amendment #39  (Generic For- Hire Reporting Amendment) (2017f)	9/1/2020	NOA:83 FR 11164 PR:83 FR 14400 FR:85 FR 10331 Correcting FR: 85 FR 47917	-Weekly electronic reporting for charter vessel operators with a federal for-hire permit; -Reduced the time allowed for headboat operators to complete electronic reports; -Requires location reporting by charter vessels with the same detail currently required for headboat vessels.
Emergency Rule Vermilion snapper and King Mackerel	9/17/2020	ER: 85 FR 57982	-Increased the vermilion snapper commercial trip limit from 1,000 to 1,500 lbs gw; -Increased the king mackerel recreational bag limit from: (1) 3-fish to 4-fish per person in federal waters from the New York/Connecticut/Rhode Island

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			boundary to the Georgia/Florida boundary, and (2) 2- fish to 4-fish per person in federal waters from the Georgia/Florida boundary south to the Miami- Dade/Monroe County, Florida, boundary.
Regulatory Amendment #33 (2020b)	11/13/2020	PR: 85 FR 28924 FR: 85 FR 64978	-Removed the requirement that if NMFS projects a red snapper season (commercial or recreational) would be 3 days or less, the respective fishing season will not open for that fishing year. Therefore, red snapper harvest could be open for either commercial or recreational harvest for less than 4 days. For the recreational sector particularly, this measure could allow for a fishing season to occur that otherwise would not be allowed.
Regulatory Amendment #34 (2020c)	4/2/2021	PR: 85 FR 73013 FR: 86 FR 17318	-Established SMZs at artificial reef sites off the coasts of North Carolina and South Carolina.
Amendment #26 (Bycatch Reporting Amendment)	TBD	TBD	-Modify bycatch and discard reporting for commercial and for-hire vessels.
Regulatory Amendment #32	TBD	TBD	-Revise accountability measures for yellowtail snapper to reduce the possibility of in-season closures.
Amendment #44 Yellowtail Snapper	TBD	TBD	-Revise ACls, AMs, allocations, and management measures for yellowtail snapper
Amendment #45 ABC Control Rule	TBD	TBD	-Modify the ABC control rule; -Specify an approach for determining the acceptable risk of overfishing and the probability of rebuilding success for overfished stocks; -Allow phase-in of ABC changes; and -Allow carry-over of unharvested catch.
Recreational Accountability Measures	TBD	TBD	-Modify the recreational AMs for the recreational sector.
Amendment #48 Wreckfish	TBD	TBD	-Modify management of wreckfish.
Amendment #49 Greater amberjack	TBD	TBD	-Revise ACLs, AMs, allocations, and management measures for greater amberjack.
Amendment #51 Snowy grouper	TBD	TBD	-Revise ACLs, AMs, allocations, and management measures for snowy grouper.
Amendment #52 Gag	TBD	TBD	-Revise ACLs, AMs, allocations, and management measures for gag.
Amendment #53 Golden tilefish	TBD	TBD	-Revise ACLs, AMs, allocations, and management measures for golden tilefish.