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AMENDMENT 20A TO THE SNAPPER GROUPER FISHERY MANAGEMENT PLAN OF THE SOUTH ATLANTIC REGION

INCLUDING A FINAL ENVIRONMENTAL ASSESSMENT, INITIAL REGULATORY FLEXIBILITY ANALYSIS, DRAFT REGULATORY IMPACT REVIEW, AND FISHERY IMPACT STATEMENT

September 6, 2011

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ABBREVIATIONS AND ACRONYMS

ABC	Acceptable Biological Catch
ACCSP	Atlantic Coastal Cooperative Statistics Program
ACL	Annual Catch Limits
AM	Accountability Measure
ACT	Annual Catch Target
APA	Administrative Procedures Act
ASMFC	Atlantic States Marine Fisheries Commission
B	A measure of stock biomass in either weight or other appropriate unit
B_{MSY}	The stock biomass expected to exist under equilibrium conditions when fishing at F_{MSY}
B_{OY}	The stock biomass expected to exist under equilibrium conditions when fishing at F_{OY}
B_{CURR}	The current stock biomass
CEA	Cumulative Effects Analysis
CEQ	Council on Environmental Quality
CFMC	Caribbean Fishery Management Council
CPUE	Catch per unit effort
CRP	Cooperative Research Program
CZMA	Coastal Zone Management Act
DEIS	Draft Environmental Impact Statement
EA	Environmental Assessment
EEZ	Exclusive Economic Zone
EFH	Essential Fish Habitat
EFH-HAPC	Essential Fish Habitat - Habitat Area of Particular Concern
EIS	Environmental Impact Statement
ESA	Endangered Species Act of 1973
F	A measure of the instantaneous rate of fishing mortality
$F_{30\%SPR}$	Fishing mortality that will produce a static SPR = 30%.
$F_{45\%SPR}$	Fishing mortality that will produce a static SPR = 45%.
F_{CURR}	The current instantaneous rate of fishing mortality
F_{MSY}	The rate of fishing mortality expected to achieve MSY under equilibrium conditions and a corresponding biomass of B_{MSY}
F_{OY}	The rate of fishing mortality expected to achieve OY under equilibrium conditions and a corresponding biomass of B_{OY}
FEIS	Final Environmental Impact Statement
FMP	Fishery management plan
FMU	Fishery management unit
FONSI	Finding of No Significant Impact
GFMC	Gulf of Mexico Fishery Management Council
IFQ	Individual fishing quota
ITQ	Individual transferable quota
M	Natural mortality rate
MARFIN	Marine Fisheries Initiative
MARMAP	Marine Resources Monitoring Assessment and Prediction Program

MBTA	Migratory Bird Treaty Act
MFMT	Maximum Fishing Mortality Threshold
MMPA	Marine Mammal Protection Act of 1972
MRFSS	Marine Recreational Fisheries Statistics Survey
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
MSST	Minimum Stock Size Threshold
MSY	Maximum Sustainable Yield
NEPA	National Environmental Policy Act of 1969
NMFS	National Marine Fisheries Service
NMSA	National Marine Sanctuary Act
NOAA	National Oceanic and Atmospheric Administration
OFL	Overfishing Limit
OY	Optimum Yield
PQBM	Post Quota Bycatch Mortality
PSE	Percent Standard Error
R	Recruitment
RFA	Regulatory Flexibility Act
RIR	Regulatory Impact Review
SAFE Report	Stock Assessment and Fishery Evaluation Report
SAMFC	South Atlantic Fishery Management Council
SDDP	Supplementary Discard Data Program
SEDAR	Southeast Data Assessment and Review
SEFSC	Southeast Fisheries Science Center
SERO	Southeast Regional Office
SFA	Sustainable Fisheries Act
SSC	Scientific and Statistical Committee
TAC	Total allowable catch
TL	Total length
USCG	U.S. Coast Guard

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INCLUDING A FINAL ENVIRONMENTAL ASSESSMENT, INITIAL REGULATORY FLEXIBILITY ANALYSIS, DRAFT REGULATORY IMPACT REVIEW, AND FISHERY IMPACT STATEMENT

Proposed actions:

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FMP Amendments – South Atlantic Fishery Management Council
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Public hearing meetings held: DATE TO BE FILLED IN

ABSTRACT

Amendment 20A to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (Amendment 20A) consists of regulatory actions that focus on modifications to the wreckfish individual transferable quota (ITQ) program. The purpose of this amendment is to adjust the distribution of wreckfish shares in order to remove inactive effort from the commercial sector and allow the commercial sector's ACL to be harvested and thereby achieve Optimum Yield (OY) in the fishery. Management actions proposed in this Amendment will: 1) define revert inactive wreckfish shares; 2) redistribute reverted shares among remaining shareholders; 3) define a cap on the number of shares one entity may own; and 4) establish an appeals process.

The Final Environmental Assessment (FEA) analyzes the effects of implementing the proposed actions listed above.

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1.0 Introduction

1.1 Background

Management of the Federal snapper grouper fishery located off the South Atlantic in the 3-200 nautical mile (nm) U.S. Exclusive Economic Zone (EEZ) is conducted under the Fishery Management Plan for the snapper grouper Fishery (SAFMC 1983) (**Figure 1-1**). The fishery management plan (FMP) and its amendments are developed under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), other applicable Federal laws, and executive orders (E.O.s) and affect the management of 73 species (**Table 1-1**). The purpose of the FMP, as amended, is to manage the snapper grouper fishery for optimum yield (OY) and specify Annual Catch Limits (ACLs) for all species in the management unit, in addition to Annual Catch Targets (ACTs) and Accountability Measurses (AMs) as needed for species undergoing overfishing.

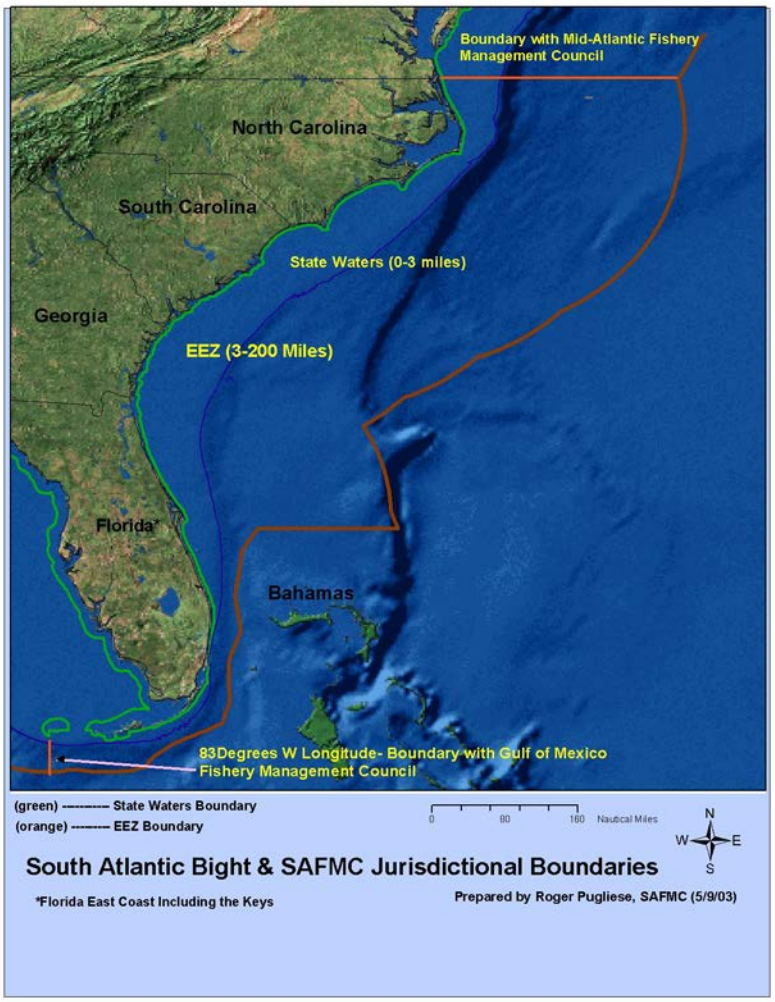


Figure 1-0-1. Jurisdictional boundaries of the South Atlantic Fishery Management Council.

Table 1-1 The South Atlantic Snapper Grouper Complex

Almaco jack, *Seriola rivoliana*
Atlantic spadefish, *Chaetodipterus faber*
Banded rudderfish, *Seriola zonata*
Bank sea bass, *Centropristis ocyurus*
Bar jack, *Carangoides ruber*
Black grouper, *Mycteroperca bonaci*
Black margate, *Anisotremus surinamensis*
Black sea bass, *Centropristis striata*
Black snapper, *Apsilus dentatus*
Blackfin snapper, *Lutjanus buccanella*
Blue runner, *Caranx crysos*
Blueline tilefish, *Caulolatilus microps*
Bluestriped grunt, *Haemulon sciurus*
Coney, *Cephalopholis fulva*
Cottonwick, *Haemulon melanurum*
Crevalle jack, *Caranx hippos*
Cubera snapper, *Lutjanus cyanopterus*
Dog snapper, *Lutjanus jocu*
French grunt, *Haemulon flavolineatum*
Gag, *Mycteroperca microlepis*
Golden tilefish, *Lopholatilus chamaeleonticeps*
Goliath grouper, *Epinephelus itajara*
Grass porgy, *Calamus arctifrons*
Gray (mangrove) snapper, *Lutjanus griseus*
Gray triggerfish, *Balistes capriscus*
Graysby, *Cephalopholis cruentata*
Greater amberjack, *Seriola dumerili*
Hogfish, *Lachnolaimus maximus*
Jolthead porgy, *Calamus bajonado*
Knobbed porgy, *Calamus nodosus*
Lane snapper, *Lutjanus synagris*
Lesser amberjack, *Seriola fasciata*
Longspine porgy, *Stenotomus caprinus*
Mahogany snapper, *Lutjanus mahogoni*
Margate, *Haemulon album*
Misty grouper, *Epinephelus mystacinus*
Mutton snapper, *Lutjanus analis*
Nassau grouper, *Epinephelus striatus*
Ocean triggerfish, *Canthidermis sufflamen*
Porkfish, *Anisotremus virginicus*
Puddingwife, *Halichoeres radiatus*
Queen snapper, *Etelis oculatus*
Queen triggerfish, *Balistes vetula*
Red grouper, *Epinephelus morio*
Red hind, *Epinephelus guttatus*
Red porgy, *Pagrus pagrus*
Red snapper, *Lutjanus campechanus*
Rock hind, *Epinephelus adscensionis*
Rock Sea Bass, *Centropristis philadelphica*
Sailors choice, *Haemulon parra*
Sand tilefish, *Malacanthus plumieri*
Saucereye porgy, *Calamus calamus*
Scamp, *Mycteroperca phenax*
Schoolmaster, *Lutjanus apodus*
Scup, *Stenotomus chrysops*
Sheepshead, *Archosargus probatocephalus*
Silk snapper, *Lutjanus vivanus*
Smallmouth grunt, *Haemulon chrysargyreum*
Snowy grouper, *Epinephelus niveatus*
Spanish grunt, *Haemulon macrostomum*
Speckled hind, *Epinephelus drummondhayi*
Tiger grouper, *Mycteroperca tigris*
Tomtate, *Haemulon aurolineatum*
Yellow jack, *Carangoides bartholomaei*
Yellowedge grouper, *Epinephelus flavolimbatus*
Yellowfin grouper, *Mycteroperca venenosa*
Yellowmouth grouper, *Mycteroperca interstitialis*
Yellowtail snapper, *Ocyurus chrysurus*
Vermilion snapper, *Rhomboplites aurorubens*
Warsaw grouper, *Epinephelus nigritus*
White grunt, *Haemulon plumierii*
Whitebone porgy, *Calamus leucosteus*
Wreckfish, *Polyprion americanus*

1.2 Purpose and Need

When the Wreckfish ITQ program was implemented in 1992, the Total Allowable Catch (TAC) was set at 2 million pounds whole weight (ww). The fishery has changed significantly over the last two decades. For many years, there have been 25 shareholders but less than a handful of active participants (i.e., shareholders with commercial wreckfish landings). Between fishing years 2001-02 and 2008-09, landings averaged around 172,000 lbs (ww), but increased to more than 216,000 and 257,000 lbs (ww) in the past two fishing seasons (2009-10 and 2010-11), respectively. Commercial landings in 2010-11 were the highest since the 1996-97 fishing season. Participation has also increased slightly in the last two fishing seasons, though the number of shareholders is also expected to decrease slightly this year. While the effort of the active shareholders account for all of the landings, their ITQ shares represent less than 60% of the total shares. The 2012 ACL is expected to be set at 250,000 lbs (ww) under the Comprehensive ACL Amendment (SAFMC 2011), which represents more than an 87% decrease from the current TAC. Because the recreational sector is being given a 5% allocation, the commercial sector's ACL will be 237,500 lbs (ww). With this significant reduction in the commercial sector's allocation, each shareholder's ITQ in terms of the annual pounds (coupons) that he/she will receive under the new ACL will also be reduced by more than 87%. Thus, active shareholders, captains, crew, and dealers who depend on a certain level of wreckfish production to maintain their operations will be particularly affected by the reduction in the commercial ACL.

The overall purpose of this amendment is to adjust the distribution of wreckfish shares in order to remove inactive effort from the commercial sector and allow the commercial sector's ACL to be harvested and thereby achieve Optimum Yield (OY) in the fishery. To achieve this, the proposed actions will 1) define and revert inactive wreckfish shares; 2) redistribute reverted shares among remaining shareholders; 3) define a cap on the number of shares one entity may own; and 4) establish an appeals process.

1.3 Management Objectives

Objectives of the Snapper Grouper FMP, as modified by Amendment 8 (SAFMC 1996), are shown below. In addition, two new objectives proposed in Amendment 17A (SAFMC 2010) are also provided.

1. Prevent overfishing.
2. Collect necessary data.
3. Promote orderly utilization of the resource.
4. Provide for a flexible management system.
5. Minimize habitat damage.
6. Promote public compliance and enforcement.
7. Mechanism to vest participants.
8. Promote stability and facilitate long-run planning.
9. Create market-driven harvest pace and increase product continuity.
10. Minimize gear and area conflicts among fishermen.
11. Decrease incentives for overcapitalization.

12. Prevent continual dissipation of returns from fishing through open access.
13. Evaluate and minimize localized depletion.
14. End overfishing of snapper grouper stocks undergoing overfishing.
15. Rebuild stocks declared overfished.

1.4 History of Management

The wreckfish fishery is regulated as part of the South Atlantic snapper grouper fishery. The snapper grouper Fishery Management Plan (FMP) was implemented in 1983 and wreckfish was added to the Fishery Management Unit (FMU) in 1990 under an emergency rule. In 1991, Amendment 5 (SAFMC 1991 implemented the Individual Transferable Quota (ITQ) for the commercial wreckfish fishery. The Comprehensive Annual Catch Limit (ACL) Amendment (SAFMC 2011) will implement the new commercial wreckfish ACL of 237,000 lbs (ww).

Table 1-2 includes history of management that affected the wreckfish fishery. For a complete history of management for the entire snapper grouper fishery, see **Appendix B**.

Table 1-2 History of Management for the Wreckfish Fishery of the South Atlantic Region

Document	**All Actions Effective By:**	**Proposed Rule Final Rule**	**Major Actions for Wreckfish. 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” 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)
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.
Emergency Rule	8/3/90	55 FR 32257	-Added **wreckfish** to the FMU -Wreckfish fishing year beginning 4/16/90 -Wreckfish commercial quota of 2 million pounds -Wreckfish commercial trip limit of 10,000 pounds per trip
Fishery Closure Notice	8/8/90	55 FR 32635	- Wreckfish fishery closed because the commercial quota of 2 million pounds was reached

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.
Emergency Rule Extension	11/1/90	55 FR 40181	-extended the measures implemented via emergency rule on 8/3/90
Emergency Rule	8/3/90	55 FR 32257	-Added **wreckfish** to the FMU -Wreckfish fishing year beginning 4/16/90 -Wreckfish commercial quota of 2 million pounds -Wreckfish commercial trip limit of 10,000 pounds per trip
Fishery Closure Notice	8/8/90	55 FR 32635	- Wreckfish fishery closed because the commercial quota of 2 million pounds was reached
Emergency Rule Extension	11/1/90	55 FR 40181	-extended the measures implemented via emergency rule on 8/3/90
Amendment #3 (1990)	01/31/91	PR: 55 FR 39023 FR: 56 FR 2443	-Added **wreckfish** to the FMU; -Defined optimum yield and overfishing -Required permit to fish for, land or sell **wreckfish**; -Required catch and effort reports from selected, permitted vessels; -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; and -Provided for annual adjustments of wreckfish management measures;

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.
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" limit – lane snapper -10" limit – vermilion snapper (recreational only) -12" limit – red porgy, vermilion snapper (commercial only), gray, yellowtail, mutton, schoolmaster, queen, blackfin, cubera, dog, mahogany, and silk snappers -20" limit – red snapper, gag, and red, black, scamp, yellowfin, and yellowmouth groupers. -28" 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 south of Cape Canaveral, FL -spawning season closure – commercial harvest mutton snapper >snapper aggregate prohibited during May and June -charter/headboats and excursion boat possession limits extended

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.
Amendment #5 (1991)	04/06/92	PR: 56 FR 57302 FR: 57 FR 7886	-**Wreckfish**: established limited entry system with 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 TAC
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 demonstrate landings of any species in SG FMU in 1993, 1994, 1995 or 1996; and have held valid SG permit between 02/11/96 and 02/11/97. -granted transferable permit with unlimited landings if vessel landed ≥ 1,000 lbs. of snapper grouper spp. in any of the years -granted non-transferable permit with 225 lb. trip limit to all other vessels -modified problems, objectives, OY, and overfishing definitions -expanded Council's habitat responsibility -allowed retention of snapper grouper spp. 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.
Emergency Action	9/3/99	64 FR 48326	-Reopened the Amendment 8 permit application process
Amendment #10 (1998)	07/14/00	PR: 64 FR 37082 and 64 FR 59152 FR: 65 FR 37292	-Identified EFH and established HAPCs for species in the SG FMU.

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.
Amendment #11 (1998d)	12/02/99	PR: 64 FR 27952 FR: 64 FR 59126	-MSY proxy: goliath and Nassau grouper = 40% static 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 (MSST=3.72 mp, 1995 biomass=1.33 mp); undergoing overfishing (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]*B_{MSY}. MFMT = F_{MSY}

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.
Amendment #12 (2000)	09/22/00	PR: 65 FR 35877 FR: 65 FR 51248	-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 during Jan-April; 1 fish bag limit; 50 lb. bycatch comm. trip limit May-December; modified management options and list of possible framework actions.
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 spp. within the *Oculina* Experimental Closed Area.
Amendment #14 (2007) Sent to NMFS 7/18/07	2/12/09	PR: 73 FR 32281 FR: 74 FR 1621	-Establish 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 #15B (2008b)	2/15/10	PR: 74 FR 30569 FR: 74 FR 58902	- Prohibit the sale of bag-limit caught snapper grouper species. -Reduce the effects of incidental hooking on sea turtles and smalltooth sawfish. - Adjust commercial renewal periods and transferability requirements. - Implement plan to monitor and assess bycatch, - Establish reference points for golden tilefish. - Establish allocations for snowy grouper (95% com & 5% rec) and red porgy (50% com & 50% rec).
Amendment #16 (SAFMC 2008c)	7/29/09	PR: 74 FR 6297 FR: 74 FR 30964	-Specify SFA parameters for gag and vermilion snapper -For gag grouper: Specify interim allocations 51%com & 49%rec; rec & com spawning closure January through April; directed com quota=348,440 pounds gutted weight; reduce 5-grouper aggregate to 3-grouper and 2 gag/black to 1 gag/black and exclude captain & crew from possessing bag limit. -For vermilion snapper: Specify interim allocations 68%com & 32%rec; directed com quota split Jan-June=168,501 pounds gutted weight and 155,501 pounds July-Dec; reduce bag limit from 10 to 4 and a rec closed season October through May 15. In addition, the NMFS RA will set new regulations based on new stock assessment. -Require dehooking tools.

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.
Amendment #19 (included in Comprehensive Ecosystem-based Amendment 1) (SAFMC 2010c)	7/22/10	PR: 3/26/10 FR: 6/22/10	-Provide presentation of spatial information for Essential Fish Habitat (EFH) and EFH-Habitat Areas of Particular Concern (EFH-HAPC) designations under the Snapper Grouper FMP
Amendment #20A	TBD	TBD	-Modify wreckfish ITQ program by removing inactive shares, redistributing reverted shares to remaining shareholders, and setting a share cap.
Amendment #20B	TBD	TBD	-Modify wreckfish ITQ program to bring into compliance with Reauthorized MSA requirements for LAPPs. - Implement provisions for program maintenance.
Amendment #23 (included in Comprehensive Ecosystem-based Amendment 2)	TBD	TBD	- Designate the Deepwater MPAs as EFH-HAPCs - Limit harvest of snapper grouper species in SC Special Management Zones to the bag limit - Modify sea turtle release gear
Comprehensive ACL Amendment	2012	TBD	-Establish ABC control rules, establish ABCs, ACLs, and AMs for species not undergoing overfishing -Remove some species from South Atlantic FMU -Specify allocations among the commercial, recreational, and for-hire sectors for species not undergoing overfishing -Limit the total mortality for federally managed species in the South Atlantic to the ACLs

2.0 Actions and Alternatives

This section outlines the proposed actions and alternatives considered by the Council. A complete analysis of these alternatives can be found in **Section 4.0.**

Alternatives the Council considered during the development of this amendment and/or presented at the first round of public hearings but eliminated from further detailed study are described in **Appendix A**.

Definitions

Shares - Shares are a **percentage of the commercial quota**. With limited exceptions, an individual's percent share of the quota does not change unless they buy or sell shares.

Annual Pounds – An individual's annual pounds is the **amount of pounds** (gutted weight) an individual is ensured the opportunity to possess, land, or sell in a calendar year. Actions addressing annual pounds specifically will be considered for inclusion in Amendment 20B.

Inactive Shares – Shares that are defined by the Council as not being used to harvest wreckfish.

Reverted Shares – Shares that are returned to the Council's possession, and can be redistributed.

Share Cap – Maximum percentage of shares that one entity may own.

Excess Shares - Shares in excess of the share cap. For e.g., if the share cap is 49% and an entity holds 55% of the shares, then the amount of excess shares would be 6%.

2.1 Action 1: Define and revert inactive wreckfish shares.

Alternative 1: No Action. Do not define or revert inactive shares for redistribution.

Alternative 2: Define inactive shares as shares belonging to any ITQ shareholder who has not reported wreckfish landings between 2009-10 and 2010-11, and revert for redistribution.

Alternative 3: Define inactive shares as shares belonging to any ITQ shareholder who has not reported wreckfish landings between 2006-07 and 2010-11, and revert for redistribution.

2.1.1 Comparison of alternatives

Although there are over 20 individuals holding wreckfish ITQs, there have been only a few participants actively harvesting wreckfish over the past ten years. The purpose of this action is to define 'inactive shares' that will be reverted for redistribution among individuals with

'active shares'. This is intended to allow shareholders who have actively participated in the fishery to maintain operations after the new ACL becomes effective. The proposed action will revert shares that qualify as inactive without compensation to shareholders.

Alternative 1 will not define inactive shares so that they can be redistributed among remaining shareholders, which likely would result in some active participants not being able to maintain operations under the new ACL. **Alternative 2** defines inactive shares as those shares held by individuals who have not fished the shares during the last two fishing years, while **Alternative 3** uses the last five fishing years as the qualifying period. For these two alternatives, **Table 2-1** shows the number of shareholders who would have inactive shares and the percentage of shares that would be reverted for redistribution.

Table 2-1. Expected outcomes of alternatives for Action 1

	Number of Shareholders with Inactive Shares	Percentage of Shares Reverted
Alternative 1	0	0%
Alternative 2	18	54.5%
Alternative 3	17	41%

2.2 Action 2: Redistribute reverted shares to remaining shareholders.

Alternative 1: No Action. Do not redistribute reverted shares.

Alternative 2: Redistribute reverted shares to remaining shareholders based on 50% equal allocation + 50% landings history.
Option a: landings history in fishing years 2009-10 to 2010-11
Option b: landings history in fishing years 2006-07 to 2010-11

Alternative 3: Redistribute reverted shares to remaining shareholders based landings history.
Option a: landings history in fishing years 2009-10 to 2010-11
Option b: landings history in fishing years 2006-07 to 2010-11

Alternative 4: Redistribute reverted shares based on proportion of remaining shares held by each remaining shareholder after inactive shares are reverted.

Alternative 5: Redistribute reverted shares equally among all remaining shareholders.

2.2.1 Comparison of alternatives

Redistribution of shares is necessary for active wreckfish harvesters to maintain operations under the new ACL. The alternatives in this action are similar to initial allocation scenarios, including the initial allocation formula used for the wreckfish ITQ program in 1991. Reverted shares would only be redistributed among shareholders who did not have inactive shares (as they are defined in Action 1).

Alternative 1 would not redistribute the shares that were reverted from Action 1, and wreckfish fishermen would not be able to maintain operation size under the new ACL. **Alternative 2** considers a formula under which half of the reverted shares would be equally allocated among remaining shareholders, and the other half would be allocated based on landings history. This type of allocation was used in the initial allocation of wreckfish ITQs in 1991. Under this alternative, the Council will consider allocating reverted shares based on landings in the past two years (**Alternative 2- Option a**) and landings in the past five fishing years (**Alternative 2- Option b**).

Alternative 3 allocates reverted shares based on landings history only during the past two years (**Alternative 3- Option a**) and in the past five fishing years (**Alternative 3- Option b**). **Alternative 4** considers only the proportions of shares among remaining shareholders. For example, if after reversion an individual held 20% of remaining shares, then he/she would be allocated 20% of the reverted shares. **Alternative 5** considers allocating reverted shares equally among all remaining shareholders.

Section 4.2 discusses the expected effects of each alternative and options in detail.

2.3 Action 3: Establish a share cap.

Alternative 1: No Action. Do not establish share cap.

Alternative 2: Establish share cap as 15% of the total shares.

Alternative 3: Establish share cap as 25% of the total shares.

Alternative 4: Establish share cap as 49% of the total shares.

Alternative 5: Establish share cap as 65% of the total shares.

Alternative 6: Establish share cap as the percentage of total shares held by largest shareholder after redistribution.

2.3.1 Comparison of alternatives

The Council is required to define excessive shares for the ITQ program in order to establish a cap on the number of shares that one entity may own. This action is necessary to prohibit one individual from holding so many shares that he/she would control the market for wreckfish, in addition to equity concerns for the fishermen. A share cap can also be defined based on management goals for the fishery. The wreckfish ITQ program does not currently have a cap on shares, as this was not an MSA requirement until the Act was reauthorized in 2007 and the wreckfish ITQ program was implemented in 1991.

Alternative 1 would not establish a share cap, which would not only allow one entity to hold any amount of wreckfish shares, but also would not be in compliance with the reauthorized MSA. **Alternative 2** would allow one entity to own 15% of shares, which under the new commercial ACL would allocate no more than 35,625 annual pounds to each fisherman in a fishing year. **Alternative 3** would establish a share cap at 25%, and each fisherman would receive no more than 59,375 annual pounds each year. **Alternative 4** sets the cap at 49%, which would never allow one entity to own half or more of wreckfish shares. Because the number of participants in the wreckfish fishery is small, some of the alternatives present share caps in which one individual may own more than half of the wreckfish shares. One entity may hold 65% of shares under **Alternative 5**. **Alternative 6** would set the cap at whatever the maximum percentage of shares that one fisherman holds after redistribution.

Section 4.3 discusses how the different share caps would affect shareholders, because under some alternatives, some fishermen would receive more shares than allowed under the share cap. It should also be noted that wreckfish fisherman may also lease annual pounds from other fishermen, and there currently is no cap on how many annual pounds that an individual may have in a fishing year.

2.4 Action 4: Establish an appeals process.

Alternative 1: No Action. Do not specify provisions for an appeals process associated with the IFQ program.

Alternative 2: The Regional Administrator (RA) will review, evaluate, and render final decision on appeals. Filing of an appeal based on landings data must be completed within 90 days of the effective date of the final regulations implementing this Amendment. Hardship arguments will not be considered. The RA will determine the outcome of appeals based on NMFS' logbooks. If NMFS' logbooks are not available, the RA may use state landings records. Appellants must submit NMFS' logbooks or state landings records to support their appeal.

Alternative 3: A special board composed of state directors/designees will review, evaluate, and make individual recommendations to RA on appeals. Filing of an appeal must be completed within 90 days of the effective date of the final regulations implementing the IFQ program. Hardship arguments will not be considered.

Alternative 4: A percentage of the wreckfish shares for fishing year 2012/13 will be set aside to resolve appeals. After the appeals process has been terminated, any amount remaining from the set-aside will be distributed back to remaining IFQ shareholders according to the redistribution method selected under **Action 3**.
Option a: Three percent of wreckfish shares will be set aside for appeals.
Option b: Five percent of wreckfish shares will be set aside for appeals.
Option c: Ten percent of wreckfish shares will be set aside for appeals.

2.4.1 Comparison of alternatives

This action establishes an appeals process to address issues that arise when shares are defined as inactive and reverted in Action1, and redistributed in Action 2. **Alternative 1** would not establish any kind of process for fishermen to ask for reconsideration of share reversion or redistribution formulas. **Alternative 2** would establish the process under which the Regional Administrator would hear and consider all appeals requests, while **Alternative 3** would allow a board to hear and consider requests, but the Regional Administrator would render the final decision based on the board's recommendations. **Alternative 4** establishes a set-aside so that there are shares available for appeals requests, and **Alternative 4- Options a-c** would set aside 3%, 5%, or 10% of shares for appeals.

3.0 Affected Environment

3.1 Habitat

3.1.1 Habitat for Snapper Grouper Species (including wreckfish)

Information on the habitat utilized by species in the Snapper Grouper Complex (which includes wreckfish) is included in Volume II of the Fishery Ecosystem Plan (SAFMC 2009b) and incorporated here by reference. The FEP can be found at: http://www.safmc.net/ecosystem/Home/EcosystemHome/tabid/435/Default.aspx

3.1.1.1 Essential Fish Habitat

Essential fish habitat (EFH) is defined in the Reauthorized 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 feet (but to at least 2,000 feet 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 of Mexico 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-foot) contour, such as attached macroalgae; submerged rooted vascular plants (seagrasses); estuarine emergent vegetated wetlands (saltmarshes, brackish marsh); tidal creeks; estuarine scrub/shrub (mangrove fringe); oyster reefs and shell banks; unconsolidated bottom (soft sediments); artificial reefs; and coral reefs and live/hard bottom habitats.

EFH utilized by wreckfish *(Polyprion americanus)* off the coast of South Carolina and Georgia (the United States), 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 near-vertical 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).

3.1.1.2 Essential Fish Habitat-Habitat Areas of Particular Concern

Areas which meet the criteria for Essential Fish Habitat-Habitat Areas of Particular Concern (EFH-HAPCs) for species in the snapper grouper management unit include medium to high profile offshore hard bottoms where spawning normally occurs; localities of known or likely periodic spawning aggregations; 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; and Council-designated Artificial Reef Special Management Zones (SMZs).

Areas that meet the criteria for EFH-HAPCs include habitats required during each life stage (including egg, larval, postlarval, juvenile, and adult stages).

In addition to protecting habitat from fishing related degradation though FMP regulations, the Council, in cooperation with NOAA Fisheries, actively comments on non-fishing projects or policies that may impact essential fish habitat. The Council adopted a habitat policy and procedure document that established a four-state Habitat Advisory Panel and adopted a comment and policy development process. With guidance from the Advisory Panel, the Council has developed and approved habitat policies on: energy exploration, development, transportation and hydropower re-licensing; beach dredging and filling and large-scale coastal engineering; protection and enhancement of submerged aquatic vegetation; and alterations to riverine, estuarine and near shore flows, offshore aquaculture, invasive estuarine species, and invasive marine species (available at www.safmc.net).

3.2 Biological/Ecological Environment

3.2.1 Species Most Impacted by this Amendment

3.2.1.1 Wreckfish, *Polyprion americanus*

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 et al. 1994; Sedberry 1995; Sedberry et al. 2001; Ball et al. 2010). 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 (Sedberry et al. 1996; Ball et al. 2000). Active adult migration is also possible as the frequent occurrence of European fishhooks in western North Atlantic wreckfish suggests 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, that is 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 km^2, characterized by a rocky ridge and trough feature with a slope greater than 15° (Sedberry et al. 1994; Sedberry et al. 1999; Sedberry et al. 2001).

Adults are demersal and attain lengths of 200 cm TL (79 in; Heemstra 1986) and 100 kg (221 lbs; Roberts 1986). Wreckfish landed in the southeastern United States average 15 kg (33 lbs) and 100 cm TL (39 inches TL) (Sedberry et al. 1994). Goldman and Sedberry (2010) found that wreckfish predominantly consumed teleost 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 maximum ages of 35 years, however, off Brazil ages as great as 76 years have been reported for wreckfish (Peres and Haimovici 2004). In a recent MARMAP report, 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 immature females were 576-831 mm. The estimate of length at 50% maturity was 790 mm (Gomperz model; 95% CI = 733-820). Mature gonads were present in 40% of males at 651-800 mm and 100% at larger sizes. The smallest mature male was 661 mm, and immature males were 518-883 mm. L50 was not estimated because transition to maturity was abrupt.

Wreckfish spawn from December through May, with a peak during February and March. The highest percentages of ripe males occurred during 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 Other Affected Species

Descriptions of other Council-managed species may be found in Volume II of the Fishery Ecosystem Plan (SAFMC 2009b) or at the following web address: http://www.safmc.net/ecosystem/Home/EcosystemHome/tabid/435/Default.aspx

In the wreckfish commercial fishery, barrelfish *(Hyperoglyphe perciformes)* and red bream *(Beryx decadactylus)* are caught as bycatch (Goldman and Sedberry 2010). Other species collected by Goldman and Sedberry (2010) 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)*.

3.2.2 Protected species

There are 31 different species of marine mammals that may occur in the exclusive economic zone (EEZ) of the South Atlantic region. All 31 species are protected under the Marine Mammal Protection Act of 1972 (MMPA) and six are also listed as endangered under the ESA (i.e., sperm, sei, fin, blue, humpback, and North Atlantic right whales). Other species protected under the ESA occurring in the South Atlantic include five species of sea turtle (green, hawksbill, Kemp's ridley, leatherback, and loggerhead); the smalltooth sawfish; and two *Acropora* coral species (elkhorn [*Acropora palmata*] and staghorn [*A. cervicornis*]). Designated critical habitat for the *Acropora* corals also occurs within the South Atlantic region. The species potentially affected by the fishery are discussed below.

3.2.2.1 ESA-Listed turtles

Green, hawksbill, Kemp's ridley, leatherback, and loggerhead sea turtles are all highly migratory and travel widely throughout the South Atlantic. The following sections are a brief overview of the general life history characteristics of the sea turtles found in the South Atlantic region. Several volumes exist that cover the biology and ecology of these species more thoroughly (i.e., Lutz and Musick (eds.) 1997, Lutz et al. (eds.) 2002).

Green sea turtle hatchlings are thought to occupy pelagic areas of the open ocean and are often associated with *Sargassum* rafts (Carr 1987, Walker 1994). Pelagic stage green sea turtles are thought to be carnivorous. Stomach samples of these animals found ctenophores and pelagic snails (Frick 1976, Hughes 1974). At approximately 20 to 25 cm carapace length, juveniles migrate from pelagic habitats to benthic foraging areas (Bjorndal 1997). As juveniles move into benthic foraging areas a diet shift towards herbivory occurs. They consume primarily seagrasses and algae, but are also know to consume jellyfish, salps, and sponges (Bjorndal 1980, 1997; Paredes 1969; Mortimer 1981, 1982). The diving abilities of all sea turtles species vary by their life stages. The maximum diving range of green sea turtles is estimated at 110 m (360 ft) (Frick 1976), but they are most frequently making dives of less than 20 m (65 ft.) (Walker 1994). The time of these dives also varies by life stage. The maximum dive length is estimated at 66 minutes with most dives lasting from 9 to 23 minutes (Walker 1994).

The **hawksbill's** pelagic stage lasts from the time they leave the nesting beach as hatchlings until they are approximately 22-25 cm in straight carapace length (Meylan 1988, Meylan and Donnelly 1999). The pelagic stage is followed by residency in developmental habitats (foraging areas where juveniles reside and grow) in coastal waters. Little is known about the diet of pelagic stage hawksbills. Adult foraging typically occurs over coral reefs, although other hard-bottom communities and mangrove-fringed areas are occupied occasionally. Hawksbills show fidelity to their foraging areas over several years (van Dam and Diéz 1998).

The hawksbill's diet is highly specialized and consists primarily of sponges (Meylan 1988). Gravid females have been noted ingesting coralline substrate (Meylan 1984) and calcareous algae (Anderes Alvarez and Uchida 1994), which are believed to be possible sources of calcium to aid in eggshell production. The maximum diving depths of these animals are not known, but the maximum length of dives is estimated at 73.5 minutes. More routinely, dives last about 56 minutes (Hughes 1974).

Kemp's ridley hatchlings are also pelagic during the early stages of life and feed in surface waters (Carr 1987, Ogren 1989). Once the juveniles reach approximately 20 cm carapace length they move to relatively shallow (less than 50m) benthic foraging habitat over unconsolidated substrates (Márquez-M. 1994). They have also been observed transiting long distances between foraging habitats (Ogren 1989). Kemp's ridleys feeding in these nearshore areas primarily prey on crabs, though they are also known to ingest mollusks, fish, marine vegetation, and shrimp (Shaver 1991). The fish and shrimp Kemp's ridleys ingest are not thought to be a primary prey item but instead may be scavenged opportunistically from bycatch discards or from discarded bait (Shaver 1991). Given their predilection for shallower water, Kemp's ridleys most routinely make dives of 50 m or less (Soma 1985, Byles 1988). Their maximum diving range is unknown. Depending on the life stage a Kemp's ridleys may be able to stay submerged anywhere from 167 minutes to 300 minutes, though dives of 12.7 minutes to 16.7 minutes are much more common (Soma 1985, Mendonca and Pritchard 1986, Byles 1988). Kemp's ridleys may also spend as much as 96% of their time underwater (Soma 1985, Byles 1988).

Leatherbacks are the most pelagic of all ESA-listed sea turtles and spend most of their time in the open ocean. Although they will enter coastal waters and are seen over the continental shelf on a seasonal basis to feed in areas where jellyfish are concentrated. Leatherbacks feed primarily on cnidarians (medusae, siphonophores) and tunicates. Unlike other sea turtles, leatherbacks' diets do not shift during their life cycles. Because leatherbacks' ability to capture and eat jellyfish is not constrained by size or age, they continue to feed on these species regardless of life stage (Bjorndal 1997). Leatherbacks are the deepest diving of all sea turtles. It is estimated that these species can dive in excess of 1000 m (Eckert et al. 1989) but more frequently dive to depths of 50 m to 84 m (Eckert et al. 1986). Dive times range from a maximum of 37 minutes to more routines dives of 4 to 14.5 minutes (Standora et al. 1984, Eckert et al. 1986, Eckert et al. 1989, Keinath and Musick 1993). Leatherbacks may spend 74% to 91% of their time submerged (Standora et al. 1984).

Loggerhead hatchlings forage in the open ocean and are often associated with Sargassum rafts (Hughes 1974, Carr 1987, Walker 1994, Bolten and Balazs 1995). The pelagic stage of these sea turtles are known to eat a wide range of things including salps, jellyfish, amphipods, crabs, syngnathid fish, squid, and pelagic snails (Brongersma 1972). Stranding records indicate that when pelagic immature loggerheads reach 40-60 cm straight-line carapace length they begin to live in coastal inshore and nearshore waters of the continental shelf throughout the South Atlantic (Witzell 2002). Here they forage over hard- and soft-bottom habitats (Carr 1986). Benthic foraging loggerheads eat a variety of invertebrates with crabs and mollusks being an important prey source (Burke et al. 1993). Estimates of the maximum diving depths of loggerheads range from 211 m to 233 m (692-764ft.) (Thayer et

al. 1984, Limpus and Nichols 1988). The lengths of loggerhead dives are frequently between 17 and 30 minutes (Thayer et al. 1984, Limpus and Nichols 1988, Limpus and Nichols 1994, Lanyan et al. 1989) and they may spend anywhere from 80 to 94% of their time submerged (Limpus and Nichols 1994, Lanyan et al. 1989).

3.2.2.2 ESA-Listed Marine Fish

Historically the **smalltooth sawfish** in the U.S. ranged from New York to the Mexico border. Their current range is poorly understood but believed to have contracted from these historical areas. In the South Atlantic region, they are most commonly found in Florida, primarily off the Florida Keys (Simpfendorfer and Wiley 2004). Only two smalltooth sawfish have been recorded north of Florida since 1963 [the first was captured off North Carolina in 1963 and the other off Georgia in 2002 (National Smalltooth Sawfish Database, Florida Museum of Natural History)]. Historical accounts and recent encounter data suggest that immature individuals are most common in shallow coastal waters less than 25 meters (Bigelow and Schroeder 1953, Adams and Wilson 1995), while mature animals occur in waters in excess of 100 meters (Simpfendorfer pers. comm. 2006). Smalltooth sawfish feed primarily on fish. Mullet, jacks, and ladyfish are believed to be their primary food resources (Simpfendorfer 2001). Smalltooth sawfish also prey on crustaceans (mostly shrimp and crabs) by disturbing bottom sediment with their saw (Norman and Fraser 1938, Bigelow and Schroeder 1953).

3.2.2.3 ESA-Listed Marine Invertebrates

Elkhorn (*Acropora palmata)* and staghorn (*A. cervicornis*) coral were listed as threatened under the ESA on May 9, 2006. The Atlantic *Acropora* Status Review (*Acropora* Biological Review Team 2005) presents a summary of published literature and other currently available scientific information regarding the biology and status of both these species.

Elkhorn and **staghorn** corals are two of the major reef-building corals in the wider Caribbean. In the South Atlantic region, they are found most commonly in the Florida Keys; staghorn coral occurs the furthest north with colonies documented off Palm Beach, Florida (26º3'N). The depth range for these species ranges from <1 meter (3.2 feet) to 60 meters (197 feet). The optimal depth range for elkhorn is considered to be 1 to 5 meters (3.2-16 feet) depth (Goreau and Wells 1967), while staghorn corals are found slightly deeper, 5 to 15 meters (16-49 feet) (Goreau and Goreau 1973).

All Atlantic *Acropora* species (including elkhorn and staghorn coral) are considered to be environmentally sensitive, requiring relatively clear, well-circulated water (Jaap et al. 1989). Optimal water temperatures for elkhorn and staghorn coral range from 25° to 29°C (77 to 84° F) (Ghiold and Smith 1990, Williams and Bunkley-Williams 1990). Both species are almost entirely dependent upon sunlight for nourishment, contrasting the massive, boulder-shaped species in the region (Porter 1976, Lewis 1977) that are more dependent on zooplankton. Thus, Atlantic *Acropora* species are much more susceptible to increases in water turbidity than some other coral species.

Fertilization and development of elkhorn and staghorn corals is exclusively external. Embryonic development culminates with the development of planktonic larvae called planulae (Bak et al. 1977, Sammarco 1980, Rylaarsdam 1983). Unlike most other coral

larvae, elkhorn and staghorn planulae appear to prefer to settle on upper, exposed surfaces, rather than in dark or cryptic ones (Szmant and Miller 2006), at least in a laboratory setting. Studies of elkhorn and staghorn corals indicated that larger colonies of both species had higher fertility rates than smaller colonies (Soong and Lang 1992).

3.2.2.4 South Atlantic Snapper Grouper Fishery Interactions with ESA-Listed Species

Sea turtles are vulnerable to capture by bottom longline and vertical hook-and-line gear. The magnitude of the interactions between sea turtles and the South Atlantic snapper grouper fishery was evaluated in NMFS (2006) using data from the Supplementary Discard Data Program (SDDP). Three loggerheads and three unidentified sea turtles were caught on vertical lines; one leatherback and one loggerhead were caught on bottom longlines, all were released alive (**Table 3-1**). The effort reported program represented between approximately 5% and 14% of all South Atlantic snapper grouper fishing effort. These data were extrapolated in NMFS (2006) to better estimate the number of interactions between the entire snapper grouper fishery and ESA-listed sea turtles. The extrapolated estimate was used to project future interactions (**Table 3-2**).

The SDDP does not provide data on recreational fishing interactions with ESA-listed sea turtle species. However, anecdotal information indicates that recreational fishermen occasionally take sea turtles with hook-and-line gear. The biological opinion also used the extrapolated data from the SDDP to estimate the magnitude of recreational fishing on sea turtles (**Table 3-2**).

Smalltooth sawfish are also considered vulnerable to capture by bottom longline and vertical hook-and-line gear based on their capture in other southeast fisheries using such gear (Poulakis and Seitz 2004; Simpfendorfer and Wiley 2004). SDDP data does not include any reports of smalltooth sawfish being caught in the South Atlantic commercial snapper grouper fishery. There are no other documented interactions between smalltooth sawfish and the South Atlantic commercial snapper grouper fishery. However, the potential for interaction, led NOAA Fisheries Service to estimate future interactions between smalltooth sawfish and the snapper grouper fishery in the 2006 biological opinion (**Table 3-2**).

Table 3-1. Sea turtle incidental take data from the supplementary discard data program (SDDP) for the Southeast U.S. Atlantic

Reporting Period	Month	Logbook Statistical Grid	Species Caught	Number Caught	Discard Condition
Vertical Hook-and-Line Sea Turtle Catch Data					
8/1/01-7/31/02	April	2482	Unidentified	1	Alive
8/1/01-7/31/02	November	3377	Loggerhead	1	Alive

8/1/02-7/31/03	February	2780	Loggerhead	1	Alive
8/1/02-7/31/03	November	3474	Loggerhead	1	Alive
8/1/02-7/31/03	November	3476	Unknown	1	Alive
8/1/02-7/31/03	December	3476	Unknown	1	Alive
Bottom Longline Sea Turtle Catch Data					
8/1/01-7/31/02	August	3674	Leatherback	1	Alive
8/1/03-7/31/04	January	3575	Loggerhead	1	Unknown

Table 3-2. Three-year South Atlantic anticipated takes of ESA-Listed species for snapper grouper gear

Species	Amount of Take	Total
Green	Total Take	39
	Lethal Take	14
Hawksbill	Total Take	4
	Lethal Take	3
Kemp's ridley	Total Take	19
	Lethal Take	8
Leatherback	Total Take	25
	Lethal Take	15
Loggerhead	Total Take	202
	Lethal Take	67
Smalltooth sawfish	Total Take	8
	Lethal Take	0

Source: NMFS 2006

3.2.2.6 Designated Critical Habitat for ESA-Listed Species in the South Atlantic

In the South Atlantic, critical habitat has been designated for elkhorn and staghorn corals, and the North Atlantic right whale.

Four areas of critical habitat were designated in for **elkhorn and staghorn coral** in Florida, Puerto Rico, St. Thomas/St. John, U.S.V.I, and St. Croix, U.S.V.I. Only the Florida area overlaps with the SAFMC's jurisdiction. The Florida unit contains three sub-areas: (1) The shoreward boundary for Florida sub-area A begins at the 6-ft (1.8 m) contour at the south side of Boynton Inlet, Palm Beach County at 26°32'42.5"N; then runs due east to the point of intersection with the 98-ft (30 m) contour; then follows the 98-ft (30 m) contour to the point of intersection with latitude 25°45'55"N, Government Cut, Miami-Dade County; then runs due west to the point of intersection with the 6-ft (1.8 m) contour, then follows the 6-ft (1.8 m) contour to the beginning point; (2) The shoreward boundary of Florida sub-area B begins at the MLW line at 25°45'55"N, Government Cut, Miami-Dade County; then runs due east to the point of intersection with the 98-ft (30 m) contour; then follows the 98-ft (30 m) contour to the point of intersection with longitude 82°W; then runs due north to the point of intersection with the South Atlantic Fishery Management Council (SAFMC) boundary at 24°31'35.75" N; then follows the SAFMC boundary to a point of intersection with the MLW line at Key West, Monroe County; then follows the MLW line, the SAFMC boundary (see 50 CFR 600.105(c)), and the COLREGS line (see 33 CFR 80.727. 730, 735, and 740) to the

beginning point; and (3) The seaward boundary of Florida sub-area C (the Dry Tortugas) begins at the northern intersection of the 98-ft (30 m) contour and longitude 82°45'W; then follows the 98-ft (30 m) contour west around the Dry Tortugas, to the southern point of intersection with longitude 82°45'W; then runs due north to the beginning point.

The physical or biological feature of elkhorn and staghorn coral critical habitat essential to their conservation is substrate of suitable quality and availability to support larval settlement and recruitment, and reattachment and recruitment of asexual fragments. Substrate of suitable quality and availability is defined as consolidated hardbottom or dead coral skeleton that is free from fleshy macroalgae cover and sediment cover, occurring in water depths from the mean high water (MHW) line to 30 meters (98 feet).

Critical habitat for the **North Atlantic right whale** has been designated off coastal Florida and Georgia; a small portion of which occurs overlaps SAFMC's jurisdiction. The unit is defined from the mouth of the Altamaha River, Georgia, to Jacksonville, Florida, out 15 nautical miles and from Jacksonville, Florida, to Sebastian Inlet, Florida, out five nautical miles. The area was designated because of its importance as a calving area. The physical or biological feature of the critical habitat essential to the conservation of North Atlantic right whales are related to water depth, water temperature, and bathymetry.

3.3 Administrative Environment

3.3.1 The Fishery Management Process and Applicable Laws

3.3.1.1 Federal Fishery Management

Federal fishery management is conducted under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (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 U.S. EEZ, an area extending 200 nautical miles 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 summarized in **Section 8.0**. In most cases, the Secretary has delegated this authority to NOAA Fisheries Service.

The South Atlantic Fishery Management 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 miles offshore from the seaward boundary of the States of North Carolina, South Carolina, Georgia, and east Florida to Key West. The Council has thirteen voting members: one from NOAA Fisheries Service; 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 South Atlantic 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, State Department, and Atlantic States Marine Fisheries Commission (ASMFC). The South Atlantic 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. Council members serve three-year terms and are recommended by State Governors and appointed by the Secretary of Commerce 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 matters, are open to the public. The Council uses a Scientific and Statistical Committee 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 Procedures Act, in the form of "notice and comment" rulemaking.

3.3.1.2 State Fishery Management

The state governments of North Carolina, South Carolina, Georgia, and Florida have 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 Environment and Natural Resources. The Marine Resources Division of the South Carolina Department of Natural Resources regulates South Carolina's marine fisheries. Georgia's marine fisheries are managed by the Coastal Resources Division of the Department of Natural Resources. The Marine Fisheries Division 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 the 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 consistent state regulations to conserve coastal species. The ASFMC also is represented at the Council level, but does not have voting authority at the Council level.

NOAA Fisheries Service' 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.

3.3.2 Enforcement

Both the NOAA Fisheries Service Office for Enforcement (NOAA/OLE) and the United States Coast Guard (USCG) have the authority and the responsibility to enforce NOAA Fisheries 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 enforcement of fisheries regulations.

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 Florida, Georgia, and South 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.

NOAA General Counsel issued a revised Southeast Region Magnuson-Stevens Act Penalty Schedule in June 2003, which addresses all Magnuson-Stevens Act violations in the Southeast Region. In general, this Penalty Schedule increases the amount of civil administrative penalties that a violator may be subject to up to the current statutory maximum of $120,000 per violation.

3.4 Economic Environment

3.4.1 Wreckfish Fishery

Wreckfish were discovered by fishermen in commercial concentrations on the Blake Plateau in deep water located about 120 nautical miles east of Savannah, Georgia in the mid 1980s (SAFMC 1999). They are caught at depths from 1,500-2,000 feet (450-600 m) over rocky ridge systems. The average weight of wreckfish caught during the 1980s and 1990s was just over 13 kg (30 pounds) (Vaughan 1998). Longliners retrieving pieces of parted longline gear first caught wreckfish in the mid 1980s. Later, hydraulic reels with baited hooks were developed to exploit this fishery. The fishery expanded rapidly from two vessels landing fewer than 30,000 pounds in 1987 to six vessels with landings of over 300,000 pounds in 1988, and about 25 vessels landing over two million pounds in 1989.

3.4.2 Description of Regulations, Harvest Methods and Gear

In 1990, about four million pounds of wreckfish were landed by 40 vessels. In response to the rapid growth of the fishery, the South Atlantic Fishery Management Council (Council) added wreckfish to the Snapper Grouper management unit via Amendment 3 (SAFMC 1990) to the Snapper Grouper FMP. Amendment 3 also established a permit system, as well as a total allowable catch (TAC), a control date, and a spawning season closure. In September 1991, the Council established the individual transferable quota (ITQ) program for the wreckfish fishery which provides shareholders with an allocation of the TAC (SAFMC 1991). The Wreckfish ITQ was implemented by the Council in March 1992 through Snapper Grouper Amendment 5. The overall goal of the South Atlantic Wreckfish ITQ is to "manage the wreckfish sector of the snapper-grouper fishery so that its long-term economic viability will be preserved". Other objectives as stated in Amendment 5 are:

- 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 benefits from efforts to conserve and manage the wreckfish resource.
- 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.
- Develop a mechanism that allows the marketplace to drive harvest strategies and product forms in order to maintain product continuity and increase total producer and consumer benefits from the fishery.
- Promote management regimes that minimize gear and area conflicts among fishermen.
- Minimize the tendency for overcapitalization in the harvesting and processing/distribution
  sectors.
- 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.

Structure of the Wreckfish ITQ Program

Snapper Grouper Amendment 5 outlines the structure of the wreckfish ITQ program adopted by the Council in September 1991. The summaries below are, in some cases, taken directly from Amendment 5.

Initial Eligibility

Eligibility for participation required that applicants include those who can document wreckfish landings during the period beginning January 1, 1989 and ending September 24, 1990 (the effective control date). The applicants also needed to be able to document having landed at least 5,000 pounds (dressed weight) of wreckfish in aggregate between January 1, 1987 and September 24, 1990.

Distribution of Initial Allocation

Initial allocations were made based on dividing one-half of the available shares (100 were made available, each representing 1% of the TAC) equally among eligible participants. The remaining shares were divided based on participant's percentage of total wreckfish landings between January 1, 1987 and August 8, 1990. The formula for the weighted portion of the initial allocation for an individual was: participant's total documented wreckfish catch 1987-1990 divided by total wreckfish catch 1987-1990 by all participants, as determined by fish house receipts and dealer records with affidavits submitted, not official landings data. Shares were allocated as percentages of the 2 million pound TAC. Initial allocation was made to vessel owners even if the portion of an individual's share is based on catch history from separate vessels owned by an individual during the 1987-1990 period.

Amendment 5 stipulated that no percentage share could be greater than 10% of the available shares at the time of the initial allocation. No rule was put in place by the Council to limit ownership of shares after initial allocation. This is one area of discussion below.

Regarding the Wreckfish TAC, Amendment 5 states that whether larger or smaller, allocation of future Wreckfish TACs to ITQ shareholders would be based on the annual percentage shares at the beginning of the fishing year which runs from April 16-January 15.

Transferability

Sale of percentage wreckfish shares is allowed to anyone. However, sale or lease of individual quota is allowed between shareholders only. Therefore, if someone wanted to fish for wreckfish and did not own shares, they would first have to purchase shares and then purchase individual quota (if the purchase was made mid-season and was not accompanied by quota) or wait for annual allocation of individual quota based on shares owned.

Tracking sales of individual quota is done by requiring the buyer and seller to sign and date coupons that are sold. The system to track transactions of percent shares involves a NMFS single point transfer agent similar to the way stock and bond transactions are recorded.

No Direct Use Requirement

Individual quota not in direct use by the owner of the corresponding percentage share does not have to be sold and will not revert back to the management program. The Council will monitor the use of individual quota over time and may take steps to direct its use in the future, if absentee ownership or other potential problems arise.

Tracking and Monitoring

The system to track and monitor individual quotas to ensure that TAC and individual quotas are not exceeded is a dual-entry record keeping system. The main features of the dual-entry system are as follows:

1) Individual quotas are issued via coupons in small denominations of wreckfish pounds (100 and 500 pound denominations) equaling the total pounds of a fishermen's individual quota for that year. (Note: the lack of divisibility of the coupons has presented problems for fishermen in the past who wanted to deliver more than 100 pound increments allowed but less than 500 pound increments allowed. This resulted in the loss of pounds to the fishermen. This can be corrected by issuing coupons down to 1 pound.).

2) Coupons are serial numbered, and coded for each fisherman, and a portion of the serial number is the permit number (associated with a particular vessel) of the fisherman receiving the individual quota allocation.

3) Coupons are separable at the center, one part is submitted to the National Marine Fisheries Service (NMFS) Southeast Regional Office within seven days of the time of trip settlement along with the logbook sheet for the trip; the other half goes to the fish house or dealer that purchases the wreckfish.

4) Fishermen must have adequate coupon units on board for the wreckfish in their possession, and the proper number of coupons must be "canceled" by being signed and dated, in ink, prior to landing.

5) Fishermen must obtain a permit for the vessel used to harvest wreckfish, and submit logbook sheets and canceled coupons to record their catch. Anyone in possession of wreckfish who does not have a permit, logbook, and adequate coupons for the wreckfish in their possession is in violation.

6) Fishermen must return any unused coupons to NMFS at the end of the fishing year. (Note: This is not being done.)

7) Fish houses are responsible for signing and dating their portions of the coupons accompanying wreckfish they purchase. Fish houses must have canceled and date coupons equaling the pounds of wreckfish at their fish house at a given time. Fish houses are also responsible for printing their Federal wreckfish permit dealer permit number on their side of coupons accompanying wreckfish they purchase.

8) Fish houses must submit monthly settlement sheets or the equivalent, to report the total number of pounds of wreckfish purchased that month, as well as submitting their portion (the side marked for dealers) of wreckfish coupons totaling the quantity of wreckfish purchased that month.

Dealer Permits

Dealers must obtain a Federal wreckfish dealer permit in order to receive wreckfish. Requirements for a dealer permit include that the applicant possess a state dealer's license, and that the applicant must have a physical facility at a fixed location in the state wherein the dealer has a state dealer's license.

Fishing Permit

Fishermen are required to possess a wreckfish vessel permit in conjunction with coupons and a current logbook. To obtain a wreckfish permit, an applicant must possess a certificate of percentage share, which is issued at the initial allocation of shares or obtained from the transfer agent after purchasing percentage share or portion thereof.

Twenty-Four Hour Notice Prior to Offloading

To offload wreckfish at any location other than that of a federally permitted wreckfish dealer, the vessel operator must notify the NMFS enforcement office 24 hours prior to offloading.

Offloading Wreckfish Between 8am and 5pm

All offloading of wreckfish is to occur between 8am and 5pm regardless of whether offloading occurs at a federally permitted dealer location.

The Market for Wreckfish Shares and Coupons

Shareholders that bought into the fishery or that increased their initial allocation through purchasing shares from others, bought shares in order to be able to fish for a particular poundage of wreckfish annually in perpetuity. No shareholders contacted had purchased shares with the intent of selling them when prices were higher. Most purchased shares because they felt it was a good investment and that if they did not fish all of their coupons, then they could sell them. Several shareholders are interested in selling their shares or coupons if offered an "appropriate" price. However, no shareholder knew what the appropriate price might be.

All shareholders contacted were aware that they could sell their shares and coupons to a buyer, however, a lack of buyers prevent them from doing so. Several shareholders were waiting for the stock to rebound so that they could sell, lease, or fish their wreckfish shares/coupons. Three shareholders felt that implementation of the IFQ created a great deal of animosity due to the initial allocation. They theorized that other shareholders were holding on to the quota out of bitterness and to help rebuild the stock. Other shareholders stated that they would sell or lease if there were buyers willing to pay a fair price. Most shareholders contacted preferred to hold onto their shares and sell their coupons instead.

3.4.3 Landings, Ex-Vessel Value, Price, and Effort

Historical Landings

Wreckfish landings are available from 1987-1990 (by calendar year) from NMFS general canvas files and from 1991-2001 (by fishing year April 16-January 15) from fishermen logbooks. Landings for 1997, 1999, 2000, 2002-2005, and 2008 are confidential since three or less vessels fished during those years. Landings beyond 2005 are confidential because three or less dealers received wreckfish in those years. **Table 3-3** shows non-confidential landings.

Table 3-3. Landings in Pounds (gutted) and Ex-Vessel Value, 1987-2001. (Landings after 2001 are confidential given the small number of participating vessels.)

Year	**Pounds** (rounded to the nearest 1000 lbs)	**Dollars** (rounded to the nearest 1000 dollars)
1987	28,000	$53,000
1988	307,000	$468,000
1989	2,153,000	$2,688,000
1990	3,793,000	$4,714,000
1991	1,926,000	$2,567,000
1992	1,018,000	$1,960,000
1993	1,048,000	$1,943,000
1994	1,082,000	$2,080,000
1995	628,000	$1,150,000
1996	405,000	$763,000
1997	Confidential	-
1998	196,000	$430,000
1999	Confidential	-
2000	Confidential	-
2001	154,000	$339,000

Historical Vessel Participation

Vessel participation has fluctuated greatly over time. **Table 3-4** shows the number of vessels participating annually.

Table 3-4. Number of Vessels and Dealers Participating in the Wreckfish Fishery, 1991-2009

Year	Vessels Permitted	Vessels Participating	Dealers Participating
1991	91	38	22
1992	39	20	14
1993	27	19	8
1994	25	17	8
1995	17	13	7
1996	17	9	4
1997	7	7	3
1998	3	3	3
1999	3	3	3
2000	3	3	3
2001	2	2	2
2002	3	3	2
2003	2	2	1
2004	3	3	2
2005	4	4	2
2006	4	4	2
2007	4	4	2
2008	3	3	2
2009	5	5	4

Number of Shareholders

Table 3-5 shows the number of shareholders over time. **Table 3-6** shows the number of shareholders in the wreckfish fishery by the percentage of shares held.

Table 3-5. Number of Wreckfish ITQ Shareholders, 1991-2008

Year	Shareholders
1991	49
1992	37
1993	35
1994	26
1995	25
1996	25
1997	25
1998	25
1999	25
2000	25
2001	25
2002	25
2003	25
2004	25
2005	25
2006	25
2007	25
2008	25
2009	25

Table 3-6. Number of Shareholders and Number of Shares Held, 1991-2008

Share Percentage	Initial Allocation	July 1992	1993	1994	1995-2008	2009-2010*
Less than 1%	0	0	1	2	3	3
1-1.9%	31	2	2	1	10	10
2-2.9%	9	5	5	1	1	2
3-3.9%	6	4	4	2	2	2
4-5.9%	2	1	1	3	2	2
6-7.9%	1	3	3	3	3	2
8-9.9%	0	1	1	0	1	1
10-14.9%	0	1	1	2	2	2
More than	0	0	0	1	1	1
Total	**49**	**3**	**3**	**2**	**25**	**25**

3.4.4 Imports

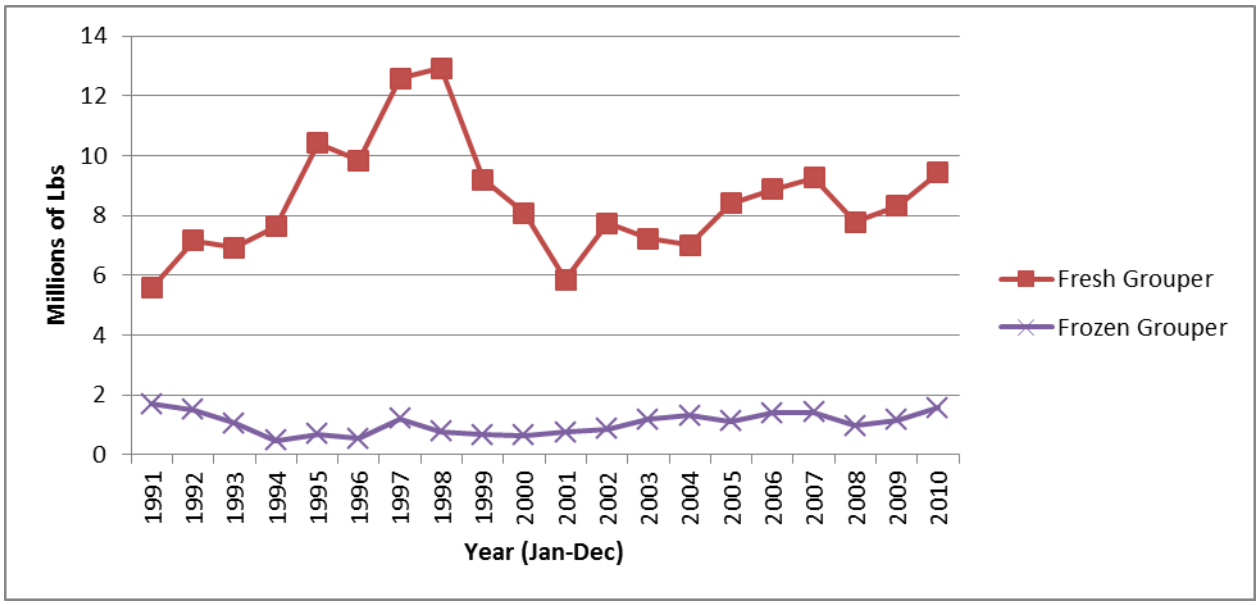
Wreckfish specifically is not imported, but wreckfish is comparable and marketed as general "grouper" or as a substitute for other grouper species. NOAA Fisheries Service purchases fisheries trade data from the Foreign Trade Division of the U.S. Census Bureau, and data are available for download at http://www.st.nmfs.noaa.gov/st1/trade/index.html. The list of product codes relevant to this data request includes fresh and frozen groupers.

Data are summarized from 1991-2009. Imports are tabulated in thousands of pounds, product weight. Import values are tabulated in thousands of current year dollars and constant 2009 dollars.

Imports of fresh groupers increased from 5.6 million pounds (product weight) worth $6.1 million (current dollars) in 1991 to a peak of 12.9 million pounds worth $18.6 million in 1998 (**Figure 3-1**). Imports have remained relatively steady since 1999, with an annual average of 8.0 million pounds worth $18.1 million. Imports generally originated in Mexico, and in Panama to a much lesser extent, and entered the U.S. in Miami. Prior to 2006, imports of fresh groupers were above average in March and April and below average in October and November. However, imports in March have declined significantly since 2006.

Imports of frozen grouper were relatively minor, and averaged 1.0 million pounds worth $1.6 million since 2006 (**Figure 3-1**). Imports generally originated in Mexico or Asia, and entered the U.S. in Miami, Tampa or San Juan. On average from 2006-2009, imports of frozen groupers were above average from December through April and below average from June through August.

Figure 3-1. Grouper imports in pounds (product weight)



3.5 Social and Cultural Environment

Background

To understand the social and cultural environment of the wreckfish fishery, it is important to understand the history of the fishery. Past and present fishery participants contributed to the following descriptions of the wreckfish fishery and the wreckfish ITQ program.

Late 1980s and Early 1990s

In the late 1980s, a few fishermen began to target wreckfish about 50 miles offshore. The species, also called stone bass, inhabited areas about a mile under the surface of the water. According to shareholders contacted, because the species had never been targeted before in South Atlantic waters, the species was relatively easy to catch and harvests were large. Prior to participation in the wreckfish fishery, shareholders shrimped or fished for snapper grouper or sharks, swordfish, and/or tuna. These fishermen typically had larger vessels and so it was possible for these vessels to participate in the wreckfish fishery which requires a larger vessel given its distance from land. During this time, shrimp yields were relatively low and the ex-vessel price for shrimp was low as well. Several boats re-rigged to switch from shrimping to fishing for wreckfish. Other people bought new boats specifically made for fishing for wreckfish. By 1991, more than 100 vessels were fishing for wreckfish in derby-like conditions.

Shareholders contacted stated that the derby was caused by:

- An influx of shrimp boats (33% of shareholders contacted);

- A desire to qualify for the ITQ and receive an initial allocation they could profitably fish with[1]; and
- A desire to participate in a fishery with high yields from a virgin stock which would likely require less effort to harvest from than a non-virgin stock.

The shareholders contacted all agreed that the ITQ eliminated the derby fishery. However, all felt this would have happened anyway given how difficult the fishery is to prosecute.

During the derby, ex-vessel prices were lower than previously and it was sometimes difficult to move the wreckfish harvest due to the large size of total landings; there were market gluts. Average nominal prices received ranged from $0.90 to $1.35 per pound in the late 1980s and early 1990s. Shareholders noted that on a typical trip, 15,000 - 18,000 pounds of wreckfish were harvested.

Prior to implementation of the ITQ, several fishermen noticed that wreckfish were filled with roe in winter and early spring. A spawning season closure from January 15-April 15 was proposed and implemented. In April of the year of the first spawning season closure, fishermen found that the markets that had developed for wreckfish were no longer available due to the interruption caused by the three month spawning season closure. Average ex-vessel prices decreased and harvests were harder to sell. This, the ITQ eligibility requirements, initial allocation, the difficulty of harvesting wreckfish, and a rebound in the shrimp fishery[2] contributed to a decline in the number of vessels participating in the fishery in the early 1990s after implementation of the ITQ.

The general feeling among shareholders is that the wreckfish fishery is a very difficult fishery to prosecute and that many vessels left because there were easier and more profitable fisheries open to them. Some of the factors that make the wreckfish fishery difficult are:

- The location of the fishing grounds near the Gulf Stream;
- The distance of the fishing grounds offshore and the expense associated with the fuel required to travel to the fishing grounds and harvest; and
- The inability to locate fish with a fish finder because wreckfish do not have air bladders.

While some vessels remained in the fishery, in 2002, there was yet another drop in landings which appears to be at least partially due to the untimely deaths of three highliners. One additional shareholder passed away at a later date. Since that time, the number of active participants has varied between two and four vessels each year, with a few additional participants in the past two years.

<u>Wreckfish Shareholders</u>

[1] One shareholder stated that once the initial allocation occurred, his fishing effort was decreased because he saw others easing up on their fishing effort.

[2] At about the same time that the ITQ was implemented, the shrimp fishery improved and several vessels stopped fishing for wreckfish.

Currently the wreckfish fishery is made up of IFQ shareholders with varying degrees of participation since the start of the IFQ program. The fishery consolidated initially in the first few years and from the 1995/96 season up to the present fishing season, there were 25 shareholders. Initial allocation of the shares designated 49 shareholders, of which over half were associated to vessels with home ports in Florida, and 11 of those in Duval County around Jacksonville and Mayport, FL (**Table 3-7**). Seven permits with shares had home ports in South Carolina (mostly Charleston) and five were in North Carolina.

Table 3-7. Total number of shareholder accounts in each state during the first season of the ITQ program (1992-93), after consolidation in the first few years (1995-96), and the most recent fishing season (2010-11)

	1992/93	**1995/96**	**2010/2011**
Florida	26	18	17
Georgia	4	1	1
South Carolina	7	4	4
North Carolina	5	2	3
Outside the South Atl/Unknown	7	0	0
TOTAL	**49**	**25**	**25**

After the 1995-96 fishing year, consolidation of the fleet ---a result of share transfers--- mostly stopped, and the distribution stabilized. One difference is that in the 1995-96 fishing season, Volusia County (including Port Orange and New Smyrna) in Florida surpassed Duval County (Jacksonville and Mayport) has having the most shareholders (8 in Volusia, 7 in Duval).

The wreckfish fishery now supports a niche market that employs one fisherman almost year round, one fisherman for most of the year, and two shareholders who participate every few years. Inactive shareholders are discussed later in this section.

Shareholders Actively Fishing for Wreckfish

A few fishermen have consistently reported wreckfish landings. Two of these fishermen are based in Charleston, SC, including the largest operation. The wreckfish is purchased either by fish houses in the area (Cherry Point Seafood and Johns Island Seafood Company). The wreckfish is sold restaurants or consumers, and shipped to dealers around the U.S. In Charleston, wreckfish is not uncommon at local fine dining establishments during the fishing season. More recently there have been wreckfish sales to dealers in the Florida Keys, and additional transfers of shares to individuals in the Keys. Because of the small number of participants, most years of landings data are confidential. For more information, see **Section 3.4**.

Shareholders Not Fishing for Wreckfish

Over time the number of shareholders actively participating in the fishery declined as fishermen targeted other species, retired, or passed away. At the end of the 2010-11 fishing season, there were 19 shareholders who had not reported any wreckfish landings in the previous ten years. Most of these shareholders reside in Florida (11 out of 19), in Volusia and Duval Counties. Georgia and South Carolina also have one shareholder account, and

North Carolina has three. Of these current 19 shareholders without landings, 12 are original allocations from the start of the ITQ program in 1992.

Current shareholders not fishing for wreckfish also fish for king mackerel, tuna mahi-mahi, swordfish, shark and shrimp. One shareholder harvests oysters and seabass with pots. Another shareholder fishes for snapper grouper species and lobsters. At least three shareholders contacted in 2009 that did not currently fish for wreckfish, stated that they were preparing to participate in the wreckfish fishery in 2009 and/or 2010 in order to make up for revenue they expected to receive from fisheries they would be unable to participate in due to changes in regulations. Some mentioned that they would make more trips for wreckfish if they had a newer and larger vessel, if their physical health was better, and if their balance was better as it was when they were younger. Several shareholders were retired or planned to retire soon.

Dealers

There are 53 wreckfish dealer permits in the South Atlantic, and 24 of these are in Florida (mostly Monroe County (Florida Keys) and Miami-Dade County). There is one dealer with a wreckfish dealer permit in Georgia (McIntosh County); five in South Carolina (Charleston, Georgetown and Horry Counties); and 8 in North Carolina (Beaufort, Dare and Carteret Counties). Additionally, 14 of the wreckfish dealer permits are registered in other states, including Ney York, New Jersey, Virgina, Maryland, Lousiana, and Texas. South Atlantic wreckfish are sold in Canada, Boston, New York and Orlando, among other places. It is a substitute for grouper but has a market of its own as well. It is sold as “wreckfish” or “wreckfish grouper”.

In general, only two or three wreckfish dealers have purchased wreckfish in the past ten years, and these are in the Charleston area, Volusia County (FL), and in the Florida Keys. Active wreckfish fishermen note that the wreckfish market is a niche market. They stated that recently, the price for wreckfish has decreased by about 25%. Active wreckfish fishermen have had to abort trips recently because it is uncertain whether the wreckfish poundage brought to the dock can be moved. The fishermen have also stated that it is also sometimes uncertain whether they will get paid right away due to a cash shortage on the part of the fish house.

Another shareholder stated that recently, the market has been flooded with red grouper which is a substitute for wreckfish. That has brought prices down. There is hope that the market for wreckfish might improve if red grouper harvest decreased and/or marketing improved.

Affected Communities

Detailed information about potential effects on communities associated with the Snapper Grouper fishery can be found in Jepson et al. 2005 and SAFMC 2011. In general, the two areas most associated with wreckfish is Charleston, SC; Port Orange, FL; and Key Largo, FL. However, shareholders also live in the Jacksonville, FL, area, among other towns and communities along with South Atlantic coast.

4.0 Environmental Effects

4.1 Action 1. Define and revert inactive wreckfish shares.

Alternative 1: No Action. Do not define or revert inactive shares for redistribution.

Alternative 2: Define inactive shares as shares belonging to any IFQ shareholder who has not reported wreckfish landings between 2009-10 and 2010-11, and revert for redistribution.

Alternative 3: Define inactive shares as shares belonging to any IFQ shareholder who has not reported wreckfish landings between 2006-07 and 2010-11, and revert for redistribution.

4.1.1 Biological Effects

Defining and reverting inactive wreckfish shares, independent of the other actions in this amendment, would not result in direct biological impacts. However, if the reverted shares are re-allocated to other shareholders (Action 2) who would actively fish the shares; it is likely biological impacts would result. Therefore, biological impacts analysis for this action takes into account the likely scenario in which the South Atlantic Fishery Management Council (Council) could choose to redistribute reverted shares to active fishery participants. Otherwise, simply defining inactive shares and reverting those shares are largely administrative actions.

Under **Alternative 1 (No Action)** inactive shares would remain with their current shareholders and thus, may or may not be utilized for harvesting wreckfish. The new annual catch limit (ACL) for the commercial sector for wreckfish proposed in the Comprehensive ACL Amendment (SAFMC 2011) is 237,500 pounds ww, compared to the previous 2 million pound ww commercial quota. This new harvest limit would result in a significant reduction in the amount of pounds associated with each share, including inactive shares, in order to maintain harvest at or below the ACL. As a result, if inactive shares are not reverted it is likely that harvest would only reach approximately 108,181[3] -139,650[4] pounds ww, after applying the new ACL, and optimum yield (OY) would not be achieved. Because **Alternative 1 (No Action)** would result in the lowest overall commercial harvest of wreckfish it is considered the most biologically beneficial alternative for the wreckfish stock when compared to **Alternatives 2** and **3**.

However, according to the 2010 Status of Fisheries (NMFS 2010) wreckfish are not undergoing overfishing and their overfished status is unknown, and landings by the seven participating shareholders during the 2010/2011 fishing season were 257,322 pounds ww,

[3] Obtained by multiplying 0.4555 x 237,500, where the former is the percentage of shares held by active shareholders under Alternative 2 in Action 1.
[4] Obtained by multiplying 0.588 x 237,500 where the former is the percentage of shares held by the active shareholders under Alternative 3 in Action 1

well under the 2 million pound ww quota. Currently, there is no biological reason to restrict the commercial sector beyond the ACL of 237,500 pounds ww proposed in the Comprehensive ACL Amendment (SAFMC 2011). The Comprehensive ACL Amendment (SAFMC 2011) also proposes to set the OY equal to the ACL, which for both sectors combined is 250,000 pounds ww. If the Council were to select **Alternative 1 (No Action)** and the shares in question continue to go unfished, it is likely the fishery for wreckfish would be prevented from achieving OY, because the recreational sector is also limited in the amount poundage of wreckfish they are allowed to harvest annually. Allowing the status quo situation to persist is contrary to Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) National Standard 1 (NS1), which states, "Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery…", and unnecessarily restricts harvest of wreckfish.

Out of 25 wreckfish shareholders, currently there are either 18 inactive shareholders (**Alternative 2**), or 17 inactive shareholders (**Alternative 3**) holding shares that would be redistributed among a group of 7-8 remaining active wreckfish shareholders. **Table 4-a** illustrates the number of shares that would be reverted based on individual fishing quota (IFQ) shareholders who have no reported wreckfish landings during the 2009/2010 and 2010/2011 fishing seasons (**Alternative 2**) or had no landings during or between the 2006/2007-2010/2011 fishing seasons (**Alternative 3**).

Table 4-1. Inactive Shares held by IFQ shareholder with no landings during the time periods specified under each alternative

Alternative	Number of Active Shareholders	Percentage of Shares Held by Active Shareholders	Number of Inactive Shareholders*	Percentage of Shares Held by Inactive Shareholders
Alternative 2 (No landings during the 2009-10 thru 2010-11 fishing seasons)	7	45.55%	18	54.45%
Alternative 3 (No ladings between and during the 2006-07 thru 2010-11 fishing seasons)	8	58.8%	17	41.2%

Alternative 2 would result in a total of 54.45% of the existing wreckfish shares being reverted and made available for redistribution under Action 2. **Alternative 3** would result in 41.2% of existing shares being reverted. Compared to the status quo, **Alternatives 2** and **3** are likely to result in the greatest level of fishing effort in the commercial sector assuming all redistributed shares under each alternative would result in 100% of the shares being fished. Inactive shares taken from wreckfish permit holders and reverted under **Alternatives 2** and **3** would remove the opportunity to fish for wreckfish for those individuals unless they were to obtain shares via transfer in the future. Though opportunities to fish for wreckfish would no longer be available for those with inactive shares as defined under this action, those fishing opportunities would be transferred to active shareholders under the following action.

Because the shares that were previously unfished would be transferred to those who are more likely to fish them, a small indirect biological impact could be expected from this action in the form of increased opportunities to fish for wreckfish that would likely result under Action 2.

Though defining inactive shares, and reverting them for redistribution would have no immediate biological impacts on target or non-target species it would result in indirect biological impacts by freeing up the unused shares to be fished in the future. If the Council chooses to redistribute shares (Action 2) that are not currently being fished, the probability of bycatch associated with commercial wreckfish fishing could increase. Though bycatch in the wreckfish fishery is minimal, the bycatch mortality rate is likely to be high because wreckfish are a deepwater species and are typically harvested in waters deeper than 984 ft (300 m) (SAFMC 1991; Machias 2003). Bycatch in the wreckfish fishery typically consists of deepwater finfish species such as barrelfish (*Hyperoglyphe perciformis*) and red bream (*Beryx decadactylus*) (NMFS 2001; Goldman and Sedberry 2010).

The action to define inactive wreckfish shares and revert those shares for redistribution would not directly increase or decrease the current level of fishing effort, or modify the gear types used in the fishery. Additionally, fishing practices for the harvest of wreckfish would not be modified under this action; therefore, no increased risk of gear interactions with protected species such as large whales, other marine mammals, or sea turtles is expected. Subsequent to the last Biological Opinion (2006) for the Snapper Grouper fishery being completed, two *Acropora* sp. were designated as threatened under the Endangered Species Act. Comprehensive Ecosystem-Based Amendment 1 established a series of deepwater coral habitat areas of particular concern (CHAPC) to protect deepwater coral species such as *Acropora* sp. Within these deepwater CHAPCs no bottom-tending gear may be used; however, deep-dropping is allowed and wreckfish fishing is permitted within the protected areas. The Council has expressed concern that the type of fishing gear and the gear configurations used to fish for wreckfish may potentially harm deepwater coral species. Therefore, the Council has asked that this issue be addressed in the Comprehensive Ecosystem-Based Amendment 3, which is currently under development.

4.1.2 Economic Effects

Under **Alternative 1**, quota shares would not be defined as inactive and reverted for redistribution. Thus, the distribution of shares between the current 25 shareheolders would be expected to continue in the future. Statistics regarding that distribution are presented in **Table 4-2**. These estimates indicate that the current minimum quota share held by a shareholder is .06%, the maximum quota share is 16.43%, the mean quota share is 4%, and the median quota share is 2.17%. Because the median is significantly less than the mean and the standard deviation is relatively large compared to the mean, these statistics indicate a highly skewed distribution of quota shares, with most shareholders owning less than 5% of the quota shares and a few owning more than 10% of the quota shares.

Assuming that shareholders who have recently been active continue to be active in the fishery, and those who have been inactive continue to be inactive, this distribution would result in commercial landings between 101,181 and 139,650 pounds ww. In turn, between

97,850 and 129,319 pounds ww of landings are expected to be foregone as a result, depending on the time period chosen for determining whether a shareholder is active or inactive. Given an average price of $2.66/lb ww[5] in the 2010/11 fishing season, the expected loss in annual gross revenue to the commercial sector is estimated to be between $260,300 and $344,000 under **Alternative 1**. Consistent with previous information, these estimates reflect a loss of potential gross revenue in the commercial sector between 41.2% and 54.45% relative to a distribution of quota shares that would allow the entire commercial quota of 237,500 pounds ww to be harvested by active shareholders. These losses in gross revenue are expected to lead to a loss in profits as well. However, cost data for the active wreckfish vessels is not presently available and thus the potential loss in profits to the commercial sector and those vessels cannot be estimated.

On the other hand, by not defining some quota shares as inactive and redistributing those quota shares to active shareholders, all shareholders will be allowed to retain their current quota shares. Based on currently available transfer price data between the 2009/10 and 2011/12 fishing seasons,[6] the market value of a 1% share of quota is estimated to be $6,407 on average,[7] or approximately $.32/lb. This estimate must be used with some caution as it is based on only 10 share transfer transactions. Further, this estimate is based on buyers and sellers assuming the current 2 million pound commercial quota in their negotiations, and the associated allocation of pounds that would come with the shares under that quota. Assuming the quota will be reduced to 237,500 pounds ww, or by nearly 88%, the allocation associated with those quota shares will be proportionally reduced. In turn, the expected stream of future income associated with that reduced allocation is expected to decrease significantly as well, leading to a reduction in the market value of those quota shares.

Based on the information in **Table 4-2** and the information above, the total market value of all quota shares is estimated to be approximately $640,700. On a per shareholder basis, the minimum market value of a shareholder's current quota shares is $384 while the maximum market value of a shareholder's current quota shares is approximately $105,300. The mean market value of a shareholder's current quota shares is approximately $25,600 while the median market value is approximately $13,900. Given the skewed distribution of quota shares, the median value is likely more representative of the "average" value.

[5] All price and values are in 2009 dollars.
[6] Based on share transfer price data compiled on August 24, 2011. No share transfers occurred between 1999 and 2008 and share transfer prices before 1999 are likely not reflective of current market conditions.
[7] The average in this case is a mean value.

Table 4-2. All Shareholder Statistics for **Alternative 1** under **Action 1**

Number of Shareholders	25
Minimum Share per Shareholder	.06
Maximum Share per Shareholder	16.43
Total Shares	100.0
Median Share per Shareholder	2.17
Mean Share per Shareholder	4.00
Standard Deviation	4.32

Under **Alternative 2**, some quota shares would be defined as inactive and reverted for redistribution to shareholders determined to be active. Information regarding the number of active and inactive shareholders and the quota shares held by each group under this alternative is presented in Table 4-a. In sum, 7 shareholders would be deemed active and 18 shareholders would be deemed inactive, with the former group holding 45.55% of the quota shares and the latter group holding 55.45% of the quota shares. Statistics regarding the shareholders determined to be inactive under **Alternative 2** are presented in **Table 4-3**. These estimates indicate that the current minimum quota share held by an inactive shareholder is .06%, the maximum quota share is 13.25%, the mean quota share is 3.03%, and the median quota share is 1.89%.

Because these shareholders are inactive, they would not incur any losses in wreckfish landings or gross revenue. Most of these shareholders (14) have not been active in any commercial fisheries and thus appear to not be involved in commercial fishing at all. However, four of these inactive shareholders did have commercial landings and gross revenue from other fisheries in 2009 and 2010. The extent to which these shareholders were involved in other fisheries differs greatly, with average annual gross revenue per vessel ranging from approximately $5,600 to $205,800. The loss of wreckfish shares under **Alternative 2** is not expected to affect these vessels' current operations, though it would take away the option of fishing for wreckfish in the future. Based on the average market value of a 1% share, the total loss of quota share to these 18 shareholders is estimated to be approximately $348,860, or about $19,380 per shareholder. If the median quota share per shareholder is used, then the "average" loss per shareholder would be approximately $12,100. Because information on these shareholders' incomes is not available, it is not possible to determine the economic significance of these losses to them.

Table 4-3. Inactive Shareholder Statistics for **Alternative 2** under **Action 1**

Number of Inactive Shareholders	18
Minimum Share Reverted per Shareholder	.06
Maximum Share Reverted per Shareholder	13.25
Total Shares Reverted	54.45
Median Share Reverted per Shareholder	1.89
Mean Share Reverted per Shareholder	3.03
Standard Deviation	3.28

Under **Alternative 3**, some quota shares would be defined as inactive and reverted for redistribution to shareholders determined to be active. Information regarding the number of active and inactive shareholders and the quota shares held by each group under this alternative is presented in Table 4-a. In sum, 8 shareholders would be deemed active and 17 shareholders would be deemed inactive, with the former group holding 58.8% of the quota shares and the latter group holding 41.2% of the quota shares. Statistics regarding the shareholders determined to be inactive under **Alternative 3** are presented in **Table 4-4**. These estimates indicate that the current minimum quota share held by an inactive shareholder is .06%, the maximum quota share is 7.31%, the mean quota share is 2.42%, and the median quota share is 1.79%.

Because these shareholders are inactive, they would not incur any losses in wreckfish landings or gross revenue. Most of these shareholders (13) have not been active in any commercial fisheries and thus appear to not be involved in commercial fishing at all. However, four of these inactive shareholders did have commercial landings and gross revenue from other fisheries between 2006 and 2010. The extent to which these shareholders were involved in other fisheries differs greatly, with average annual gross revenue per vessel ranging from approximately $2,300 to $223,300. The loss of wreckfish shares under **Alternative 3** is not expected to affect these vessels' current operations, though it would take away the option of fishing for wreckfish in the future. Based on the average market value of a 1% share, the total loss of quota share to these 18 shareholders is estimated to be approximately $264,000, or about $15,530 per shareholder. If the median quota share per shareholder is used, then the "average" loss per shareholder would be approximately $11,470. Because information on these shareholders' incomes is not available, it is not possible to determine the economic significance of these losses to them.

Table 4-4. Inactive Shareholder Statistics for **Alternative 3** under **Action 1**

Number of Inactive Shareholders	17
Minimum Share Reverted per Shareholder	.06
Maximum Share Reverted per Shareholder	7.31
Total Shares Reverted	41.20
Median Share Reverted per Shareholder	1.79
Mean Share Reverted per Shareholder	2.42
Standard Deviation	2.12

4.1.3 Social Effects

Effects from fishing regulations on the social environment are difficult to analyze due to complex human-environment interactions and a lack of quantitative data about that interaction. Generally, social impacts can be categorized according to changes in: human behavior (what people do), social relationships (how people interact with one another), and human-environment interactions (how people interact with other components of their environment, including enforcement agents and fishery managers). It is generally accepted that a positive correlation exists between economic impacts and social impacts. Thus, in the preceding section, Economic Effects, alternatives predicting positive or negative economic impacts are expected to have correlating positive or negative social impacts.

The recent development of the Comprehensive ACL has significantly reduced the commercial sector's allocation of wreckfish (SAFMC 2011) which has caused Amendment 20A to be driven by the desire to adjust the distribution of wreckfish shares in order to remove latent effort from the commercial sector and allow the commercial sector's ACL to be harvested and thereby achieve OY in the fishery. This would allow for the continued participation of active shareholders, captains, crew, and wreckfish dealers.

Alternative 1 (No Action) would result in the most negative social impacts. The wreckfish portion of the snapper grouper fishery currently includes 25 shareholders and has included fewer than 9 active shareholders in recent years (fishing years 2006-2010). The annual pounds of wreckfish quota received by these active shareholders will be reduced with the 2012 ACL by more than 87%. If the inactive shares are not redistributed to active shareholders it is assumed that the amount of wreckfish being fished and delivered would also be reduced at the same level. This loss in pounds of landings and revenue has been detailed in the Economic Effects section. This extreme reduction in catch and landings will impact active shareholders, captains, crew members, and dealers who depend on wreckfish production. As expressed in public testimony at the August South Atlantic Council meeting, this loss in shareholders' catch would cause a difficulty in making a living from one's wreckfish involvement.

During the years 2006-2010, a total of 7 dealers have been involved in wreckfish production; however a large portion of these landings have been delivered in a few communities. These communities with the largest portion of wreckfish landings, Wadmalaw Island, South Carolina, and Port Orange, Florida would likely be the most affected by a reduction in pounds if **Alternative 1 (No Action)** is selected. Ripple effects such the closure of a dealer resulting from a loss in income from wreckfish could possibly occur and impact other fishermen who depend on that particular dealer for the delivery of their product.

In addition, **Alternative 1 (No Action)** would not comply with Magnuson-Stevens Act NS8 guidelines which require that conservation and management measures take into account the importance of fishery resources to fishing communities in order to provide for the sustained participation of those communities and to the extent practicable minimize adverse economic impacts on such communities.

Conversely, **Alternative 1 (No Action)** would result in some positive social impacts in that inactive shareholders would be allowed to keep their shares and have the choice to fish, sell, or lease their shares in the future. Based on an informal survey of wreckfish shareholders, "All shareholders contacted were aware that they could sell their shares and coupons to a buyer, however, a lack of buyers prevent them from doing so. Several shareholders were waiting for the stock to rebound so that they could sell, lease, or fish their wreckfish shares/coupons" (SAFMC 2009). Some inactive shareholders may still be relying on their shares for future use and **Alternative 1 (No Action)** would remove this option.

Alternative 2 and **Alternative 3** are the most socially beneficial because these alternatives revert inactive shares to active shareholders and allow for their continued participation at a comparable level to pre-Comprehensive ACL levels. These two alternatives would benefit active shareholders and wreckfish dealers and only differ in terms of one shareholder's shares being reverted because of the landings years considered (**Alternative 2** includes 18 inactive shareholders and 7 active shareholders; whereas **Alternative 3** includes 17 inactive shareholders and 8 active). **Table 4-1** in the Biological Effects section details this difference showing that **Alternative 2** would redistribute 54.45%; whereas **Alternative 3** would redistribute 41.2% to active shareholders. If the larger percentage of shares in **Alternative 2** were to be redistributed to the remaining shareholders, this would benefit the rest of the remaining participants to a larger degree.

Although the shareholder that would be considered inactive under **Alternative** 2 but not under **Alternative 3** has not fished their quota in the recent landings period, it could be assumed that this shareholder would likely fish their quota in the future because of the reduction in the ACL; however this shareholder could also decide to not fish their quota. The difference in the two socially beneficial **Alternatives 2 and 3** is based on one shareholder. It would be in this shareholder's best interest and would provide the most benefits for the individual if they were included as an active shareholder and **Alternative 3** is selected; however the benefits to the remaining shareholders would be greater if **Alternative 2** is selected.

Alternatives 2 and 3 will also cause some negative social impacts by removing the ability of those shareholders deemed inactive to utilize their shares in the future. Inactive shareholders whose shares are reverted would not have the option fish, sell, or lease their shares in the future and thus would have fewer options for if the fishing of their primary species were to change and they were in need of a fall back plan.

4.1.4 Administrative Effects

Alternative 1 (No Action) would not result in any direct administrative impacts because it would not require any action on behalf of the Council in deciding how to allocate reverted shares or NOAA Fisheries Service Southeast Regional Office (SERO) in conducting the transfer of reverted shares from inactive shareholders to the SERO for redistribution. However, in the long-term allowing the inactive shares to remain unused could lead to unnecessary under-capitalization of the commercial wreckfish component of the snapper grouper fishery. Action 1 is largely administrative in nature and would require SERO to revert inactive shares for redistribution via a method chosen under Action 2. Initially, the

universe of shareholders would be bound by the time series under either **Alternative 2** or **Alternative 3**. Those who hold inactive shares under **Alternative 2** or **Alternative 3** would be notified via certified letter of their inactive share status and the Council's decision to revert those shares for redistribution. Once notified of their status, the inactive shareholders may be given the option to either fish their shares during the 2010/2011 fishing year or to sell their shares before a date certain after which, SERO would automatically transfer the inactive shares from the shareholder to SERO temporarily for redistribution.

In order to establish a stable universe of shares and shareholders, the Council may choose to freeze share transfers on a specific date for a specific period time. During this freeze on share transfers, SERO would establish the final percentage of shares to be redistributed and would redistribute those shares according to the method chosen under Action 2 of this amendment. The greater the number of reverted shares, the greater the administrative burden. Therefore, **Alternative 2** is likely to result in greater administrative impacts than **Alternative 3**; however, none of the options under consideration are expected to significantly affect the administrative environment. Overall, the process of determining the number of shares to be reverted, and reverting inactive shares would require minimal to moderate time and cost increases to implement when compared to the status quo **Alternative 1 (No Action)**.

4.1.5 Council Conclusions

4.2 Action 2. Redistribute reverted shares to remaining shareholders.

Alternative 1: No Action. Do not redistribute reverted shares.

Alternative 2: Redistribute reverted shares to remaining shareholders based on 50% equal allocation + 50% landings history.
Option a: landings history in fishing years 2009/10 to 2010/11
Option b: landings history in fishing years 2006/07 to 2010/11

Alternative 3: Redistribute reverted shares to remaining shareholders based landings history.
Option a: landings history in fishing years 2009/10 to 2010/11
Option b: landings history in fishing years 2006/07 to 2010/11

Alternative 4: Redistribute reverted shares based on proportion of remaining shares held by each remaining shareholder after inactive shares are reverted.

Alternative 5: Redistribute reverted shares equally among all remaining shareholders.

4.2.1 Biological Effects

Alternative 1 (No Action) would not redistribute reverted shares to active wreckfish fishery participants and those shares would not be used for the purposes of harvesting the wreckfish

commercial ACL. **Alternative 1 (No Action)** would likely result in an unnecessary reduction in fishing opportunities caused by a decrease in poundage associated with each share due to a significantly reduced commercial quota soon to be implemented through the Comprehensive ACL Amendment (SAFMC 2011). Furthermore, **Alternative 1 (No Action)** would be expected to prevent the fishery from achieving OY, which would not comply with Magnusson Stevens Act NS1 guidelines. Currently, there is no biological reason to restrict harvest to a level below the proposed commercial ACL of 237,000 pounds ww. Under the status quo alternative, it is likely that only between 108,181 and 139,650 pounds ww of wreckfish would be landed during the 2012/2013 fishing year given the number of inactive shares that would be left unfished. All other alternatives would theoretically result in some level of increased fishing effort among the core group of wreckfish fishery participants, and would thus result in increased harvest limited only by the commercial ACL of 237,500 pounds ww proposed in the Comprehensive ACL Amendment (SAFMC 2011) and the poundage associated with the total shares held by each entity. Because the proposed commercial ACL in the Comprehensive ACL Amendment (SAFMC 2011) is scheduled to be implemented prior to this amendment becoming final the commercial sector would be limited to harvest at or below the ACL regardless of how many shares are reallocated to any one entity. Additionally, the share cap chosen under Action 3 may limit the number of reverted shares that are actually reallocated to any one entity. For example, if one individual already held 40% of the shares in the fishery and the Council chose a share cap of 49%, regardless of which redistribution option the Council chooses, that individual would only be allowed to receive the number of shares equal to or less than 9% of the total reverted shares.

Because the Comprehensive ACL Amendment would restrict harvest to the new commercial ACL, the determination as to how reverted shares would be reallocated among active commercial wreckfish fishery participants has more socioeconomic and administrative implications than direct biological impacts. However, because the inactive shares were not fished within recent years, and because it is assumed that under this action they would now be actively fished, some minor biological impacts may result. **Alternative 2** is the most complex of the alternatives considered. Shares that would be reverted to the Council under Action 1 of this amendment would be allocated based on 50% of what their allocation would be if all inactive shares were distributed equally among active shareholders, plus 50% of each active shares holder's landings history (individual landings under the chosen time series would be totaled and compared to the total landings for the entire time series for the fishery to determine what percentage the individual's total landings are), under **Options a,** and **b**. **Option a** would benefit individuals who recently entered the fishery and have no previous landings history, whereas **Option b** would include a broader time series of landings histories among fishery participants and would also include those who recently entered the fishery. Since this alternative would use a combination of criteria for determining how many of the reverted shares would be received by each entity it could be perceived as being the fairest method for redistribution. The difference in the percentage of shares redistributed to each entity under **Options a** and **b** of **Alternative 2** is negligible (**Table 4-5**); therefore, there is likely to be no difference in the biological impact between the two **Alternative 2** options. Additionally, the total percentage of shares to be redistributed is 54.45% based on **Alternative 2** in Action 1 or 41.2% based on **Alternative 3** in Action 1. Regardless of how those shares are allocated among the active fishery participants, the total number of

redistributed shares would not change, limiting effort to the total percentage of shares issued to each shareholder.

Table 4-5. Percentage range of reverted shares redistributed to each active shareholder based on Action 1, **Alternative 2** options

Reverted Shares Based on Action 1. Alternative 2.	
Number of Active Shareholders to Receive a % of Reverted Shares Redistributed Under Action 2. Alternative 2. Option a.	**Number of Active Shareholders to Receive a % of Reverted Shares Redistributed Under Action 2. Under Action 2. Alternative 2 Option b.**
4 shareholders would receive 1%-5%	3 shareholders would receive 1%-5%
2 shareholders would receive 5%-10%	2 shareholders would receive 5%-10%
0 shareholders would receive 10%-15%	1 shareholder would receive 10%-15%
0 shareholders would receive 15%-20%	1 shareholder would receive 15%-20%
1 shareholder would receive 20%-25%	0 shareholders would receive 20%-25%
Reverted Shares Based on Action 1. Alternative 3.	
Number of Active Shareholders to Receive a % of Reverted Shares Redistributed Under Action 2. Alternative 2. Option a.	**Number of Active Shareholders to Receive a % of Reverted Shares Redistributed Under Action 2. Under Action 2. Alternative 2. Option b.**
6 shareholders would receive 1%-5%	5 shareholders would receive 1%-5%
1 shareholder would receive 5%-10%	3 shareholder would receive 5%-10%
0 shareholders would receive 10%-15%	0 shareholders would receive 10%-15%
1 shareholder would receive 15%-20%	0 shareholders would receive 15%-20%
0 shareholders would receive 20%-25%	0 shareholders would receive 20%-25%

Because landings data are confidential for this fishery, only the number of shares that would be distributed can be shown. Fifty percent of reverted shares (27.23% based on Alternative 2 under Action 1, and 20.6% based on **Alternative 3** in **Action 1**) divided by the 7 or 8 active shareholders would either be 3.89% or 2.58%, respectively. Each person would receive the rest of the reverted shares based on 50% of their landings histories depending upon the sub-option chosen for **Alternative 2 (Table 4-5)**. Regardless of how reverted shares are distributed under this alternative, the commercial fishery as a whole would be limited to harvest levels at or below the ACL, or risk triggering AMs to correct for an ACL overage. Therefore, adverse biological impacts that could result from this action would be expected to be negligible unless the fishery far exceeds the ACL repeatedly over the course of several years. If this scenario were to occur, the Council would be required to reassess the system of ACLs and AMs for the wreckfish fishery, and make adjustments as needed. Furthermore, the South Atlantic Council intends to evaluate landings and other available information on species in the Snapper Grouper fishery management unit (FMU) every five years, and wreckfish are part of the snapper grouper FMU.

Alternative 3 would redistribute reverted shares based on landings histories only. So those with larger landings histories would account for a larger percentage of the total landings for

the fishery during the chosen time series and thus, would receive the greatest number of reverted shares (**Table 4-6**). As stated previously, the number of shares distributed to each shareholder would have to result in a total share holding less than or equal to the share cap chosen by the Council under Action 3 of this amendment, unless the share holder is allowed a certain period of time to sell the excess reverted shares after they have been distributed. In either case, each shareholder would be limited to holding shares at or below the share cap level. The biological impacts of **Alternative 3** would be similar to those under **Alternative 2** for the same reasons given above. For example, one shareholder would receive no additional shares from the pool of reverted shares based in the criteria outlined under **Alternative 3, Option a**, the same share holder would benefit more under **Option b** of the same alternative as noted in **Table 4-6**. No significant biological impacts are expected to result from redistributing reverted shares to active shareholders based on landings histories.

Table 4-6. Percentage range of reverted shares redistributed to each active shareholder based on Action 2. **Alternative 3** options

Reverted Shares Based on Action 1. Alternative 2.	
Number of Active Shareholders to Receive a % of Reverted Shares Redistributed Under Action 2. Alternative 3. Option a.	**Number of Active Shareholders to Receive a % of Reverted Shares Redistributed Under Action 2. Alternative 3 Option b.**
3 shareholders would receive 0%-1%	3 shareholders would receive 0%-1%
1 shareholders would receive 1%-5%	1 shareholders would receive 1%-5%
1 shareholder would receive 5%-10%	1 shareholder would receive 5%-10%
1 shareholder would receive 10%-15%	2 shareholders would receive 10%-15%
0 shareholder would receive 15%-20%	0 shareholders would receive 15%-20%
0 shareholders would receive 20%-25%	0 shareholders would receive 20%-25%
0 shareholders would receive 25%-30%	0 shareholders would receive 25%-30%
0 shareholders would receive 30%-35%	0 shareholders would receive 30%-35%
1 shareholder would receive 35%-40%	0 shareholders would receive 35%-40%
Reverted Shares Based on Action 1. Alternative 3.	
Number of Active Shareholders to Receive a % of Reverted Shares Redistributed Under Action 2. Alternative 3. Option a.	**Number of Active Shareholders to Receive a % of Reverted Shares Redistributed Under Action 2. Alternative 3. Option b.**
4 shareholders would receive 0%-1%	3 shareholders would receive 0%-1%
2 shareholders would receive 1%-5%	2 shareholders would receive 1%-5%
1 shareholder would receive 5%-10%	1 shareholder would receive 5%-10%
0 shareholders would receive 10%-15%	2 shareholders would receive 10%-15%
0 shareholder would receive 15%-20%	0 shareholders would receive 15%-20%
1 shareholder would receive 20%-25%	0 shareholders would receive 20%-25%
0 shareholders would receive 25%-30%	0 shareholders would receive 25%-30%

Alternative 4 would redistribute shares proportionally among all remaining shareholders. In other words, those who hold the most shares currently would receive the greatest number of

reverted shares until the share cap is reached. Or if reverted shares are issued in excess of the share cap, the Council may allow the shareholder to sell those excess shares within a certain period of time. Distributing the reverted shares proportionately among shareholders would result in the biggest shareholders receiving the largest portion of reverted shares (**Table 4-7**). Assuming the largest shareholders are the most likely to fish all shares they own because they are the most active fishery participants, **Alternative 4** may have the potential to have slightly higher biological implications for the species when compared to **Alternatives 2** and **3**. However, because the number of shares would be capped, and overall harvest would be limited to the ACL significant biological impacts would not be expected.

Table 4-7. Percent range of reverted shares redistributed to each active shareholding entity under Action 2. **Alternative 4**

Reverted Shares Based on Action 1 Alternative 2	
Number of Shareholders to Receive Shares	**% Range of Reverted Shares Redistributed Under Action 2. Alternative 4.**
1	0%-1%
2	1%-5%
2	5%-10%
1	10%-15%
1	15%-20%
Reverted Shares Based on Action 1 Alternative 3	
Number of Shareholders to Receive Shares	**% Range of Reverted Shares Redistributed Under Action 2. Alternative 4.**
2	0%-1%
2	1%-5%
3	5%-10%
1	10%-15%
0	15%-20%

Alternative 5 would redistribute shares equally among all remaining shareholders. This alternative would result in each shareholder receiving 7.78% based on Alternative 2 under Action 1 or 5.15% based on Alternative 3 under Action 1of the reverted shares (**Table 4-8**). Shareholders who would receive shares in excess of the preferred share cap would either need to sell their excess shares, or the Council may limit the number of shares that may be redistributed to fall within the share cap limit and redistribute the rest among the other shareholders equally. Because overall harvest of wreckfish would be limited to the proposed commercial ACL in the Comprehensive ACL Amendment (SAFMC 2011), **Alternative 5** is not expected to result in adverse biological impacts that would jeopardize the target or non-target species.

Table 4-8. Distribution of reverted shares based on equal redistribution **(Alternative 5)**

Number of Active Shareholders Designated Under Action 1. Alternative 2.	**% of Reverted Shares Redistributed Under Action 2. Alternative 5**
7	7.78
Active Shareholding Entity Designated Under Action 1. Alternative 3.	**% of Reverted Shares Redistributed Under Action 2 Alternative 5.**
8	5.15

Table 4-9. Summary of share redistribution for all alternatives under Action 2

	Shareholders receiving redistributed shares - Action 1, Alt 2						**Shareholders receiving redistributed shares - Action 1, Alt 3**					
% shares redistributed	Alt 2(a)	Alt 2(b)	Alt 3(a)	Alt 3(b)	Alt 4	Alt 5	Alt 2(a)	Alt 2(b)	Alt 3(a)	Alt 3(b)	Alt 4	Alt 5
0-5%	4	3	4	4	3	0	5	5	6	5	4	0
5.01-10%	2	2	1	1	1	7	1	3	1	1	3	8
10.01-15%	0	1	1	0	2	0	0	0	0	2	1	0
15.01-20%	0	1	0	1	1	0	1	0	0	0	0	0
20.01-25%	1	0	0	0	0	0	0	0	0	0	0	0
25.01-30%	0	0	0	1	0	0	0	0	1	0	0	0
30.01-35%	0	0	0	0	0	0	0	0	0	0	0	0
35.01-40%	0	0	1	0	0	0	0	0	0	0	0	0

Table 4-10. Summary of total % shares that would be held by each shareholder after redistribution under **Action 2**

% shares after redistribution	**Shareholders after redistribution - Action 1, Alt 2**						**Shareholders after redistribution - Action 1, Alt 3**					
	Alt 2(a)	Alt 2(b)	Alt 3(a)	Alt 3(b)	Alt 4	Alt 5	Alt 2(a)	Alt 2(b)	Alt 3(a)	Alt 3(b)	Alt 4	Alt 5
0-5%	1	2	3	3	3	0	3	3	3	3	3	0
5.01-10%	2	1	0	0	0	2	0	0	0	0	0	3
10.01-15%	1	0	1	1	1	2	2	2	3	2	1	2
15.01-20%	1	2	1	0	1	2	1	1	0	1	2	2
20.01-25%	1	1	1	2	1	1	1	2	1	1	1	1
25.01-30%	0	1	0	0	0	0	1	0	0	1	1	0
30.01-35%	1	0	0	0	0	0	0	0	0	0	0	0
35.01-40%	0	0	0	1	1	0	0	0	1	0	0	0
40.01-45%	0	0	0	0	0	0	0	0	0	0	0	0
45.01-50%	0	0	1	0	0	0	0	0	0	0	0	0

It is important to note that wreckfish are very widely distributed and are considered data deficient. Only the United States and New Zealand currently regulate fisheries for wreckfish through management measures such as gear prohibitions and seasonal closures. Furthermore, the exact source of pelagic juveniles and true extent of other unknown stocks and sizes in U.S. waters is unknown, which makes estimating the current wreckfish population extremely difficult (Sedberry et al. 1999). Fishing pressure on those juvenile populations in European waters is apparent since European fish hooks are often found in wreckfish caught in U.S. waters (Sedberry et al. 1999). Other types of fishing pressure on the source stock of juveniles such as pelagic tuna drift-net fishing in the north Atlantic may also impact the adult population of wreckfish harvested in the Mid-Atlantic and Southeast Regions of the U.S. (Sedberry *et al.* 1999). Given this information, the action to redistribute unused shares is not likely to significantly add or detract from the current management and biological uncertainties that surround this fishery and thus is not likely to jeopardize the sustainability of the South Atlantic wreckfish population.

Impacts on Endangered Species Act (ESA)-listed species under this action are expected to be minimal. **Alternative 1 (No Action)** is the most biologically beneficial of all the alternatives considered relative to potential gear interactions with protected species since fishing effort would be limited to the number of actively fished shares and poundage limits associated with them. If the Council were to choose **Alternative 1 (No Action)** as the preferred, under the new ACL of 237,000 pounds ww, it is expected that commercial harvest would be between 108,181 and 139,650 pounds ww after applying the new ACL, which is significantly less than what was harvested during the 2010/2011 fishing season. For this reason, **Alternative 1 (No Action)** is considered the most biologically beneficial alternative in terms of reducing the risk to protected species and CHAPCs; however, there is no biological reason to intentionally restrict harvest to a level lower than the proposed ACL in the Comprehensive ACL Amendment (SAFMC 2011).

Redistributing inactive shares among the active shareholders in the fishery may increase effort; therefore, there is an increased chance that marine mammals and sea turtles may interact with wreckfish gear and that wreckfish gear may damage fragile deepwater corals. The proposed list of fisheries (LOF) for 2011 [76 FR 37743, June 28, 2011] includes the wreckfish fishery as part of the snapper grouper hook-and-line fishery, which is considered a Category III fishery. Category III fisheries are those in which annual mortality and serious injury of a stock is less than or equal to one percent of the potential biological removal rate (i.e., a remote likelihood or no known incidental mortality and serious injuries of marine mammals). Since fishing effort would be limited to the commercial ACL of 237,000 pounds ww, and the wreckfish fishery is considered part of a Category III fishery on the 2011 proposed LOF, any increased risk to protected species is likely to be negligible.

4.2.2 Economic Effects

Table 4-11. Statistics for All Alternatives under **Action 2** assuming **Alternative 2** under **Action 1**

Statistic	Additional Shares Alt2a	Final Shares Alt2a	Additional Shares Alt2b	Final Shares Alt2b	Additional Shares Alt3a	Final Shares Alt3a	Additional Shares Alt3b	Final Shares Alt3b	Additional Shares Alt4	Final Shares Alt4	Additional Shares Alt5	Final Shares Alt5
Minimum Share	3.92	4.36	3.91	4.33	0.05	0.60	0.04	0.54	0.42	0.77	7.78	8.13
Maximum Share	22.13	31.20	17.74	26.81	36.47	45.54	27.69	36.76	19.64	36.07	7.78	24.21
Total Shares	54.45	100.00	54.45	100.00	54.45	100.00	54.45	100.00	54.45	100.00	54.45	100.00
Median Share	4.78	14.97	6.02	16.21	1.78	11.97	4.27	14.46	7.38	13.55	7.78	13.95
Mean Share	7.78	14.29	7.78	14.29	7.78	14.28	7.78	14.28	7.78	14.28	7.78	14.29
Standard Deviation	6.61	10.10	5.16	9.25	13.22	16.04	10.32	13.80	6.97	12.81	0.00	5.83

Table 4-12. Statistics for All Alternatives under **Action 2** assuming **Alternative 3** under **Action 1**

Statistic	Additional Shares Alt2a	Final Shares Alt2a	Additional Shares Alt2b	Final Shares Alt2b	Additional Shares Alt3a	Final Shares Alt3a	Additional Shares Alt3b	Final Shares Alt3b	Additional Shares Alt4	Final Shares Alt4	Additional Shares Alt5	Final Shares Alt5
Minimum Share	2.58	3.02	2.58	2.97	0.00	0.54	0.02	0.44	0.25	0.60	5.15	5.50
Maximum Share	16.37	25.44	9.81	23.06	27.60	36.67	14.47	27.72	11.51	27.94	5.15	21.58
Total Shares	41.20	100.00	41.20	100.00	41.20	100.00	41.20	100.00	41.20	100.00	41.20	100.00
Median Share	2.96	13.09	3.97	13.13	0.77	12.39	2.78	12.93	5.34	12.96	5.15	12.77
Mean Share	5.15	12.50	5.15	12.50	5.15	12.50	5.15	12.50	5.15	12.50	5.15	12.50
Standard Deviation	4.75	8.25	3.01	7.96	9.49	12.10	6.02	10.49	4.14	10.04	0.00	5.90

4.2.3 Social Effects

Alternative 1 (No Action) would not redistribute reverted shares to active wreckfish participants and would result in the same negative social impacts as those described for **Action 1, Alternative 1 (No Action)**.

All other alternatives and options would result in positive social impacts as they would redistribute the reverted shares to active shareholders with the difference between the remaining alternatives and options being in the redistribution method. These alternatives and options are reliant on the alternatives selected in **Action 1** (**Alternative 2** of **Action 1** would include the redistribution of 54.45% of shares to 7 shareholders; whereas **Alternative 3** of **Action 1** would include the redistribution of 41.2% of shares to 8 shareholders).

Table 4-11 in the Economic Effects section (**Section 4.2.2**) details the statistics for **Alternatives 2 through 5** assuming **Alternative 2** of **Action 1**is selected. **Table 4-12** in the Economic Effects section details the statistics for **Alternatives 2 through 5** assuming **Alternative 3** of **Action 1**is selected. The differences in the various alternatives and actions on individual shareholders are evident from the material provided in these statistical tables including each option's final maximum number of shares (with the largest shareholder holding the maximum share), minimum number of shares, and median number of shares.

As was discussed in the Biological Effects section, **Alternative 2** has a high likelihood of being perceived as a fair redistribution method and thus being more socially acceptable because of its mixed method which would revert shares to remaining shareholders based on 50% equal allocation plus 50% landings history. **Option a** of **Alternative 2** which would redistribute reverted shares to remaining shareholders based on 50% equal allocation plus 50% landings history in fishing years 2009/10 to 2010/11would benefit shareholders that are new to the fishery; whereas **Option b** of **Alternative 2** which would redistribute reverted shares to remaining shareholders based on 50% equal allocation plus 50% landings history in fishing years 2006/07 to 2010/11 would benefit shareholders with a longer landing history.

As with **Alternative 2, Option a** under **Alternative 3** would benefit shareholders that new to the fishery the fishery because this alternative would redistribute reverted shares to remaining shareholders based on landings history in the fishing years 2009/10 to 2010/11. Conversely, **Option b** of **Alternative 3** would benefit shareholders with a longer landing history because this alternative would redistribute reverted shares to remaining shareholders based on landings history in fishing years 2006/07 to 2010/11. **Alternative 3** also has a high likelihood of being perceived as a fair redistribution method because it is based on past participation.

Alternative 4 would redistribute reverted shares based on proportion of remaining shares held by each remaining shareholder after inactive shares are reverted. Thus, **Alternative 4** would benefit shareholders who have recently purchased additional or new shares. Although, this alternative would not necessarily reflect past landings patterns, **Alternative 4** would provide protection and social benefits for shareholders who have recently invested in the fishery through the purchase of additional shares.

Alternative 5 would redistribute reverted shares equally among all the remaining shareholders which would benefit those participants who hold a smaller number of shares because the smaller shareholders would be granted access to a larger portion of the resource than in the past with this alternative; whereas **Alternative 5** would negatively impact those participants who hold a larger number of shares since the distribution of shares equally would not allow these larger shareholders to fish continue to fish at the same level as in the past.

4.2.4 Administrative Effects

Alternative 1 (No Action) would result in the lowest administrative burden of all the Action 2 alternatives considered since it would require no increase in staff time or cost to redistribute reverted shares. **Alternative 2** would result in the greatest administrative burden in the form of staff time and cost to calculate the number of shares each shareholder would receive and then distribute the shares accordingly. **Alternative 2** would require the greatest level of computation including 50% of equal allocation among active shareholders, as well as 50% of landings history. Once the number of shares to be received by each entity is established, SERO would issue letters of explanation along with the reallocated shares to each respective shareholder. The administrative impacts of **Alternative 3** would be slightly less than **Alternative 2** since only one calculation would be required to determine how many shares each shareholder would receive. Under **Alternative 3**, the landings for each shareholder during the selected time series would be totaled. That total would then be compared to the total landings for the fishery during the same time. The proportion of the total fishery's landings that each shareholder is responsible for would determine how many inactive shares each shareholder would receive. The same share distribution process described under **Alternative 2** would follow once the number of reallocated shares is established.

Alternative 4 would result in an increase in cost and staff time burdens similar to that of **Alternative 3**. Instead of basing redistribution on landings, SERO staff would be responsible for issuing the correct number of reverted shares based on the proportion of shares already held by each qualifying entity. The number of shares held by each shareholder (after shares have been reverted) would be calculated as a percentage of the number of total active shares held by all active shareholders. Those with the largest percentage of shareholdings would receive the largest proportion of reverted shares. The share distribution process would be the same under **Alternatives 2** and **3** where a letter would be sent to the active shareholder informing them of how many shares that have been re-allocated to them along with the shares themselves. **Alternative 5** would incur the lowest administrative impact after **Alternative 1 (No Action)** since all reverted shares would be distributed equally among the remaining shareholders regardless of their landings history or the number of shares they currently hold.

When redistributing shares, the share cap chosen under the following action would need to be taken into account. If redistribution of reverted shares results in any entity exceeding the share cap the Council could allow those individuals time to sell those shares, or the Council could choose not to redistribute any shares that would exceed the share cap. If the Council allows excess shares to be sold, the administrative impacts under **Alternatives 2-5** would increase proportionately with the number of shares that must be sold.

4.2.5 Council Conclusions

4.3 Action 3. Establish a share cap.

Alternative 1: No Action. Do not establish share cap.

Alternative 2: Establish share cap as 15% of the total shares.

Alternative 3: Establish share cap as 25% of the total shares.

Alternative 4: Establish share cap as 49% of the total shares.

Alternative 5: Establish share cap as 65% of the total shares.

Alternative 6: Establish share cap as the percentage of total shares held by largest shareholder after redistribution.

4.3.1 Biological Effects

Establishing share caps is an IFQ management measure required by implementing provision of the Magnuson-Stevens Act. The wreckfish individual transferable quota (ITQ) program in the South Atlantic has not previously had a mechanism to ensure that limited access privilege holders do not acquire excessive shares of the total IFQ program as required by the Magnuson-Stevens Act; therefore, Amendment 20A is addressing this mandate along with several other wreckfish shareholder issues. Under **Alternative 1 (No Action),** a cap on shares would not be implemented and the Wreckfish FMP would not comply with the Magnuson-Stevens Act mandates for limited access privilege programs. For this reason, **Alternative 1 (No Action)** is the least practical of all the alternatives considered, but would also result in no change to the biological environment from the status quo.

The level at which the Council chooses to cap total shares held by any one entity would not be expected to impact the biological environment. Regardless of the level at which shares are capped, the fishery may not exceed the proposed commercial ACL of 237,500 pounds ww in the Comprehensive ACL Amendment (SAFMC 2011), without triggering corrective accountability measures (AMs) also proposed in the Comprehensive ACL Amendment (SAFMC 2011). Capping the number of shares held by a single shareholder would not result in an increase or decrease in overall harvest of wreckfish in the commercial sector unless a large number of shares are held by relatively inactive fishermen who may not catch their allocated poundage. However, it is expected that any re-allocated shares would be, for the most part, fished to their respective poundage limits in order to maximize yield among the current universe of active wreckfish fishery participants.

Alternative 2 would ensure that a minimum of seven vessels would be able to participate in the fishery with at least 15% of the shares each. **Alternative 3** was proposed as a mid-point

for analysis between **Alternatives 2** and **4**. **Alternative 4** would prevent any one shareholder from holding the majority of shares in the fishery, and **Alternative 5** represents the highest share percentage (65%) the Council is willing to consider under this action. If the number of shares held by a shareholder decrease significantly, as would likely be the case under **Alternative 2**, those shares would be either be sold or reallocated to other shareholders holding shares in amounts less than the cap. If the excess shares go unfished because they are not sold or reallocated in a timely manner some biological benefit to the species may accrue due to decreased fishing pressure; however, this is an unlikely scenario due to the increasingly restrictive regulatory environment and recent effort shifts into the fishery.

Alternative 6 is the closest to the status quo in that it would allow the entity currently holding the most shares in the fishery to set the share cap. If this entity were to acquire several more shares before the freeze on share transfers takes place, the share cap could be higher than it would be currently. It is anticipated that entities interested in holding the largest proportion of shares among the shareholders are the most likely to fish all the shares. Therefore, biological impacts under **Alternative 6** may be slightly higher than under **Alternatives 2-4**, but may be lower than **Alternative 5** since no shareholder currently holds 65% of the shares. However, as stated previously, the commercial ACL for the wreckfish component of the snapper grouper fishery would be 237,500 pounds ww under the preferred wreckfish ACL alternative in the Comprehensive ACL Amendment (SAFMC 2011). If this ACL is exceeded AMs would be triggered to correct for the overage. Therefore, regardless of how shares are allocated or how efficiently the fishery is prosecuted once streamlined to include only active participants, overall harvest and associated biological effects would be constrained by the proposed commercial ACL.

Establishing a share cap is not likely to result in adverse impacts on protected species. Share caps would not modify the gear used in the wreckfish fishery, nor would it change how the fishery is prosecuted in the South Atlantic. Potential impacts of wreckfish fishing gear on CHAPCs will be addressed in Comprehensive Ecosystem-Based Amendment 3, currently under development. The proposed LOF for 2011 [76 FR 37743, June 28, 2011] includes the wreckfish fishery as part of the snapper-grouper hook-and-line fishery, which is considered a Category III fishery. Category III fisheries are those in which annual mortality and serious injury of a stock is less than or equal to 1 percent of the potential biological removal rate (*i.e.*, a remote likelihood or no known incidental mortality and serious injuries of marine mammals). Because overall fishing effort would be limited to the commercial ACL of 237,000 pounds ww, and because the wreckfish fishery is considered part of a Category III fishery on the 2011 proposed LOF, any increased risk to protected species is likely to be negligible.

4.3.2 Economic Effects

Table 4-13. Number of Shareholders and Shares Exceeding Share cap under Alternatives for **Action 3** for Each Alternative under **Action 2** Assuming **Alternative 2** under **Action 1**

Alternative under Action 2	Alt2	Alt3	Alt4	Alt5	Alt6	Alt2	Alt3	Alt4	Alt5	Alt6
2a	3	1	0	0	0	24.46	16.20	0	0	0
2b	4	1	0	0	0	24.47	1.81	0	0	0
3a	3	1	0	0	0	38.89	30.54	0	0	0
3b	3	1	0	0	0	36.50	21.76	0	0	0
4	3	1	0	0	0	33.35	11.07	0	0	0
5	3	0	0	0	0	14.03	0	0	0	0

Table 4-14. Number of Shareholders and Shares Exceeding Share Cap under Alternatives for **Action 3** for Each Alternative under **Action 2** Assuming **Alternative 3** under **Action 1**

Alternative under Action 2	Alt2	Alt3	Alt4	Alt5	Alt6	Alt2	Alt3	Alt4	Alt5	Alt6
2a	2	1	0	0	0	32.24	16.27	0	0	0
2b	2	1	0	0	0	32.24	16.50	0	0	0
3a	2	1	1	0	0	40.28	24.92	.92	0	0
3b	2	1	1	0	0	40.29	25.39	1.39	0	0
4	3	2	0	0	0	38.23	15.90	0	0	0
5	3	1	0	0	0	24.54	7.62	0	0	0

4.3.3 Social Effects

Alternative 1 (No Action) would not implement a share cap on the number of shares held by active shareholders and as mentioned in the Biological Effects section would thus not comply with the mandates for limited access privilege programs under the Magnuson-Stevens Act. Although **Alternative 1 (No Action)** would provide the most social benefits to shareholders holding a large number of shares, it is not practical because of its non-compliance with the mandates for limited access privilege programs.

All other alternatives would establish share caps at levels of 15% (**Alternative 2)**, 25% (**Alternative 3)**, 49% (**Alternative 4**), 65% **(Alternative 5**), and at a level equal to that held by the largest shareholder after redistribution (**Alternative 6**). **Tables 4-13** and **4-14** in the Economic Effects section (**Section 4.3.2)** show in detail the number of shareholders and shares exceeding the share cap under the various alternatives and actions. As explained in the Biological Effects section, **Alternative 2** would ensure that a minimum of seven vessels

would be able to participate in the fishery with at least 15% of the shares each. This would allow for an equal participation by all entities at some point in time; however it would cap the shares of 3 to 4 entities throughout the various alternatives assuming **Alternative 2** under **Action 1**, and would cap the shares of 2 to 3 entities assuming **Alternative 3** under **Action 1**. This would reduce the possible participation of the largest shareholders and although it is assumed the other participants would fish their shares and therefore the commercial sector's ACL would be harvested and the OY would be achieved, this would act in opposition to the underlying social and economic purpose of this amendment which includes not adversely impacting those who depend on wreckfish for their livelihoods. **Alternative 2** could adversely impact these 2 to 4 entities as well as their captains, crew, and could impact the dealers who rely on these shareholders for their landings because it is likely that the distribution of landings would change.

Alternative 3 was proposed as a mid-point for analysis between **Alternatives 2** and **4** and would establish a share cap at 25% which would cap the shares of zero to 1 entity throughout the various alternatives assuming **Alternative 2** under **Action 1**, and would cap the shares of 1 to 2 entities assuming **Alternative 3** under **Action 1**. These entities are the largest shareholders and as was explained above in **Alternative 2**, although other participants would likely fish the shares removed by the implementation of a 25% cap, this would act in opposition to the underlying social and economic purpose of this amendment which includes not adversely impacting those who depend on wreckfish for their livelihoods.

Alternative 4 would establish a share cap at 49% and would prevent any one shareholder from holding the majority of shares in the fishery. The share cap would currently only impact 1 entity (at their current share level with any of the various alternatives and options) under **Action 2** Assuming **Alternative 3** under **Action 1** for **Alternative 3 Option a** (redistribute shares based on landings history in fishing years 2009/10 to 2010/11) and **Alternative 3 Option b** (redistribute shares based on landings history in fishing years 2006/07 to 2010/11).

Alternative 5 would establish a share cap at 65% and currently would not impact any entity at their current share levels with any of the various alternatives and options. If the largest entity were to acquire more shares prior to the freeze on transfers, this could change. If this large share cap were met by an entity, they would have the majority of the shares in the fishery and this could cause negative social impacts including impacts to wreckfish dealers which currently depend on wreckfish landings, but are located in a different delivery area from the large shareholder entity.

As explained in the Biological Effects section, **Alternative 6** is the closest to the status quo in that it would allow the entity currently holding the most shares in the fishery to set the share cap. If this entity were to acquire several more shares before the freeze on share transfers takes place, the share cap could be higher than it would be currently. It is anticipated that entities interested in holding the largest proportion of shares among the shareholders are the most likely to fish all the shares. **Alternative 6** could allow for a possible situation similar to that of **Alternative 5** where one entity would have the majority of the shares in the fishery. Both **Alternative 5** and **Alternative 6** have the capability of

creating a majority shares held by a shareholder situation which could negatively impact other shareholders and dealers; however for years (including the time period of 2006-2011 considered by this amendment) the bulk of wreckfish landings have been delivered primarily by a few individuals and this does not appear to have caused negative social impacts.

4.3.4 Administrative Effects

Establishing a cap on the number of wreckfish shares that can be held by any single entity is largely an administrative action with socio-economic implications. Regardless of the share cap limit chosen for implementation by the Council, any shareholders having shares in excess of the preferred cap amount would be notified of their shareholder status. The Council would also need to determine what would be done with excess shares, for example, the shares could be evenly reallocated to active wreckfish permit holders, or they may be sold on the open market to those who hold less than the maximum percentage of shares. The office of Sustainable Fisheries would be responsible for notifying fishery participants if they hold excess shares, and SERO would be responsible for managing the transfer and/or sale of excess shares. Excess shares would most likely become an issue under **Alternatives 2** and **3**, and least likely under **Alternatives 5** and **6**.

It is reasonable to assume that the lower the share cap is set the more administratively burdensome the action would be due to increased numbers of excess shares. Therefore, **Alternative 2** is likely to incur the greatest cost and time burden followed by **Alternatives 3**, **4**, **6,** and **5**. Depending on Council choice of preferred, dealing with excess shares and associated outreach efforts could constitute a minimal to moderate impact on the administrative environment. **Alternatives 1 (No Action)** and **Alternative 6** are likely to result in the same negligible level of cost and time burden since both would require little to no effort to implement. However, as stated previously, a cap on shares is a Magnuson-Stevens Act requirement and; therefore, if no share cap is established (**Alternative 1 (No Action)**) NOAA Fisheries Service could be subject to significant administrative burdens.

4.3.5 Council Conclusions

4.4 Action 4. Establish an appeals process.

Alternative 1: No Action. Do not specify provisions for an appeals process associated with the IFQ program.

Alternative 2: The Regional Administrator (RA) will review, evaluate, and render final decision on appeals. Filing of an appeal based on landings data must be completed within 90 days of the effective date of the final regulations implementing this Amendment. Hardship arguments will not be considered. The RA will determine the outcome of appeals based on NMFS' logbooks. If NMFS' logbooks are not available, the RA may use state landings records. Appellants must submit NMFS' logbooks or state landings records to support their appeal.

IPT suggestion for Alternative 2 Modification:

Ten percent of the wreckfish shares for fishing year 2012/2013 will be set-aside to resolve appeals for a period of 90-days starting on the effective date of the final rule. The (RA) will review, evaluate, and render final decisions on appeals. Hardship arguments will not be considered. The RA will determine the outcome of appeals based on NMFS' logbooks. If NMFS' logbooks are not available, the RA may use state landings records. Appellants must submit NMFS' logbooks or state landings records to support their appeal. After the appeals process has been terminated, any amount remaining from the set-aside will be distributed back to remaining IFQ shareholders according to the redistribution method selected under Action 2.

Alternative 3: A special board composed of state directors/designees will review, evaluate, and make individual recommendations to RA on appeals. Filing of an appeal must be completed within 90 days of the effective date of the final regulations implementing the IFQ program. Hardship arguments will not be considered.

IPT suggestion for Alternative 3 modification:

Ten percent of the wreckfish shares for fishing year 2012/2013 will be set-aside to resolve appeals for a period of 90-days starting on the effective date of the final rule. The (RA) will review, evaluate, and render final decisions on appeals. Hardship arguments will not be considered. A special board composed of state directors/designees will review, evaluate, and make individual recommendations to RA on appeals. Hardship arguments will not be considered. The special board and the RA will determine the outcome of appeals based on NMFS' logbooks. If NMFS' logbooks are not available, the RA may use state landings records. Appellants must submit NMFS' logbooks or state landings records to support their appeal. After the appeals process has been terminated, any amount remaining from the set aside will be distributed back to remaining IFQ shareholders according to the redistribution method selected under Action 2.

Alternative 4: A percentage of the wreckfish shares for fishing year 2012/13 will be set aside to resolve appeals. After the appeals process has been terminated, any amount remaining from the set-aside will be distributed back to remaining IFQ shareholders according to the redistribution method selected under **Action 3**.

Option a: Three percent of wreckfish shares will be set aside for appeals.

Option b: Five percent of wreckfish shares will be set aside for appeals.

Option c: Ten percent of wreckfish shares will be set aside for appeals.

The IPT suggests **Alternative 4** be combined with **Alternatives 2** and **3** because on its own it is not a reasonable alternative since it only establishes a set aside, not a mechanism for addressing appeals. Additionally, **Alternatives 2** and **3** are not administratively feasible without including a set aside to work with, otherwise it would require shareholders to send back coupons after they have been mailed out, which typically happens at the beginning of the calendar year.

4.4.1 Biological Effects

The wreckfish shareholder's appeals process is largely an administrative action that would have few if any biological implications. **Alternative 1 (No Action)** would result in no adverse biological impacts since it would not increase the number of shareholders allowed to received reverted shares under Action 3 of the Amendment, and thus fish those shares. **Alternative 2** is similar to appeals processes used in the reef fish and red snapper IFQs in the Gulf of Mexico and the proposed endorsement programs for black sea bass and golden tilefish in Amendments 18A and 18B (under development). **Alternative 2** would give shareholders an opportunity to appeal their inactive share status or the number of reverted shares that were issued to them through the redistribution process. If either type of appeal were granted by the Regional Administrator (RA), no adverse biological impact would be expected since more shares would not be created to rectify the appellant's situation; rather, existing shares would be shifted from current shareholders toward the appellant, maintaining effort level that would result from implementing Actions 2 and 3 of this amendment. Biological impacts of **Alternative 3** would be the same as those under **Alternative 2**. The only difference between **Alternatives 2** and **3** is the means by which appeals are considered; i.e., via RA determination, or via special board recommendations presented to the RA. **Alternative 4** may result is some short-term biological benefit during the 2012/2013 wreckfish fishing season, since 10% of the wreckfish shares would not be held by NOAA Fisheries Service and would not be fished unless those shares are distributed to successful appellants. After the 2012/2013 season, the long-term biological impacts of **Alternative 4** would be the same as those under **Alternatives 2** and **3**.

Ideally, the Council could choose either **Alternative 2** or **3** in conjunction with **Alternative 4** in order to utilize a designated set aside percentage of shares for the purposes of satisfying any appeals that may be granted. If **Alternative 4** is not chose alone or in conjunction with **Alternative 2** or **Alternative 3**, holder of coupons, which are mailed out at the beginning of the calendar year may be required to send back a certain portion of their coupons to cover

any granted appeals. It is much easier to set aside a portion of the shares at the start of the share version/redistribution process and given those shares back to the active shareholders after the appeals time limit has expired, than asking shareholder to send back a number of coupons they have already been issued. Biologically there is no long-term difference between the two approaches; however, using an initial set aside of shares for the purposes of satisfying granted appeals would be administratively beneficial.

Because any successful appeals that could be granted under **Alternatives 2** and **3** would be done by shifting the distribution of existing shares among shareholders, no increase in effort would be expected. Therefore, these two alternatives are not likely to result in any adverse impacts on protected or ESA-listed species. **Alternative 4** would be the most biologically beneficial of the alternatives considered since 10% percent of the shares could potentially go unfished during the 2012/2013 wreckfish fishing season if no appeals are granted. Assuming that all shares would have otherwise been fished during the 2012/2013 fishing season, this set-aside would constitute a potential 10% decrease in fishing effort for wreckfish during that time. This small reduction in effort may reduce the risk of wreckfish gear interactions with protected species such as *Acropora* sp. coral; however, such a small reduction would likely be negligible and would not yield long-term benefits to protected species.

4.4.2 Economic Effects

Overall, the economic effects of not establishing an appeals process (**Alternative 1)** would be negative if some active participants do not receive adequate allocations to maintain operations. Establishment of an appeals process thru the Regional Administrator (**Alternative 2**) or with a board (**Alternative 3**) would likely avoid any negative economic effects from **Alternative 1.** A set-aside (**Alternative 4, Options a-b)** would also be expected to produce positive economic impacts by providing a portion of wreckfish shares to be used to address appeals.

4.4.3 Social Effects

Because the reversion and redistribution of shares would be expected to result in increased social benefits relative to the absence of a reversion and redistribution system, social benefits would be expected to be maximized if all appropriate fishermen are determined to hold active shares and receive reverted shares. The exclusion of any appropriate fishermen would be expected to result in decreased social benefits. The absence of an appeals process, as would occur under **Alternative 1 (No Action),** would be expected to increase the likelihood that one or more appropriate qualifiers would have either been deemed inactive and would not receive reverted shares or would not have received the proper amount of reverted shares through some sort of error, resulting in less social benefits. **Alternative 2**, **Alternative 3**, and **Alternative 4** all allow for an appeals process and would be expected to result in greater social benefits than **Alternative 1 (No Action).**

Alternative 2 and **Alternative 3** both provide an appeals process; however the process for coming to a decision is different as are the sources used for making the decision (in **Alternative 2** the Regional Administrator will review, evaluate, and render final decision based on NMFS' logbooks and if NMFS' logbooks are not available, the RA may use state

landings records; whereas in **Alternative 3** a board composed of state directors/designees will review, evaluate, and make individual recommendations to RA on appeals without relying on logbooks or state landings records). **Alternative 2** could be perceived as the fairest method because it is based on the validation of records rather than the recommendations of a board.

Alternative 4 would set aside ten percent of the wreckfish shares for fishing year 2012/13 in order to resolve appeals. After the appeals are settled this alternative would redistribute those shares back to the remaining shareholders according to the method selected under **Action 2**. **Alternative 4** would likely allow for the fewest disturbances among remaining shareholders since it does not require that shares be taken away from other holders in order to resolve appeals as **Alternatives 2** and **3** would require. Although the remaining shareholders would not have access to these additional shares during the fishing year 2012/2013 (if they are not necessary for use during the appeals process), the social benefits of these additional shares would be received the following fishing year. If **Alternative 4** could be chosen in conjunction with **Alternatives 2** or **3**, this would likely provide the least amount of disturbance to remaining shareholders during the 2012/2013 fishing year. Although, this process could negatively impact the remaining shareholders as well as the dealers which rely on wreckfish landings by causing this amount of shares and landings to not be available to them during the fishing year. Shareholders engaged in the appeals process would likely be the most negatively impacted by this year long process, rather than if **Alternatives 2** or **3** were selected alone as they include a shorter time frame for decision making.

4.4.4 Administrative Effects

Alternative 1 (No Action) would result in the lowest administrative burden when compared to the other appeals process alternatives under consideration. Under **Alternative 1(No Action)** no inactive shareholders would have the ability to appeal their non-active status in the commercial wreckfish fishery, and no active shareholders could contest the number of shares that were redistributed to them through **Action 2** of this amendment; therefore, no administrative action would be required. **Alternative 2** would require the individual or entity to submit any and all applicable documentation they feel could prove their status as an active shareholder including any type of landings records, dealer receipts, and logbooks. Those materials would need to be reviewed by SERO staff, as well as the RA to determine the legitimacy of the appellants request for inclusion in the wreckfish fishery, or for issuance of additional reverted shares. Under **Alternatives 2-4** the appellants would only be given a limited amount of time to submit their appeal package, which would subsequently limit the time and cost associated with processing appeals requests. Because Alternative 4 would allow for a full fishing season as the appeal time limit, processing of appeals could go on longer than under **Alternatives 2** and **3**. **Alternative 3** is likely to incur the greatest administrative burden since logistically heavy with the requirement to convene of a group of individuals, which could be a time consuming and costly process.

If **Alternatives 2** or **3** are chosen without also choosing **Alternative 4**, or choosing Alternative 4 alone as a preferred alternative, shareholders would be required to send back a certain percentage of the their share coupons to fulfill any granted appeals. This is because

coupons would have already been sent to shareholders for the 2012/2013 fishing season by the time this amendment is implemented, if approved by the Secretary of Commerce. It is much less administratively burdensome to set aside a percentage of shares at the outset and then redistribute unused shares to active shareholders after the appeals time limit has expired, rather than asking shareholders to send back coupons that have already been issued to them for the 2012/2013 fishing season. Because of the issue of shareholders possibly being required to send back coupons to fulfill granted appeals, **Alternative 4** would have lower administrative impacts when compared to **Alternatives 2** and **3**; however, those impacts would be extended over a longer period of time (one year fishing season compared to 90-days). Alternately, 10% of an already small commercial ACL (compared to the previous quota of 2 million pounds) would be unavailable for the 2012/2013 fishing season, which may cause **Alternative 4** to be the least attractive option for the affected individuals.

4.4.5 Council Conclusions

5.0 Cumulative Effects

5.1 Significant cumulative effects issues associated with the proposed action and assessment goals.

The direct and indirect effects of the proposed action are discussed in detail in (**Section 4.0**). Affected resources, ecosystems, and human communities are outlined in (**Section 3.0**).

5.1.1 Geographic scope of the analysis.

The immediate impact area would be the federal 200-nautical mile limit of the Atlantic off the coasts of North Carolina, South Carolina, Georgia, and east Florida to Key West; specifically, deepwater ecosystems identified in **Section 3.0**.

5.1.2 Timeframe for the analysis.

Wreckfish were added to the snapper grouper fishery management unit in 1990 through Amendment 3 to the FMP. For the purposes of this amendment, the earliest data used is from the implementation year of the wreckfish individual transferable quota (ITQ) program in 1991 through Amendment 5 to the FMP. The time period, on which this amendment focuses, is primarily between the years of 2001 and 2011 when the universe of current shareholders was established. The most recent data used is from the 2010/2011 fishing season.

5.1.3 Other actions affecting the resources, ecosystems, and human communities of concern

The cumulative effects to the human communities are discussed in **Section 4.0.** Listed in the **Section 5.1.5** are other past, present, and reasonably foreseeable actions occurring in the South Atlantic region. These actions, when added to the proposed management measures, may result in cumulative effects on the biophysical environment.

5.1.4 Past, Present, and Future Fishery-related actions affecting South Atlantic wreckfish.

A. Past

Recently implemented amendments to the FMP have resulted in an increasingly restrictive regulatory environment for the snapper grouper fishery in the South Atlantic. Therefore, effort shifts into other less capitalized components of the snapper grouper fishery have and are currently taking place. It is possible that such effort shifting may impact the wreckfish fishery as fishermen seek alternative means of fishing-related income. However, because wreckfish harvest will soon be limited to a relatively low annual catch limit (ACL), negative impacts on the stock are likely to be negligible. The reader is referred to **Section 1.3** and **Appendix C.** for past regulatory activity for snapper grouper.

B. Present

The Comprehensive ACL Amendment is currently under development and includes actions to establish an ACL of 237,500 pounds ww for the commercial sector, and allocates 5% of the total allowable catch to the recreational sector, which would have an ACL of 12,500 pounds ww. The Comprehensive ACL Amendment also specifies accountability measures (AMs) for the commercial and recreational sectors that would limit harvest in both sectors to their respective ACLs, and if an ACL is exceeded corrective action would be taken to account for the overage. Amendment 20B to the FMP is also under development, which would updated the current wreckfish ITQ system to bring the fishery into compliance with Magnuson-Stevens Act limited access privilege program requirements.

C. Reasonably Foreseeable Future

In the future the Council may consider an action to prohibit deep-dropping within the South Atlantic coral habitat areas of particular concern (CHAPCs) designated in the Comprehensive Ecosystem-Based Amendment I. A prohibition of this type of fishing activity would impact prosecution of the wreckfish fishery in the areas where the subject CHAPCs have been established.

5.1.5 Non-Council and other non-fishery related actions, including natural events affecting wreckfish.

Non-Council, non-fishery related events such as hurricanes, fuel price fluctuations, and oil spills do periodically occur and could affect the wreckfish component of the snapper grouper fishery. However, the extent to which the wreckfish stock is impacted by such events cannot be determined at this time. It is assumed that events leading to decreased fishing effort would benefit the species and events that lead to increased pressure on the stock or adverse environmental conditions would result in negative impacts for the species. Specifically, the BP/Deepwater Horizon Oil spill, which occurred April 20, 2010, did not result in documented adverse impacts to South Atlantic snapper grouper species. Oil from that spill event was not detected in the South Atlantic region, and therefore, no short-term impacts are expected from the oil spill event. However, the long-term impacts of the spill will in all regions of the southeast will continue to be monitored by NOAA Fisheries Service and several state and local entities.

5.1.6 Characterization of the resources, ecosystem, and human communities identified in scoping in terms of their response to change and capacity to withstand stresses.

Wreckfish are a long-lived deepwater species, and the southeastern stock is considered relatively data poor. Because wreckfish have a vast range and may experience fishing pressure in other regions of the world while in their juvenile state, assessing the U.S. wreckfish stock's ability to withstand stresses such as increased fishing pressure or uneven sex ratios is extremely difficult. No issues regarding characterization of the resources,

ecosystem, and human communities were identified during the scoping process. However, because of the specie' biological characteristics, it may be assumed that impacts of increased fishing pressure or habitat loss would be slow to be detected and would require significant time to correct.

5.1.7 Characterization of the stresses affecting these resources, ecosystems, and human communities and their relation to regulatory thresholds.

Stresses affecting the wreckfish stock include fishing pressure in most areas of the world where they exist at various stages of their lifecycle. Stresses affecting the wreckfish ecosystem may include the use of potentially destructive fishing gear used to harvest the species. Stresses affecting the human communities which rely on wreckfish as a source of income include highly variable fuel prices, and an ever-increasingly complex regulatory environment. Together these factors are influenced by regulatory thresholds in that the Magnuson-Stevens Act requires all overfishing to cease by 2010, and to limit harvest of any federally-managed species to the ACL. Regulations to achieve these ends can be highly restrictive and could contribute to effort shifting into other fisheries that are less restricted, and reductions in overall fishing effort, which could benefit the species.

5.1.8 Baseline condition for the resources, ecosystems, and human communities.

According to the 2010 Status of Fisheries (NMFS 2010), wreckfish are not undergoing overfishing and their overfished status is unknown. During the development process for the Comprehensive ACL Amendment the South Atlantic Council's Scientific and Statistical Committee (SSC) stated that the 2001 assessment (Vaughan et al. 2001) indicated depletion at higher historical levels of effort and that the catch reductions appeared to have come mainly from gear restrictions, the spawning season closure, and ITQ implementation. Since stock size cannot be projected, an estimate of the overfishing limit from the 2001 assessment could not be produced. Although an estimate of F_{MSY} exists, it cannot be applied to current stock biomass. A recent estimate of F is close to F_{MSY}, so increasing F could lead to overfishing if there were increases in catch. Even though B_{MSY} is unknown, fishing at F_{MSY} on a stock that is below B_{MSY} is acceptable for a stock that is not overfished. Therefore, the SSC recommended setting the proposed allowable biological catch at the average historical catch (1997-recent) of 250,000 lbs ww in September 2010. Due to confidentially of data, a more precise level could not be set. This level of harvest would cap effort in the wreckfish fishery where it is currently.

5.1.9 Important cause-and-effect relationships between human activities and resources, ecosystems, and human communities.

The relationship between human activities and biophysical ecosystems within the context of this amendment is solely related to extractive activities and the installment of regulations as outlined in **Table 5-1**.

Table 5-1. Relationship between Council action and wreckfish/fishery response

Action	Implementation Date	Action Taken	Species/Fishery Response
Amendment 3 to the FMP	1990	Wreckfish added to the FMP, required annual permit to fish for, land or sell wreckfish; Established a control date of March 28, 1990 for the area bounded by 33° and 30° N. latitude; Established a fishing year beginning 4/16; Established a process whereby annual quotas would be specified; Implemented a 10,000 pound trip limit and a 1/15-4/15 season closure.	Previously unregulated harvest was brought under control, and landings could be monitored. Spawning populations were protected.
Amendment 5 to the FMP	1991	Establish the wreckfish ITQ system.	Limited participants in the fishery to promote a sustainable fishery. Fishery participation dropped significantly over the next 20 years. No overfishing occurring.
Comprehensive ACL Amendment	2011	Established ACLs and AMs for wreckfish.	Limited total harvest in commercial and recreational sectors to the ACLs. Prevents overfishing via AMs when triggered.
Amendment 20A to the FMP	2012	Redistribute inactive shares to active fishery participants.	Once inactive shares are able to be fished, but harvest is still limited to the commercial ACL so

			no negative impacts to the stock.
Amendment 20B to the FMP	Projected 2013	Update the wreckfish ITQ system.	Brings the fishery into compliance with Magnuson-Stevens Act requirements. No impacts on the stock.
Comprehensive Ecosystem-Based Amendment III	Projected 2013-2014	Address deep-droping in CHAPCs	Could protect CHAPCs from gear interactions.

5.1.10 Magnitude and significance of cumulative effects.

Defining shares, establishing a share cap, and redistributing once inactiveshares for the wreckfish fishery combined with past, present, and future actions as applied to the wreckfish fishery, are not expected to result in any significant cumulative impacts on the biological environment. The majority of actions contained in this and other wreckfish amendments are largely administrative in nature with socioeconomic implications rather than biological impacts. Therefore, the magnitude and/or significance of actions contained within this amendment are considered extremely small and would not result in cumulative modifications to the biological environment.

5.1.11 Alternatives to avoid, minimize, or mitigate significant cumulative effects.

The cumulative effects on the biophysical environment are expected to be negligible. Therefore, avoidance, minimization, and mitigation are not necessary.

5.1.12 Monitoring the cumulative effects of the selected alternative and adaptation of management measures.

The effects of the proposed actions are, and will continue to be, monitored through collection of data by NOAA Fisheries Service, states, life history studies, and other scientific observations.

5.1.13 Effects on protected species

ESA-listed species that occur within areas where the action area would be located and that may be impacted by unrelated, future, non-federal activities reasonably certain to occur within the action area include several species of marine mammals, sea turtles, and fish. The actions in this amendment are not expected to negatively affect any ESA-listed species if implemented through rulemaking.

5.2 Socioeconomic

The overall cumulative socioeconomic effects from actions that would revert inactive shares and redistribute them to active participants will likely be positive in the long term for active participants, but may have some negative effects for inactive shareholders and possibly for future participants. For active fishermen, actions that would revert shares and re-allocate shares will allow them to maintain operation size and to avoid loss of investment for those who bought shares. With the new ACL, these fishermen will not have enough shares to harvest at the same level, and would need to buy or lease shares in order to continue operating at the same scale. For inactive shareholders, the process of removing shares from their possession without compensation may incur negative socioeconomic impacts because they may have planned to use the shares to harvest wreckfish at a future time. Additionally, reversion of shares may be perceived as conflicting with the fundamentals of ITQ programs, (long-tem ownership of shares). The proposed actions will also cause some consolidation of the wreckfish fishery, which may hinder future participants from entering the fishery if they cannot buy or lease shares. However, with the new ACL for this fishery, it is likely that no action will result in the decline of wreckfish harvest and potential negative impacts on active fishermen.

6.0 Other Things to Consider

6.1 Unavoidable Adverse Effects

The regulatory actions proposed in Snapper Grouper Amendment 20A would apply to the wreckfish fisheries of the South Atlantic. There are no unavoidable adverse effects expected through the implementation of these actions. However, actions in this amendment are needed for the continuation of the wreckfish fishery under the ITQ program. If no action is taken, the wreckfish fishermen may not have the economic incentives to continue, which would essentially leave the wreckfish fishery participants without a fishery.

6.2 Effects of the Fishery on the Environment

The biological impacts of the proposed actions are described in **Section 4.0**, including impacts on habitat. No actions proposed by this amendment are expected to have any adverse impacts on EFH or EFH-HAPCs for managed species. This amendment modifies the structure of the wreckfish ITQ program and all of the actions are administrative in nature. However, the action alternatives in the amendment would allow for the continuation of the fishery through the restructuring of the ITQ program. Without this restructuring, the fishery would not have the economic incentive to continue.

6.3 Effects on Ocean and Coastal Habitats

The actions and alternatives proposed by this amendment are not expected to have any adverse effect on the ocean and coastal habitat. This amendment modifies the structure of the wreckfish ITQ program and all of the actions are administrative in nature.

6.4 Relationship of Short-Term Uses and Long-Term Productivity

The purpose of this amendment is to make modifications to the wreckfish ITQ program to alleviate some concerns with the level of fishing allowed due to the approval and pending implementation of the Comprehensive ACL amendment. Amendment 20A will adjust the distribution of wreckfish shares in order to remove latent effort from the commercial sector and allow the commercial sector's ACL to be harvested and thereby achieve Optimum Yield (OY) in the fishery. Management actions proposed in this Amendment will: 1) define revert latent wreckfish shares; 2) define a cap on the number of shares one entity may own; 3) redistribute reverted shares among remaining shareholders; and 4) establish an appeals process. In the short term this will allow for the continuation of the wreckfish fishery. The actions would not allow for increased effort in the fishery and the effects of the fishery would not have any impact on the long term productivity of the wreckfish fishery.

6.5 Irreversible and Irretrievable Commitments of Resources

Irreversible commitments are defined as commitments which cannot be reversed, except perhaps in the extreme long-term, whereas irretrievable commitments are lost for a period of time. None of the actions proposed by this amendment would result in irreversible or irretrievable commitments of resources.

6.6 Monitoring and Mitigation

The actions and alternatives proposed by this amendment are not expected to have any impact on the monitoring and mitigation measures imposed by the wreckfish fishery. This amendment modifies the structure of the wreckfish ITQ program and all of the actions are administrative in nature. All of the current monitoring and mitigation measures (See Section XX) for the wreckfish fishery will continue.

6.7 Effects of the Fishery Associated with Climate Change

How global climate changes will affect Gulf of Mexico and South Atlantic fisheries is unclear. Climate change can impact marine ecosystems through ocean warming by increased thermal stratification, reduced upwelling, sea level rise; and through increases in wave height and frequency, loss of sea ice, and increased risk of diseases in marine biota. Decreases in surface ocean pH due to absorption of anthropogenic CO_2 emissions may impact a wide range of organisms and ecosystems, particularly organism that absorb calcium from surface waters, such as corals and crustaceans (IPCC 2007, and references therein). The actions proposed in this amendment are administrative in nature and will have no impact on the wreckfish fishery operations with regards to climate change.

6.8 Unavailable or Incomplete Information

The Council on Environmental Quality, in its implementing regulations for the National Environmental Policy Act, addressed incomplete of unavailable information at 40 CFR 1502.22 (a) and (b). That direction has been considered. There are two tests to be applied: (1) does the incomplete or unavailable information involve "reasonable foreseeable adverse effects…" and (2) is the information about these effects "essential to a reasoned choice among alternatives…"

Stock assessments have not been conducted on wreckfish. Status determinations for these species were derived through review of data by the South Atlantic Council and the SSC and are considered the best available information.

7.0 Fishery Impact Statement

In Progress

7.5 Note for CEQ Guidance to Section 1502.22

In accordance with the CEQ Guidance for 40 CFR Section 1502.22 of the NEPA (1986), the Council has made "reasonable efforts, in the light of overall costs and state of the art, to obtain missing information which, in its judgment, is important to evaluating significant adverse impacts on the human environment"…At this time, the Council has made reasonable efforts in light of the costs, to obtain additional social and community information in order to analyze the social impacts of the proposed actions and alternatives. However, additional sociologists or anthropologists and funding are needed to conduct community surveys and needed enthnographies that would allow a comprehensive analysis.

7.6 Environmental Justice Considerations

Executive Order 12898 mandates that each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions. Federal agency responsibilities under this Executive Order include conducting their programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons from participation in, denying persons the benefit of, or subjecting persons to discrimination under, such programs, policies and activities, because of their race, color, or national origin. Furthermore, each federal agency responsibility set forth under this Executive Order shall apply equally to Native American programs.

Specifically, federal agencies shall, to the maximum extent practicable: conduct human health and environmental research and analysis; collect human health and environmental data; collect, maintain, and analyze information on the consumption patterns of those who principally rely on fish and/or wildlife for subsistence; allow for public participation and access to information relating to the incorporation of environmental justice principals in Federal agency programs or policies; and share information and eliminate unnecessary duplication of efforts through the use of existing data systems and cooperative agreements among Federal agencies and with State, local, and tribal governments.

The Council conducted XX scoping meetings for this amendment in which the public was invited to provide input on actions contained therein. Comments received were considered during the development of this amendment, and no environmental justice issues were raised during the scoping process. No Native American programs would be affected by actions contained within this amendment; therefore no tribal consultation has been initiated.

8.0 Other Applicable Law

8.1 Administrative Procedures Act

All federal rulemaking is governed under the provisions of the Administrative Procedures Act (APA) (5 U.S.C. Subchapter II), which establishes a "notice and comment" procedure to enable public participation in the rulemaking process. Under the APA, 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. This amendment complies with the provisions of the APA through the Council's extensive use of public meetings, requests for comments and consideration of comments. The proposed rule associated with this amendment will have request for public comments which complies with the APA.

8.2 Information Quality Act

The Information Quality Act (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 Information Quality Act. This document has used the best available information and made a broad presentation thereof. The process of public review of this document provides an opportunity for comment and challenge to this information, as well as for the provision of additional information.

The information contained in this document was developed using best available scientific information. Therefore, this Amendment and EIS are in compliance with the IQA.

8.3 Coastal Zone Management Act

Section 307(c)(1) of the federal Coastal Zone Management Act (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 South Atlantic 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. Based on the analysis of the environmental consequences of the proposed action in Section 4.0, the Council has concluded this amendment would improve Federal management of deepwater coral ecosystems.

The Council believes this amendment is consistent to the maximum extent practicable with the Coastal Zone Management Plans of Florida, Georgia, South Carolina, and North Carolina. This determination will be submitted to the responsible state agencies under Section 307 of the CZMA administering approved Coastal Zone Management Programs in the States of Florida, South Carolina, Georgia, and North Carolina.

8.4 Endangered Species Act

"The Endangered Species Act (ESA) of 1973 (16 U.S.C. Section 1531 et seq.) requires that federal agencies ensure actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or the habitat designated as critical to their survival and recovery. The ESA requires NOAA Fisheries Service to consult with the appropriate administrative agency (itself for most marine species and the U.S. Fish and Wildlife Service for all remaining species) when proposing an action that may affect threatened or endangered species or adversely modify critical habitat. Consultations are necessary to determine the potential impacts of the proposed action. They are concluded informally when proposed actions may affect but are "not likely to adversely affect" threatened or endangered species or designated critical habitat. Formal consultations, resulting in a biological opinion, are required when proposed actions may affect and are "likely to adversely affect" threatened or endangered species or adversely modify designated critical habitat.

NOAA Fisheries Service completed a biological opinion in 2006 evaluating the impacts of the continued authorization of the South Atlantic snapper grouper fishery under the snapper grouper FMP and Amendment 13C (NMFS 2006) on ESA-listed species (see **Section 3.2.3**). The opinion stated the fishery was not likely to adversely affect northern right whale critical habitat, seabirds, or marine mammals (see NMFS 2006 for discussion on these species). However, the opinion did state that the snapper grouper fishery would adversely affect sea turtles and smalltooth sawfish, but would not jeopardize their continued existence. An incidental take statement was issued for green, hawksbill, Kemp's ridley, leatherback, and loggerhead sea turtles, as well as smalltooth sawfish. Reasonable and prudent measures to minimize the impact of these incidental takes were specified, along with terms and conditions to implement them.

NOAA Fisheries Service conducted an informal section 7 consultation on July 9, 2007, evaluating the impacts of the South Atlantic snapper grouper fishery on ESA-listed *Acropora* species. The consultation concluded that the continued operation of the snapper grouper fishery was not likely to adversely affect newly listed *Acropora* species. On November 26, 2008, a final rule designating *Acropora* critical habitat was published in the *Federal Register*. A memo dated December 2, 2008, evaluated the effects of the continued authorization of the South Atlantic snapper grouper fishery on *Acropora* critical habitat pursuant to section 7. The evaluation concluded the proposed actions are not likely to adversely affect *Acropora* critical habitat.

8.5 Executive Order 12612: Federalism

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 amendment and associated regulations. Therefore, preparation of a Federalism assessment under E.O. 13132 is not necessary.

8.6 Executive Order 12866: Regulatory Planning and Review

E.O. 12866, signed in 1993, requires federal agencies to assess the costs and benefits of their proposed regulations, including distributional impacts, and to select alternatives that maximize net benefits to society. To comply with E.O. 12866, NMFS prepares a Regulatory Impact Review (RIR) for all fishery regulatory actions that implement a new FMP or that significantly amend an existing plan. RIRs provide a comprehensive analysis of the costs and benefits to society associated with proposed regulatory actions, the problems and policy objectives prompting the regulatory proposals, and the major alternatives that could be used to solve the problems. The reviews also serve as the basis for the agency's determinations as to whether proposed regulations are a "significant regulatory action" under the criteria provided in E.O. 12866 and whether proposed regulations will have a significant economic impact on a substantial number of small entities in compliance with the RFA. A regulation is significant if it is likely to result in an annual effect on the economy of at least $100,000,000 or if it has other major economic effects.

In accordance with E.O. 12866, the following is set forth by the Council: (1) this rule is not likely to have an annual effect on the economy of more than $100 million or to adversely affect in a material way the economy, a sector of the economy, productivity, jobs, the environment, public health or safety, or state, local, or tribal governments or communities; (2) this rule is not likely to create any serious inconsistencies or otherwise interfere with any action take or planned by another agency; (3) this rule is not likely to materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights or obligations of recipients thereof; (4) this rule is not likely to raise novel or policy issues arising out of legal mandates, or the principles set forth in the Executive Order; (5) this rule is not controversial.

8.7 Executive Order 12898: Environmental Justice

E.O. 12898 requires that "to the greatest extent practicable and permitted by law…each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations in the United States and its territories and possessions…"

The alternatives being considered in this amendment are not expected to result in any disproportionate adverse human health or environmental effects to minority populations or low-income populations of Florida, North Carolina, South Carolina or Georgia, rather the impacts would be spread across all participants in the golden crab and shrimp fisheries participants regardless of race or income.

8.8 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 including, but not limited to, developing joint partnerships; promoting the restoration of recreational fishing areas that are limited by water quality and habitat degradation; fostering sound aquatic conservation and restoration endeavors; and evaluating the effects of Federally-funded, permitted, or authorized actions on aquatic systems and evaluating the effects of Federally-funded, permitted, or authorized actions on aquatic systems and recreational fisheries, and documenting those effects. 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 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 amendment are consistent with the directives of E.O. 12962.

8.9 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 amendment are consistent with the directives of E.O. 13089.

8.10 Executive Order 13158: Marine Protected Areas

E. O. 13158 was signed on May 26, 2000 to strengthen the protection of U.S. ocean and coastal resources through the use of Marine Protected Areas (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 amendment are consistent with the directives of E.O. 13158.

8.11 Marine Mammal Protection Act

"The Marine Mammal Protection Act (MMPA) established a moratorium, with certain exceptions, on the taking of marine mammals in U.S. waters and by U.S. citizens on the high seas. It also prohibits the importing of marine mammals and marine mammal products into the United States. Under the MMPA, the Secretary of Commerce (authority delegated to NOAA Fisheries Service) is responsible for the conservation and management of cetaceans and pinnipeds (other than walruses). The Secretary of the Interior is responsible for walruses, sea otters, polar bears, manatees, and dugongs.

In 1994, Congress amended the MMPA, to govern the taking of marine mammals incidental to commercial fishing operations. This amendment required the preparation of stock assessments for all marine mammal stocks in waters under U.S. jurisdiction; development and implementation of take-reduction plans for stocks that may be reduced or are being maintained below their optimum sustainable population levels due to interactions with commercial fisheries; and studies of pinniped-fishery interactions. The MMPA requires a commercial fishery to be placed in one of three categories, based on the relative frequency of incidental serious injuries and mortalities of marine mammals. Category I designates fisheries with frequent serious injuries and mortalities incidental to commercial fishing; Category II designates fisheries with occasional serious injuries and mortalities; and Category III designates fisheries with a remote likelihood or no known serious injuries or mortalities. To legally fish in a Category I and/or II fishery, a fisherman must obtain a marine mammal authorization certificate by registering with the Marine Mammal Authorization Program (50 CFR 229.4), the must accommodate an observer if requested (50 CFR 229.7(c)) and comply with any applicable take reduction plans.

The commercial hook-and-line components of the South Atlantic snapper grouper fishery (i.e., bottom longline, bandit gear, and handline) are listed as part of a Category III fishery (74 FR 27739; June 11, 2009) because there have been no documented interactions between these gears and marine mammals. The black sea bass pot component of the South Atlantic snapper grouper fishery is part of the Atlantic mixed species trap/pot fishery, a Category II fishery, in the 2010 proposed LOF (74 FR 27739; June 11, 2009). The Atlantic mixed species trap/pot fishery designation was created in 2003 (68 FR 41725, July 15, 2003), by combining several separately listed trap/pot fisheries into a single group. This group was designated Category II as a precaution because of known interactions between marine mammals and gears similar to those included in this group. Prior to this consolidation, the black sea bass pot fishery in the South Atlantic was a part of the "U.S. Mid-Atlantic and Southeast U.S. Atlantic Black Sea Bass Trap/Pot" fishery (Category III). There has never been a documented interaction between marine mammals and black sea bass trap/pot gear in the South Atlantic. The actions in Amendment 20 are not expected to negatively impact the provisions of the MMPA."

8.12 Migratory Bird Treaty Act and Executive Order 13186

The Migratory Bird Treaty Act (MBTA) implemented several bilateral treaties for bird conservation between the United States and Great Britain, the United States and Mexico, the United States and Japan, and the United States and the former Union of Soviet Socialists

Republics. Under the MBTA, it is unlawful to pursue, hunt, take, capture, kill, possess, trade, or transport any migratory bird, or any part, nest, or egg of a migratory bird, included in treaties between the, except as permitted by regulations issued by the Department of the Interior (16 U.S.C. 703-712). Violations of the MBTA carry criminal penalties. Any equipment and means of transportation used in activities in violation of the MBTA may be seized by the United States government and, upon conviction, must be forfeited to it.

Executive Order 13186 directs each federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations to develop and implement a memorandum of understanding (MOU) with the U.S. Fish and Wildlife Service (USFWS) to conserve those bird populations. In the instance of unintentional take of migratory birds, NOAA Fisheries Service would develop and use principles, standards, and practices that will lessen the amount of unintentional take in cooperation with the USFWS. Additionally, the MOU would ensure that NEPA analyses evaluate the effects of actions and agency plans on migratory birds, with emphasis on species of concern.

An MOU is currently being developed, which will address the incidental take of migratory birds in commercial fisheries under the jurisdiction of NOAA Fisheries Service. NOAA Fisheries Service must monitor, report, and take steps to reduce the incidental take of seabirds that occurs in fishing operations. The United States has already developed the U.S. National Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries. Under that plan many potential MOU components are already being implemented.

The alternatives considered in this amendment are consistent with the directives of E.O. 13186.

8.13 National Environmental Policy Act

This amendment to the Councils' Golden Crab FMP has been written and organized in a manner that meets NEPA requirements, and thus is a consolidated NEPA document, including a draft Environmental Impact Statement, as described in NOAA Administrative Order (NAO) 216-6, Section 6.03.a.2.

Purpose and Need for Action
The purpose and need for this action are described in **Section 1.1.**

Alternatives
The alternatives for this action are described in **Section 2.0.**

Affected Environment
The affected environment is described in **Section 3.0**.

Impacts of the Alternatives
The impacts of the alternatives on the environment are described in **Section 4.0.**

8.14 National Marine Sanctuaries Act

Under the National Marine Sanctuaries Act (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 the NOAA. The Act 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 two main sanctuaries in the South Atlantic EEZ are Gray's Reef and Florida Keys National Marine Sanctuaries.

The alternatives considered by this document are not expected to have any adverse impacts on the resources managed by the Gray's Reef and Florida Keys National Marine Sanctuaries.

8.15 Paperwork Reduction Act

The purpose of the Paperwork Reduction Act (PRA) is to minimize the burden on the public. The Act 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.

8.16 Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) of 1980 (5 U.S.C. 601 et seq.) requires Federal agencies to assess the impacts of regulatory actions implemented through notice and comment rulemaking procedures on small businesses, small organizations, and small governmental entities, with the goal of minimizing adverse impacts of burdensome regulations and record-keeping requirements on those entities. Under the RFA, NMFS must determine whether a proposed fishery regulation would have a significant economic impact on a substantial number of small entities. If not, a certification to this effect must be prepared and submitted to the Chief Counsel for Advocacy of the Small Business Administration. Alternatively, if a regulation is determined to significantly impact a substantial number of small entities, the Act requires the agency to prepare an initial and final Regulatory Flexibility Analysis to accompany the proposed and final rule, respectively. These analyses, which describe the type and number of small businesses, affected, the nature and size of the impacts, and alternatives that minimize these impacts while accomplishing stated objectives, must be published in the Federal Register in full or in summary for public comment and submitted to the chief counsel for advocacy of the Small Business Administration. Changes to the RFA in June 1996 enable small entities to seek court review of an agency's compliance with the Act's provisions.

This amendment document includes an Initial Regulatory Flexibility Analysis (IRFA) in **Appendix D**.

8.17 Small Business Act

Enacted in 1953, the Small Business Act requires that agencies assist and protect small-business interests to the extent possible to preserve free competitive enterprise. The objectives of the act 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.

8.18 Public Law 99-659: Vessel Safety

Public Law 99-659 amended the MSFCMA to require that a FMP or FMP amendment must consider, and may provide for, temporary adjustments (after consultation with the U.S. Coast Guard and persons utilizing the fishery) regarding access to a fishery for vessels that would be otherwise prevented from participating in the fishery because of safety concerns related to weather or to other ocean conditions.

No vessel would be forced to participate in South Atlantic fisheries under adverse weather or ocean conditions as a result of the imposition of management regulations proposed in this amendment.

No concerns have been raised by South Atlantic fishermen or by the U.S. Coast Guard that the proposed management measures directly or indirectly pose a hazard to crew or vessel safety under adverse weather or ocean conditions. Therefore, this amendment proposes neither procedures for making management adjustments due to vessel safety problems nor procedures to monitor, evaluate, or report on the effects of management measures on vessel or crew safety under adverse weather or ocean conditions.

9.0 List of Preparers

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10.0 List of Agencies, Organizations, and Persons to Whom Copies of the Statement are Sent

Responsible Agency

Amendment:

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List of Agencies, Organizations, and Persons Consulted

SAFMC Habitat and Environmental Protection Panel
SAFMC Coral Advisory Panel
SAFMC Scientific and Statistical Committee
SAFMC Law Enforcement Advisory Panel
SAFMC Snapper Grouper Advisory Panel
SAFMC Golden Crab Advisory Panel
SAFMC Shrimp Advisory Panel
SAFMC Deepwater Shrimp Advisory Panel
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
Gulf and South Atlantic Fisheries Development Foundation
Gulf of Mexico Fishery Management Council
National Marine Fisheries Service
- Washington Office
- Office of Ecology and Conservation
- Southeast Regional Office
- Southeast Fisheries Science Center

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Appendix A. Alternatives Considered but Eliminated from Detailed Analyses

Appendix B. History of Management for the Snapper Grouper Fishery of the South Atlantic Region.

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" 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 (1986)	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 (1988)	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 lbs s-g on board. -Established rebuttable assumption that vessel with s-g on board had harvested such fish in EEZ.
Regulatory Amendment #2 (1988)	03/30/89	PR: 53 FR 32412 FR: 54 FR 8342	-Established 2 artificial reefs off Ft. Pierce, FL as SMZs.
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 (1990)	10/30/90	PR: 55 FR 31406 FR: 55 FR 46213	-Prohibited harvest/possession of goliath grouper in or from the EEZ -Defined overfishing for goliath grouper and other species

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.
Emergency Rule	8/3/90	55 FR 32257	-Added wreckfish to the 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
Emergency Rule Extension	11/1/90	55 FR 40181	-extended the measures implemented via emergency rule on 8/3/90
Amendment #3 (1990)	01/31/91	PR: 55 FR 39023 FR: 56 FR 2443	-Added wreckfish to the FMU; -Defined optimum yield and overfishing -Required permit to fish for, land or sell wreckfish; -Required catch and effort reports from selected, permitted vessels; -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; and -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.

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.
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" limit – lane snapper -10" limit – vermilion snapper (recreational only) -12" limit – red porgy, vermilion snapper (commercial only), gray, yellowtail, mutton, schoolmaster, queen, blackfin, cubera, dog, mahogany, and silk snappers -20" limit – red snapper, gag, and red, black, scamp, yellowfin, and yellowmouth groupers. -28" 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

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.
Amendment #5 (1991)	04/06/92	PR: 56 FR 57302 FR: 57 FR 7886	-Wreckfish: established limited entry system with 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 TAC
Emergency Rule	8/31/92	57 FR 39365	-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	-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 (1992)	07/06/93	FR: 58 FR 36155	-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 (1992)	07/31/93	PR: 58 FR 13732 FR: 58 FR 35895	-Established 8 SMZs off S. Carolina, where only hand-held, hook-and-line gear and spearfishing (excluding powerheads) was allowed.
Amendment #6 (1993)	07/27/94	PR: 59 FR 9721 FR: 59 FR 27242	-commercial quotas for snowy grouper, golden tilefish -commercial trip limits for snowy grouper, golden tilefish, speckled hind, and warsaw grouper -include 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 IFQ system

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.
Amendment #7 (1994)	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 N. Carolina -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 (1994)	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 bsb pot fishery off S. Atlantic states after 04/23/97 was not assured of future access if limited entry program developed.

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.
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 demonstrate landings of any species in SG FMU in 1993, 1994, 1995 or 1996; and have held valid SG permit between 02/11/96 and 02/11/97. -granted transferable permit with unlimited landings if vessel landed ≥ 1,000 lbs. of snapper grouper spp. in any of the years -granted non-transferable permit with 225 lb. trip limit to all other vessels -modified problems, objectives, OY, and overfishing definitions -expanded Council's habitat responsibility -allowed retention of snapper grouper spp. 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.
Regulatory Amendment #7 (1998)	01/29/99	PR: 63 FR 43656 FR: 63 FR 71793	-Established 10 SMZs at artificial reefs off South Carolina.
Interim Rule Request	1/16/98		-Council requested all Amendment 9 measures except black sea bass pot construction changes be implemented as an interim request under MSA
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
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

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.
Amendment #9 (1998)	2/24/99	PR: 63 FR 63276 FR: 64 FR 3624	-Red porgy: 14" length (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" length (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 lbs; began fishing year May 1; prohibited coring. -Vermilion snapper: 11" length (recreational) Gag: 24" length (recreational); no commercial harvest or possession > bag limit, and no purchase or sale, during March and April -Black grouper: 24" length (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 SG without a bag limit: aggregate recreational bag limit 20 fish/person/day, excluding tomtate and blue runners -Vessels with longline gear aboard may only possess snowy, warsaw, yellowedge, and misty grouper, and golden, blueline and sand tilefish.
Amendment #9 (1998) resubmitted	10/13/00	PR: 63 FR 63276 FR: 65 FR 55203	-Commercial trip limit for greater amberjack

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.
Regulatory Amendment #8 (2000)	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
Emergency Interim Rule	09/08/99, expired 08/28/00	64 FR 48324 and 65 FR 10040	-Prohibited harvest or possession of red porgy.
Emergency Action	9/3/99	64 FR 48326	-Reopened the Amendment 8 permit application process
Amendment #10 (1998)	07/14/00	PR: 64 FR 37082 and 64 FR 59152 FR: 65 FR 37292	-Identified EFH and established HAPCs for species in the SG FMU.

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.
Amendment #11 (1998d)	12/02/99	PR: 64 FR 27952 FR: 64 FR 59126	-MSY proxy: goliath and Nassau grouper = 40% static 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 (MSST=3.72 mp, 1995 biomass=1.33 mp); undergoing overfishing (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]*B_{MSY}. MFMT = F_{MSY}

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.
Amendment #12 (2000)	09/22/00	PR: 65 FR 35877 FR: 65 FR 51248	-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 during Jan-April; 1 fish bag limit; 50 lb. bycatch comm. trip limit May-December; modified management options and list of possible framework actions.
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 spp. within the *Oculina* Experimental Closed Area.
Notice of Control Date	10/14/05	70 FR 60058	-The Council is considering 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 (gutted weight) = 151,000 lbs gw in year 1, 118,000 lbs gw in year 2, and 84,000 lbs gw in year 3 onwards. Trip limit = 275 lbs gw in year 1, 175 lbs gw in year 2, and 100 lbs 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 lbs gw, 4,000 lbs gw trip limit until 75% of the quota is taken when the trip limit is reduced to 300 lbs gw. Do not adjust the trip limit downwards unless 75% is captured on or before September 1. Recreational: Limit possession to 1 golden

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.
			tilefish in 5 grouper per person/day aggregate bag limit. 3. Vermilion Snapper Commercial: Quota of 1,100,000 lbs gw. Recreational: 12" size limit. 4. Black Sea Bass Commercial: Commercial quota (gutted weight) of 477,000 lbs gw in year 1, 423,000 lbs gw in year 2, and 309,000 lbs gw in year 3 onwards. Require 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. Require black sea bass pots be removed from the water when the quota is met. Change fishing year from calendar year to June 1 – May 31. Recreational: Recreational allocation of 633,000 lbs gw in year 1, 560,000 lbs gw in year 2, and 409,000 lbs gw in year 3 onwards. Increase minimum size limit from 10" to 11" in year 1 and to 12" in year 2. Reduce recreational bag limit from 20 to 15 per person per day. Change fishing year from the calendar year to June 1 through May 31. 5. Red Porgy Commercial and recreational 1. Retain 14" TL size limit and seasonal closure (retention limited to the bag limit); 2. Specify a commercial quota of 127,000 lbs 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; 3. Increase commercial trip limit from 50 lbs ww to 120 red porgy (210 lbs gw) during May through December; 4. Increase recreational bag limit from one to three red porgy per person per day.
Notice of Control Date	3/8/07	72 FR 60794	-The Council may consider measures to limit participation in the snapper grouper for-hire fishery

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.
Amendment #14 (2007) Sent to NMFS 7/18/07	2/12/09	PR: 73 FR 32281 FR: 74 FR 1621	-Establish 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 (2007)	3/14/08	73 FR 14942	- Establish rebuilding plans and SFA parameters for snowy grouper, black sea bass, and red porgy.
Amendment #15B (2008b)	2/15/10	PR: 74 FR 30569 FR: 74 FR 58902	- Prohibit the sale of bag-limit caught snapper grouper species. -Reduce the effects of incidental hooking on sea turtles and smalltooth sawfish. - Adjust commercial renewal periods and transferability requirements. - Implement plan to monitor and assess bycatch, - Establish reference points for golden tilefish. - Establish allocations for snowy grouper (95% com & 5% rec) and red porgy (50% com & 50% rec).
Amendment #16 (SAFMC 2008c)	7/29/09	PR: 74 FR 6297 FR: 74 FR 30964	-Specify SFA parameters for gag and vermilion snapper -For gag grouper: Specify interim allocations 51%com & 49%rec; rec & com spawning closure January through April; directed com quota=348,440 pounds gutted weight; reduce 5-grouper aggregate to 3-grouper and 2 gag/black to 1 gag/black and exclude captain & crew from possessing bag limit. -For vermilion snapper: Specify interim allocations 68%com & 32%rec; directed com quota split Jan-June=168,501 pounds gutted weight and 155,501 pounds July-Dec; reduce bag limit from 10 to 4 and a rec closed season October through May 15. In addition, the NMFS RA will set new regulations based on new stock assessment. -Require dehooking tools.
Amendment #17A (SAFMC 2010a)	12/3/10	PR: 75 FR 49447 FR: 75 FR	-Specify an ACL and an AM for red snapper with management measures to reduce the probability that catches will

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.
		76874	exceed the stocks' ACL -Specify a rebuilding plan for red snapper -Specify status determination criteria for red snapper -Specify a monitoring program for red snapper
Emergency Rule	12/3/10	75 FR 76890	- Delay the effective date of the area closure for snapper grouper species implemented through Amendment 17A
Amendment #17B (SAFMC 2010b)	January 31, 2011	PR: 75 FR 62488 FR: 75 FR 82280	-Specify ACLs, ACTs, and AMs, where necessary, for 9 species undergoing overfishing. -Modify management measures as needed to limit harvest to the ACL or ACT. -Update the framework procedure for specification of total allowable catch.
Notice of Control Date	12/4/08	TBD	Establishes a control date for the golden tilefish fishery of the South Atlantic
Notice of Control Date	12/4/08	TBD	- Establishes control date for black sea bass pot fishery of the South Atlantic
Amendment #18A (TBD)	TBD	TBD	- Limit participation and effort in the golden tilefish fishery - Modifications to management of the black sea bass pot fishery - Separate snowy grouper quota into regions/states - Separate the gag recreational allocation into regions/states - Change the golden tilefish fishing year - Improve the accuracy, timing, and quantity of fisheries statistics

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.
Amendment #19 (included in Comprehensive Ecosystem-based Amendment 1) (SAFMC 2010c)	7/22/10	PR: 3/26/10 FR: 6/22/10	-Provide presentation of spatial information for Essential Fish Habitat (EFH) and EFH-Habitat Areas of Particular Concern (EFH-HAPC) designations under the Snapper Grouper FMP
Amendment #20	TBD	TBD	-Update wreckfish ITQ according to reauthorized MSFCMA -Establish ACLs, AMs, and management reference points for wreckfish fishery
Amendment #21	TBD	TBD	- Establish effort controls for various species including: trip limits, effort and participation reductions, endorsements, catch shares, regional quotas, and state-by-state quotas.
Amendment #22	TBD	TBD	- Establish measures to maintain long-term red snapper harvest at or below the ACL. Options include trip limits, bag limits, catch shares, tagging programs, endorsements, spawning season/area closures, gear requirements, and special management zones.
Amendment #23 (included in Comprehensive Ecosystem-based Amendment 2)	TBD	TBD	- Designate the Deepwater MPAs as EFH-HAPCs - Limit harvest of snapper grouper species in SC Special Management Zones to the bag limit - Modify sea turtle release gear
Comprehensive ACL Amendment	TBD	TBD	-Establish ABC control rules, establish ABCs, ACLs, and AMs for species not undergoing overfishing -Remove some species from South Atlantic FMU -Specify allocations among the commercial, recreational, and for-hire sectors for species not undergoing overfishing -Limit the total mortality for federally managed species in the South Atlantic to the ACLs

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.
Amendment #24	TBD	TBD	-Specify MSY, rebuilding plan (including ACLs, AMs, and OY), and allocations for red grouper

Appendix C. Regulatory Impact Review

Introduction

The NOAA Fisheries Service (NMFS) requires a Regulatory Impact Review (RIR) for all regulatory actions that are of public interest. The RIR does three things: (1) it provides a comprehensive review of the level and incidence of impacts associated with a proposed or final regulatory action; (2) it provides a review of the problems and policy objectives prompting the regulatory proposals and an evaluation of the major alternatives that could be used to solve the problem; and (3) it ensures that the regulatory agency systematically and comprehensively considers all available alternatives so that the public welfare can be enhanced in the most efficient and cost-effective way. The RIR also serves as the basis for determining whether the proposed regulations are a 'significant regulatory action' under the criteria provided in Executive Order (E.O.) 12866 and provides information that may be used in conducting an analysis of impacts on small business entities pursuant to the Regulatory Flexibility Act (RFA). This RIR analyzes the expected impacts of this action on the golden crab fishery. Additional details on the expected economic effects of the various alternatives in this action are included in **Section 4.0** and are incorporated herein by reference.

Problems and Objectives

The purpose and need, issues, problems, and objectives of the proposed amendment are presented in **Section 1.0** and are incorporated herein by reference. In summary, the purpose of this amendment includes

Methodology and Framework for Analysis

This RIR assesses management measures from the standpoint of determining the resulting changes in costs and benefits to society. To the extent practicable, the net effects of the proposed measures are stated in terms of producer and consumer surplus, changes in profits, and participation by for-hire vessel fishermen and private anglers. In addition, the public and private costs associated with the process of developing and enforcing regulations of this amendment are provided.

Description of the Fishery

Impacts of Management Measures

Details on the economic impacts of all alternatives are included in **Section 4.0** and are included herein by reference. The following discussion provides a summary of the expected effects of the preferred alternatives.

Public and Private Costs of Regulations

The preparation, implementation, enforcement, and monitoring of this or any Federal action involves the expenditure of public and private resources that can be expressed as costs associated with the regulations. Costs associated with this amendment include:

Council costs of document preparation, meetings, public hearings, and information dissemination …….$
NOAA Fisheries administrative costs of document preparation, meetings and review .....$
Annual law enforcement costs.....unknown
TOTAL .....$

Law enforcement currently monitors regulatory compliance in these fisheries under routine operations and does not allocate specific budgetary outlays to these fisheries, nor are increased enforcement budgets expected to be requested to address any component of this action.

Summary of Economic Impacts

Determination of Significant Regulatory Action

Appendix D. Initial Regulatory Flexibility Analysis

Introduction

The purpose of the Regulatory Flexibility Act (RFA) is to establish a principle of regulatory issuance that agencies shall endeavor, consistent with the objectives of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of businesses, organizations, and governmental jurisdictions subject to regulation. To achieve this principle, agencies are required to solicit and consider flexible regulatory proposals and to explain the rationale for their actions to assure that such proposals are given serious consideration. The RFA does not contain any decision criteria; instead, the purpose of the RFA is to inform the agency, as well as the public, of the expected economic impacts of various alternatives contained in the FMP or amendment (including framework management measures and other regulatory actions) and to ensure that the agency considers alternatives that minimize the expected impacts while meeting the goals and objectives of the FMP and applicable statutes.

With certain exceptions, the RFA requires agencies to conduct a regulatory flexibility analysis for each proposed rule. The regulatory flexibility analysis is designed to assess the impacts various regulatory alternatives would have on small entities, including small businesses, and to determine ways to minimize those impacts. In addition to analyses conducted for the RIR, the regulatory flexibility analysis provides: (1) a statement of the reasons why action by the agency is being considered; (2) a succinct statement of the objectives of, and legal basis for the proposed rule; (3) a description and, where feasible, an estimate of the number of small entities to which the proposed rule will apply; (4) a description of the projected reporting, record-keeping, and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirements of the report or record; (5) an identification, to the extent practical, of all relevant Federal rules which may duplicate, overlap, or conflict with the proposed rule; and (6) a description of any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities.

In addition to the information provided in this section, additional information on the expected economic impacts of the proposed action was presented in **Sections 4.0** and **5.0** and is included herein by reference.

Statement of Need for, Objectives of, and Legal Basis for the Rule

The purpose and need, issues, problems, and objectives of the proposed rule are presented in **Section 1.0** and are incorporated herein by reference. The purpose and need, issues, problems, and objectives of the proposed amendment are presented in **Section 1.0** and are incorporated herein by reference. In summary, the purpose of this amendment includes

Identification of All Relevant Federal Rules Which May Duplicate, Overlap, or Conflict with the Proposed Rule

No duplicative, overlapping, or conflicting Federal rules have been identified.

Description and Estimate of the Number of Small Entities to Which the Proposed Rule will Apply

This proposed action is expected to directly impact commercial fishermen. The SBA has established size criteria for all major industry sectors in the U.S. including fish harvesters. A business involved in fish harvesting is classified as a small business if it is independently owned and operated, is not dominant in its field of operation (including its affiliates), and has combined annual receipts not in excess of $4.0 million (NAICS code 114111 and 114112, finfish and shellfish fishing) for all its affiliated operations worldwide.

Description of the Projected Reporting, Record-keeping and Other Compliance Requirements of the Proposed Rule, Including an Estimate of the Classes of Small Entities Which will be Subject to the Requirement and the Type of Professional Skills Necessary for the Preparation of the Report or Records

The proposed actions do not impose any new reporting, record-keeping or other compliance requirements.

Substantial Number of Small Entities Criterion

Significant Economic Impact Criterion

The outcome of 'significant economic impact' can be ascertained by examining two issues: disproportionality and profitability.

Disproportionality: Do the regulations place a substantial number of small entities at a significant competitive disadvantage to large entities?

All entities that are expected to be affected by the proposed rule are considered small entities so the issue of disproportionality does not arise in the present case.

Profitability: Do the regulations significantly reduce profit for a substantial number of small entities?

Description of Significant Alternatives

The Council's preferred alternatives are:

Appendix E. Bycatch Practicability Analysis

The Council is required by MSFCMA §303(a)(11) to establish a standardized bycatch reporting methodology for federal fisheries and to identify and implement conservation and management measures that, to the extent practicable and in the following order: (A) minimize bycatch and (B) minimize the mortality of bycatch that cannot be avoided. The MSFCMA defines bycatch as "fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards. Such term does not include fish released alive under a recreational catch-and-release fishery management program" (MSFCMA §3(2)). Economic discards are species that are discarded because they are undesirable to the harvester. This category of discards generally includes certain species, sizes, and/or sexes with low or no market value. Regulatory discards are species required by regulation to be discarded, but also include fish that may be retained but not sold.

NMFS outlines at 50 CFR §600.350(d)(3)(i) ten factors that should be considered in determining whether a management measure minimizes bycatch or bycatch mortality to the extent practicable. These are:

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

Agency guidance provided at 50 CFR §600.350(d)(3)(ii) suggests the Councils adhere to the precautionary approach found in the Food and Agriculture Organization of the United Nations (FAO) Code of Conduct for Responsible Fisheries (Article 6.5) when faced with uncertainty concerning these ten practicability factors. According to Article 6.5 of the FAO Code of Conduct for Responsible Fisheries, using the absence of adequate scientific information as a reason for postponing or failing to take measures to conserve target species, associated or dependent species, and non-target species and their environment, would not be consistent with a precautionary approach.

Population Effects for the Bycatch Species

Background

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

Ecological Effects Due to Changes in the Bycatch of the Species

Changes in Bycatch of Other Fish Species and Resulting Population and Ecosystem Effects

Effects on Marine Mammals and Birds

Changes in Fishing, Processing, Disposal, and Marketing Costs

Changes in Fishing Practices and Behavior of Fishermen

Changes in Research, Administration, and Enforcement Costs and Management Effectiveness

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

Changes in the Distribution of Benefits and Costs

Social Effects

The Social Effects of the proposed management measures are described in **Section 4.0**.

Conclusion

Appendix F. Summary of Public Comments