Amendment 48

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

Modernization of the Wreckfish Individual Transferable Quota Program

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

September 2022

South Atlantic Fishery Management Council
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Award Number FNA15NMF4410010

Amendment 48
to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region

Proposed actions: The actions in Amendment 48 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region would modify management of wreckfish. Actions would establish an electronic reporting system, vessel monitoring system, cost recovery and revise sector allocations, permit requirements, the fishing year and spawning season closure, and offloading site and time requirements.

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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 March 6, 2022, and accordingly proceeds under the 2022 regulations.

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To be completed.

Chapter 1. Introduction

1.1 What actions are being proposed in this plan amendment?

The actions in Amendment 48 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region would modify management of wreckfish. Actions would establish an electronic reporting system, vessel monitoring system, cost recovery and revise sector allocations, permit requirements, the fishing year and spawning season closure, and offloading site and time requirements.

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). NMFS determines whether to approve, disapprove, or partially approve the amendment. NMFS also 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.

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.

The Council and NMFS are also responsible for making this document available for public comment. The draft environmental assessment (EA) was made available to the public during the scoping process, public hearings, and Council meetings. The EA/amendment was made available for comment during the amendment review and will be available during 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, including red porgy.

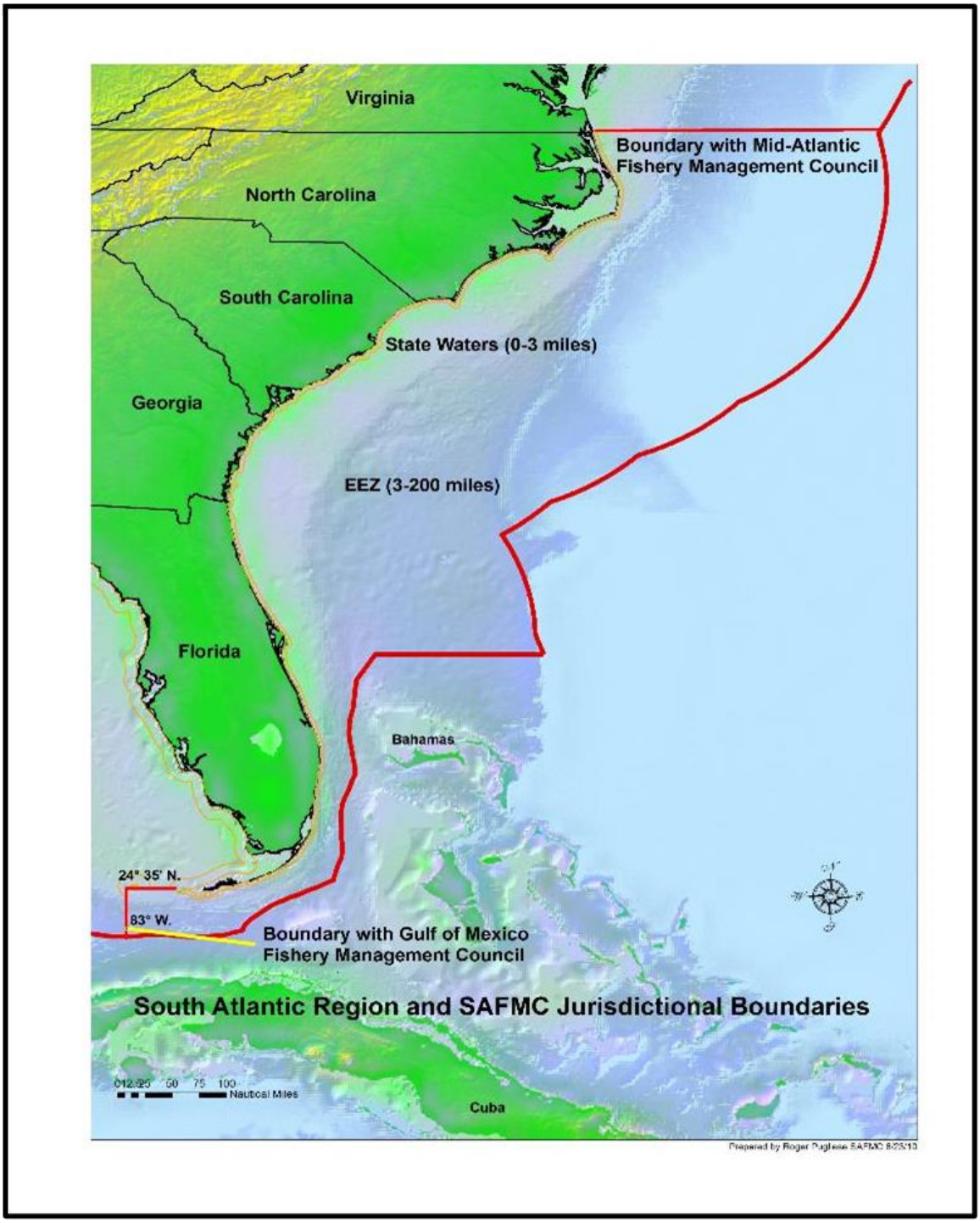

Figure 1.3.1. Jurisdictional boundaries of the Council.

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

Purpose: The *purpose* of this action is to modernize the wreckfish individual transferable quota (ITQ) program, revise management measures, and update the goals and objectives of the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region.

Need: The *need* for this action is to improve program monitoring and enforcement, as well as data collection and management, provide more flexibility for fishers and increase profitability in the wreckfish ITQ program, and ensure the goals and objectives of the fishery management plan provide for a comprehensive approach to addressing problems within the snapper grouper fishery.

The South Atlantic Fishery Management Council (Council) is required by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) to review the Wreckfish Individual Transferable Quota (ITQ) program every five to seven years. The Council initially reviewed the program in 2009. The review completed in 2019 was the first subsequent review (Attachment 1a). That review examined how the Wreckfish ITQ program changed between the baseline time period (2009/2010 – 2011/2012 fishing years) and the review time period (2012/2013 – 2016/2017 fishing years) with respect to various social, economic, biological, and administrative factors, and offered conclusions and recommended changes to the program based on the findings. In general, the program has been relatively successful in achieving its stated objectives, although there is still room for further improvement, particularly with respect to confidentiality issues and related constraints; moving away from a paper coupon-based program to an electronic program; cost recovery; wreckfish permit requirement; allocation issues; offloading sites and times; and economic data collection. Snapper Grouper Amendment 48 will consider actions and alternatives necessary to improve and modernize the Council's Wreckfish ITQ program.

1.5 Wreckfish Individual Quota Program Goals and Objectives

The review of the Wreckfish ITQ Program (2019) evaluated the program based on whether it met the original goals and objectives established in Snapper Grouper Amendment 5 (SAFMC 1991). Since the beginning of the program in 1991, the fishery has changed significantly through regulation and participation. The following goals and objectives for the Wreckfish ITQ program were listed as justification for limiting participation in the fishery through an ITQ program:

1. "Develop a mechanism to vest fishermen in the wreckfish fishery and create incentives for conservation and regulatory compliance whereby fishermen can realize potential long-run benefit …"
2. "Provide a management regime which promotes stability and facilitates long-range planning and investment by harvesters and fish dealers while avoiding, where possible,

the necessity for more stringent management measures and increasing management costs over time."

3. "Develop a mechanism that allows the marketplace to drive harvest strategies…"
4. "Promote management regimes that minimize gear and area conflicts…
5. "Minimize the tendency for over-capitalization in the harvesting and processing/distribution sectors."
6. "Provide a reasonable opportunity for fishermen to make adequate returns from commercial fishing by controlling entry so that returns are not regularly dissipated by open access, while also providing avenues for fishermen not initially included in the limited entry program to enter the program."

Wreckfish ITQ shareholders reviewed the current goals and objectives in October 2020 and agreed that the current program was successfully meeting all six goals and objectives. The shareholders did express concern about giving wreckfish fishermen an unrealistic expectation of permanent ownership in the fishery as unused shares have been reallocated in the past (Snapper Grouper Amendment 20B) (Objective One) and creating any new avenues for fishermen to enter the program because the fishery is already at maximum capacity with current effort (Objective Six). The Council reviewed the goals and objectives during their December 2020 Council meeting and chose to retain the current goals and objectives for the Wreckfish ITQ Program without modification. The Council determined no changes were needed because there have not been substantial modifications to the program and the current amendment proposes only to modernize existing systems.

1.6 How has recreational data collection changed in the southeast?

The Marine Recreational Fisheries Statistics Survey (MRFSS) was created in 1979 by 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 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.

MRIP[1] 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

[1] https://media.fisheries.noaa.gov/2021-09/MRIP-Survey-Design-and-Statistical-Methods-2021-09-15.pdf/

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. 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 so different, 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 the wreckfish portion of the snapper grouper fishery?

Snapper grouper regulations in the South Atlantic were first implemented in 1983. The reader is referred to Appendix I for the management history of the species in the Snapper Grouper FMP. Below are amendments to the Snapper Grouper FMP addressing wreckfish within the South Atlantic EEZ.

Snapper Grouper FMP (1983)
The FMP included provisions to prevent growth overfishing in thirteen species in the snapper grouper complex and established a procedure for preventing overfishing in other species; established minimum size limits for red snapper, yellowtail snapper, red grouper, Nassau grouper, and black sea bass; established a 4-inch trawl mesh size to achieve a 12-inch total length (TL) minimum size limit for vermilion snapper; and included additional harvest and gear limitations.

UPDATE

Chapter 2. Proposed Actions and Alternatives

2.1 Action 1. Revise sector allocations and sector annual catch limits for wreckfish.

2.1.1 Alternatives

Alternative 1 (No Action). Retain the current commercial sector and recreational sector allocations as 95% and 5%, respectively, of the total annual catch limit for wreckfish.

Alternative 2. Allocate 98% of the total annual catch limit for wreckfish to the commercial sector. Allocate 2% of the total annual catch limit for wreckfish to the recreational sector.

Alternative 3. Allocate 99% of the total annual catch limit for wreckfish to the commercial sector. Allocate 1% of the total annual catch limit for wreckfish to the recreational sector.

Alternative 4. Allocate 99.5% of the total annual catch limit for wreckfish to the commercial sector. Allocate 0.5% of the total annual catch limit for wreckfish to the recreational sector.

Discussion:
Recommendation came from the Snapper Grouper Advisory Panel. There is concern that the recreational allocation for wreckfish is too high. It was originally intended as a bycatch fishery, not a targeted one. A lower allocation may be more appropriate, especially considering the low encounter rate in the MRIP survey.

2.1.2 Comparison of Alternatives:

To be completed.

2.2 Action 2. Implement an electronic reporting system for the wreckfish individual transferable quota (ITQ) program.

2.2.1 Alternatives

Alternative 1 (No Action). Retain the current ITQ paper-based reporting system including, share certificates, allocation coupons, vessel logbooks, and dealer reports.

Alternative 2. Implement an electronic system of reporting for the wreckfish ITQ program to electronically track ownership and transfers of quota shares, distribution and transfers of annual allocation (quota pounds), and electronically record wreckfish landing information.

Discussion:
Data management and user experience could be greatly enhanced by moving from a paper system to an electronic system. The migration to an electronic system would increase timeliness of reported data, improve data quality, reduce cost and time for management, provide additional flexibility and benefits to fishermen, and improve program enforcement and monitoring.

2.2.2 Comparison of Alternatives:

To be completed.

2.3 Action 3. Modify the requirement to possess a commercial vessel permit for wreckfish.

2.3.1 Alternatives

Alternative 1 (No Action). To commercially harvest or sell wreckfish, a commercial vessel permit for wreckfish and a commercial permit for South Atlantic snapper grouper must have been issued to the vessel and the permit must be on board. To obtain a commercial vessel permit for wreckfish, the applicant must be a wreckfish shareholder; and either the shareholder must be the vessel owner, or the owner or operator must be an employee, contractor, or agent of the shareholder.

Alternative 2. To commercially harvest or sell wreckfish, a commercial vessel permit for wreckfish and a commercial permit for South Atlantic snapper grouper (unlimited) must have been issued to the vessel and the permit must be on board. To obtain a commercial vessel permit for wreckfish, the applicant must be a wreckfish shareholder; and the shareholder must be the vessel owner.

Alternative 3. To commercially harvest or sell wreckfish, a commercial permit for South Atlantic snapper grouper (unlimited) must have been issued to the vessel, the permit must be on board, and the permit holder must be a wreckfish shareholder.

Discussion:
The requirements to possess two permits in addition to owning ITQ shares is duplicative and therefore unnecessarily burdensome for program participants and data managers. These requirements also unnecessarily complicate the use of data by program analysts. Additionally, requiring NMFS to determine whether an entity is an employee, contractor, or agent of the vessel owner is difficult without requesting more information than is typically requested of permit applicants and it creates additional administrative burden for applicants and NMFS.

2.3.2 Comparison of Alternatives:

To be completed.

2.4 Action 4. Modify the commercial fishing year for wreckfish.

2.4.1 Alternatives

Alternative 1 (No Action). The commercial fishing year for wreckfish begins on April 15 and ends on April 14.

Alternative 2. The commercial fishing year for wreckfish begins on January 1 and ends on December 31.

Discussion:
A calendar year fishing year would reduce administrative burden and system downtime as the ITQ program moves towards an electronic reporting system.

2.4.2 Comparison of Alternatives:

To be completed.

2.5 Action 5. Modify the spawning season closure for wreckfish.

2.5.1 Alternatives

Alternative 1 (No Action). From January 15 through April 15, each year, no person may harvest or possess wreckfish on a fishing vessel, in or from the exclusive economic zone.

Alternative 2. From January 1 through April 1, each year, no person may harvest or possess wreckfish on a fishing vessel, in or from the exclusive economic zone.

Discussion:
A calendar year fishing year would reduce administrative burden and system downtime as the ITQ program moves towards an electronic reporting system. The spawning season closure could be modified to better align with the change in the commercial fishing year proposed in Action 4.

2.5.2 Comparison of Alternatives:

To be completed.

2.6 Action 6. Require all commercial vessels with a South Atlantic Unlimited Snapper-Grouper Permit participating in the wreckfish portion of the snapper grouper fishery to be equipped with vessel monitoring systems.

2.6.1 Alternatives

Alternative 1 (No Action). Commercial vessels with a South Atlantic Unlimited Snapper-Grouper Permit are not required to be equipped with vessel monitoring systems when participating in the wreckfish portion of the snapper grouper fishery.

Alternative 2. Require all commercial vessels with a South Atlantic Unlimited Snapper-Grouper Permit participating in the wreckfish portion of the snapper grouper fishery to be equipped with vessel monitoring systems.

Discussion:
Wreckfish shareholders mentioned adding VMS requirements in order to get eliminate the current offloading site and time requirements. The Law Enforcement Advisory Panel noted the VMS can be beneficial for enforcing offloading requirements, enforcing closed areas, search and rescue, and communication between owners and operators.

2.6.2 Comparison of Alternatives:

To be completed.

2.7 Action 7. Modify offloading site and time requirements for wreckfish.

2.7.1 Alternatives

Alternative 1 (No Action). Wreckfish may only be offloaded between the hours of 8 a.m. and 5 p.m., local time. Wreckfish must be offloaded only at the fixed facility of a dealer with a Gulf of Mexico and South Atlantic Dealer Permit. Wreckfish may be offloaded at a location other than a fixed facility of a dealer who holds a Gulf of Mexico and South Atlantic dealer permit, if the wreckfish shareholder or the vessel operator advises the NMFS Office for Law Enforcement of the location not less than 24 hours prior to offloading.

Alternative 2. Wreckfish may only be offloaded between the hours of 6 a.m. and 6 p.m., local time. Wreckfish must be offloaded only at the fixed facility of a dealer with a Gulf of Mexico and South Atlantic Dealer Permit. Wreckfish may be offloaded at a location other than a fixed facility of a dealer who holds a Gulf of Mexico and South Atlantic dealer permit, if the wreckfish shareholder or the vessel operator advises the NMFS Office for Law Enforcement of the location not less than 24 hours prior to offloading.

Alternative 3. Wreckfish may only be offloaded between the hours of 5 a.m. and 8 p.m., local time. Wreckfish must be offloaded only at the fixed facility of a dealer with a Gulf of Mexico and South Atlantic Dealer Permit. Wreckfish may be offloaded at a location other than a fixed facility of a dealer who holds a Gulf of Mexico and South Atlantic dealer permit, if the wreckfish shareholder or the vessel operator advises the NMFS Office for Law Enforcement of the location not less than 24 hours prior to offloading.

Alternative 4. Remove the requirement to offload wreckfish between the hours of 8 a.m. and 5 p.m., local time. Wreckfish must be offloaded only at the fixed facility of a dealer with a Gulf of Mexico and South Atlantic Dealer Permit. Wreckfish may be offloaded at a location other than a fixed facility of a dealer who holds a Gulf of Mexico and South Atlantic dealer permit, if the wreckfish shareholder or the vessel operator advises the NMFS Office for Law Enforcement of the location not less than 24 hours prior to offloading.

Discussion:
Wreckfish shareholders expressed that having designated landing sites and the daily unloading timeframe to be overly burdensome, particularly the hours allowed for offloading. The allowable offloading time requirement affects the efficiency of their fishing operations. Shareholders would like to see the approved offloading sites and times requirements removed.

2.7.2 Comparison of Alternatives:

To be completed.

2.8 Action 8. Implement a cost recovery plan and associated conditions for the wreckfish individual transferable quota program.

2.8.1 Sub-Action 8-1. Implement a cost recovery plan for the wreckfish individual transferable quota program.

2.8.1.1 Alternatives

Alternative 1 (No Action). Do not implement a cost recovery plan for the wreckfish individual transferable quota program.

This is not a legally viable alternative.

Alternative 2. Implement an individual transferable quota cost recovery plan. The transferable quota shareholder landing wreckfish would be responsible for collection and submission of the cost recovery fee to NMFS.

Alternative 3. Implement an individual transferable quota cost recovery plan. The dealer receiving Wreckfish would be responsible for collecting the cost recovery fee from the shareholder landing the wreckfish and submitting the fee to NMFS.

Discussion:

Cost recovery, the collection of a fee to recover the actual cost directly related to the management, data collection, and enforcement of any LAPP, is mandated under section 304(d)(2)(A) of the Magnuson-Stevens Act.

2.8.1.2 Comparison of Alternatives

To be completed.

2.8.2 Sub-Action 8-2. Collection of wreckfish individual transferable quota program cost recovery fees.

2.8.2.1 Alternatives

Alternative 1 (No Action). Do not implement a cost recovery plan for the wreckfish individual transferable quota program.

This is not a legally viable alternative.

Alternative 2. Fees will be collected at the time of landing.

Alternative 3. Fees will be collected upon the sale of such fish during a fishing season.

Alternative 4. Fees will be collected in the last quarter of the calendar year in which the fish is harvested.

Discussion:

Cost recovery, the collection of a fee to recover the actual cost directly related to the management, data collection, and enforcement of any LAPP, is mandated under section 304(d)(2)(A) of the Magnuson-Stevens Act.

2.8.2.2 Comparison of Alternatives

To be completed.

2.8.3 Sub-Action 8-3. Frequency of wreckfish individual transferable quota program cost recovery fee submission.

2.8.3.1 Alternatives

Alternative 1 (No Action). Do not implement a cost recovery plan for the wreckfish individual transferable quota program.

This is not a legally viable alternative.

Alternative 2. Cost recovery fee will be submitted once per year.

Alternative 3. Cost recovery fee will be submitted twice per year.

Alternative 4. Cost recovery fee will be submitted four times per year.

Alternative 5. Cost recovery fee will be submitted twelve times per year.

Discussion:

Cost recovery, the collection of a fee to recover the actual cost directly related to the management, data collection, and enforcement of any LAPP, is mandated under section 304(d)(2)(A) of the Magnuson-Stevens Act.

2.8.3.2 Comparison of Alternatives

To be completed.

2.8.4 Sub-Action 8-4. Determination of wreckfish individual transferable quota program cost recovery fees.

2.8.4.1 Alternatives

Alternative 1 (No Action). Do not implement a cost recovery plan for the wreckfish individual transferable quota program.

This is not a legally viable alternative.

Alternative 2. The cost recovery fee will be based on actual* ex-vessel value of the wreckfish landings.

Alternative 3. The cost recovery fee will be based on standard** ex-vessel value of the wreckfish landings as calculated by NMFS.

* actual ex-vessel value is calculated by multiplying the wreckfish landings by the actual ex-vessel price, where the actual ex-vessel price is the total monetary sale amount a fisherman receives per pound of fish for ITQ landings from a registered ITQ dealer before any deductions are made for transferred allocation and goods and services (e.g. bait, ice, fuel, repairs, machinery replacement, etc.).

** standard ex-vessel value is calculated by multiplying the wreckfish landings by the standard ex-vessel price, which is based on the average ex-vessel price for the previous fishing year and any expected price change in the current fishing year.

Discussion:
Cost recovery, the collection of a fee to recover the actual cost directly related to the management, data collection, and enforcement of any LAPP, is mandated under section 304(d)(2)(A) of the Magnuson-Stevens Act.

2.8.4.2 Comparison of Alternatives

To be completed.

Chapter 3. Affected Environment

This section describes the affected environment in the proposed project area. The affected environment is divided into five 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

3.1.1 Inshore/Estuarine Habitat

Many snapper grouper species utilize both pelagic and benthic habitats during several stages of their life histories: larval stages of these species live in the water column and feed on plankton. Most juveniles and adults are demersal (bottom dwellers) and associate with hard structures on the continental shelf that have moderate to high relief (e.g., coral reef systems and artificial reef structures, rocky hard-bottom substrates, ledges, caves, sloping soft-bottom areas, and limestone outcroppings). Juvenile stages of some snapper grouper species also utilize inshore seagrass beds, mangrove estuaries, lagoons, oyster reefs, and embayment systems. In many species, various combinations of these habitats may be utilized during daytime feeding migrations or seasonal shifts in cross-shelf distributions. Additional information on the habitat utilized by species in the Snapper Grouper Complex is included in Volume II of the Fishery Ecosystem Plan (FEP; SAFMC 2009b).

3.1.2 Offshore Habitat

Predominant snapper grouper offshore fishing areas are located in live bottom and shelf-edge habitats where water temperatures range from 11º to 27º C (52º to 81º F) due to the proximity of the Gulf Stream, with lower shelf habitat temperatures varying from 11º to 14º C (52º to 57º F). Water depths range from 16 to 27 meters (54 to 90 ft) or greater for live-bottom habitats, 55 to 110 meters (180 to 360 ft) for the shelf-edge habitat, and from 110 to 183 meters (360 to 600 ft) for lower-shelf habitat areas.

The exact extent and distribution of productive snapper grouper habitat on the continental shelf north of Cape Canaveral, Florida is unknown. Current data suggest from 3 to 30% of the shelf is

suitable habitat for these species. These live-bottom habitats may include low relief areas, supporting sparse to moderate growth of sessile (permanently attached) invertebrates, moderate relief reefs from 0.5 to 2 meters (1.6 to 6.6 ft), or high relief ridges at or near the shelf break consisting of outcrops of rock that are heavily encrusted with sessile invertebrates such as sponges and sea fan species. Live-bottom habitat is scattered irregularly over most of the shelf north of Cape Canaveral, Florida, but is most abundant offshore from northeastern Florida. South of Cape Canaveral, Florida the continental shelf narrows from 56 to 16 kilometers (35 to 10 mi) wide off the southeast coast of Florida and the Florida Keys. The lack of a large shelf area, presence of extensive, rugged living fossil coral reefs, and dominance of a tropical Caribbean fauna are distinctive benthic characteristics of this area.

Rock outcroppings occur throughout the continental shelf from Cape Hatteras, North Carolina to Key West, Florida (MacIntyre and Milliman 1970, Miller and Richards 1979, Parker et al. 1983), which are principally composed of limestone and carbonate sandstone (Newton et al. 1971), and exhibit vertical relief ranging from less than 0.5 to over 10 meters (33 ft). Ledge systems formed by rock outcrops and piles of irregularly sized boulders are also common. Parker et al. (1983) estimated that 24% (9,443 km2) of the area between the 27 and 101 meters (89 and 331 ft) depth contours from Cape Hatteras, North Carolina to Cape Canaveral, Florida is reef habitat. Although the bottom communities found in water depths between 100 and 300 meters (328 and 984 ft) from Cape Hatteras, North Carolina to Key West, Florida is relatively small compared to the whole shelf, this area, based upon landing information of fishers, constitutes prime reef fish habitat and probably significantly contributes to the total amount of reef habitat in this region.

Artificial reef structures are also utilized to attract fish and increase fish harvests; however, research on artificial reefs is limited and opinions differ as to whether or not these structures promote an increase of ecological biomass or merely concentrate fishes by attracting them from nearby, natural un-vegetated areas of little or no relief.

The distribution of coral and live hard bottom habitat as presented in the Southeast Marine Assessment and Prediction Program (SEAMAP) bottom mapping project is a proxy for the distribution of the species within the snapper grouper complex. The method used to determine hard bottom habitat relied on the identification of reef obligate species including members of the snapper grouper complex. The Florida Fish and Wildlife Research Institute (FWRI), using the best scientific information available on the distribution of hard bottom habitat in the South Atlantic region, prepared ArcView maps for the four-state project.

Plots of the spatial distribution of offshore species were generated from the Marine Resources Monitoring, Assessment, and Prediction Program (MARMAP) data. The plots serve as point confirmation of the presence of each species within the scope of the sampling program. These plots, in combination with the hard bottom habitat distributions previously mentioned, can be employed as proxies for offshore snapper grouper complex distributions in the south Atlantic region. Maps of the distribution of snapper grouper species by gear type based on MARMAP data can also be generated through the South Atlantic Council's Internet Mapping System at the above address.

3.1.3 Essential Fish Habitat

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)). Specific categories of EFH identified in the South Atlantic Bight, which are utilized by federally managed fish and invertebrate species, include both estuarine/inshore and marine/offshore areas. Specifically, estuarine/inshore EFH includes Estuarine emergent and mangrove wetlands, submerged aquatic vegetation, oyster reefs and shell banks, intertidal flats, palustrine emergent and forested systems, aquatic beds, and estuarine water column. Additionally, marine/offshore EFH includes live/hard bottom habitats, coral and coral reefs, artificial and manmade reefs, Sargassum species, and marine water column.

EFH utilized by snapper grouper species in this region 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 183 meters [600 ft (but to at least 2,000 ft for wreckfish)] where the annual water temperature range is sufficiently warm to maintain adult populations of members of this largely tropical fish complex. EFH includes the spawning area in the water column above the adult habitat and the additional pelagic environment, including Sargassum, required for survival of larvae and growth up to and including settlement. In addition, the Gulf Stream is also EFH because it provides a mechanism to disperse snapper grouper larvae.

For specific life stages of estuarine-dependent and near shore snapper grouper species, EFH includes areas inshore of the 30-meter (100-ft) 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 habitats.

EFH utilized by wreckfish (Polyprion americanus) off the coast of South Carolina and Georgia, is an area of extensive hard bottom habitat known as the Charleston Bump, on the northern Blake Plateau (Sedberry et al. 2001). This topographic feature is located in the Gulf Stream at depths of 400–800 m and roughly 160 km offshore. The rough topography of the Charleston Bump includes over 100 m of nearvertical steep rocky relief with carbonate outcroppings, overhangs, and phosphorite–manganese flat hard bottom (Popenoe and Manheim 2001, Sedberry et al. 2001). The high topographic relief of the bottom deflects the Gulf Stream offshore and creates eddies, gyres, and upwellings in the Gulf Stream flow (Sedberry et al. 2001), which advect nutrients from the bottom into the euphotic zones, creating areas of high productivity (Lee et al. 1991).

Refer to Appendix D for more information about EFH and Ecosystem Based Management in the South Atlantic.

3.1.4 Habitat Areas of Particular Concern

Areas which meet the criteria for Essential Fish Habitat-Habitat Areas of Particular Concern (EFHHAPCs) 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; near shore 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; South Atlantic Council-designated Artificial Reef Special Management Zones (SMZs); and deep water MPAs.

Areas that meet the criteria for EFH-HAPCs include habitats required during each life stage (including egg, larval, post larval, juvenile, and adult stages). Refer to Appendix I for detailed information on EFH and EFH-HAPCs for all Council managed species.

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 wreckfish, other affected species, and protected species. These components are described in detail in the following sections.

3.2.1 Wreckfish

3.2.1.1 Life History

The wreckfish, Polyprion americanus, is a large grouper-like fish that has a global anti-tropical distribution, but it was rarely captured in the western North Atlantic until the late 1980s, when a bottom hook-and-line fishery that targets wreckfish developed on the Blake Plateau (Vaughan et al. 2001). Wreckfish occur in the Eastern and Western Atlantic Ocean, on the Mid-Atlantic Ridge, on Atlantic islands and seamounts, and in the Mediterranean Sea, southern Indian Ocean, and southwestern Pacific Ocean (Heemstra 1986, Sedberry 1995; Sedberry et al. 1994, 2001). In the western Atlantic, they occur from Grand Banks (44°50' N) off Newfoundland (Scott and Scott 1988) to the Valdes Peninsula (43°30' S) in Argentina (Menni et al. 1981). Genetic evidence suggests that there are three stocks: one that encompasses the entire North Atlantic and Mediterranean, one from Brazil, and the third from Australia/New Zealand in the South Pacific (Ball et al. 2000, Sedberry et al. 1996). Active adult migration is also possible based on the observation of European fish hooks present in western North Atlantic wreckfish suggest migration across great distances (Sedberry et al. 2001).

Wreckfish have supported substantial fisheries in the eastern North Atlantic, Mediterranean, Bermuda, and the western South Atlantic, but concentrations of wreckfish adequate to support a

fishery off the southeastern United States were not discovered until 1987. The fishery off the southeastern United States occurs over a complex bottom feature that has over 100 m of topographic relief, known as the Charleston Bump, located 130-160 km southeast of Charleston, South Carolina, at 31°30' N and 79°00' W on the Blake Plateau (Sedberry et al. 2001). Fishing occurs at water depths of 450-600 m. Primary fishing grounds comprise an area of approximately 175-260 km2 characterized by a rocky ridge and trough feature with a slope greater than 15° (Sedberry et al. 1994, 1999, 2001).

Adults are demersal and attain lengths of 200 cm TL (79 in; Heemstra 1986) and 100 kg (221 pounds; Roberts 1986). Wreckfish landed in the southeastern United States average 15 kg (33 pounds) and 100 cm TL (39 inches TL) (Sedberry et al. 1994). Goldman and Sedberry (2011) found that wreckfish predominantly consumed bony fish and squid. Juvenile wreckfish (< 60 cm TL) are pelagic, and often associate with floating debris, which accounts for their common name. The absence of small pelagic and demersal wreckfish on the Blake Plateau has led to speculation that young wreckfish drift for an extended period, up to four years, in surface currents until reaching the eastern Atlantic, or perhaps that they make a complete circuit of the North Atlantic (Sedberry et al. 2001).

Vaughan et al. (2001) reported a maximum age of 35 years; however, off Brazil the maximum age for wreckfish has been reported as 76 years (Peres and Haimovici 2004). In a recent Marine Resources Monitoring, Assessment, and Prediction (MARMAP) report (Wyanski and Meister 2002), mature gonads were present in 60% of females at 751-800 mm, 57% at 801-850 mm, and 100% at larger sizes. The smallest mature female was 692 mm, and a portion of the females was immature at lengths between 576 and 831 mm. The estimate of length at 50% maturity (L50) was 790 mm (Gomperz model; 95% CI = 733-820). Mature gonads were present in 40% of males between 651 and 800 mm and 100% at larger sizes. The smallest mature male was 661 mm, and a portion of males was immature between 518 and 883 mm. L50 was not estimated for males because transition to maturity was abrupt.

Wreckfish spawn from December through May based on female gonadal maturity. Spawning activity peaks from February to March. The highest percentages of ripe males occurred from December through May, which corresponded with the female spawning season; however, males in spawning condition were collected throughout the year. The male spawning peak was also during February and March.

3.2.1.2 Stock Status

In the 2022 2nd quarter report of status of stocks to U.S. Congress, wreckfish in the South Atlantic is listed as not undergoing overfishing and is not overfished https://www.fisheries.noaa.gov/national/population-assessments/fishery-stock-status-updates#2022-quarterly-updates). As of this writing, wreckfish has never been determined to be overfished or subject to overfishing.

A statistical catch-at-age assessment of the wreckfish stock in the South Atlantic was initially conducted in 2012 (Butterworth and Rademeyer 2012) and determined that wreckfish in the South Atlantic was not undergoing overfishing and was not overfished. Following the November 2012 Council's Scientific and Statistical Committee (SSC) meeting, and based on the recommendations of the SSC, the Council adopted a new third-party peer review process in

2013, and determined that this 18 assessment should be subject to that process. The SSC reviewed the revised assessment at their April/May 2014 meeting (Rademeyer and Butterworth 2014), accepted it as representing the best scientific information available on the current status of wreckfish in South Atlantic waters, and recommended it as appropriate for management decisions.

3.2.1.3 Landings

During fishing years 2009/2010-2016/2017, an average of 269,785 lb whole weight (ww) wreckfish were landed with an average weight of 32 lb ww (Table 3.2.1.3.1; Table 3.2.1.3.2)

Table 3.2.1.3.1. Wreckfish landings, average weight (lb ww), and percent (%) quota/ACL caught during fishing years 2009/2010-2016-2017.

Fishing Year	Landings (lb ww)	Quota/ACL (lb ww)	Average Weight (lb ww)	% Quota/ACL caught
2009/2010	217,229	2,000,000	35.8	11%
2010/2011	266,270	2,000,000	36.8	13%
2011/2012	318,809	2,000,000	38.6	16%
2012/2013	213,701	223,250	36.7	96%
2013/2014	216,542	223,250	34.5	97%
2014/2015	190,639	223,250	35.9	85%
2015/2016	359,081	433,000	27.5	83%
2016/2017	376,013	423,700	29.9	89%
Average	269,785	-	34.5	-

Source: Wreckfish Program Logbooks and Dealer Records, SEFSC Logbooks.

Table 3.2.1.3.2. Acceptable biological catch (ABC) and ACLs for wreckfish specified under Regulatory Amendment 22 (SAFMC 2015) where ACL = optimum yield (OY) = ABC. The ACL for 2020/2021 would remain in place until modified.

Fishing Year	New ABC lb ww	ACL	Commercial ACL (95%)	Recreational ACL (5%)
2015/2016	433,000	433,000	411,350	21,650
2016/2017	423,700	423,700	402,515	21,185
2017/2018	414,200	414,200	393,490	20,710
2018/2019	406,300	406,300	385,985	20,315
2019/2020	396,800	396,800	376,960	19,840
2020/2021	389,100	389,100	369,645	19,455
2021/2022	389,100	389,100	369,645	19,455

Source: SAFMC 2015 (http://safmc.net/wp-content/uploads/2016/06/Reg22_022615_FINAL.pdf).

3.2.2 Bycatch

Very little is known outside of the fishery dependent data available from the fishery conducted at the Charleston Bump off South Carolina. Available life history data reflect data from older and bigger fish, with low sample sizes for smaller, younger fish. Rademeyer and Butterworth (2014) estimated natural mortality (M) for wreckfish at 0.037 per year. Lytton et al. (2016) recommends using M at 0.09 for wreckfish stock assessment. In the wreckfish commercial sector, barrelfish (*Hyperoglyphe perciformes*) and red bream (*Beryx decadactylus*) are caught as bycatch

(Goldman and Sedberry 2011) and are likely sold or used for personal consumption. Other species collected by Goldman and Sedberry (2011) on vertical lines with baited hooks from 400 to 800 m depth, on and around Charleston Bump were: splendid alfonsino (*Beryx splendens*), conger eel (Conger oceanicus), gulper shark (*Centrophorus granulosus*), roughskin dogfish (*Cirrhigaleus asper*), and shortspine dogfish (*Squalus mitsukurii*). Fishermen could harvest one of these species and return co-occurring species to the water as "regulatory discards" (e.g., if the fish are under the size limit) or if undesirable; however, a portion of the discarded fish would not survive due to the depths at which these fish are caught. Wreckfish are rarely encountered by recreational fishermen and discard mortality would be 100% due to the depths at which they are captured.

3.2.3 Other Species Affected

This amendment indirectly affects other species in the Snapper Grouper FMU (greater amberjack, vermilion snapper, red snapper, and gray triggerfish) that are caught while fishing for red porgy. For summary information on other snapper grouper species that may be affected by the actions in this plan amendment, refer to Section 3.2.5 in Vision Blueprint Regulatory Amendment 27 to the Snapper Grouper FMP (SAFMC 2019a).

3.2.4 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)3 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 Vision Blueprint Regulatory Amendment 27 to the Snapper Grouper FMP (SAFMC 2019a).

3.3 Economic Environment

The Wreckfish ITQ program is one component of the Snapper Grouper FMP. As such, wreckfish harvesters are a small portion of the larger group of commercial fishing operations under the Council's and NMFS's jurisdiction. Additional economic information on the commercial sector of the snapper grouper fishery can be found in Amendment 41 (SAFMC 2017a), Amendment 37 (SAFMC 2016b), Amendment 36 (SAFMC 2016a), Regulatory Amendment 25 (SAFMC 2016b), and Amendment 35 (SAFMC 2015b) to the Snapper Grouper FMP. This section will concentrate on components of the economic environment that are relevant to the Wreckfish ITQ program.

3.3.1 Shareholders

The primary purpose of Amendment 20A (SAFMC 2012) was to eliminate "inactive" shareholders (i.e., those who had not harvested the quota lb derived from their shares in many years) and redistribute the "inactive" shares they possessed to entities that had been harvesting the quota lb associated with their shares. The desire to reduce the number of shareholders was driven by a significant decrease (approximately 89%) in the commercial ACL for wreckfish beginning in the 2012/2013 fishing year, which in turn could not economically sustain a higher number of harvesters than those participating in the fishery at the time. Inactive shareholders held a significant percentage of the shares and thus of the coupons/quota lb. Further, the limited number of share and coupon transfers suggested that the share and quota pound markets were not operating as intended to correct the problem, which in turn did not allow those quota lb to be harvested. As Table 3.3.1.1 illustrates, Amendment 20A was successful in significantly reducing the number of shareholders. The number of shareholders in this table reflect the total number of share certificates held at any time during the fishing year.[2]

[2] The number of entities possessing share certificates in a single year will generally exceed the number of certificates.

Table 3.3.1.1. Number of wreckfish ITQ shareholders, 2009-2016.

Year	Number of Shareholders
2009/2010	27
2010/2011	26
2011/2012	33
2012/2013	11
2013/2014	7
2014/2015	6
2015/2016	6
2016/2017	6

Source: SERO SF, Permits and Shareholder databases.

Most of Amendment 20A's intended effects actually occurred prior to the effective date of the final rule (October 26, 2012) as numerous share transfers occurred in the preceding months. The high number of share transfers is reflected by the relatively large number of shareholders in 2011/2012. Inactive shareholders had an incentive to sell their shares prior to the effective date of the final rule as their shares would have been reverted to NMFS after that date and thus, they would not have received any economic compensation for those shares. Although the inactive shareholders may not have received as much as they would have liked, they were economically better off by selling their shares to active shareholders who intended to remain in the program. In addition, Amendment 20A provided information to active shareholders regarding what percentage of additional shares they could expect to receive as a result of inactive shares being reverted and redistributed. Although no entity would be allowed to acquire more than 49% of the total shares as a result of the new share cap established under Amendment 20A, some active shareholders wanted to increase their shares by more than what they were likely to get as a result of redistribution, and so those shareholders had an incentive to buy more shares than what they would have acquired as a result of redistribution.

Statistics regarding the distribution of shares across shareholders (share certificates) from 2009/2010 through 2016/2017 are provided in Table 3.2.2.2. These statistics only include shareholders that possessed shares at the end of each fishing year, and thus the number of shareholders is not always the same as in Table 3.2.2.1. These statistics also do not account for affiliations between shareholders (e.g., where a particular entity may have an ownership interest in multiple share certificates). Table 3.2.2.1 demonstrates that, as the number of shareholders decreased directly or indirectly as a result of Amendment 20A, the minimum, maximum, and average (median and mean) percentage of shares held by each shareholder increased. Table 3.2.2.1 also demonstrates the redistribution that occurred in 2011/2012 prior to the effective date of the final rule that implemented Amendment 20A. Table 3.2.2.1 also demonstrates that the distribution of shares across shareholders has remained constant since the end of 2012/2013 (i.e., after Amendment 20A took effect). Finally, Table 3.2.2.1 illustrates the share cap of 49% that was established under Amendment 20A.

Table 3.3.1.2. Quota Share Statistics, 2009/2010-2016/2017. Shares are in percentages.

Statistic	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017
Number of Shareholders	26	25	11	6	6	6	6	6
Minimum Shares	0.06	0.06	0.06	2.99	2.99	2.99	2.99	2.99
Maximum Shares	16.43	16.43	44.61	49.00	49.00	49.00	49.00	49.00
Median Shares	1.89	2.18	6.17	10.23	10.23	10.23	10.23	10.23
Mean Shares	3.85	4.00	9.09	16.67	16.67	16.67	16.67	16.67

Source: SERO SF, Permits and Shareholder databases.

3.3.2 Permits

Wreckfish shareholders must possess a valid South Atlantic snapper grouper permit in order to harvest wreckfish. Two types of permits may be used to commercially harvest snapper grouper species in the South Atlantic: a South Atlantic snapper grouper unlimited permit (SG1) or a 225-lb trip limited permit for South Atlantic snapper grouper (SG2). A vessel with a Snapper Grouper 1 (SG1) permit can harvest up to the full commercial trip limits for all snapper grouper species while a vessel with an SG2 permit is limited to 225 lb total of snapper grouper species, including wreckfish, per trip. These snapper grouper permits are limited access permits, meaning that no new permits can be issued. Snapper grouper permits expire approximately one year from renewal and will terminate if not renewed within one year of the expiration date.

In 2008, the number of SG1 and SG2 permits was 664 and 151, respectively. The number of SG1 permits has decreased steadily over time, in large part due to the requirement, in most circumstances, to exchange two such permits for one new permit when requesting a permit transfer (Table 3.2.2.1).[3] SG2 permits are not transferable except to a different vessel under the same owner or to an immediate family member. Although the decrease in SG1 permits has been greater in absolute numbers than the decrease in SG2 permits from 2008 to 2016 (99 vs 35), the percentage decrease in SG2 permits has been greater than the percentage decrease in SG1 permits (23% vs 15%). Given that the 2 for 1 requirement only applies to SG1 permits, it is likely that other regulatory and economic factors have contributed to these declines, particularly for the SG2 permits.

[3] Exceptions to this requirement are specified in CFR Section 622.171, paragraphs (b)(1)(i) and (ii).

Table 3.3.2.1. Number of valid and renewable South Atlantic commercial snapper grouper permits by calendar year, 2009-2016.

Year	Number of permits		Change		% Change	
	SG1	SG2	SG1	SG2	SG1	SG2
2009	639	144	-25	-7	-3.76%	-4.64%
2010	624	139	-15	-5	-2.35%	-3.47%
2011	615	138	-9	-1	-1.44%	-0.72%
2012	604	132	-11	-6	-1.79%	-4.35%
2013	592	129	-8	-3	-1.32%	-2.27%
2014	584	125	-8	-4	-1.35%	-3.10%
2015	571	121	-13	-4	-2.23%	-3.20%
2016	565	116	-6	-5	-1.05%	-4.13%

Source: SERO SF-Permits Database, accessed 6/21/2018.

According to MacLauchlin (2018), the average price of an SG1 permit was about $40,000 in 2011. As of early 2018, the average price had increased to around $70,000, or by 75% since 2011. Also, temporary use of an SG1 permit has become common. Although leasing of permits is not allowed under the regulations, fishermen have found ways around this restriction, such as by entering contracts indicating that a vessel that has an SG1 permit is being leased. Current data are insufficient to determine exactly how many permits are being "leased" under this and other types of private arrangements. However, MacLauchlin (2018) estimates that the average price of a 1-year "lease" associated with an SG1 permit was about $7,000 in early 2018.[4]

Commercial vessels must have a valid snapper grouper and wreckfish permit to harvest wreckfish. Commercial wreckfish permits have open access as well as limited access characteristics. Commercial wreckfish permits are only issued to vessels owned by entities with shares in the Wreckfish ITQ program, or to agents of those entities, and thus are limited to a large extent by the number of shareholders in the program (see Section 3.2.4). However, shareholders that own multiple vessels can have permits on each vessel they own, and thus the number of permits can be larger than the number of shareholders. Also, commercial wreckfish permits are only issued for a single fishing year and thus expire but do not terminate, unlike limited access permits. Table 3.3.2.1 illustrates how the number of commercial wreckfish permits has changed from 2009 through 2016.

The number of permits has declined from about 15 permits to 8 permits per year on average between the 2009-2011 time period and the 2012-2016 time period, or by almost 50%. The decline in permits is directly related to the decrease in shareholders as discussed in Section 3.2.1. The decline is directly and indirectly related to the Council's action to revert and redistribute "inactive" shares in Amendment 20A. The number of issued permits is still typically higher than the number of active vessels in each year (see Section 3.2.3), indicating shareholders apply for permits but sometimes do not actually use them for harvesting wreckfish in a particular year. However, the number of "unused" permits in a given year has decreased significantly as a result of the decrease in shareholders. Also, although the number of shareholders was significantly

[4] Depending on the nature of the agreement, this price may not only reflect the cost of the SG1 permit.

greater than the number of permits from 2009-2011, the number of shareholders has been about the same as the number of permits in subsequent years and was actually greater in 2014 and 2016, as some shareholders own multiple vessels and chose to put permits on more than one vessel. Also, when compared to the number of active vessels, the number of permits was more than double the number of active vessels in each year from 2009-2011. And though this was still the case in 2012, the number of permits and active vessels have largely been about the same in subsequent years, in large part due to the removal of "inactive" shareholders and thus permit holders as a result of Amendment 20A.

Table 3.3.2.1. Number of commercial wreckfish permits by calendar year, 2009-2016.

Year	Number of Permits
2009	15
2010	14
2011	17
2012	12
2013	7
2014	7
2015	5
2016	8

Source: SERO SF-Permits Database, accessed 6/22/2018.

3.3.3 Vessels

The information in Table describe the activity of all 14 vessels that were active in the Wreckfish ITQ program from calendar years 2009 to 2016, including their activities in South Atlantic and Gulf of Mexico non-IFQ fisheries. The maximum annual gross revenue earned by a single vessel during this time was $1,403,065 (2016 dollars), though the mean gross revenue was lower at about $347,000 and the median was lower still at around $260,000. Although a majority of these vessels' gross revenue came from harvesting wreckfish, nearly as much came from harvesting non-IFQ species in the South Atlantic, and in 2009 one of the active wreckfish vessels also harvested species in the Gulf of Mexico.

Table 3.3.3.1. Revenue per vessel statistics for the 14 vessels active in the Wreckfish ITQ Program from 2009-2016. All dollar estimates are in 2016 dollars.

Statistic	IFQ Revenue	Other Logbook Revenue	Total Gross Revenue
Maximum	$1,067,472	$1,403,065	$1,403,065
Median	$103,877	$62,025	$259,067
Mean	$174,343	$173,176	$347,159
Total	$8,019,790	$7,966,083	$15,985,873

Source: Wreckfish Program Logbooks and Dealer Records, SEFSC Logbooks.

Vessel participation was fluid for a small fishery and not all of these vessels were active in the wreckfish ITQ fishery, or any other fishery covered by the Southeast Coastal logbooks in every year during this time. The number of vessels that were active in the ITQ program in each year varied between 4 and 7 vessels, as can be seen in Table. Note that participation in and revenue from the Wreckfish ITQ program dipped when the ACL was lowered for the 2012-2014 seasons.

The vessels were much more likely to participate in other South Atlantic fisheries during those years (primarily other species in the snapper grouper fishery) and revenue from those other species outstripped wreckfish revenue until the commercial wreckfish ACL was increased in 2015.

Table 3.3.3.2. Total revenue and revenue per vessel statistics for the 14 vessels active in the Wreckfish IFQ Program from 2009-2016 by year.

Year	Number of Vessels	Statistic	IFQ Revenue	Other Logbook Revenue	Total Gross Revenue
2009	7	Max	$395,479	$228,537	$395,479
		Median	$21,334	$5,400	$78,276
		Mean	$82,975	$52,768	$135,743
		Total	$580,823	$369,378	$950,201
2010	7	Max	$511,844	$516,137	$521,988
		Median	$18,144	$27,597	$155,971
		Mean	$114,137	$116,901	$231,038
		Total	$798,961	$818,305	$1,617,266
2011	7	Max	$443,837	$662,625	$717,351
		Median	$112,925	$18,451	$159,716
		Mean	$140,215	$113,986	$254,202
		Total	$981,507	$797,904	$1,779,411
2012	5	Max	$327,690	$984,218	$1,071,621
		Median	$98,938	$59,268	$314,370
		Mean	$152,333	$235,673	$388,007
		Total	$761,666	$1,178,367	$1,940,033
2013	5	Max	$394,853	$891,247	$957,481
		Median	$84,227	$176,597	$394,853
		Mean	$154,056	$267,747	$421,803
		Total	$770,279	$1,338,734	$2,109,013
2014	4	Max	$441,936	$1,403,065	$1,452,030
		Median	$119,678	$141,372	$396,758
		Mean	$182,564	$421,452	$604,016
		Total	$730,256	$1,685,809	$2,416,065
2015	5	Max	$945,197	$590,276	$945,197
		Median	$210,288	$144,990	$450,684
		Mean	$324,977	$179,836	$504,813
		Total	$1,624,885	$899,182	$2,524,067
2016	6	Max	$1,067,472	$541,026	$1,067,472
		Median	$168,816	$87,180	$331,265
		Mean	$295,236	$146,401	$441,637
		Total	$1,771,415	$878,404	$2,649,819

Source: Wreckfish Program Logbooks and Dealer Records, SEFSC Logbook Series.

3.3.4 Dealers

Ten dealers purchased wreckfish from shareholders from 2009 to 2016. Just as the number of active shareholders has fluctuated during this time period, so has the number of purchasing dealers, with between three and six dealers active in the wreckfish markets in any given year covered by this review. There is no clear trend of increases or decreases in the number of active wreckfish dealers over the time period. The dealers are geographically dispersed, generally located near one of the active shareholders.

The dealer who handled the most wreckfish combined during these years bought $5,010,009 of that species during this time, while the largest combined harvest of all species handled by a dealer was $10,584,656. There was a substantial range in purchases per dealer as evidenced by the spread between the median and mean purchases of both wreckfish ($36,045 and $810,456) and all species combined ($454,247 and $3,219,059). Half of the dealers purchased less than $20,000 apiece during this eight-year period, and many only purchased in one or two years. Three dealers were responsible for 98% of the purchases of wreckfish during this time, but even for them wreckfish did not constitute the majority of their seafood purchases.

Table 3.3.4.1 summarizes the per-year information on wreckfish and non-wreckfish purchases by the ten dealers active in the program.

Table 3.3.4.1. Annual purchases per dealer statistics for the 10 dealers active in the Wreckfish ITQ Program from 209-2016. All dollar estimates are in 2016 dollars.

Year	Number of Active Dealers	Statistic	IFQ Purchases	Other Purchases	Total Gross Revenue
2009	4	Max	$513,852	$994,182	$1,041,590
		Median	$31,658	$806,856	$567,358
		Mean	$144,625	$806,856	$548,054
		Total	$578,501	$1,613,713	$2,192,214
2010	6	Max	$660,198	$1,249,723	$1,639,498
		Median	$4,188	$885,754	$603,342
		Mean	$133,036	$826,659	$684,141
		Total	$798,214	3,306,634	$4,104,848
2011	5	Max	$580,355	$2,818,979	$2,819,440
		Median	$54,791	$1,183,805	$1,250,116
		Mean	$193,439	$1,497,973	$1,391,818
		Total	$967,197	$5,991,892	$6,959,089
2012	3	Max	$383,575	$1,149,562	$1,237,029
		Median	$291,214	$936,075	$1,227,288
		Mean	$254,085	$972,494	$1,226,579
		Total	$762,255	$2,917,482	$3,679,738
2013	4	Max	$393,943	$1,061,643	$1,293,383
		Median	$187,104	$938,245	$1,187,049
		Mean	$192,126	$966,443	$916,958
		Total	$768,505	$2,899,329	$3,667,833
2014	3	Max	$440,186	$1,096,708	$1,335,118
		Median	$238,410	$954,064	$1,002,836
		Mean	$242,456	$845,169	$1,087,625
		Total	$727,367	$2,535,508	$3,262,875
2015	4	Max	$908,718	$987,183	$1,846,513
		Median	$338,785	$951,283	$1,314,762
		Mean	$404,955	$736,657	$1,141,612
		Total	$1,619,819	$2,946,628	$4,566,447
2016	5	Max	$1,129,182	$778,120	$1,402,532
		Median	$55,010	$269,246	$789,810
		Mean	$376,540	$374,969	$751,509
		Total	$1,882,699	$1,874,844	$3,757,544

Source: Wreckfish Dealer Records, Southeast Fisheries Science Center ALS.

3.3.5 Economic Performance Indicators

Systematically measuring the economic performance of U.S. catch share programs has been difficult historically because the programs are so diverse in terms of target species, location, size, duration, management objectives, program design features, etc. However, in 2011, NMFS developed a set of standard economic performance indicators that measure the economic performance of catch share programs regardless of their design (Brinson and Thunberg 2016).

The approach adopted in the implementation and use of these indicators is to compare the baseline estimate for each indicator to its performance following implementation of the program. The baseline is generally the three-year average of the metric prior to implementing the catch shares program. Metrics included in this group of indicators covered six areas: management context (e.g., whether quota increased); management performance (e.g., whether quota was exceeded and whether season length increased); economic benefits (e.g., whether landings revenue increased, whether quota utilization increased, and whether average prices increased); economic efficiency (e.g., whether revenue per vessel increased); capacity (e.g., whether the number of fishing vessels decreased); and distributional effects (e.g., has the distribution of shares, landings, and revenue become more or less unequal). The metrics used to measure these estimators have been refined and enhanced in specific programs.

When the economic performance indicators program was implemented in 2011, the Wreckfish ITQ program was not included in the program because the metrics discussed above could not be publicly released. For fishing years 2001 through 2008, annual landings and revenue were confidential because the number of dealers purchasing wreckfish in each year was less than three. However, as annual landings and revenue data for more recent years are not confidential, NMFS should reassess whether economic performance indicators should be reported for the Wreckfish ITQ program.

3.3.6 Economic Returns

Economic return measures for the wreckfish ITQ fishery have been estimated twice throughout the program's history, once in the first season of the ITQ program (Richardson 1994) and later by Yandle and Crosson (2015) for the 2012-2013 season. Both analyses are based on a combination of wreckfish logbook data, wreckfish dealer data, and an economic survey at the vessel level. The economic surveys collect data on gross revenue, variable costs, fixed costs, as well as some auxiliary economic variables (e.g., market value of the vessel). Results from Yandle and Crosson are reported in Table 3.3.6.1.

Table 3.3.6.1. Variable costs collected by Yandle and Crosson for 2012-2013 fishing season.

Crew	$166,860
Fuel	$112,115
Bait	$32,027
Ice	$12,780
Unloading	$31,800
Gear repair/replace	$28,809
Trip repairs	$19,667
Groceries	$22,672
Other variable costs	$29,500
Total variable costs	$456,230

Source: Yandle and Crosson (2015).

The analysis was modeled on those done for other SEFSC-monitored fisheries (e.g. Liese 2013, Overstreet et al. 2017). Trip net revenue is trip revenue minus the costs for fuel, bait, ice, groceries, miscellaneous, and hired crew. Trip net revenue was positive in both Richardson

(1994) and Yandle and Crosson (2015), generally indicating that "profits" were being earned on wreckfish trips, though some trips earned much greater profits than others. Wreckfish-related fixed costs for each vessel were multiplied by the percentage of boat revenues accounted for by wreckfish. Because the fleet is so small, only summary information is provided. Landings information is from the wreckfish logbook data set. Price data were derived from the wreckfish dealer reports and broken down by vessel and area to give a more accurate basis for estimating each boat's profits. Yandle and Crosson calculated economic return on asset value by dividing the net revenue from operations by the reported vessel value (Table 3.3.6.2).

Table 3.3.6.2. Economic return from vessel operations.

Total lb landed (whole)	203,019
Total lb landed (gutted)	192,523
Average value/lb (gutted)	$3.64
Total landings revenue	$701,005
Total variable costs	$456,230
Total fixed costs	$126,257
Fleet profit (net revenue)	$118,518
Total fleet assets	$1,375,000
Net return (net revenue/landings revenue)	17%
Economic annual return (wreckfish net revenue/assets)	9%

Source: Yandle and Crosson (2015).

Yandle and Crosson (2015) also provided a comparison of their survey results to those of Richardson, as shown below. Net returns were very similar, although the return on assets was much lower, due to the drastically reduced volume of landings and vessels during the 20-year time span between surveys.

Table 3.3.6.3. Economic return from vessel operations.

	1992-1993	1992-1993 adjusted	2012-2013
Active Vessels	17	17	5
Total Landing Revenue	$1,952,766	$3,104,898	$701,005
Total Costs	$1,598,092	$2,540,966	$581,487
Fleet Net Revenues (Profit)	$354,674	$563,932	$118,518
Net Return	18%[5]	18%	17%
Fleet Assets	$1,737,536	$2,762,682	$1,375,000
Fleet Return on Assets	20%	20%	9%

Source: Yandle and Crosson (2015).

3.3.7 Imports

Imports of seafood products compete in the domestic seafood market and have in fact dominated many segments of the seafood market. Imports tend to set the price in the market segments in which they dominate and so have downstream effects on the local fish market. At the harvest

[5] .Richardson (1994), Table 7

level for wreckfish, imports affect the returns to fishermen through the ex-vessel prices they receive for their landings. As substitutes to domestic production of wreckfish, imports tend to cushion the adverse economic effects on consumers resulting from a reduction in domestic landings. The following describes the imports of snapper and grouper products which are thought to directly compete with domestic landings of wreckfish.[6]

Imports of fresh snapper increased from 21.4 mp product weight (pw) in 2009 to 22.7 mp pw in 2010, but then decreased to 21.7 mp pw in 2011. Total revenue from fresh snapper imports increased from $55 million (2016 dollars) in 2009 to $66 million in 2011 due to a significant increase in the per pound price of fresh snapper imports in 2010 and 2011. Imports of frozen snapper were substantially less than imports of fresh snapper from 2009 through 2011. Frozen snapper imports increased from 8.1 mp pw in 2009 to 11 mp pw in 2010, decreasing to 8.5 mp pw in 2011. Total revenue from these imports increased from $17.7 million (2016 dollars) in 2009 to $26.2 million in 2010, decreasing to $21.4 million in 2011.

Imports of fresh grouper ranged from 8.3 mp pw in 2009 to 9.4 mp pw in 20010, but decreased to 8.2 mp pw in 2011. Total revenue from fresh grouper imports increased from $24.3 million (2016 dollars) to $29.8 million in 2010, but decreased to $28.3 million in 2011. Imports of frozen grouper were minimal, increasing from 1.2 mp pw in 2009 to 2 mp pw in 2011. Similarly, total revenue from frozen grouper increased from $2.1 million to $3.7 million (2016 dollars) from 2009 to 2011.

From 2012 to 2016, imports of fresh snapper increased steadily from 22.7 mp pw to 30.6 mp pw. Total revenue from fresh snapper imports increased from $69.4 million (2016 dollars) in 2012 to an all-time high of $90.2 million in 2016. Imports of frozen snapper were substantially less than imports of fresh snapper from 2012 through 2016. Frozen snapper imports ranged from 11.4 mp pw worth $30.8 million (2016 dollars) in 2012 to 14.4 mp pw worth $38 million in 2016.

Imports of fresh snappers primarily originated in Mexico, Central America, or South America, and entered the U.S. through the port of Miami. Imports of fresh snapper were highest on average during the months of March through August. Imports of frozen snapper primarily originated in South America (especially Brazil), Indonesia, and Mexico. The majority of frozen snapper imports entered the U.S. through the ports of Miami and New York. Imports of frozen snappers tended to be lowest during March through June when fresh snapper imports were strong.

Imports of fresh grouper ranged from 9.2 mp pw in 2012 to 11.5 mp pw in 2016. Total revenue from fresh grouper imports ranged from $33.1 million (2016 dollars) to $47.2 million during this time period. Imports of frozen grouper were minimal, increasing from 1.3 mp pw in 2012 to 1.8 mp pw in 2014, but then decreasing significantly to only .81 mp pw in 2016. Similarly, total revenue from frozen grouper increased from $2.6 million to $3.7 million (2016 dollars) from 2012 to 2014, but then declined to $1.5 million in 2016.

Based on the above information, imports of snapper and grouper products increased significantly in terms of lb and particularly in terms of value from 2009 through 2016. Although imports of

[6] Import estimates were derived from https://www.st.nmfs.noaa.gov/commercial-fisheries/foreign-trade/index#

frozen grouper in lb and value decreased during this time, imports of other snapper and grouper products far outweighed this decrease. Increases in the volume and prices of fresh grouper and particularly fresh snapper drove the overall increase, which is important as imports of fresh snapper and grouper products likely compete with domestic landings of wreckfish more directly than frozen product.

The bulk of fresh grouper imports originated in Mexico and entered the U.S. through Miami and Tampa. From 2012 through 2016, fresh grouper imports were lowest on average during the month of March and higher the rest of the year, with a peak in July. Frozen grouper imports generally originated in Mexico and, to a lesser extent, Asia and entered the U.S. through Miami and Tampa. There was an inverse relationship in monthly imports between frozen and fresh groupers, with average imports being the highest in March for frozen grouper and lower during other months.

3.3.8 Economic Impacts of the ITQ Program

The commercial harvest and subsequent sales and consumption of fish generates business activity as fishermen expend funds to harvest the fish and consumers spend money on goods and services, such as red grouper purchased at a local fish market and served during restaurant visits. These expenditures spur additional business activity in the region(s) where the harvest and purchases are made, such as jobs in local fish markets, grocers, restaurants, and fishing supply establishments. In the absence of the availability of a given species for purchase, consumers would spend their money on substitute goods and services. As a result, the analysis presented below represents a distributional analysis only; that is, it only shows how economic effects may be distributed through regional markets and should not be interpreted to represent the impacts if these species are not available for harvest or purchase.

Estimates of the U.S. average annual business activity associated with the commercial harvest of IFQ species in the Gulf of Mexico were derived using the model[7] developed for, and applied in NMFS (2017b), and are provided in Table 3.3.8. andTable 3.3.8.1 for "average" conditions in 2009-2011 and 2012-2016, respectively. This business activity is characterized as full-time equivalent jobs, income impacts (wages, salaries, and self-employed income), and output (sales) impacts (gross business sales). Income impacts should not be added to output (sales) impacts because this would result in double counting.

The results provided should be interpreted with caution and demonstrate the limitations of these types of assessments. These results are based on average relationships developed through the analysis of many fishing operations that harvest many different species. Separate models for individual species are not available. From 2009 to 2011, wreckfish landings resulted in approximately $817,000 million in gross revenue (2016$). In turn, this revenue generated employment, income, value-added and output impacts of 109 jobs, $2.97 million, $4.2 million, and $8.1 million, respectively. From 2012-2016, wreckfish landings resulted in approximately $1.15 million in gross revenue (2016$). In turn, this revenue generated employment, income, value-added and output impacts of 153 jobs, $4.18 million, $5.91 million, and $11.39 million,

[7] A detailed description of the input/output model is provided in NMFS (2011).

respectively. Thus, between these two time periods, revenues from wreckfish landings increased by more than $332,000, or by more than 40%. This increase was partly attributable to the increase in the commercial ACL implemented under Regulatory Amendment 22 (SAFMC 2015a) as well as an increase in the average ex-vessel price for wreckfish (see Section 6.2). At the national level, this increase in revenues subsequently lead to an additional 44 jobs, $1.2 million in income, $1.7 million in value-added, and $3.3 million in output.

Table 3.3.8.1. Economic impacts of the Wreckfish ITQ program, 2009-2011. All dollar estimates are in thousands of 2016 dollars and employment is measured in full-time equivalent jobs.

Industry sector	Direct	Indirect	Induced	Total
Harvesters				
Employment impacts	19	3	4	26
Income Impacts	441	82	198	721
Total value-added impacts	470	295	339	1,103
Output Impacts	817	664	657	2,138
Primary dealers/processors				
Employment impacts	4	2	3	8
Income Impacts	144	133	125	402
Total value-added impacts	153	169	236	559
Output Impacts	463	349	461	1,273
Secondary wholesalers/distributors				
Employment impacts	2	0	2	4
Income Impacts	86	25	90	201
Total value-added impacts	91	43	154	288
Output Impacts	230	84	299	613
Grocers				
Employment impacts	8	1	2	11
Income Impacts	176	59	88	323
Total value-added impacts	188	94	150	432
Output Impacts	301	153	294	749
Restaurants				
Employment impacts	49	3	8	60
Income Impacts	707	214	405	1,327
Total value-added impacts	754	383	682	1,820
Output Impacts	1,378	600	1,347	3,325
Harvesters and seafood industry				
Employment impacts	82	9	18	109
Income Impacts	1,554	513	907	2,974
Total value-added impacts	1,656	984	1,561	4,201
Output Impacts	3,189	1,850	3,059	8,097

Source: Calculated by NMFS SERO using the model developed for and applied in NMFS (2017b).

Table 3.3.8.1. Economic impacts of the Wreckfish ITQ Program, 2012-2016. All dollar estimates are in thousands of 2016 dollars and employment is measured in full-time equivalent jobs.

Industry sector	Direct	Indirect	Induced	Total
Harvesters				
Employment impacts	27	4	6	36
Income Impacts	620	115	279	1,014
Total value-added impacts	661	415	477	1,552
Output Impacts	1,149	935	925	3,009
Primary dealers/processors				
Employment impacts	6	2	4	12
Income Impacts	202	187	176	565
Total value-added impacts	216	238	332	786
Output Impacts	651	491	649	1,791
Secondary wholesalers/distributors				
Employment impacts	3	1	3	6
Income Impacts	121	36	127	283
Total value-added impacts	129	60	217	405
Output Impacts	323	118	421	862
Grocers				
Employment impacts	11	1	2	15
Income Impacts	248	82	124	455
Total value-added impacts	264	133	211	608
Output Impacts	424	216	414	1,053
Restaurants				
Employment impacts	69	5	11	85
Income Impacts	995	302	570	1,867
Total value-added impacts	1,061	539	960	2,560
Output Impacts	1,939	844	1,895	4,678
Harvesters and seafood industry				
Employment impacts	115	13	26	153
Income Impacts	2,186	722	1,276	4,184
Total value-added impacts	2,331	1,385	2,196	5,912
Output Impacts	4,487	2,603	4,304	11,394

Source: Calculated by NMFS SERO using the model developed for and applied in NMFS (2017b).

3.4 Social Environment

Because of its small size, when describing the social environment of the wreckfish fishery, the issue of confidentiality quickly constrains the types of information that can be presented to the public. As is often the case with other social environments, in order to meet National Standard (NS) 8, a summary of communities involved and their dependence upon fishing is often presented. Because of the small footprint of the wreckfish fishery that type of description is not possible. Both the number of vessels and dealers are so few that little description is possible without revealing confidential information. See SAFMC 2011 for another recent description of the social environment.

In the initial Wreckfish ITQ program review, SAFMC (2009) described a pattern of participation that has shown a steady decline from 1991 to 2009 for both the number of vessels and dealers active in the fishery. Since 2009, there has been a slight increase in participation, although for some vessels it has been sporadic (Figure 3.4.1). Some vessels participated for one year only, while others enter and leave only to enter again a year or two later. Vessel 14 is the only one that has consistently participated over the time period, although both vessels 5 and 9 have only one year they did not have landings (Figure 3.4.1). In 2016 there were 7 vessels (with known vessel IDs) participating in the fishery with landings.

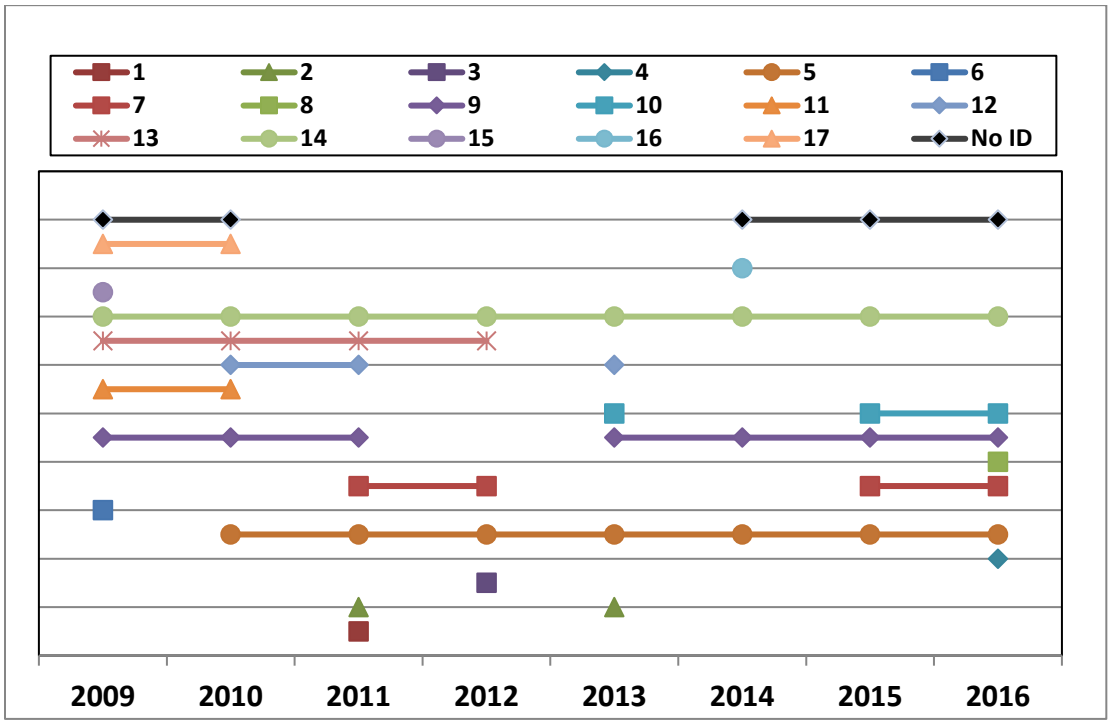

Figure 3.4.1. Vessels participating in the wreckfish fishery with landings 2009-2016.
Source: SEFSC 2018.

Participation in the wreckfish fishery is a concern for stakeholders who have suggested that declines in participation due to shifts by some participants to other fisheries may not have been sufficiently considered in the setting of ABCs and ACLs (SAFMC 2009).

Wreckfish has been primarily landed in the states of Florida and South Carolina from 2010 to 2016 with vessels homeported in the communities of Holden Beach, North Carolina, Key Largo and Port Orange, Florida, and Charleston, South Carolina. However, shareholders also live in the Jacksonville, Florida area among other towns and communities along with South Atlantic coast. Dealers who handle wreckfish in Florida are in the communities of Daytona Beach, Islamorada, Key Largo, Marathon, Palm Beach Gardens, Port Orange, and Tavernier. In South Carolina dealers are located in Charleston, McClellanville, and Wadmalaw Island.

With recent changes to the ACLs fishermen have often switched to other fisheries to compensate for reduced quota and for other reasons (Yandle and Crosson 2015). This is evident in Figure 3.4.1 as vessels often drop out of the wreckfish fishery. It is assumed that they have switched to other more lucrative fisheries but may not always be the case.

Figure 3.3.2 shows the overall commercial fishing engagement for those communities with either vessels home ported or dealers located within the community. Overall commercial engagement is a measure of the importance of fishing within the community as measured by the amount and value of landings, number of vessels and vessel owners located within a community by vessel homeport. Only three communities in Figure 3.3.2 do not exceed both thresholds for fishing engagement in all years. Daytona Beach, Florida and Wadmalaw Island, South Carolina both have at least one year that reaches the lower threshold of ½ standard deviation, while Port Orange exceeds the lower threshold for all years but reaches the highest threshold in only four out of the six years. All other communities score above the highest threshold for all years.

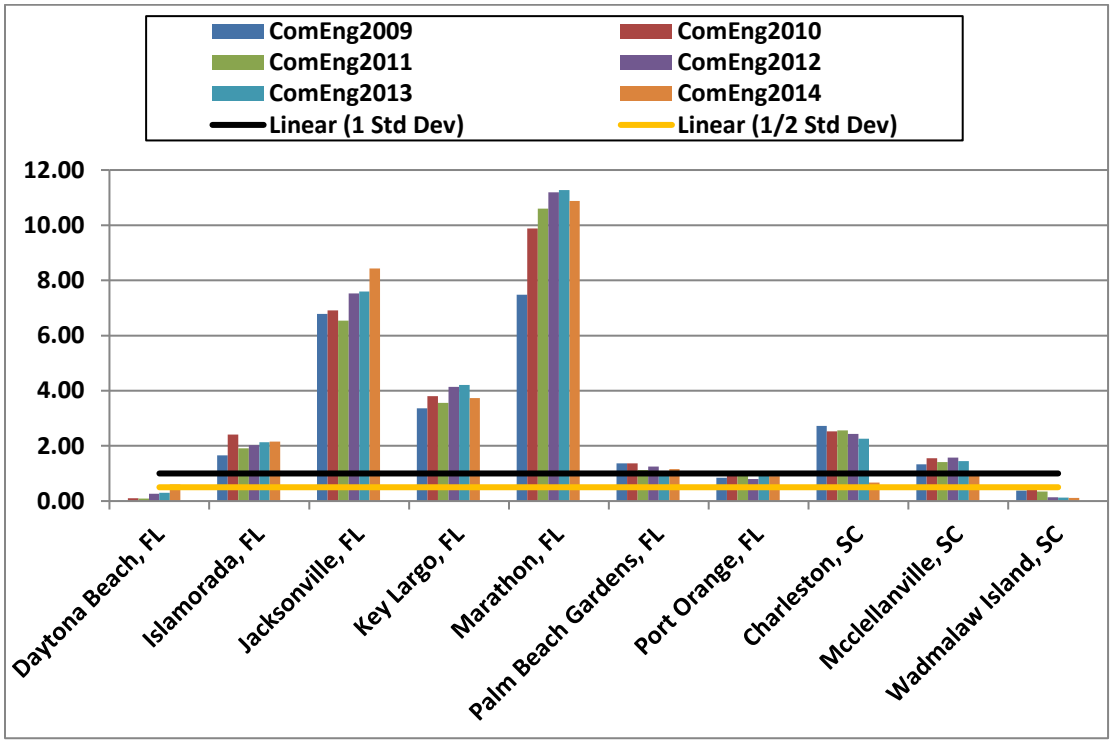

Figure 3.4.2. Overall commercial fishing engagement 2009-2014 for communities with vessels, shareholders or dealers in the wreckfish fishery.
Source: NMFS SERO Community Social Vulnerability Indicators Database (ACS 2014) 2014.

With most communities exceeding the thresholds in all years, it is likely that commercial fishing plays an important role in the local economy. Other communities that are below the thresholds may have other sectors of their economy that play a larger role or the community defined is not easily demarcated like Wadmalaw Island which is not recognized as a census designated place and placing people within that boundary is more difficult.

3.4.1 Environmental Justice

Executive Order 12898 requires that 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. This executive order is generally referred to as environmental justice (EJ).

In order to assess whether a community may be experiencing EJ issues, a suite of indices created to examine the social vulnerability of coastal communities (Colburn and Jepson 2012) is presented in Figure for those communities that appear in Figure 3.4.1. The three indices are poverty, population composition, and personal disruptions. The variables included in each of these indices have been identified as important components that contribute to a community's vulnerability. Indicators such as increased poverty rates for different groups, more single female-headed households and children under the age of five, disruptions such as higher separation rates, higher crime rates, and unemployment all are signs of vulnerable populations. These indicators are closely aligned to previously used measures of EJ which used thresholds for the number of minorities and those in poverty. For those communities that exceed the threshold, it is expected that they would exhibit vulnerabilities to sudden changes or social disruption that might accrue from regulatory change.

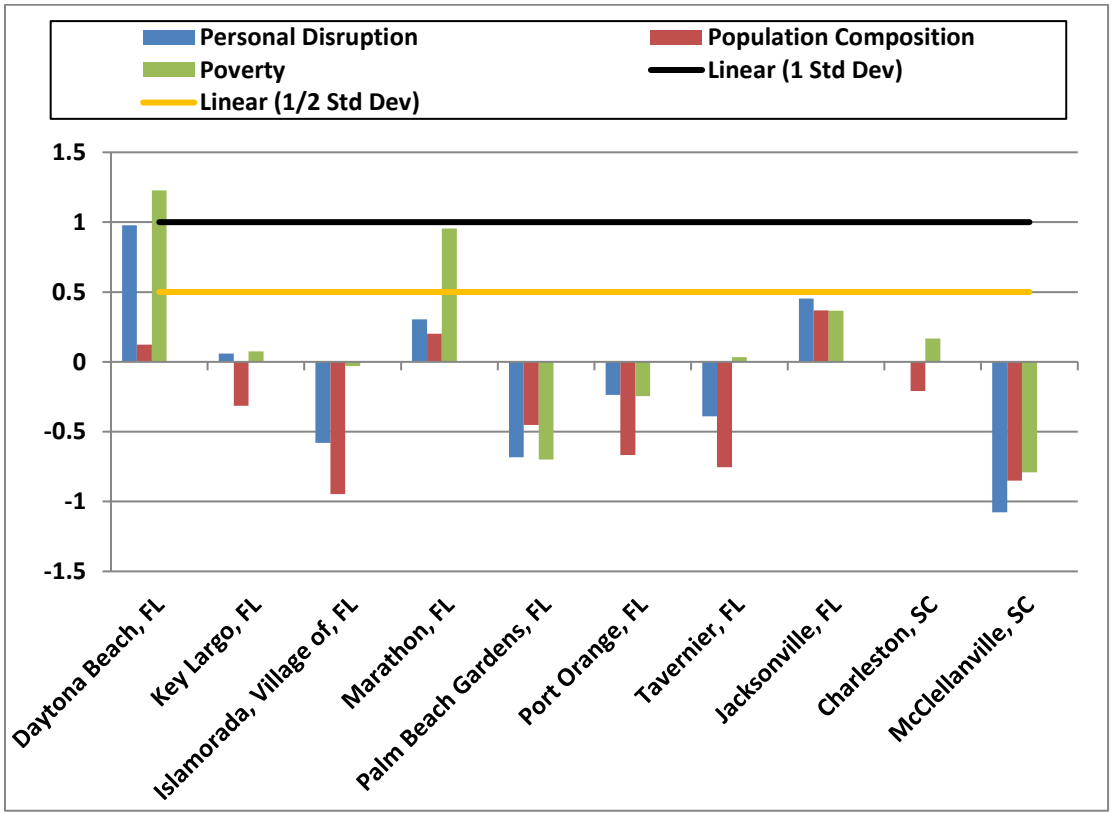

Figure 3.4.1.1. Social vulnerability indicators for wreckfish fishing communities.
Source: NMFS SERO Community Social Vulnerability Indicators Database (ACS 2014) 2014.

The communities in Figure 3.3.3 demonstrate few social vulnerabilities, with Daytona Beach the only community that exceeds both thresholds for poverty and close to both thresholds for personal disruption. Marathon is the only other community that exceeds a threshold and that is the ½ standard deviation threshold for poverty.

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 http://www.gc.noaa.gov/enforce-office3.html.

Chapter 4. Environmental Effects and Comparison of Alternatives

4.1 Action 1. Revise sector allocations and sector annual catch limits for wreckfish.

Alternatives*

1 (No Action). Retain the current commercial sector and recreational sector allocations as 95% and 5%, respectively.

2. Allocate 98% of the annual catch limit for wreckfish to the commercial sector and 2% to the recreational sector.

3. Allocate 99% of the annual catch limit for wreckfish to the commercial sector and 1% to the recreational sector.

4. Allocate 99.5% of the annual catch limit for wreckfish to the commercial sector and 0.5% to the recreational sector.

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

4.1.1 Biological Effects

Biological effects are not expected to be substantially different between **Alternative 1 (No Action)** and **Alternative 2**, **Alternative 3**, and **Alternative 4** since the allocation percentages do not affect the total ACL established for this fishery and the commercial sector is well regulated under an IFQ program.

Amendment 25 (SAFMC 2011) made the first specific allocation of wreckfish to the recreational sector. That amendment allocated 95% of the total wreckfish ACL to the commercial sector and 5% to the recreational sector. Prior to Amendment 25 (SAFMC 2011) it was illegal for recreationally harvested wreckfish to be possessed unless the fisherman also held and South Atlantic Commercial Snapper Grouper Permit.

According to Southeast Region Headboat Survey data, no wreckfish have been landed by South Atlantic headboats since the recreational sector was given its allocation (K. Donnelly, pers. comm., Beaufort Laboratory, 3/19/2019). Recreational landings are currently tracked using the Marine Recreational Information Program (MRIP). Wreckfish intercepts by MRIP are exceedingly rare. Since 1981, only one intercepted trip by a charter vessel off of Hatteras, NC in 2012 reported harvest of wreckfish (Pers. comm., NMFS, Fisheries Statistics Division, 3/19/2019). With wreckfish MRIP intercepts being so rare, it is uncertain how many wreckfish are being caught by the recreational sector, though it is likely the recreational sector is not fully utilizing its current allocation.

Substantial changes in fishing effort or behavior are not expected as a result of this action, thus the proposed 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). This action would not have an impact on protected species.

4.1.2 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 4** would allow for the highest potential economic benefits for the commercial sector followed by **Alternative 3**, **Alternative 2**, and **Alternative 1 (No Action)**. The opposite would be true for the recreational sector, where **Alternative 1 (No Action)** would allow for the highest potential economic benefits followed by **Alternative 2**, **Alternative 3**, and **Alternative 4**.

4.1.3 Social Effects

Sector allocations exist for the recreational and commercial sectors already, **Alternative 1 (No Action)** would maintain the current allocation percentages. Under **Alternative 2**, **Alternative 3**, and **Alternative 4** there would be a decrease in the recreational percentage compared to **Alternative 1 (No Action)**. These alternatives could have some negative social effects if recreational fishermen, have a negative perception of this change due to the decrease in fishing opportunity and concerns about long-term social effects, especially if other actions further decreased harvest opportunities.

As mentioned above, there can be many different social effects that result as allocations are discussed further, and perceptions are formed. 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 management measures in conjunction with this one.

4.1.4 Administrative Effects

The overall administrative effects are likely going to be minimal and the same across the viable alternatives. The wreckfish fishery is already managed under an ITQ program, which is a considerable administrative burden to the agency. Upon implementation of one of the action alternatives, there would be a temporary increased administrative burden to reallocate quota share to individuals in the program. However, this burden will be only at the implementation stage and minimal moving forward. 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. Administrative effects would not vary between **Alternative 1 (No Action)** and **Alternative 2, Alternative 3**, **and Alternative 4**.

4.2 Action 2. Implement an electronic reporting system for the wreckfish individual transferable quota (ITQ) program.

Alternatives*

1 (No Action). Retain the current ITQ paper-based reporting system.

2. Implement an electronic system of reporting for the wreckfish ITQ program.

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

4.2.1 Biological Effects

The current wreckfish ITQ program operates via paper-based logbook and paper coupons. Moving to an electronic ITQ system is an administrative action that would streamline an already existing program and would not directly affect the physical or biological environment but may have an indirect effect. There may be positive indirect biological effects because the electronic system may be more efficient for both fishermen and managers and would allow for better tracking of catch and allocation. The wreckfish fishery has not exceeded their ACL since the inception of the paper based ITQ program but it is expected that an electronic ITQ program will allow for better management and execution of the fishery.

4.2.2 Economic Effects

The reporting burden under **Alternative 1 (No Action)** would likely be similar to that under **Alternative 2**. If dealers and shareholders currently involved in the fishery do not already have the necessary equipment and internet connection to report electronically, **Alternative 2** would introduce a new cost. However, it is likely that these businesses are already equipped for electronic reporting, so this would likely not be a new or additional cost. **Alternative 2** would allow for more timely monitoring of the wreckfish ITQ program in comparison to **Alternative 1 (No Action)**. Additionally, once the program is set up there would be decreased administrative costs since agency staff would not need to input wreckfish landings reported on paper into an electronic system. As such, **Alternative 2** would result in increased net economic benefits in comparison to **Alternative 1 (No Action)**.

4.2.3 Social Effects

Section 3.4 (Social Environment) includes detailed information about fishermen and communities that may be affected by changes to reporting requirements for commercial wreckfish businesses. In general, positive social effects of electronic reporting requirements would likely be associated with decreased time and financial burden for wreckfish ITQ holders and crew to meet the requirements when compared to the paper-based reporting system.

The requirement for increased electronic reporting under **Alternative 2** would affect vessel owners who do not already use computer systems in their businesses or could result in errors. However, requiring all wreckfish ITQ shareholders to report electronically is expected to result in broad social benefits by improving quota monitoring. There may also be some positive benefits for individual fishing businesses associated with having a consistent record of catch on their trips under. This information could be used for marketing purposes to demonstrate the ability and knowledge of the captain and crew. Additionally, a database could be established that would allow business owners to access their own records and compare them to summarized reports at a local or regional level.

4.2.4 Administrative Effects

The monitoring program is a paper-based system that is managed through two different line offices: SERO and SEFSC. This creates a division in the management of the program, and thus all the information regarding activity in the program is not retained within a single location or database.

Maintaining data across multiple datasets and locations creates a challenge for monitoring the program in its entirety. While each line office effectively manages the components of the monitoring program for which it is responsible at present, this structure prevents NMFS from monitoring activity on a real- time basis, inhibits analysis of the program, and increases the costs of monitoring the program and evaluating its performance. Managing the system in one location may decrease costs and increase management and analysis of the program. To that end, program performance could be improved by moving to an electronic system as proposed in **Alternative 2**. The current structure of the wreckfish program lends itself well to the electronic reporting system already in place for other Catch Share programs managed or hosted by the regional office (e.g., Gulf of Mexico IFQ programs, Highly Migratory Species' Bluefin Tuna Individual Bycatch Quota program, pilot catch share program for the
Gulf Headboat Collaborative, etc.).

Benefits of moving from the paper-based program (**Alternative 1**) to the electronic program (**Alternative 2**) may include:

- One database containing all program activity (e.g., landings, effort, and participation; transfers of quota shares and quota lb; ex-vessel, share, and quota pound prices, etc.).
- More timely and accurate data reporting and real-time monitoring.
- Improved method and reduced time to transfer shares and quota lb.
- Automated share cap calculations.
- Ability to match shareholder agents/contractors more accurately from permit records with shareholder accounts.
- Participants able to view their transfer and landings history.
- Elimination of coupons, which would:
    - Allow quota lb to be transferred or landed in one pound increments rather than 100 and 500 lb increments, which would eliminate loss of quota lb due to denominational restrictions.
    - Eliminate the need to print coupons and mail coupons to the shareholders.
    - Eliminate the need to mail in coupons to the SEFSC.

Alternative 1 (No Action) would result in no increase in administrative burden on NMFS as the ITQ program has developed and implemented. **Alternative 2** would increase the administrative burden on NMFS initially related to development and implementation of an electronic system. These costs could be minimized by working through already developed systems as described above. After development of the electronic system, the administrative burden of manually maintaining the existing ITQ program will be reduced. **Alternative 2** would also have an increased administrative impact associated with education and outreach. This is expected to be significant during the outset of the program and will be reduced as the program becomes more familiar to the participants.

4.3 Action 3. Modify the requirement to possess a commercial vessel permit for wreckfish.

Alternatives*

1 (No Action). To obtain a commercial vessel permit for wreckfish, the applicant must be a wreckfish shareholder; and either the shareholder must be the vessel owner, or the owner or operator must be an employee, contractor, or agent of the shareholder.

2. To obtain a commercial vessel permit for wreckfish, the applicant must be a wreckfish shareholder; and the shareholder must be the vessel owner.

3. To commercially harvest or sell wreckfish, a commercial permit for South Atlantic snapper grouper (unlimited) must have been issued to the vessel, the permit must be on board, and the permit holder must be a wreckfish shareholder.

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

4.3.1 Biological Effects

Changing the permit requirement for wreckfish shareholders is an administrative action that would not directly affect the physical or biological environment. There may be positive indirect biological effects because **Alternative 2** and **Alternative 3** would remove the ability for an employee, contractor, or agent of the shareholder leading to more direct involvement in the fishery by the wreckfish permit holder. However, this action would not change how the fishery is prosecuted and as such would not have a direct biological impact on wreckfish, other affected species or protected species.

4.3.2 Economic Effects

In terms of entry into the wreckfish fishery, **Alternative 1 (No Action)** would be the least stringent. **Alternative 2** is similar to **Alternative 1 (No Action)** but is slightly more restrictive, there may be economic benefits to existing participants but additional costs for new entrants. From a cost standpoint, **Alternative 1 (No Action)** would require the lowest costs to wreckfish participants followed by **Alternative 2** and **Alternative 3**.

4.3.3 Social Effects

When compared to **Alternative 1 (No Action)** the proposed alternatives would be less burdensome on shareholders as well as NMFS. **Alternative 2** is slightly more restrictive than **Alternative 3** as it maintains the requirement to purchase a commercial wreckfish permit. However, **Alternative 2** would require less information to be provided by the shareholder when compared to the requirements under **Alternative 2 (No Action)**. Additionally, **Alternative 2** and **Alternative 3** would create fewer requirements to enter into the fishery. However, additional or similar requirements for entry as those under **Alternative 1 (No Action)** may be implemented as part of the electronic reporting system (Action 2) which would affect the social effects of this action.

4.3.4 Administrative Effects

In order to obtain an open access wreckfish permit, the entity must first be a wreckfish shareholder or the agent of a wreckfish shareholder. In order to harvest wreckfish, the vessel owner or the operator of the vessel must be the wreckfish shareholder or an employee, contractor, or agent of the shareholder and must also possess the limited access South Atlantic commercial Snapper/Grouper permit. Therefore, the only restriction on entry into the Wreckfish ITQ program as a shareholder is the availability of wreckfish shares, while the

restriction to harvest wreckfish is also limited by Snapper/Grouper permits. Since Snapper/Grouper permits can only be obtained by transfer, except for specific exceptions, an entity must obtain and exchange two such permits for one new permit, which may inhibit participation in the program.

The administrative impacts of this action are expected to be minimal and similar between **Alternative 1**, **Alternative 2**, and **Alternative 3**. The impacts will be associated with education and outreach, compliance, and law enforcement. There may be a reduced administrative burden with **Alternative 2** and **Alternative 3** if the electronic ITQ system is developed under Action 2. The electronic system will be able to keep track of vessel shares amongst the active vessels.

4.4 Action 4. Modify the commercial fishing year for wreckfish.

4.4.1 Biological Effects

Regardless of the alternative selected, this action is not anticipated to have negative biological impacts on wreckfish. The commercial sector is constrained by ACLs and operates under a well-regulated ITQ system. Any changes made to the ITQ system under Action 2 would not impact this action. There is not expected to be any difference in the biological impacts of **Alternative 1** and **Alternative 2**. Neither alternatives will modify the fishery in such a way that it would result in impacts to wreckfish, other affected species or protected species.

Alternatives*

1 (No Action). The commercial fishing year for wreckfish begins on April 15 and ends on April 14.

2. The commercial fishing year for wreckfish begins on January 1 and ends on December 31.

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

4.4.2 Economic Effects

The fishing year does not directly affect landings or fishing behavior, therefore the economic effects of **Alternative 1 (No Action)** and **Alternative 2** would likely be similar. Net economic benefits are not expected to change between the two alternatives.

4.4.3 Social Effects

The fishing year does not directly affect landings or fishing behavior, therefore the social effects of **Alternative 1 (No Action)** and **Alternative 2** would likely be similar. Social effects are not expected to change between the two alternatives.

4.4.4 Administrative Effects

If Alternative 2, under Action 2 is selected as preferred, this action would be needed to align the electronic system maintenance and updates with those of other catch share programs managed by NMFS. The need for this action is purely administrative and **Alternative 2** would significantly reduce the administrative burden compared to **Alternative 1** because the updates and maintenance of the ITQ program can happen at the same time as the other programs.

4.5 Action 5. Modify the spawning season closure for wreckfish.

Alternatives*

1 (No Action). From January 15 through April 15, each year, no person may harvest or possess wreckfish.

2. From January 1 through April 1, each year, no person may harvest or possess wreckfish.

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

4.5.1 Biological Effects

The current fishing year begins on April 16 and runs through April 15 of the next calendar year, although harvest is prohibited during the wreckfish spawning-season closure from January 15 – April 15 of each year. This action would slightly adjust the spawning season closure and the commercial fishing year (**Action 4**).

Regardless of the alternative selected, this action is not anticipated to have negative biological impacts on wreckfish. The commercial sector is constrained by an ACLs and operates under a well-regulated ITQ system. The length of the spawning season would remain the same but there would be a slight temporal shift. There is not expected to be any difference in the biological impacts of **Alternative 1** and **Alternative 2**. Neither alternatives will modify the fishery in such a way that it would result in impacts to wreckfish, other affected species or protected species.

4.5.2 Economic Effects

Since the number of days that fishing will be prohibited due to the spawning season closure would not change, there are no direct affects anticipated for wreckfish landings or fishing behavior and the economic effects of **Alternative 1 (No Action)** and **Alternative 2** would likely be similar. Net economic benefits are not expected to change between the two alternatives.

4.5.3 Social Effects

The number of available fishing days does to change between **Alternative 1 (No Action)** and **Alternative 2**, thus the potential social effects on commercial fishing businesses and coastal communities of modifying the wreckfish spawning closure will depend on when it is most profitable to target wreckfish. Fishing businesses who target wreckfish during the first two weeks of January may experience minor negative social effects, such as lower income at the very beginning of the year, under **Alternative 2**. However, it is likely fishing businesses may be able to make up that income during the open season, thus overall social effects are not expected to differ between **Alternative 1 (No Action)** and **Alternative 2**.

4.5.4 Administrative Effects

Action 4 and Action 5 are linked to the development of an electronic ITQ program under Action 2. If **Alternative 2** is selected under Action 2, the administrative burden of developing and maintain an electronic ITQ program is reduced if the program updates and maintenance can align with other electronic programs managed by NMFS. If **Alternative 2** is selected under Action 4, this action will allow a shift in the spawning season slightly to align with the ITQ system updates and maintenance. Under **Alternative 2**, the administrative impacts would be reduced compared to **Alternative 1**, as the electronic system maintenance and updates with those of other catch share programs managed by NMFS.

4.6 Action 6. Require all commercial vessels with a South Atlantic Unlimited Snapper-Grouper Permit participating in the wreckfish portion of the snapper grouper fishery to be equipped with vessel monitoring systems.

4.6.1 Biological Effects

The requirement to report be equipped with a vessel monitoring system is an administrative process for providing a means of collecting location data from wreckfish fishermen, and does not directly affect the biological or physical environment but may have an indirect effect. It is expected that with more complete location information, managers would be able to make better decisions about future management.

Alternatives*

1 (No Action). Commercial vessels with a South Atlantic Unlimited Snapper-Grouper Permit are not required to be equipped with vessel monitoring systems when participating in the wreckfish portion of the snapper grouper fishery.

2. Require all commercial vessels with a South Atlantic Unlimited Snapper-Grouper Permit participating in the wreckfish portion of the snapper grouper fishery to be equipped with vessel monitoring systems.

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

Alternative 2 would require commercial vessels participating in the wreckfish fishery to be equipped with vessel monitoring systems. Neither **Alternative 1 (No Action)** nor **Alternative 2** would have direct impacts on the physical, biological or ecological environment but ultimately provide more information about the fishery that may result in biological benefits to the species. Because **Alternative 2** only proposes vessel monitoring with a snapper-grouper unlimited permit and for use in the wreckfish fishery, it is tied to **Action 3.**

4.6.2 Economic Effects

Currently South Atlantic Unlimited Snapper-Grouper permitted vessels operating in the wreckfish fishery do not require VMS (**Alternative 1 (No Action)**), thus requiring VMS (**Alternative 2**) would implement new costs for these participants. Also, there may be additional administrative costs from monitoring VMS data under **Alternative 2**. As such, net economic benefits would be higher under **Alternative 1 (No Action)** compared to **Alternative 2.**

4.6.3 Social Effects

Additional effects would not be expected from **Alternative 1 (No Action)**, as there would be no increased burden on wreckfish ITQ shareholders. The effects **Alternative 2** would pertain to the increased burden to purchase, learn to use, and maintain the vessel monitory system hardware/software. Additionally, there has been opposition to the required use of vessel monitory systems by participants in other fisheries who have expressed concern with how these data may be used and who would have access to the data

In general, the expected social effects would likely be associated with a financial burden on wreckfish ITQ shareholders and businesses to purchase and maintain any required equipment, These negative direct effects would be greatest under the most expensive devices, which would require a permanently installed VMS unit.

4.6.4 Administrative Effects

Alternative 1 (No Action), the status quo alternative, would not be expected to result in an increase in administrative burden to NMFS as this alternative does not change the current requirements. **Alternative 2** would increase the administrative significantly as it would require the development of infrastructure to monitor vessel monitoring tracks. Alternative 2 would require outreach on education and compliance. Vessel monitoring systems are being used in other fisheries and likely those systems could be modified for use in the wreckfish fishery. However, there will be an administrative burden associated with approving systems, education and compliance.

4.7 Action 7. Modify offloading site and time requirements for wreckfish.

Alternatives*

1 (No Action). Wreckfish may only be offloaded between the hours of 8 a.m. and 5 p.m., local time.

2. Wreckfish may only be offloaded between the hours of 6 a.m. and 6 p.m., local time.

3. Wreckfish may only be offloaded between the hours of 5 a.m. and 8 p.m., local time.

4. Remove the requirement to offload wreckfish between the hours of 8 a.m. and 5 p.m., local time.

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

4.7.1 Biological Effects

The program limits offloading of wreckfish between daylight hours, 8 am – 5 pm EST and only at fixed dealer facilities. Landing at other locations may be approved if the vessel captain or shareholder notifies Law Enforcement at least 24 hours prior to offloading.

Regardless of the alternative selected, this action is not anticipated to have negative biological impacts on wreckfish. The commercial sector is constrained by an ACLs and operates under a well-regulated ITQ system. The offloading hours are used to ensure that law enforcement may be available to witness wreckfish being landed at a dealer facility. **Alternative 4** would be the most flexible for fishermen, by allowing them to offload their catch whenever is most convenient for them. There is not expected to be any difference in the biological impacts of **Alternative 1**, **Alternative 2, Alternative 3 or Alternative 4**. These alternatives would give flexibility to the fishermen, but the fishery would still be constrained by the ACL, the ITQ program and validated by dealer reports. Neither alternatives will modify the fishery in such a way that it would result in impacts to wreckfish, other affected species or protected species.

4.7.2 Economic Effects

Offloading time requirements implement a cost on fishery participants since the may hinder fishing activity that otherwise would have occurred should such restrictions not be in place. Thus, less restrictive time requirements offer comparative economic benefits**. Alternative 1 (No Action)** offers the fewest hours that wreckfish may be offloaded (9 hours), followed by **Alternative 2** (12 hours), **Alternative 3** (15 hours), and **Alternative 4** (24 hours). As such, **Alternative 4** offers the highest potential economic benefits to fishery participants, followed by **Alternative 3**, **Alternative 2**, and **Alternative 1 (No Action)**.

4.7.3 Social Effects

Wreckfish ITQ shareholders have expressed frustration with the current offloading time requirements under **Alternative 1 (No Action)**. Restrictive hours can be prevent fishermen from offloading the days catch and extend the amount of time they need to be at dock and away from fishing grounds. **Alternative 4** would provide fishing businesses the most flexibility in offloading time, followed by **Alternative 3** and **Alternative 2**. Additionally, **Alternative 2**, **Alternative 3**, and **Alternative 4** would address a problem in the fisheries identified by stakeholders and may help to improve perceptions of the management process.

4.7.4 Administrative Effects

By increasing the time window for offloads, the administrative burden on the agency is increased. **Alternative 1** provides for a 12 hour window for offloads, which has proved burdensome on the fishermen if they arrive after the 5:00 pm. In those situations, they would need to wait with fish onboard the vessel until the next day to begin the offload process. **Alternative 2** and **Alternative 3** would increase the window for offloads, providing a bit more flexibility for fishermen but increasing the potential administrative burden on law enforcement. **Alternative 4** would remove administrative burden from law enforcement and fishermen but may not provide the oversight the program requires. However, fishermen report that even during the current offload time frame they do not see law enforcement presence at the offload sites.

4.8 Action 8. Implement a cost recovery plan and associated conditions for the wreckfish individual transferable quota program.

4.8.1 Sub-Action 8-1. Implement a cost recovery plan for the wreckfish individual transferable quota program.

Alternatives*

1 (No Action). Do not implement a cost recovery plan for the wreckfish individual transferable quota program.

2. Implement an individual transferable quota cost recovery plan. The transferable quota shareholder landing wreckfish would be responsible for collection and submission of the cost recovery fee to NMFS.

3. Implement an individual transferable quota cost recovery plan. The dealer receiving Wreckfish would be responsible for collecting the cost recovery fee from the shareholder landing the wreckfish and submitting the fee to NMFS.

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

4.8.1.1 Biological Effects

Typically, the collection of cost recovery fees is not expected to affect the physical or biological environment, nor have any impacts on the stock, associated species or protected species.

4.5.1.2 Economic Effects

A cost recovery plan would implement an additional cost on wreckfish fishery participants but a benefit to fishery management agencies, in this case the National Marine Fisheries Service (NMFS), by offsetting administrative costs. **Alternative 1 (No Action)**, represents the lowest cost to fishery participants and lowest benefits to NMFS. **Alternative 2** and **Alternative 3** represent the same costs to fishery participants and same benefits to NMFS, both of which are higher than **Alternative 1 (No Action)**. The difference between these two alternatives would be what entity bears the burden and associated cost related to collection and submittal of the cost recovery fee. Under **Alternative 2**, the cost related to collection and submittal of the cost recovery fee would be incurred by the quota shareholder while this cost would be incurred by the dealer receiving the wreckfish under **Alternative 3**.

4.5.1.3 Social Effects

Alternative 1 (No Action) does not provide for a cost recovery program while **Alternative 2** and **Preferred Alternative 3** establish a program for the wreckfish ITQ fishery. However, **Alternative 1 (No Action)** is not a legally viable alternative. **Alternative 2** and **Alternative 3** are similar in all respects, except with respect to the responsibility for fee collection and submission. This responsibility resides on the IFQ shareholder under **Alternative 2** and on the IFQ dealer/processor under **Alternative 3**. NMFS will determine the percentage of the ex-vessel value of wreckfish landings that would be collected. The program would impose a fee of up to three percent of the ex-vessel value of wreckfish harvested under the IFQ program. Negative social effects of the cost recovery fee would be associated with the cost of the fee itself was well as the time and materials required for completing the paperwork and paying the fee.

4.5.1.4 Administrative Effects

Cost recovery was not included in the Wreckfish ITQ program when it was implemented in 1992 and cost recovery is currently not in place. Cost recovery plans for ITQ programs are a requirement of the Magnuson-Stevens Act and as such **Alternative 1 (No Action**) is not a viable

alternative. **Alternative 2** and **Alternative 3** would have similar administrative impacts to the agency. However, **Alternative 2** would increase the administrative burden on individual permit holders and **Alternative 3** would increase the administrative burden on wreckfish dealers. With the electronic ITQ program as proposed in **Action 2**, it is expected that the electronic system will be able to track and collect these payments in a way that is less burdensome to permit holders, dealers and the agency compared to a paper-based program.

4.8.2 Sub-Action 8-2. Collection of wreckfish individual transferable quota program cost recovery fees.

Alternatives*

1 (No Action). Do not implement a cost recovery plan for the wreckfish individual transferable quota program.

2. Fees will be collected at the time of landing.

3. Fees will be collected upon the sale of such fish during a fishing season.

4. Fees will be collected in the last quarter of the calendar year in which the fish is harvested.

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

4.8.2.1 Biological Effects

Typically, the collection of cost recovery fees is not expected to affect the physical or biological environment, nor have any impacts on the stock, associated species or protected species.

4.8.2.2 Economic Effects

A cost recovery plan would implement an additional cost on wreckfish fishery participants but a benefit to fishery management agencies, in this case the National Marine Fisheries Service (NMFS), by offsetting administrative costs. **Alternative 1 (No Action)**, represents the lowest costs to fishery participants and lowest benefits to NMFS. The total fees would be similar across **Alternatives 2**, **3**, and **4**. **Alternative 4** may require less effort to collect fees since it would only be required once per year, thus there may be slightly lower costs associated with this alterative in relation to **Alternatives 2** and **3**.

4.8.2.3 Social Effects

A cost recovery plan under **Alternative 2**, **Alternative 3**, and **Alternative 4** would result in additional burden on wreckfish ITQ shareholders when compared to **Alternative 1 (No Action)**. However, **Alternative 1 (No Action)** is not a legally viable alternative. Negative social effects of the cost recovery fee would be associated with the cost of the fee itself was well as the time and materials required for completing the paperwork and paying the fee. **Alternative 4** may require less effort to collect fees since it would only be required once per year, thus there may be slightly time burden associated with this alterative in relation to **Alternatives 2** and **3**.

4.8.2.4 Administrative Effects

Cost recovery plans for ITQ programs are a requirement of the Magnuson-Stevens Act and as such **Alternative 1 (No Action**) is not a viable alternative.

Alternative 2 would have increased administrative impacts compared to **Alternative 3** and **Alternative 4**. Under **Alternative 2**, fees would be collected upon landing resulting in many transactions of cost recover fees between the permit holder or dealer (depending on what alternative is selected in **Action 8**). **Alternative 3** may reduce the number of transactions as the fees would be collected upon sale of fish during a fishing season. **Alternative 4** would result in the fewest transactions between the permit holder and NOAA Fisheries; however, it may increase the permit holder's administrative impacts with a need to maintain records. With the electronic ITQ program as proposed in **Action 2**, it is expected that the electronic system will be able to track and collect these payments in a way that is less burdensome to permit holders, dealers and the agency compared to a paper-based program.

4.8.3 Sub-Action 8-3. Frequency of wreckfish individual transferable quota program cost recovery fee submission.

4.8.3.1 Biological Effects

Typically, the collection of cost recovery fees is not expected to affect the physical or biological environment, nor have any impacts on the stock, associated species or protected species.

Alternatives*

1 (No Action). Do not implement a cost recovery plan for the wreckfish individual transferable quota program.

2. Cost recovery fee will be submitted once per year.

3. Cost recovery fee will be submitted twice per year.

4. Cost recovery fee will be submitted four times per year.

5. Cost recovery fee will be submitted twelve times per year.

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

4.8.3.2 Economic Effects

Alternative 1 (No Action), represents the lowest costs to fishery participants and lowest benefits to NMFS. The total fees would be similar across **Alternatives 2**, **3**, **4** and **5**. Less frequency between when the fees must be submitted may lead to less administrative related costs from those submitting the fees to the agency and thus comparatively higher economic benefits. Under this notion, **Alternative 2** may require less administrative burden on the part of the entity submitting the fees to NMFS, since it would only be required once per year, this would be followed by slightly higher administrative related costs associated with **Alternative 3** (submittal twice per year), **Alternative 4** (submittal four times per year), and **Alternative 5** (submittal 12 times per year).

4.8.3.3 Social Effects

A cost recovery plan under **Alternative 2**, **Alternative 3**, **Alternative 4** and **Alternative 5** would result in additional burden on wreckfish ITQ shareholders when compared to **Alternative 1 (No Action)**. However, **Alternative 1 (No Action)** is not a legally viable alternative. Negative social effects of the cost recovery fee would be associated with the cost of the fee itself was well as the time and materials required for completing the paperwork and paying the fee. **Alternative 5** may require less effort to collect fees since it would only be required once per year, thus there may be slightly time burden associated with this alterative in relation to **Alternatives 2**, **Alternative 3** and **Alternative 4**.

4.8.3.4 Administrative Effects

Cost recovery plans for ITQ programs are a requirement of the Magnuson-Stevens Act and as such **Alternative 1 (No Action**) is not a viable alternative. With the electronic ITQ program as proposed in **Action 2**, it is expected that the electronic system will be able to track and collect these fees in a way that is less burdensome to permit holders, dealers and the agency compared to a paper-based program. The administrative burden on the fishermen and the agency is expected to be less with less transactions and as such the administrative burden would be greatest for **Alternative 5** and the least for **Alternative 2**.

4.8.2 Sub-Action 8-4. Determination of wreckfish individual transferable quota program cost recovery fees.

4.8.4.1 Biological Effects

Typically, the collection of cost recovery fees is not expected to affect the physical or biological environment, nor have any impacts on the stock, associated species or protected species

Alternatives*

1 (No Action). Do not implement a cost recovery plan for the wreckfish individual transferable quota program.

2. The cost recovery fee will be based on actual* ex-vessel value of the wreckfish landings.

3. The cost recovery fee will be based on standard** ex-vessel value of the wreckfish landings as calculated by NMFS.

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

4.8.4.2 Economic Effects

Alternative 1 (No Action), represents the lowest costs to fishery participants and lowest benefits to NMFS. The costs for fishery participants related to **Alternative 2** and **Alternative 3** would be situational and variable, therefore a comparison of economic benefits is not possible at this time.

4.8.4.3 Social Effects

Alternative 1 (No Action), represents the lowest burden to fishery participants but is not a legally viable alternative. The costs for fishery participants related to **Alternative 2** and **Alternative 3** would be situational and variable, therefore a comparison of social benefits is not possible at this time.

4.8.4.4 Administrative Effects

Cost recovery plans for ITQ programs are a requirement of the Magnuson-Stevens Act and as such **Alternative 1 (No Action**) is not a viable alternative. There will be no difference in the administrative impacts of **Alternative 2** and **Alternative 3**. With the electronic ITQ program as proposed in **Action 2**, it is expected that the electronic system will be able to track and collect these fees in a way that is less burdensome to permit holders, dealers and the agency compared to a paper-based program.

Chapter 5. Council's Conclusions for the Preferred Alternatives

To be completed.

Chapter 6. Cumulative Effects

To be completed.

Chapter 7. List of Interdisciplinary Plan Team Members

Name	Agency/Division	Title
Christina Wiegand	SAFMC	Social Scientist/IPT Lead
John Hadley	SAFMC	Economist
Myra Brouwer	SAFMC	Deputy Director for Management/IPT Lead
Nick Smillie	SAFMC	Digital Communications
Roger Pugliese	SAFMC	Senior Fishery Biologist
Judd Curtis	SAFMC	Quantitative Scientist
Karla Gore	SERO/SF	Fishery Biologist/IPT Lead
Rick DeVictor	SERO/SF	South Atlantic Branch Chief
Britni LaVine	SERO/LAPP	Fishery Biologist
Alisha DiLeone	SERO/SF	Data Analyst
Al Taylor	SERO/LAPP	Fishery Biologist
Adam Bailey	SERO/SF	Technical Writer and Editor
Patrick O'Pay	SERO/PR	Biologist
Nikhil Mehta	SERO/SF	Fishery Biologist/NEPA Coordinator
Ed Glazier	SERO/SF	Social Scientist
Mike Travis	SERO/SF	Social Science Branch Leader
David Dale	SERO/Habitat	Regional EFH Coordinator
Jessica Stephen	SERO/LAPP	Data Management Branch Leader
Kevin McIntosh	SERO/CS	Constituency Services Branch Chief
Scott Crosson	SEFSC	Economist
Alan Lowther	SEFSC	Survey Design, Data Management and Dissemination Branch Chief
Adam Brame	SERO/PR	Sawfish Recovery Coordinator
Monica Smit-Brunello	NOAA GC	General Counsel
Manny Antonaras	SERO/OLE	Deputy Special Agent in Charge
Matthew Walia	SERO/OLE	Compliance Liaison Analyst

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 13th 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

Chapter 9. References

To be completed.

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 50 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (Amendment 50) 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 50 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 an 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

To be completed.

Appendix C. Initial Regulatory Flexibility Analysis

To be completed.

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 Re-nourishment 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 (In transition to new Habitat and Ecosystem Page)

The FEP II Dashboard and associated online tools provided a clear description of the fundamental physical, biological, human, and institutional context of South Atlantic ecosystems within which fisheries are managed. The Council's new website (under development) will

include a new Habitat and Ecosystem page where the FEP II Dashboard layout shown below will be refined and integrated.

- 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 Implementation Plan 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 FEP II Two Year Roadmap 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:
https://ocean.floridamarine.org/safmc_dashboard/partners.html.

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 Habitat Conservation and Ecosystem Management Section which provided access to the FEP II Digital Dashboard and associated tools which is under development with the new website. 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 and spatial representations of EFH and other habitat related layers are accessible through the Council's SAFMC Atlas, a platform for searching and visualizing GIS data relevant to the Council's mission and download of GIS layers and information on regional partners is available through the SAFMC Digital Dashboard. The online systems provide access to the following Services:

i. South Atlantic Fisheries Webservice: 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. South Atlantic EFH Webservice: Provides access to spatial representation of EFH and EFH-HAPCs for South Atlantic Council-managed species and Highly Migratory Species.
iii. South Atlantic Managed Areas Service: Provides access to spatial presentations of South Atlantic Council and other managed areas in the region.
iv. South Atlantic Artificial Reefs Web Application: 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

To be completed, if needed.

Appendix F. Data Analyses

To be completed, if needed.

Appendix G. Bycatch Practicability Analysis

To be completed, if needed.

Appendix H. Fishery Impact Statement

To be completed.

Appendix I. History of Management

Updated: 5/2022

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

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	-Prohibited harvest/possession of goliath grouper in or from the EEZ;

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			-Defined overfishing for goliath grouper and other species.
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;

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			-20" TL limit – red snapper, gag, and red, black, scamp, yellowfin, and yellowmouth groupers; -28" fork length (FL) limit – greater amberjack (recreational only); -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; -Charter/headboats and excursion boat possession limits extended.
Amendment #5 (1992a)	04/06/92	PR: 56 FR 57302 FR: 57 FR 7886	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; -Modified framework procedure.
Regulatory Amendment #6 (1994b)	05/22/95	PR: 60 FR 8620 FR: 60 FR 19683	-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 interim rule request was suspended.
Emergency Rule Request	9/24/98		-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;

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			-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 Implemented	1/22/99		-NMFS informed the Council that the final rule for Amendment 9 would be effective 2/24/99; therefore they did not implement the emergency rule.
Regulatory Amendment #7 (1998a)	01/29/99	PR: 63 FR 43656 FR: 63 FR 71793	-Established 10 SMZs at artificial reefs off South Carolina.
Amendment #9 (1998b)	2/24/99	PR: 63 FR 63276 FR: 64 FR 3624	-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; -Gag: 24" TL (recreational); no commercial harvest or 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 Action	9/3/99	64 FR 48326	-Reopened the Amendment 8 permit application process.
Emergency Interim Rule	09/08/99, expired 08/28/00	64 FR 48324 and 65 FR 10040	-Prohibited harvest or possession of red porgy.

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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 million pounds (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 = 35%) -Speckled hind: 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) -Goliath 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 onwards. -Trip 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.
Amendment #15B (2008b)	12/16/09, except for the amendments to § 622.18(c) was effective 11/16/2009; the amendment to § 622.10(c) was effective 2/16/2010; and §§ 622.5, 622.8, and 622.18(b)(1)(ii) required OMB approval.	PR: 74 FR 30569 FR: 74 FR 58902	-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; -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).
Amendment #16 (2009a)	7/29/09	PR: 74 FR 6297 FR: 74 FR 30964	-Specified status determination criteria for gag and vermilion snapper; 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 snapper. -Implemented 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 deep-water 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 30. -Add 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	Not submitted	N/A	-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.
Regulatory Amendment #31 - Recreational Accountability Measures	TBD	TBD	-Modify the recreational AMs for the recreational sector to bring consistency.
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 Golden tilefish and Blueline tilefish	TBD	TBD	-Revise ACLs, AMs, allocations, and management measures for golden tilefish. Consider modification to recreational management measures and accountability measures for blueline tilefish.

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Amendment #53 Gag	TBD	TBD	-Revise ACLs, AMs, allocations, and management measures for gag and establish a rebuilding plan.

Appendix J. Allocation Review Trigger Policy

In a letter to the NOAA Assistant Administrator dated July 16, 2019, the South Atlantic Fishery Management Council (Council) responded to NOAA's Fisheries Allocation Review Policy (NMFS Policy Directive 01-119) and the associated Procedural Directive on allocation review triggers (NMFS Procedural Directive 01-119-01). The Policy established the responsibility for the Regional Fishery Management Councils to set allocation review triggers and consider three types of trigger criteria: indicator, public interest, and time. Councils were directed to establish triggers for consideration of allocation reviews by August 2019. The Council's response follows:

The Council has reviewed species allocations on numerous occasions in the past. However, these reviews may not have been formally documented in a fishery management plan amendment if a decision was made not to modify sector allocations. This new policy will ensure all species currently having sector allocations will be reviewed on a regular basis and will formalize the allocation review process so the Council's consideration of allocations will be documented.

The Council reviewed their current sector allocations and began discussions on the Policy and Procedural Directives and criteria for considering fishery allocation reviews at their December 2018 meeting. At their June 2019 meeting, the Council adopted two types of criteria for triggering consideration of an allocation review: indicator and time.

The Council chose several indicator-based criteria as triggers:

- Either sector exceeds its ACL or closes prior to the end of its fishing year three out of five consecutive years,
- Either sector under harvests its ACL or OY by at least 50% three out of five consecutive years,
- After a stock assessment is approved by the SSC and presented to the Council, and
- After the Council reviews a species Fishery Performance Report.

The Council chose a time-based trigger to ensure allocation reviews are regularly considered. Each species will have its sector allocations reviewed not less than every seven years. Table 1 shows by species when the next sector allocation review will be considered by the Council should an indicator-based criterion not be triggered. Regardless of whether consideration of an allocation review is triggered by an indicator or time criterion once it occurs the next one will automatically be scheduled for consideration seven years later. For species which are jointly managed with the Gulf of Mexico Fishery Management Council, the timing for consideration of allocation reviews was coordinated with that council.

A public interest-based criterion was not selected because the Council currently receives substantial and regular comment from the public through scoping and public hearing sessions, general public comment periods held at every Council meeting, the public comment form on the

Council's website, and through other more informal channels. Thus, the Council decided the existing Council process provides sufficient opportunity for public input on allocation.