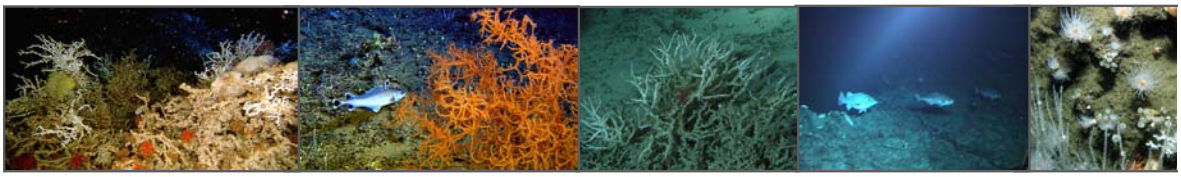
Joint South Atlantic/Gulf of Mexico Generic Headboat Reporting in the South Atlantic Amendment



AMENDMENT 31 TO THE FISHERY MANAGEMENT PLAN FOR THE SNAPPER GROUPER FISHERY OF THE SOUTH ATLANTIC REGION
AMENDMENT 6 TO THE FISHERY MANAGEMENT PLAN FOR THE DOLPHIN AND WAHOO FISHERY OF THE ATLANTIC
AMENDMENT 22 TO THE FISHERY MANAGEMENT PLAN FOR COASTAL MIGRATORY PELAGIC RESOURCES IN THE GULF OF MEXICO AND ATLANTIC REGION

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

Fishery Impact Statement

January 16, 2012

Definitions of Abbreviations and Acronyms Used in the Amendment

ABC	acceptable biological catch
ACL	annual catch limits
AM	accountability measures
ACT	annual catch target
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
CPUE	catch per unit effort
EA	environmental assessment
EEZ	exclusive economic zone
EFH	essential fish habitat
F	a measure of the instantaneous rate of fishing mortality
$F_{30\%SPR}$	fishing mortality that will produce a static SPR = 30%
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
M	natural mortality rate
MARMAP	Marine Resources Monitoring Assessment and Prediction Program
MFMT	maximum fishing mortality threshold
MMPA	Marine Mammal Protection Act
MRFSS	Marine Recreational Fisheries Statistics Survey
MRIP	Marine Recreational Information Program
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
MSST	minimum stock size threshold
MSY	maximum sustainable yield
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
OFL	overfishing limit
OY	optimum yield
RIR	regulatory impact review
SAMFC	South Atlantic Fishery Management Council
SEDAR	Southeast Data Assessment and Review
SEFSC	Southeast Fisheries Science Center
SERO	Southeast Regional Office
SIA	social impact assessment
SPR	spawning potential ratio
SSC	Scientific and Statistical Committee

Joint South Atlantic/Gulf of Mexico Generic Headboat Reporting in the South Atlantic Amendment

Amends the following South Atlantic Fishery Management Plans: Snapper Grouper, Dolphin and Wahoo, and Coastal Migratory Pelagic Resources with Environmental Assessment, Initial Regulatory Flexibility Act Analysis, Regulatory Impact Review, and Fishery Impact Statement

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Proposed actions:	Improve data collection methods.
Lead agency:	FMP Amendment – South Atlantic Fishery Management Council EA - NOAA Fisheries Service
For Further Information Contact:	Robert K. Mahood South Atlantic Fishery Management Council 4055 Faber Place, Suite 201 North Charleston, SC 29405 843-571-4366 866-SAFMC-10 Robert.Mahood@safmc.net Phil Steele NOAA Fisheries, Southeast Region 263 13th Avenue South St. Petersburg, FL 33701 727-824-5301 Phil.Steele@noaa.gov
NOI for CE-BA 3*:	May 23, 2012
Scoping meetings held:	January 24, 26, and January 30-February 2, 2012
Public Hearings held:	August 6-9, 14, and 16, 2012

*This action was originally included in CE-BA 3 but was moved to a separate amendment based on the Council's actions at the December 2012 meeting.

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Preferred Alternative 4. Require that vessels submit fishing records to the Science and Research Director (SRD) weekly or at intervals shorter than a week if notified by the SRD via electronic reporting (via computer or internet). Weekly = 7 days after the end of each week (Sunday).

Preferred Sub-Alternative 4b. Headboat

SUMMARY

For

Joint South Atlantic/Gulf of Mexico Generic Headboat Reporting in the South Atlantic Amendment

South Atlantic region - Amends the Snapper Grouper Fishery Management Plan

South Atlantic, Mid-Atlantic and New England regions - Amends the Dolphin and Wahoo Fishery Management Plan

Gulf of Mexico, South Atlantic and Mid-Atlantic regions - Amends the Coastal Migratory Pelagic Resources Fishery Management Plan

What Actions are the Councils Proposing in the Joint South Atlantic/Gulf of Mexico Generic Headboat Reporting in the South Atlantic Amendment?

The approved action would:

- Modify data reporting for headboat vessels

Which Fisheries Would be Affected?

Actions would affect fisheries for Snapper Grouper, Dolphin and Wahoo, and Coastal Migratory Pelagics (in the South Atlantic Council area only). Actions that would amend the Coastal Migratory Pelagic FMP would apply only to fishermen fishing in South Atlantic waters.

What Data are Currently Being Collected?

Landings information from the Marine Recreational Information Program (MRIP) and the NOAA Fisheries Headboat Survey provide information on landed and discarded catch in the recreational sector (for-hire and private).

What are the Current Coverage Levels for Data Collection Programs?

For-hire vessels (charter and headboat)
For-hire vessels selected to report by the Science and Research Director (SRD) must maintain a fishing record for each trip, or a portion of such trips as specified by the Science and Research Director, and on forms provided by the Science and Research Director. Furthermore, the owner or operator of a vessel for which a charter vessel/headboat permit for South Atlantic snapper-grouper has been issued, who is selected to report by the Science and Research Director must participate in the National Marine Fisheries Service-sponsored electronic logbook and/or video monitoring reporting program as directed by the Science and Research Director. Completed records for charter vessels must be submitted to the Science and Research Director weekly, postmarked no later than 7 days after the end of each trip (Sunday) (Snapper Grouper Amendment 4; SAFMC 1991). Completed records for headboats must be submitted to the Science and Research Director monthly and must either be made available to an authorized statistical reporting agent or be postmarked no later than 7 days after the end of each month (Snapper Grouper Amendment 4; SAFMC 1991).

Currently, harvest and bycatch in the private and for-hire charter vessel sector is monitored by the Marine Recreational Fisheries Statistical Survey and the Marine Recreational Information

Program. A 10% sample of charter vessel captains is called weekly to obtain trip level information. In addition, the standard dockside intercept data are collected from charter vessels and charter vessel clients are sampled through the standard random digital dialing of coastal households. Other improvements have been and will be made that should result in better estimating recreational catches and the variances around those catch estimates. Currently, landings data are provided 45 days following the end of a two-month wave.

Harvest from headboats is monitored by NOAA Fisheries at the Southeast Fisheries Science Center's Beaufort Laboratory. Collection of discard data began in 2004. Daily catch records are obtained for all trips and are filled out by the headboat operators, or in some cases by NOAA Fisheries approved headboat samplers based on personal communication with the captain or crew. Headboat trips are sub-sampled for data on species lengths and weights. Biological samples (scales, otoliths, spines, reproductive tissues, and stomachs) are obtained as time permits. Lengths of discarded fish are occasionally obtained but these data are not part of the headboat database.

For-Hire Pilot Projects

There have been two data collection projects in the Gulf of Mexico to evaluate programs with the goal of improving accuracy and timeliness of fisheries data from for-hire vessels. In September 2010, a one-year For-Hire Electronic Pilot Study was conducted in the Gulf of Mexico to test the feasibility of a mandatory electronic logbook reporting system, as well as methods to independently verify self-reported catch and effort data in the for-hire fishery. The expectation with a mandatory reporting system was that a complete census of effort and catch among all participants would be obtained. However, methods to independently validate self-reported fisheries data are needed to certify whether a true and accurate census of catch and effort is actually achieved, and to account for instances when it is not. Tracking methods are also important with any mandatory reporting requirement so that late or missing reports can be identified and participants in the fishery can be contacted in a timely manner. The full report from this project is expected to be completed in early 2013.

The iSnapper Electronic Logbook Project was conducted in the Gulf of Mexico using charter vessels and headboats during the 2011 and 2012 recreational red snapper fishing seasons. This pilot program distributed iPhones/iPads pre-loaded with the iSnapper application to charter and headboat captains in the for-hire sector in Texas, Louisiana, Alabama, and Florida. These for-hire fishing vessels targeted both reef fish (e.g., red snapper) and a variety of other pelagic species (e.g., king mackerel). In 2011, 16 captains participated from June 1 through July 18, 2011. Collectively, the group reported catches data from 327 trips, harvested more than 10,000 fish of five major species, and provided information on discard rates and fish size.

Voluntary Angler Surveys, such as those used in the iSnapper application, can provide useful data but there are concerns about such data being susceptible to bias. The Mid-Atlantic Council, in cooperation with the Marine Recreational Information Program, brought together a group of people involved in such programs in February 2012. They concluded that "Opt-in angler data may be useful for certain kinds of data that are not likely to be susceptible to bias, although it is difficult to anticipate what these data may be. However, the unique characteristics of self-

selected participants are likely to introduce bias into certain kinds of data, especially catch and effort data. Managers must be made aware of such biases, and the likely extent of such biases should be examined when implementation of these programs is considered." The Summary of the February 2, 2012 Workshop is included as **Appendix J**.

The Southeast Region Headboat Survey (SRHS) received FY2012 funding from the MRIP Operations Team for; *Pilot Project, PhaseII: Survey-Wide Implementation of Electronic Logbook Reporting on Headboats Operating in the U.S. South Atlantic and Gulf of Mexico*. The objective of this project is to develop and implement a web-based portal for electronic logbook data entry in the U.S. Atlantic and Gulf of Mexico headboat sector. This project will include development by a software contractor of additional features of the web-based data form useful to users and scientists (e.g., depth, location, on-demand fish identification catalogue, etc). SRHS staff will provide data validation via review of submitted data, helping to clear up any confusion that any of the participants may be having with data elements. These procedures will be tested for the first 60 days of the project, with an estimated rollout date of early 2013. Senior SRHS staff at the Beaufort Laboratory will work with NMFS Southeast Regional Office (SERO) legal staff and Council staff to ensure that the proper legal framework exists or can be put in place to ensure that electronic logbook reporting becomes the accepted procedure, as well as to ensure that timely and complete reporting is linked to the ability to possess and keep a for-hire permit in the applicable fisheries.

Why are the Councils taking Action?

In **Action 1**, the South Atlantic Fishery Management Council (South Atlantic Council) is considering alternatives that could increase the reporting frequency by charter and headboat fishermen, and require electronic reporting by for-hire fishermen in fisheries for snapper grouper, coastal migratory pelagic, and dolphin/wahoo fisheries. The South Atlantic Council concluded that improving data reporting in these fisheries could reduce the chance that the recreational annual catch limits are exceeded and accountability measures are triggered. The for-hire sector contributes to recreational landings that count towards the recreational annual catch limit. Catches from charter vessels are captured in the Marine Recreational Information Program but headboat catches are monitored separately. Delays in receiving and processing headboat data may contribute to the recreational annual catch limit being exceeded. Electronic reporting via computer/internet could reduce delays and result in fewer recreational annual catch limit overruns. However, a recently completed pilot study in the Gulf of Mexico to test the feasibility of a mandatory electronic logbook reporting system in the for-hire sector has indicated that there may be problems with using self-reported data to track landings. A final report on this pilot project will be completed in 2013. Note: See Section 4.1.1 of this amendment for more details on this pilot study and concerns about voluntary (Opt-In Angler Panels) data.

The Council considered reporting changes for the charter sector but decided to defer this to a future joint amendment with the Gulf Council to allow the details to be worked out with MRIP and for the SEFSC to obtain funding to proceed. It is the Council's intent that this joint amendment be completed during 2013 with regulations in place beginning in 2014. The Council is interested in evaluating requiring the charter sector submit fishing records to the Science and

Research Director weekly via electronic reporting similar to what is being proposed for headboats in this amendment. This would allow NMFS to focus the limited funding through MRIP on private recreational anglers and thereby improve those estimates. If the entire for-hire sector was providing weekly electronic reports, NMFS could use those estimates to track the for-hire component of the recreational ACLs. It is the Council's intent that NMFS use the headboat landings from the weekly electronic reporting specified in this amendment to track headboat landings to help ensure the recreational ACL is not exceeded.

Purpose for Action

The ***purpose*** of the Joint South Atlantic/Gulf of Mexico Generic Headboat Reporting in the South Atlantic Amendment is to: Improve for-hire data collection methods to help ensure recreational annual catch limit overages do not occur in South Atlantic fisheries.

Need for Action

The ***need*** for the Joint South Atlantic/Gulf of Mexico Generic Headboat Reporting in the South Atlantic Amendment is to improve data collection methods and timeliness to limit overages of annual catch limits, to improve stock assessments, and to improve compliance in South Atlantic fisheries.

What Are the Alternatives for Actions Being Considered?

Action 1. Amend the Snapper Grouper, Dolphin and Wahoo, and Coastal Migratory Pelagic Resources Fishery Management Plans to modify data reporting for charter/headboat vessels

Alternative 1 (No Action). Retain existing permits and data reporting systems for the for-hire sector. Currently, the owner or operator of a vessel for which a charter vessel / headboat permit for Gulf coastal migratory pelagic fish, South Atlantic coastal migratory pelagic fish, Gulf reef fish, South Atlantic snapper grouper, or Atlantic dolphin and wahoo has been issued, or whose vessel fishes for or lands such coastal migratory pelagic fish, reef fish, snapper-grouper, or Atlantic dolphin or wahoo in or from state waters adjoining the applicable Gulf, South Atlantic, or Atlantic EEZ, and who is selected to report by the SRD, must maintain a fishing record for each trip, or a portion of such trips as specified by the SRD, on forms provided by the SRD. Completed records for charter vessels must be submitted to the Science and Research Director weekly, postmarked no later than 7 days after the end of each trip (Sunday). Completed records for headboats must be submitted to the Science and Research Director monthly and must either be made available to an authorized statistical reporting agent or be postmarked no later than 7 days after the end of each month.

Alternative 2. Require that vessels submit fishing records to the Science and Research Director (SRD) weekly via electronic reporting (via computer or internet). Weekly = 7 days after the end of each week (Sunday).

Sub-Alternative 2a. Charter
Sub-Alternative 2b. Headboat

Alternative 3. Require that vessels submit fishing records to the Science and Research Director (SRD) daily via electronic reporting (via computer or internet). Daily = by noon of the following day.

Sub-Alternative 3a. Charter
Sub-Alternative 3b. Headboat

Preferred Alternative 4. Require that vessels submit fishing records to the Science and Research Director (SRD) weekly or at intervals shorter than a week if notified by the SRD via electronic reporting (via computer or internet). Weekly = 7 days after the end of each week (Sunday).

Sub-Alternative 4a. Charter
Preferred Sub-Alternative 4b. Headboat

It is the Councils' intent that headboats must be current in reporting to be authorized to conduct trips (compliance measure) and that in catastrophic conditions, paper reporting be authorized (catastrophic measure). See **Section 4.1** for details.

What is currently in place for charter and headboat vessels in fisheries for snapper grouper, coastal migratory pelagic, and dolphin/wahoo?

Charter vessels are required to maintain a fishing record for each trip, or a portion of each trip as specified by the Science and Research Director (at the Southeast Fisheries Science Center), on forms that are provided. Forms include instructions, indicate all of the required information and must be postmarked no later than 7 days after the end of each week (on Sunday).

Harvest and bycatch from charter and private vessels are monitored by the Marine Recreational Information Program. A 10% sample of charter vessel captains is called weekly to obtain trip level information. Additionally, standard dockside intercept data are collected from charter vessels and vessel clients are randomly sampled.

Headboat vessels are also required to report important information about their fishing trips. Vessels must complete and mail reporting forms to the Science and Research Director. The forms are due on a monthly basis, and must either be made available to a fisheries statistics reporting agent or be postmarked no later than 7 days after the end of each month.

Harvest and bycatch data from the recreational sector are monitored by the Southeast Fisheries Science Center. Headboat trips are sub-sampled for data on species lengths and weights. Biological samples are obtained as time permits, and lengths of discarded fish are occasionally obtained.

The owner or operator of a vessel for which a charter vessel/headboat permit for South Atlantic snapper-grouper has been issued, who is selected to report by the Science and Research Director must participate in the NMFS-sponsored electronic logbook and/or video monitoring reporting program as directed by the Science and Research Director.

[Note: More details are included in the Summary beginning on page S-2.]

Summary of Effects

Biological: Alternative 1 (No Action) would retain existing data reporting systems for the for-hire sector. Currently, for-hire vessels for the snapper grouper, coastal migratory pelagic, and dolphin/wahoo fisheries selected to report by the Science and Research Director need to maintain a fishing record for each trip, or a portion of such trips as specified by the Science and Research Director, and on forms provided by the Science and Research Director. Furthermore, the owner or operator of a vessel for which a charter vessel/headboat permit for South Atlantic snapper-grouper has been issued, who is selected to report by the Science and Research Director must participate in the NMFS-sponsored electronic logbook and/or video monitoring reporting program as directed by the Science and Research Director. **Alternative 1 (No Action)** does not apply to or-hire vessels for coastal migratory pelagic, and dolphin/wahoo. Under **Alternative 1 (No Action)** for-hire vessels in fisheries for coastal migratory pelagic and dolphin wahoo would not be required to submit their data via electronic reporting (computer/internet). **Alternatives 2-4** would require that data be submitted to the Southeast Fisheries Science Center more frequently via computer/internet. Assuming compliance and accurate reporting by for-hire participants, all

of the action alternatives would result in positive indirect biological effects, as the data would be reported in a timelier and efficient manner resulting in better monitoring of recreational annual catch limits. However, a recently completed pilot study in the Gulf of Mexico to test the feasibility of a mandatory electronic logbook reporting system in the for-hire sector has indicated that there may be problems with using self-reported data to track landings. **Alternative 3** would require daily electronic reporting resulting in the greatest positive indirect biological effects among the action alternatives. **Alternative 2** would require weekly reporting, which is the same as the status quo (**Alternative 1)** for charter vessels; however, **Alternative 2** would require data be submitted electronically. Further, **Alternative 2** would increase the reporting frequency for headboat vessels. Therefore, **Alternative 2** would have the least amount of biological benefits among the alternatives being considered. **Preferred Alternative 4** would initially require weekly reporting, with the additional requirement for data to be submitted via computer. **Preferred Alternative 4** would allow the Science and Research Director to require faster data submissions in the future without the South Atlantic Council having to prepare an additional amendment. **Preferred Sub-Alternative 4b** would implement this new reporting for headboats which is not as biologically beneficial as including reporting for charterboats also, however, the funding and program is not ready to be expanded to include charterboats at this time.

Economic: In summary, all alternatives except **Alternative 1 (No Action)** would change how the for-hire sector reports landings. The other alternatives would require weekly (**Alternative 2**) or daily (**Alternative 3**) electronic reporting. **Alternative 4 (Preferred)** would require weekly electronic reporting, but would shift to daily electronic reporting as necessary and determined by the SRD. The sub-alternatives for **Alternatives 2 – 4 (Preferred)** would differentiate whether the alternative would apply to just the charter boat sector (**Sub-Alternative a**) or to just the headboat sector (**Preferred Sub-Alternative b**). **Alternatives 2 – 4 (Preferred)** would incur costs of time and perhaps for computer equipment and staff time, but each alternative other than **Alternative 1 (No Action)** would provide managers with data in a more timely basis allowing for increased precision for recreational sector ACL management and help prevent sector overruns that would trigger AMs.

Social: In general, negative social effects of for-hire reporting requirements would likely be associated with any added time and financial burden for permit holders to meet the requirements. Increased frequency in reporting under **Alternatives 2-Preferred Alternative 4** may have some negative effects on vessel owners and captains because businesses will need to allocate additional time or staff to submit reports. The daily reporting requirement under **Alternative 3** and the potential for daily reporting requirement under **Preferred Alternative 4** will be more burdensome for for-hire permit holders than the weekly reporting in **Alternative 2**. **Alternative 1 (No Action)** would not be expected to negatively impact the for-hire sector in terms of additional time and money requirements. Charterboat owners and captains would not be impacted under **Sub-alternative 2b, Sub-alternative 3b** and **Preferred Sub-alternative 4b**, but requirements for only headboats may not improve quota monitoring and accuracy to the extent that inclusion of the same requirements for charterboats under **Sub-alternatives 2a, 3a,** and **4a.**

The requirement for electronic reporting under **Alternatives 2- Preferred Alternative 4** would affect vessel owners who do not already use computer systems in their businesses. Some fishermen are not familiar with computers or internet, and some may simply be more

comfortable with paper fishing records. There may also be an increased risk of errors for electronic reporting by fishermen who typically do not use computers and internet in their businesses.

However, requiring all for-hire permit holders to report electronically and more frequently (**Alternatives 2- Preferred Alternative 4**) is expected to result in broad social benefits. More frequent and timely reporting would be expected to contribute to improved quota monitoring, with which it will be less likely that an annual catch limit will be exceeded and the associated accountability measures (AMs) will negatively impact the for-hire fishermen and associated communities and businesses. AMs can have significant direct and indirect effects on the fishermen because they usually impose some restriction on harvest, during either the current season or the next. Early closures and paybacks (which in turn increase the likelihood of an earlier closure in the following year) are directly linked to the NMFS quota monitoring system and limitations in the agency's ability to close fisheries quickly enough to avoid AMs. While the negative effects of AMs are usually short-term, they may at times induce other indirect effects through changes in fishing behavior or business operations that could have long-term social effects. Some of those effects are similar to other thresholds being met and may involve switching to other species or discontinuing fishing altogether. Although additional reporting requirements may not prevent AMs from being triggered, these requirements would be expected to provide additional information to better forecast early closures and minimize post-season AMs, such as "pay-backs." Under **Alternative 1 (No Action)**, there would be no improvements to monitoring as a result of more timely reporting, and it would be more likely that AMs would continue to impact for-hire businesses, communities, and customers.

Administrative: The administrative effects of changing reporting requirements for the for-hire sector will most likely be associated with rule-making, outreach, and implementation of the revised reporting scheme. In general, increased frequency in reporting under **Alternatives 2- Preferred Alternative 4** would increase the administrative burden on the agency. As the number of vessels affected increases, and reporting frequency increases (under the sub-alternatives), so do the administrative impacts.

Chapter 1. Introduction

1.1 What Actions Are Being Proposed?

Fishery managers are proposing changes to regulations through the Joint South Atlantic/Gulf of Mexico Headboat Reporting in the South Atlantic Amendment. The action included would improve headboat data collection for better fishery management in the South Atlantic.

1.2 Who is Proposing the Actions?

The South Atlantic Fishery Management Council (South Atlantic Council) is proposing the actions contained within this document. The South Atlantic Council recommends management measures and regulations to the National Marine Fisheries Service (NOAA Fisheries) who ultimately approves, disapproves, or partially approves, and implements the actions in the amendment through regulations on behalf of the Secretary of Commerce. NOAA Fisheries Service is an agency in the National Oceanic and Atmospheric Administration within the Department of Commerce.

South Atlantic Fishery Management Council

- Is responsible for conservation and management of fish stocks
- Consists of 13 voting members: 8 appointed by the Secretary of Commerce, 1 representative from each of the 4 South Atlantic states, the Southeast Regional Director of NOAA Fisheries; and 4 non-voting members
- Management area is from 3 to 200 miles off the coasts of North Carolina, South Carolina, Georgia, and east Florida through Key West with the exception of Coastal Migratory Pelagics which is from New York to Florida and Dolphin Wahoo which is from Maine to Florida
- Develops management plans and recommends regulations to NOAA Fisheries for implementation

1.3 Where is the Project Located?

Management of the federal snapper grouper, dolphin wahoo, and coastal migratory pelagic fisheries located off the South Atlantic in the 3-200 nautical mile U.S. Exclusive Economic Zone (**Figure 1-1**) is conducted under the fisheries' respective Fishery Management Plans (FMPs). The FMPs and their amendments were developed under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), other applicable federal laws, and executive orders and affect the management of 60 species of snapper grouper, dolphin and wahoo, and 3 species of coastal migratory pelagics. (**Appendix G.** Other Applicable Laws).

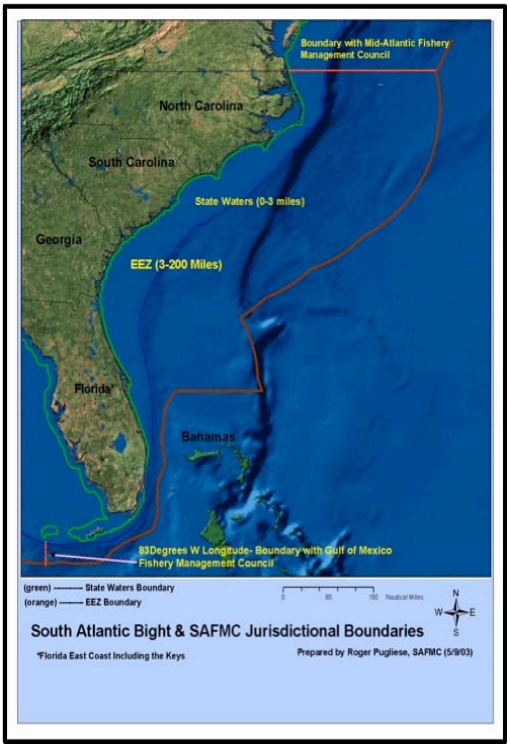

Figure 1-1. Jurisdictional boundaries of the South Atlantic Council.

1.4 Why is the South Atlantic Council Considering Action?

In **Action 1**, the South Atlantic Council is considering alternatives that could increase the reporting frequency by charter and headboat fishermen, and require electronic reporting by for-hire fishermen in fisheries for snapper grouper, coastal migratory pelagic, and dolphin/wahoo fisheries. The South Atlantic Council concluded that improving data reporting in these fisheries could reduce the chance that the recreational annual catch limits are exceeded and accountability measures are triggered. The for-hire sector contributes to recreational landings that count towards the recreational annual catch limit. Catches from charter vessels are captured in the MRIP but headboat catches are monitored separately. Delays in receiving and processing headboat data may contribute to the recreational annual catch limit being exceeded. Electronic reporting via computer/internet could reduce delays and result in fewer recreational annual catch limit overruns. However, a recently completed pilot study in the Gulf of Mexico to test the feasibility of a mandatory electronic logbook reporting system in the for-hire sector has indicated that there may be problems with using self-reported data to track landings. A final report on this pilot project will be completed in 2013. Note: See Section 4.1.1 of this amendment 3 for more details on this pilot study and concerns about voluntary (Opt-In Angler Panels) data.

The Council considered reporting changes for the charter sector but decided to defer this to a future joint amendment with the Gulf Council to allow the details to be worked out with MRIP and for the SEFSC to obtain funding to proceed. It is the Council's intent that this joint amendment be completed during 2013 with regulations in place beginning in 2014. The Council is interested in evaluating requiring the charter sector submit fishing records to the Science and Research Director weekly via electronic reporting similar to what is being proposed for headboats in this amendment. This would allow NMFS to focus the limited funding through

MRIP on private recreational anglers and thereby improve those estimates. If the entire for-hire sector was providing weekly electronic reports, NMFS could use those estimates to track the for-hire component of the recreational ACLs. It is the Council's intent that NMFS use the headboat landings from the weekly electronic reporting specified in this amendment to track headboat landings to help ensure the recreational ACL is not exceeded.

Purpose for Action

The ***purpose*** of the Joint South Atlantic/Gulf of Mexico Generic Headboat Reporting in the South Atlantic Amendment is to: Improve for-hire data collection methods to help ensure recreational annual catch limit overages do not occur in South Atlantic fisheries.

Need for Action

The ***need*** for the Joint South Atlantic/Gulf of Mexico Generic Headboat Reporting in the South Atlantic Amendment is to improve data collection methods and timeliness to limit overages of annual catch limits, to improve stock assessments, and to improve compliance in South Atlantic fisheries.

Chapter 2. Proposed Actions

This section contains the proposed actions being considered to meet the purpose and need. Each action contains a range of alternatives, including no action (status-quo). Alternatives the South Atlantic Fishery Management Council (South Atlantic Council) considered but eliminated from detailed study during the development of this amendment are described in **Appendix A**.

2.1 Action 1. Amend the Snapper Grouper, Dolphin and Wahoo, and Coastal Migratory Pelagic Resources Fishery Management Plans to modify data reporting for charter/headboat vessels

Alternative 1 (No Action). Retain existing permits and data reporting systems for the for-hire sector. Currently, the owner or operator of a vessel for which a charter vessel / headboat permit for Gulf coastal migratory pelagic fish, South Atlantic coastal migratory pelagic fish, Gulf reef fish, South Atlantic snapper grouper, or Atlantic dolphin and wahoo has been issued, or whose vessel fishes for or lands such coastal migratory pelagic fish, reef fish, snapper-grouper, or Atlantic dolphin or wahoo in or from state waters adjoining the applicable Gulf, South Atlantic, or Atlantic EEZ, and who is selected to report by the SRD, must maintain a fishing record for each trip, or a portion of such trips as specified by the SRD, on forms provided by the SRD. Completed records for charter vessels must be submitted to the Science and Research Director weekly, postmarked no later than 7 days after the end of each trip (Sunday). Completed records for headboats must be submitted to the Science and Research Director monthly and must either be made available to an authorized statistical reporting agent or be postmarked no later than 7 days after the end of each month.

Alternative 2. Require that vessels submit fishing records to the Science and Research Director (SRD) weekly via electronic reporting (via computer or internet). Weekly = 7 days after the end of each week (Sunday).

Sub-Alternative 2a. Charter

Sub-Alternative 2b. Headboat

Alternative 3. Require that vessels submit fishing records to the Science and Research Director (SRD) daily via electronic reporting (via computer or internet). Daily = by noon of the following day.

Sub-Alternative 3a. Charter

Sub-Alternative 3b. Headboat

Preferred Alternative 4. Require that vessels submit fishing records to the Science and Research Director (SRD) weekly or at intervals shorter than a week if notified by the SRD via electronic reporting (via computer or internet). Weekly = 7 days after the end of each week (Sunday).

Sub-Alternative 4a. Charter

Preferred Sub-Alternative 4b. Headboat

It is the Councils' intent that headboats must be current in reporting to be authorized to conduct trips (compliance measure) and that in catastrophic conditions, paper reporting be authorized (catastrophic measure). See **Section 4.1** for details.

Comparison of Alternatives

Biological: Alternative 1 (No Action) requires for-hire vessels in fisheries for snapper grouper, coastal migratory pelagic, and dolphin/wahoo selected to report by the SRD to maintain a fishing record for each trip, or a portion of such trips as specified by the SRD, and on forms provided by the SRD. Furthermore, the owner or operator of a vessel for which a charter vessel/headboat permit for South Atlantic snapper grouper has been issued, who is selected to report by the SRD must participate in the NMFS-sponsored electronic logbook and/or video monitoring reporting program as directed by the SRD. **Alternative 1 (No Action)** does not require for-hire fisheries for coastal migratory pelagic, and dolphin/wahoo to submit their data via electronic reporting (computer/internet), and would retain existing data reporting systems for the for-hire sector.

Alternatives 2-Preferred Alternative 4 would require that data be submitted to the Science Fisheries Science Center more frequently than under **Alternative 1**. **Alternatives 2-Preferred Alternative 4** would require data be submitted via computer/internet. Assuming compliance and accurate reporting by for-hire participants, all of the action alternatives would result in positive indirect biological effects, as the data would be reported in a more timely and efficient manner resulting in better monitoring of recreational ACLs. However, a recently completed pilot study in the Gulf of Mexico to test the feasibility of a mandatory electronic logbook reporting system in the for-hire sector has indicated that there may be problems with using self-reported data to track landings.

Alternative 3 would require daily reporting resulting in the most positive indirect biological effects, and **Alternative 2** would require weekly which is the same as the status quo (**Alternative 1)** for the charter vessels; however, **Alternative 2** would require data be submitted electronically. Further, **Alternative 2** would increase the reporting frequency for headboat vessels. Therefore, **Alternative 2** would have the least amount of biological benefits among the alternatives being considered. **Preferred Alternative 4** would initially require weekly reporting, with the additional requirement for data to be submitted via computer. **Preferred Alternative 4** would allow the SRD to require faster data submissions in the future without the South Atlantic Council having to prepare an additional amendment.

Economic: The current frequency of data reporting would be expected to increase the likelihood of harvest overages. Only in the most extreme situations would potential overages be expected to be so severe that the status of a stock or a recovery plan be jeopardized under the current reporting schedule. However, overages have the potential, depending on the AMs, to result in significant disruption in fishing behavior the following year and reduce revenue and profit for for-hire vessels and associated businesses, and reduce potential fishing opportunities for anglers. **Alternative 1 (No Action)** would be expected to continue to result in these indirect economic effects.

Alternatives 2-Preferred Alternative 4 would require electronic submission of reports, the difference between alternatives being the frequency of requirement. Currently, federally permitted

for-hire vessels are not reporting electronically. Under **Alternative 2,** charter vessel operators would be required to report on the same weekly schedule as they currently report. However, weekly reporting would be an approximately fourfold increase in reporting frequency for headboat operators. **Alternative 3** would require daily electronic reporting, while **Preferred Alternative 4** is a hybrid of **Alternatives 2** and **3** requiring either weekly or daily reporting. Under each of these alternatives headboat operators will be required to report more frequently. Each of the **Alternatives 2–Preferred Alternative 4** has the same set of **sub-alternatives**. **Sub-Alternatives 2a, 3a,** and **4a** would require electronic reporting for charter vessels. **Sub-Alternatives 2b, 3b,** and **Preferred 4b** would require electronic reporting for headboat vessels.

Potential regulatory change resulting from **Action 1** would result in the highest costs to for-hire permit holders under **Alternative 3**, followed by **Alternative 4**, and **Alternative 2**. The use of computers, the internet, and other forms of electronic connections and communication is commonplace in the business environment, so the differences in the costs between these alternatives associated with reporting method may be minimal.

Social: In general, negative social effects of for-hire reporting requirements will likely be associated with any added time and financial burden for permit holders to meet the requirements. Increased frequency in reporting under **Alternatives 2-Preferred Alternative 4** may have some negative effects on vessel owners and captains because businesses will need to allocate additional time or staff to submit reports. The daily reporting requirement under **Alternative 3** and the potential for daily reporting requirement under **Preferred Alternative 4** will be more burdensome for for-hire permit holders than the weekly reporting in **Alternative 2**. **Alternative 1 (No Action)** would not be expected to negatively impact the for-hire sector in terms of additional time and money requirements. Charterboat owners and captains would not be impacted under **Sub-alternative b** since it was not chosen as preferred under **Alternatives 2-Preferred Alternative 4**, but requirements for only headboats may not improve quota monitoring and accuracy as much as if both sectors were included.

The requirement for electronic reporting under **Alternatives 2-Preferred Alternative 4** would affect vessel owners who do not already use computer systems in their businesses. However, requiring all headboat and charterboat permit holders to report electronically and more frequently (**Alternatives 2-Preferred Alternative 4**) would be expected to result in broad social benefits from increased reporting that would allow for improved quota monitoring, with which it will be less likely that an annual catch limit will be exceeded and the associated accountability measures (AMs) will negatively impact the for-hire fishermen and associated communities and businesses.

Administrative: The administrative effects of changing permits and reporting requirements for the for-hire sector will most likely be associated with rule-making, outreach, and implementation of the revised reporting scheme. In general, increased frequency in reporting under **Alternatives 2-Preferred Alternative 4** would increase the administrative burden on the agency. As the number of vessels affected increases (under the sub-alternatives), so do the administrative impacts.

Chapter 3. Affected Environment

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

- **Habitat environment** (Section 3.1)

  Examples include coral reefs, sea grass beds, and rocky hard-bottom substrates

- **Biological environment** (Section 3.2)

  Examples include populations of golden tilefish, corals, and turtles

- **Human environment** (Sections 3.3 & 3.4)

  Examples include fishing communities and economic descriptions of the fisheries

- **Administrative environment** (Section 3.6)

  Examples include the fishery management process and enforcement activities

3.1 Habitat Environment

This amendment addresses modifications to headboat reporting requirements in three of the South Atlantic Council managed fisheries. Chapter 3 details the biological environment for the species that will be most affected by this amendment.

Detailed information on the life history of the other species affected by this amendment through the data collection action can be found in previous amendments and the habitat and biological environment can be found in the Fishery Ecosystem Plan (SAFMC 2009b).

Information on the habitat utilized by species in the Snapper Grouper Complex 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

The affected environment for the snapper grouper fishery has recently described in the Comprehensive Annual Catch Limit (ACL) Amendment (SAFMC 2011c), Amendment 17B (Amendment 17B) to the Fishery Management Plan for the Snapper Grouper of the South Atlantic Region (SAFMC 2010b), and the Fishery Ecosystem Plan (FEP) of the South Atlantic Region (SAFMC 2009b). Those descriptions of the biological, social, economic, and administrative environments are herein incorporated by reference.

Information on the habitat utilized by dolphin wahoo 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.

A detailed description of the coastal migratory pelagic (CMP) fishery was included in Amendment 18 to the Fishery Management Plan for Coastal Migratory Pelagic Resources in the Gulf of Mexico and Atlantic Region (FMP) (GMFMC and SAFMC 2011a) and is incorporated here by reference. Amendment 18 can be found at http://www.gulfcouncil.org/docs/amendments/Final%20CMP%20Amendment%2018%20092311%20w-o%20appendices.pdf.

Copies of these amendments are available from the South Atlantic Fishery Management Council's (South Atlantic Council) Web site (www.safmc.net).

3.1.1 Inshore/Estuarine Habitat

Snapper Grouper

Many deepwater snapper grouper species utilize both pelagic and benthic habitats during several stages of their life histories; larval stages of these species live in the water column and feed on plankton. Most juveniles and adults are demersal (bottom dwellers) and associate with hard structures on the continental shelf that have moderate to high relief (e.g., coral reef systems and artificial reef structures, rocky hard-bottom substrates, ledges and caves, sloping soft-bottom

areas, and limestone outcroppings). Juvenile stages of some snapper grouper species also utilize inshore seagrass beds, mangrove estuaries, lagoons, oyster reefs, and embayment systems. In many species, various combinations of these habitats may be utilized during daytime feeding migrations or seasonal shifts in cross-shelf distributions. More detail on these habitat types can be found in Volume II of the Fishery Ecosystem Plan (SAFMC 2009b).

Dolphin Wahoo

Dolphin and wahoo do not use inshore/estuarine habitat.

Coastal Migratory Pelagic

The mackerels in this management unit are often referred to as scombrids. The family Scombridae also includes tunas, mackerels, and bonitos. They are among the most important commercial and sport fishes. The habitat of adults in the coastal pelagic management unit is the coastal waters out to the edge of the continental shelf in the Atlantic Ocean. Within the area, the occurrence of coastal migratory pelagic species (including cobia) is governed by temperature and salinity. These species are seldom found in water temperatures less than 20°C. Salinity preference varies, but these species generally prefer high salinity, less than 36 ppt. Salinity preference of cobia is not well defined. The larval habitat of all species in the coastal pelagic management unit is the water column. Within the spawning area, eggs and larvae are concentrated in the surface waters.

3.1.2 Offshore Habitat

Snapper Grouper

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

The exact extent and distribution of productive snapper grouper habitat on the continental shelf north of Cape Canaveral is unknown. Current data suggest from 3 to 30% of the shelf is suitable habitat for these species. These live-bottom habitats may include low relief areas, supporting sparse to moderate growth of sessile (permanently attached) invertebrates, moderate relief reefs from 0.5 to 2 meters (1.6 to 6.6 feet), or high relief ridges at or near the shelf break consisting of outcrops of rock that are heavily encrusted with sessile invertebrates such as sponges and sea fan species. Live-bottom habitat is scattered irregularly over most of the shelf north of Cape Canaveral, Florida, but is most abundant offshore from northeastern Florida. South of Cape Canaveral, the continental shelf narrows from 56 to 16 kilometers (35 to 10 miles) wide, the narrowing off the southeast coast of Florida and the Florida Keys. The lack of a large shelf area,

presence of extensive, rugged living fossil coral reefs, and dominance of a tropical Caribbean fauna are distinctive benthic characteristics of this area.

Rock outcroppings occur throughout the continental shelf from Cape Hatteras, North Carolina to Key West, Florida (MacIntyre and Milliman 1970; Miller and Richards 1979; Parker et al. 1983), which are principally composed of limestone and carbonate sandstone (Newton et al. 1971), and exhibit vertical relief ranging from less than 0.5 to over 10 meters (33 feet). Ledge systems formed by rock outcrops and piles of irregularly sized boulders are also common. Parker et al. (1983) estimated that 24% (9,443 km^2) of the area between the 27 and 101 meters (89 and 331 feet) depth contours from Cape Hatteras, North Carolina to Cape Canaveral, Florida is reef habitat. Although the bottom communities found in water depths between 100 and 300 meters (328 and 984 feet) from Cape Hatteras, North Carolina to Key West, Florida is relatively small compared to the whole shelf, this area, based upon landing information of fishers, constitutes prime reef fish habitat and probably significantly contributes to the total amount of reef habitat in this region.

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

The distribution of coral and live hard bottom habitat as presented in the Southeast Marine Assessment and Prediction (SEAMAP) Bottom Mapping Project is a proxy for the distribution of the species within the snapper grouper complex. The method used to determine hard bottom habitat relied on the identification of reef obligate species including members of the snapper grouper complex. The Florida Fish and Wildlife Research Institute (FWRI), using the best available information on the distribution of hard bottom habitat in the south Atlantic region, prepared ArcView maps for the four-state project. These maps, which consolidate known distribution of coral, hard/live bottom, and artificial reefs as hard bottom, are available on the South Atlantic Fishery Management Council's (South Atlantic Council) Internet Mapping System website: http://ocean.floridamarine.org/efh_coral/ims/viewer.htm.

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

Dolphin Wahoo

Information on the habitat utilized by dolphin and wahoo 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.

The common dolphin (*Coryphaena hippurus)* is an oceanic pelagic fish found worldwide in tropical and subtropical waters. The range for dolphin in the western Atlantic is from George's Bank, Nova Scotia to Rio de Janeiro, Brazil. They are also found throughout the Caribbean Sea and the Gulf of Mexico and they are generally restricted to waters warmer than 20°C (Oxenford, 1997). The wahoo (*Acanthocybium solandri*) is an oceanic pelagic fish found worldwide in tropical and subtropical waters. In the western Atlantic, wahoo are found from New York through Columbia including Bermuda, the Bahamas, the Gulf of Mexico, and the Caribbean. Wahoo are present throughout the Caribbean area, especially along the north coast of western Cuba where it is abundant during the winter (from FAO species guide; FAO 1978).

Dolphin and wahoo utilize pelagic habitat in the Gulf Stream, Charleston Gyre, Florida Current, and pelagic *Sargassum.*

Coastal Migratory Pelagic

King Mackerel

King mackerel is a marine pelagic species that is found throughout the Gulf of Mexico and Caribbean Sea and along the western Atlantic from the Gulf of Maine to Brazil and from the shore to 200 meter depths. Adults are known to spawn in areas of low turbidity, with salinity and temperatures of approximately 30 ppt and 27°C, respectively. There are major spawning areas off Louisiana and Texas in the Gulf (McEachran and Finucane 1979); and off the Carolinas, Cape Canaveral, and Miami in the western Atlantic (Wollam 1970; Schekter 1971; Mayo 1973).

Spanish Mackerel

Spanish mackerel is also a pelagic species, occurring over depths to 75 meters throughout the coastal zones of the western Atlantic from southern New England to the Florida Keys and throughout the Gulf of Mexico (Collette and Russo 1979). Adults usually are found in neritic waters (area of ocean from the low-tide line to the edge of the continental shelf) and along coastal areas. They inhabit estuarine areas, especially the higher salinity areas, during seasonal migrations, but are considered rare and infrequent in many Gulf estuaries.

Cobia

The cobia is distributed worldwide in tropical, subtropical, and warm-temperate waters. In the western Atlantic Ocean, this pelagic fish occurs from Nova Scotia (Canada), south to Argentina, including the Caribbean Sea. It is abundant in warm waters off the coast of the U.S. from the Chesapeake Bay south and throughout the Gulf of Mexico. Cobia prefers water temperatures between 68-86°F. Seeking shelter in harbors and around wrecks and reefs, the cobia is often found off south Florida and the Florida Keys. As a pelagic fish, cobias are found over the continental shelf as well as around offshore reefs. They prefer to reside near any structure that interrupts the open water such as pilings, buoys, platforms, anchored boats, and flotsam. The

cobia is also found inshore inhabiting bays, inlets, and mangroves. Remoras are often seen swimming with cobia.

3.1.3 Essential Fish Habitat

Snapper Grouper

Essential fish habitat (EFH) is defined in the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) as "those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity" (16 U.S. C. 1802(10)). Specific categories of EFH identified in the South Atlantic Bight, which are utilized by federally managed fish and invertebrate species, include both estuarine/inshore and marine/offshore areas. Specifically, estuarine/inshore EFH includes: Estuarine emergent and mangrove wetlands, submerged aquatic vegetation, oyster reefs and shell banks, intertidal flats, palustrine emergent and forested systems, aquatic beds, and estuarine water column. Additionally, marine/offshore EFH includes: Live/hard bottom habitats, coral and coral reefs, artificial and manmade reefs, *Sargassum* species, and marine water column.

EFH utilized by snapper grouper species in this region includes coral reefs, live/hard bottom, submerged aquatic vegetation, artificial reefs and medium to high profile outcroppings on and around the shelf break zone from shore to at least 183 meters [600 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 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.

Dolphin Wahoo

EFH for dolphin and wahoo is the Gulf Stream, Charleston Gyre, Florida Current, and pelagic *Sargassum.*

Note: This EFH definition for dolphin was approved by the Secretary of Commerce on June 3, 1999, as a part of the South Atlantic Council's Comprehensive Habitat Amendment (SAFMC 1998d) (dolphin was included within the Coastal Migratory Pelagics FMP). This definition does not apply to extra-jurisdictional areas.

Coastal Migratory Pelagic

Essential fish habitat for coastal migratory pelagic species includes sandy shoals of capes and offshore bars; high profile rocky bottom and barrier island ocean-side waters, from the surf to the shelf break zone, but from the Gulf stream shoreward, including *Sargassum*; all coastal inlets; and all state-designated nursery habitats of particular importance (for example, in North Carolina this would include all Primary Nursery Areas and all Secondary Nursery Areas).

EFH for Cobia: High salinity bays, estuaries, and seagrass habitat.

3.1.3.1 Habitat Areas of Particular Concern

Snapper Grouper

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 fishery management plan (FMP) regulations, the South Atlantic Council, in cooperation with NOAA Fisheries Service, actively comments on non-fishing projects or policies that may impact essential fish habitat. With guidance from the Habitat Advisory Panel, the South Atlantic Council has developed and approved 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; alterations to riverine, estuarine and near shore flows; offshore aquaculture; marine invasive species and estuarine invasive species.

Dolphin Wahoo

EFH-HAPCs for dolphin and wahoo in the Atlantic include The Point, The Ten-Fathom Ledge, and Big Rock (North Carolina); The Charleston Bump and The Georgetown Hole (South Carolina); The Point off Jupiter Inlet (Florida); The Hump off Islamorada, Florida; The Marathon Hump off Marathon, Florida; The “Wall” off of the Florida Keys; and Pelagic Sargassum.

Note: This EFH-HAPC definition for dolphin was approved by the Secretary of Commerce on June 3, 1999 as a part of the South Atlantic Council's Comprehensive Habitat Amendment (SAFMC 1998d) (dolphin was included within the Coastal Migratory Pelagics FMP).

Coastal Migratory Pelagic

EFH-HAPCs for coastal migratory pelagic species includes sandy shoals of Capes Lookout, Cape Fear, and Cape Hatteras from shore to the ends of the respective shoals, but shoreward of the Gulf stream; The Point, The Ten-Fathom Ledge, and Big Rock (North Carolina); The Charleston Bump and Hurl Rocks (South Carolina); The Point off Jupiter Inlet (Florida); Phragmatopoma (worm reefs) reefs off the central east coast of Florida; nearshore hard bottom south of Cape Canaveral; The Hump off Islamorada, Florida; The Marathon Hump off Marathon, Florida; The "Wall" off of the Florida Keys; Pelagic Sargassum; and Atlantic coast estuaries with high numbers of Spanish mackerel (Bogue Sound and New River, NC) and Cobia (Broad River, SC).

3.2 Biological and Ecological Environment

The environment in the South Atlantic management area affected by actions in this amendment is defined by two components (**Figure 3-1**). Each component will be described in detail in the following sections.

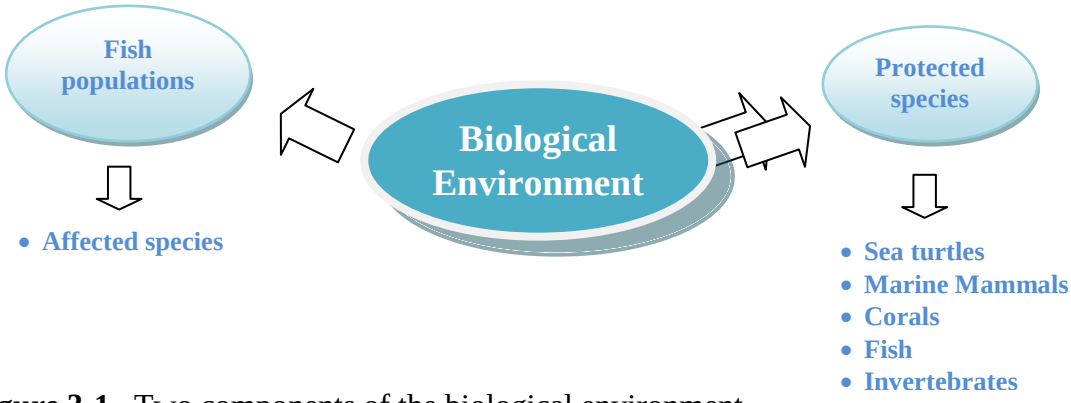

Figure 3-1. Two components of the biological environment described in this amendment.

3.2.1 Fish Populations

Snapper Grouper

The waters off the South Atlantic coast are home to a diverse population of fish. The snapper grouper fishery management unit currently contains 60 species of fish, many of them neither "snappers" nor "groupers". These species live in depths from a few feet (typically as juveniles)

to hundreds of feet. As far as north/south distribution, the more temperate species tend to live in the upper reaches of the South Atlantic management area (black sea bass, red grouper) while the tropical variety's core residence is in the waters off south Florida waters, Caribbean Islands, and northern South America (black grouper, mutton snapper).

These are reef-dwelling species that live amongst each other. These species rely on the reef environment for protection and food. There are several reef tracts that follow the southeastern coast. The fact that these fish populations congregate together dictates the nature of the fishery (multi-species) and further forms the type of management regulations proposed in this amendment.

Dolphin Wahoo

Dolphin are attracted to *Sargassum*, a floating brown alga, which serves as a hiding place and source of food. Other sources of food associated with the *Sargassum* include small fish, crabs, and shrimp. Dolphin may also pursue fast-swimming fish, such as flying fish or mackerels. The diets of other oceanic pelagic species indicate that dolphin, particularly juveniles, serve as prey for many oceanic fish. Wahoo are essentially piscivorous. Based on work in North Carolina (Hogarth 1976), fish accounted for 97.4% of all food organisms. These fish included mackerels, butterfishes, porcupine fishes, round herrings, scads, jacks, pompanos, and flying fishes. Invertebrates, squid, and the paper nautilus comprised 2.6% of the total food.

Coastal Migratory Pelagic

Indirect and inter-related effects of the actions in this amendment, especially in concert with the Deepwater Horizon MC252 oil spill, on the biological and ecological environment are not well understood. Changes in the population size structure as a result of shifting fishing effort to specific geographic segments of CMP populations, combined with any anthropogenically induced natural mortality that may occur from the impacts of the oil spill, could lead to changes in the distribution and abundance of these throughout the Gulf. The impacts on the food web from phytoplankton, to zooplankton, to baitfish, to top predators may be significant in the future. Impacts to CMP species from the oil spill will similarly impact other species that may be preyed upon by those species, or that might benefit from a reduced stock.

<u>King Mackerel</u>

Like other members of this genus, king mackerel feed primarily on fishes. They prefer to feed on schooling fish, but also eat crustaceans and occasionally mollusks. Some of the fish they eat include jack mackerels, snappers, grunts, and halfbeaks. They also eat penaeid shrimp and squid at all life stages (larvae to adult). Adult king mackerels mainly eat fish between the sizes of 3.9-5.9 in (100-150 mm). Juveniles eat small fish and invertebrates, especially anchovies. The Atlantic and Gulf of Mexico populations differ significantly in their feeding habits. The Atlantic stock consumed 58% engraulids, 1% clupeids, and 3.1% squid; the Gulf stock consumed 21.4% engraulids, 4.3% clupeids, and 7.1% squid. The Gulf population also showed more diversity in its feeding habits. In south Florida, the king mackerel's food of choice is the ballyhoo. On the

east coast of Florida, the king mackerel prefers Spanish sardines, anchovies, mullet, flying fish, drums, and jacks. Larval and juvenile king mackerel fall prey to little tunny and dolphins. Adult king mackerel are consumed by pelagic sharks, little tunny, and dolphins. Bottlenosed dolphins have been known to steal king mackerel from commercial fishing nets.

Spanish Mackerel

Like Gulf migratory group king mackerel, Spanish mackerel primarily eat other fish species (herring, sardines, and menhaden) and to a lesser extent crustaceans and squid at all life stages (larvae to adult). They are eaten primarily by larger pelagic predators like sharks, tunas, and bottlenose dolphin.

Cobia

Cobia are voracious feeders often engulfing their prey whole. Their diet includes crustaceans, cephalopods, and small fishes such as mullet, eels, jacks, snappers, pinfish, croakers, grunts, and herring. A favorite food is crabs, hence the common name of crabeater. Cobia often cruise in packs of 3-100 fish, hunting for food during migrations in shallow water along the shoreline. They are also known to feed in a manner similar to remoras. Cobia will follow rays, turtles, and sharks, sneaking in to scavenge whatever is left behind. Little is known about the feeding habits of larvae and juvenile cobia. Not much is known regarding the predators of cobia, however they are presumably eaten by larger pelagic fishes. Dolphin (*Coryphaena hippurus*) have been reported to feed on small cobia.

3.2.2 Protected Species

There are 31 different species of marine mammals that may occur in the EEZ of the South Atlantic region. All 31 species are protected under the Marine Mammal Protection Act (MMPA) and six are also listed as endangered under the ESA (i.e., sperm, sei, fin, blue, humpback, and North Atlantic right whales). In addition to those six marine mammals, 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*]) are protected under the ESA. Portions of designated critical habitat for North Atlantic right whales and *Acropora* corals also occur within the South Atlantic Council's jurisdiction. **Section 3.5** in the Comprehensive ACL Amendment (77 FR 15916, March 16, 2012) describes the life history characteristics of these species and discusses the features essential for conservation found in each critical habitat area. In **Section 3.5** in the Comprehensive ACL Amendment (77 FR 15916, March 16, 2012) five distinct population segments (DPSs) of the Atlantic sturgeon were listed under the ESA. The Carolina and South Atlantic DPSs of the Atlantic sturgeon occur in the South Atlantic region. The following sections briefly describe the general life history characteristics of animals from these DPSs. Because Atlantic sturgeon spawn in freshwater rivers, federal fisheries of the South Atlantic generally do not interact with spawning sturgeon. However, the populations of Atlantic sturgeon in spawning rivers and threats to animals occurring in those rivers is of significant importance to the species overall survival and recover.

Additional information on specific river systems where Atlantic sturgeon spawn, and the threats to animals in those systems, can be found in ASSRT (2007).

Atlantic sturgeon are long-lived (approximately 60 years), late maturing, relatively large, anadromous[1] fish (Bigelow and Schroeder 1953, Vladykov and Greeley 1963, Mangin 1964, Pikitch et al. 2005, Dadswell 2006, ASSRT 2007). Atlantic sturgeon may reach lengths up to 14 feet and weigh over 800 pounds. They are distinguished by armor-like plates and a long protruding snout that is ventrally located. Atlantic sturgeons are bottom feeders that use four barbells in front of the mouth assist in locating prey (Bigelow and Schroeder 1953). Adults and sub-adults eat mollusks, gastropods, amphipods, annelids, decapods, isopods, and fish such as sand lance (Bigelow and Schroeder 1953, ASSRT 2007, Guilbard et al. 2007, Savoy 2007), while juveniles feed on aquatic insects, insect larvae, and other invertebrates (Bigelow and Schroeder 1953, ASSRT 2007, Guilbard et al. 2007). Sturgeon are commonly found in less than 200 feet of water, but have been captured in water as deep as 3,000 ft (Stein et al. 2004, ASMFC 2007) and 40 miles offshore (D. Fox, DSU, pers. comm.).

Atlantic sturgeon mature between the ages of 5 and 19 years in South Carolina (Smith et al. 1982). The age of maturity is unknown for animals originating in Florida, Georgia, and North Carolina rivers. In general, male Atlantic sturgeons grow faster than females and attain larger sizes (Smith et al. 1982, Smith and Dingley 1984, Smith 1985, Scott and Scott 1988, Young et al. 1998, Collins et al. 2000, Caron et al. 2002, Dadswell 2006, ASSRT 2007, Kahnle et al. 2007, DFO 2011). Females can produce from 400,000 to 4 million eggs per spawning year, but only spawn every 2-5 years; males spawn every 1-5 years (Vladykov and Greeley 1963, Smith et al. 1982, Smith 1985, Van Eenennaam et al. 1996, Van Eenennaam and Doroshov 1998, Stevenson and Secor 1999, Collins et al. 2000, Caron et al. 2002, Dadswell 2006). In the South Atlantic region, spawning occurs in specific, freshwater rivers in North Carolina, South Carolina, and Georgia. Water temperature appears to trigger spawning migrations (ASMFC 2009), which generally occur during February-March in the South Atlantic region (Murawski and Pacheco 1977, Smith 1985, Bain 1997, Smith and Clugston 1997, Caron et al. 2002).

The Carolina DPS includes all Atlantic sturgeon that spawn or are spawned in the watersheds (including all rivers and tributaries) from Albemarle Sound southward along the southern Virginia, North Carolina, and South Carolina coastal areas to Charleston Harbor. The marine range of Atlantic sturgeon from the Carolina DPS extends from the Hamilton Inlet, Labrador, Canada, to Cape Canaveral, Florida. The riverine range of the Carolina DPS and the adjacent portion of the marine range is shown in **Figure 3-2**. Rivers known to have current spawning populations within the range of the Carolina DPS include the Roanoke, Tar-Pamlico, Cape Fear, Waccamaw, and Pee Dee Rivers. There may also be spawning populations in the Neuse, Santee and Cooper Rivers, though it is uncertain. Both rivers may be used as nursery habitat by young Atlantic sturgeon originating from other spawning populations.

[1] Anadromous refers to a fish that is born in freshwater, spends most of its life in the sea, and returns to freshwater to spawn (NEFSC FAQ's, available at http://www.nefsc.noaa.gov/faq/fishfaq1a.html, modified June 16, 2011); Atlantic sturgeon are also highly reliant on estuarine environments for certain life stages.

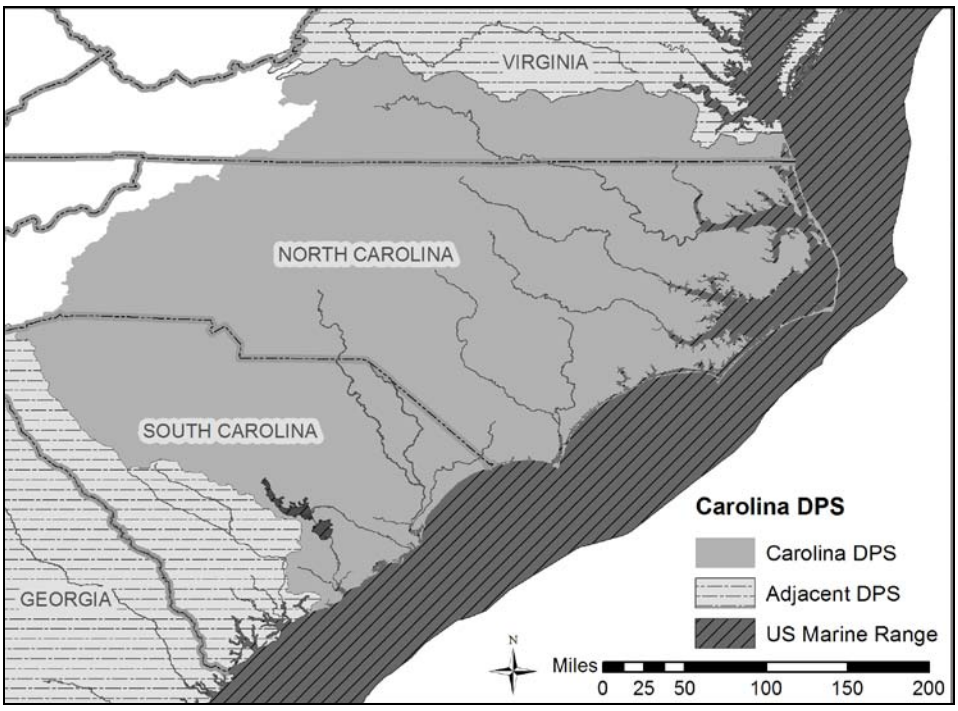

Figure 3-2. The Carolina DPS, Including the Marine Portion of the Range.

The South Atlantic DPS includes all Atlantic sturgeon that spawn or are spawned in the watersheds (including all rivers and tributaries) of the Ashepoo, Combahee, and Edisto Rivers (ACE) Basin southward along the South Carolina, Georgia, and Florida coastal areas to the St. Johns River, Florida. The marine range of Atlantic sturgeon from the South Atlantic DPS extends from the Hamilton Inlet, Labrador, Canada, to Cape Canaveral, Florida. The riverine range of the South Atlantic DPS and the adjacent portion of the marine range are shown in **Figure 3-3**. Rivers known to have current spawning populations within the range of the South Atlantic DPS include the Combahee, Edisto, Savannah, Ogeechee, Altamaha, and Satilla Rivers.

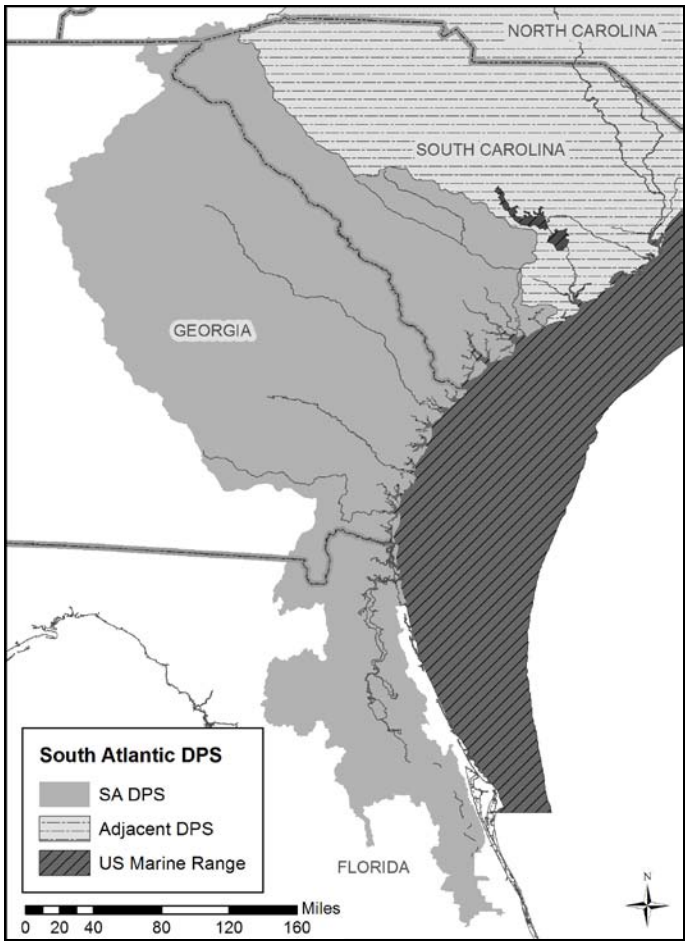

Figure 3-3. The South Atlantic DPS, Including the Marine Portion of the Range.

Currently, only 16 U.S. rivers are known to support spawning based on available evidence (ASSRT 2007). The number of rivers supporting spawning of Atlantic sturgeon are approximately half of what they were historically. Between 7,000 and 10,500 adult female Atlantic sturgeon may have been present in North Carolina prior to 1890 (Armstrong and Hightower 2002, Secor 2002). Secor (2002) estimates that 8,000 adult females were present in South Carolina during that same time. However, past threats from commercial fishing and ongoing threats have drastically reduced the numbers of Atlantic sturgeon within the Carolina and South Atlantic DPSs. The abundances of the remaining river populations within these DPSs, each estimated to have fewer than 300 spawning adults, is estimated to range from less than 6 to less than 1 percent of what they were historically (ASSRT 2007).

3.3 Economic Environment

Economic descriptions of the snapper-grouper, coastal migratory pelagic (CMP), and dolphin-wahoo recreational fisheries are contained in the Comprehensive ACL Amendment (SAFMC 2011c; snapper-grouper and dolphin-wahoo fisheries), and CMP Amendment 18 (GMFMC/SAFMC 2011a; CMP fishery) and are incorporated herein by reference.

The recreational sector is comprised of the private sector and for-hire sector. The private sector includes anglers fishing from shore (all land-based structures) and private/rental boats. The for-hire sector is composed of the charterboat and headboat (also called partyboat) sectors. Charterboats generally carry fewer passengers and charge a fee on an entire vessel basis, whereas headboats generally carry more passengers and payment is per person. For-hire vessels are required to have a charter/headboat permit to fish for or possess snapper-grouper, king mackerel, Spanish mackerel, dolphin, or wahoo in the South Atlantic EEZ. Separate charter/headboat permits exist for snapper-grouper, CMP species (king or Spanish mackerel and cobia), and dolphin/wahoo. Each of these permits is an open access permit. The following provides updated information on the number of charter/headboat permits in the respective fisheries.

On July 27, 2012, the number of valid (non-expired) charter/headboat permits for the following components of the recreational for-hire sector were: 1,543 snapper-grouper; 1,555 CMP (king or Spanish mackerel); and 1,734 dolphin/wahoo. Charter/headboat permits do not distinguish charterboats from headboats. However, headboats that operate in the EEZ are required to participate in the NOAA Fisheries headboat logbook program and 75 headboats are listed in the 2012 headboat registry.

Recreational anglers who fish in the EEZ are required to possess either a state recreational fishing permit that authorizes saltwater fishing in general, or be registered in the federal National Saltwater Angler Registry system, subject to appropriate exemptions. An estimate of the number of anglers who fished in the South Atlantic EEZ is not available. The estimated number of anglers (participants) from the Marine Recreational Information Program who fished in the South Atlantic in 2011 is approximately 2.34 million. However, this estimate includes all marine anglers and not just those who fished in the EEZ and does not include out-of-state anglers (anglers who reside in states outside the South Atlantic region but travel to the South Atlantic to fish).

Estimates of the economic activity associated with recreational fishing were derived using average coefficients for recreational angling across all fisheries (species), as derived through an economic add-on to the Marine Recreational Fisheries Statistics Survey (MRFSS), and described and utilized in NMFS (2011), and are provided in **Table 3-1**. Business activity is characterized in the form of FTE jobs, income impacts (wages, salaries, and self-employed income), output (sales) impacts (gross business sales), and value-added impacts (difference between the value of goods and the cost of materials or supplies). Job and output (sales) impacts are equivalent metrics across both the commercial and recreational sectors. Income and value-added impacts

are not equivalent, though similarity in the magnitude of multipliers may result in roughly equivalent values. Neither income nor value-added impacts should be added to output (sales) impacts because this would result in double counting. The estimates of economic activity should not be added across species because of possible duplication (some trips may target multiple species). Also, the estimates should not be added across states to generate a regional total because state-level impacts reflect the economic activity expected to occur within the state before the revenues or expenditures "leak" outside the state, possibly to another state within the region. Under a regional model, economic activity that "leaks" from, for example, Florida into Georgia would still occur within the region and continue to be tabulated. As a result, regional totals would be expected to be greater than the sum of the individual state totals. Regional, or national, estimates of the economic activity associated with these species are unavailable at this time.

As previously noted, the estimates of target effort provided in **Tables 3-1** only reflect effort derived from the MRFSS. Because the headboat sector in the Southeast is not comprehensively covered by the MRFSS, the results in these tables do not include estimates of the economic activity associated with headboat fishing. While estimates of headboat effort are available (an average of 225,219 headboat angler days were taken per year, 2005-2009; see SAFMC (2011c)), target information is not collected in the Headboat Survey, which prevents the generation of estimates of the number of headboat target trips. Further, because the model developed for NMFS (2011) was based on expenditure data collected through the MRFSS, expenditure data from headboat anglers was not collected through the economic add-on and appropriate economic expenditure coefficients are not available. As a result, estimates of the economic activity associated with the headboat sector cannot be provided.

Table 3-1. Average annual economic activity associated with the recreational target effort1 (all modes) for the respective species. All dollar values are in 2008 dollars (millions). Output and value added impacts are not additive. Totals are not additive across species or states.

	North Carolina	South Carolina	Georgia	Florida
	All Snapper-Grouper[2]			
Target Trips	92,355	109,565	30,527	733,902
Output Impact	$10.58	$6.73	$0.52	$37.05
Value Added Impact	$5.92	$3.87	$0.32	$21.92
Jobs	123	80	5	387
	South Atlantic King Mackerel			
Target Trips	213,786	100,326	10,804	423,018
Output Impact	$21.60	$8.25	$0.18	$25.00
Value Added Impact	$12.10	$4.67	$0.11	$14.84
Jobs	250	100	2	261
	South Atlantic Spanish Mackerel			
Target Trips	253,883	62,937	5,681	189,164
Output Impact	$27.29	$5.76	$0.10	$6.19
Value Added Impact	$15.27	$3.24	$0.06	$3.64
Jobs	316	70	1	65
	Cobia			
Target Trips	53,045	18,457	2,995	96,031
Output Impact	$7.60	$1.00	$0.05	$4.19
Value Added Impact	$4.25	$0.58	$0.03	$2.50
Jobs	90	12	0	44
	Dolphin			
Target Trips	122,652	12,491	978	751,056
Output Impact	$16.45	$0.95	$0.02	$34.52
Value Added Impact	$9.24	$0.55	$0.01	$20.57
Jobs	199	11	0	361
	Wahoo			
Target Trips	17,147	5,082	0	126,067
Output Impact	$2.39	$0.25	$0.00	$5.56
Value Added Impact	$1.34	$0.15	$0.00	$3.32
Jobs	29	3	0	58

Source: effort data from the MRFSS, economic activity results calculated by NMFS SERO using the model developed for NMFS (2011).

[1]2005-2009 average annual target trips.

[2] The estimate of snapper-grouper target effort is based on the species included in the FMU prior to the development of the Comprehensive ACL Amendment (SAFMC 2011c) and does not account for any species removed from the FMU as a result of this amendment.

3.4 Social and Cultural Environment

The proposed actions in this amendment may affect fishermen and communities associated with the snapper grouper fishery, the coastal migratory pelagic fishery, and the dolphin and wahoo fishery. Communities associated with each of the fisheries will be described in the sections below and previous amendments with detailed descriptions of social environments of these fisheries are incorporated as references.

In general, the people who may be directly affected by the proposed regulations include captain and crew of commercial and for-hire vessels, vessel owners, fish houses and dealers, restaurants, recreational anglers, businesses associated with recreational fishing, businesses associated with coastal tourism, and coastal communities. In addition to regulatory change, individuals who may be affected by proposed actions also live and work in an environment with natural, economic, social and political dynamics.

Coastal growth and development affects many coastal communities, especially those with either or both commercial and recreational working waterfronts. The rapid disappearance of these types of waterfronts has important implications as the disruption of various types of fishing-related businesses and employment. The process of "gentrification," which tends to push those of a lower socio-economic class out of traditional communities as property values and taxes rise has become common along coastal areas of the U.S. and around the world. Working waterfronts tend to be displaced with development that is often stated as the "highest and best" use of waterfront property, but often is not associated with water-dependent occupations. However, with the continued removal of these types of businesses over time the local economy becomes less diverse and more reliant on the service sector and recreational tourism. As home values increase, people within lower socio-economic strata find it difficult to live within these communities and eventually must move. Consequently, they spend more time and expense commuting to work, if jobs continue to be available. Newer residents often have no association with the water-dependent employment and may see that type of work and its associated infrastructure as unappealing. They often do not see the linkage between those occupations and the aesthetics of the community that produced the initial appeal for many migrants. The demographic trends within counties can provide some indication as to whether these types of coastal change may be occurring if an unusually high rate of growth or change in the demographic character of the population is present. A rise in education levels, property values, fewer owner occupied properties and an increase in the median age can at times indicate a growing process of gentrification (Colburn and Jepson 2012). Demographic profiles of coastal communities can be found in the Comprehensive Annual Catch Limit Amendment (SAFMC 2011c).

3.4.1 Fishing Communities

The communities displayed in the figures in Sections 3.4.2 through 3.4.9 represent a categorization of communities based upon their overall value of local commercial landings

divided by the overall value of commercial landings referred to as a "regional quotient" (RQ). These data were assembled from the accumulated landings system which includes all species from both state and federal waters landed in 2010. All communities were ranked on this "RQ" and divided by those who were above the mean and those below. This breakdown of fisheries involvement is similar to the how communities were categorized in the community profiling of South Atlantic fishing communities (Jepson et al. 2005). However, the categorization within the community profiles included other aspects associated with fishing such as infrastructure and other measures to determine a community's status with regard to reliance upon fishing.

The social vulnerability index (SoVI) was created to understand social vulnerability of communities to coastal environmental hazards and can also be interpreted as a general measure of vulnerability to other social disruptions, such as adverse regulatory change or manmade hazards. Detailed information about the SoVI can be found in Comprehensive ACL Amendment (SAFMC 2011c). High social vulnerability does not necessarily mean that there will be adverse effects of proposed actions in this amendment, only that there may be a potential for adverse effects under the right circumstances. Fishing communities in these counties may have more difficulty adjusting to regulatory changes if those impacts affect employment or other critical social capital. The SoVI for counties in each state is illustrated in the maps in Sections 3.4.6 through 3.4.9.

3.4.2 Snapper Grouper Fishing Communities

Figure 3-4 presents the top communities based upon a regional quotient of combined commercial landings and value for all snapper grouper species in the South Atlantic snapper grouper complex. There were 154 communities with snapper grouper landings but the 11 communities included in **Figure 3-4** were those with Pounds RQ larger than 3%. Therefore, because so many communities have snapper grouper landings, many had low RQs and are not included in the figure. There are also communities that have high landings of a particular species, such as black sea bass in Sneads Ferry, NC.

Key West, FL, has the highest landings of combined snapper grouper species, followed by Murrell's Inlet, SC, and Miami FL. No Georgia communities made up more than 3% of the snapper grouper landings.

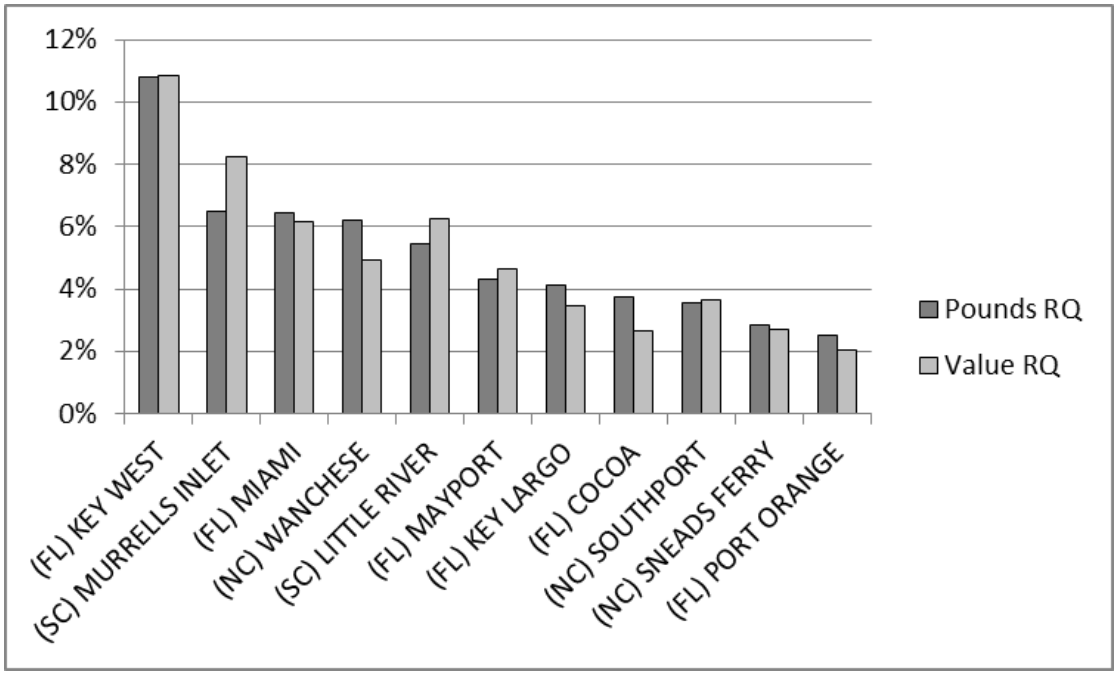

Figure 3-4. The top eleven South Atlantic communities ranked by Pounds and Value Regional Quotient (RQ) of Snapper Grouper species. Only communities with Pounds RQ larger than 3% were included. Data source: ALS 2010.

The recreational sector of the snapper grouper fishery is very important throughout the region, and recreational landings estimate vary depending on the region and species. Black sea bass, tilefish, vermilion snapper, silk snapper, red grouper, black grouper, and gray triggerfish are some of the more important species for private recreational anglers.

The for-hire recreational fleet is also important in each state, and there is a federal charter permit required for snapper grouper. The distribution of charter permits at the county level is included in Sections 3.4.6 through 3.4.9. Overall, Florida has the largest number of charter permits (**Table 3-2**). The primary communities in North Carolina are part of Dare County, New Hanover County, Brunswick County, and Carteret County. Communities in South Carolina with significant for-hire fleets are in Charleston County and Horry County, and in Georgia, most of the permits are associated with communities in Chatham County and Glynn County. In Florida, almost half of the permits are from Monroe County, and a majority of the permits are associated with communities in south Florida (Brevard, Palm Beach and Miami-Dade Counties).

Table 3-2. Federal snapper grouper charter permits in the South Atlantic region (2012).

State	Number of Snapper Grouper Charter Permits
North Carolina	253
South Carolina	105
Georgia	25
Florida	641
TOTAL	**1,024**

3.4.3 Coastal Migratory Pelagic Fishing Communities

Detailed demographic information on communities that target coastal migratory pelagic (CMP) species is available in CMP Amendment 18 (GMFMC/SAFMC 2011a). **Figure 3-5** shows the top communities ranked by combined pounds and value for king mackerel, Spanish mackerel, and cobia. Cocoa and Fort Pierce have the largest proportion of CMP landings. Only one North Carolina community (Hatteras) had more than 3% of CMP landings, and no South Carolina or Georgia communities had at least 3% of the regional CMP landings.

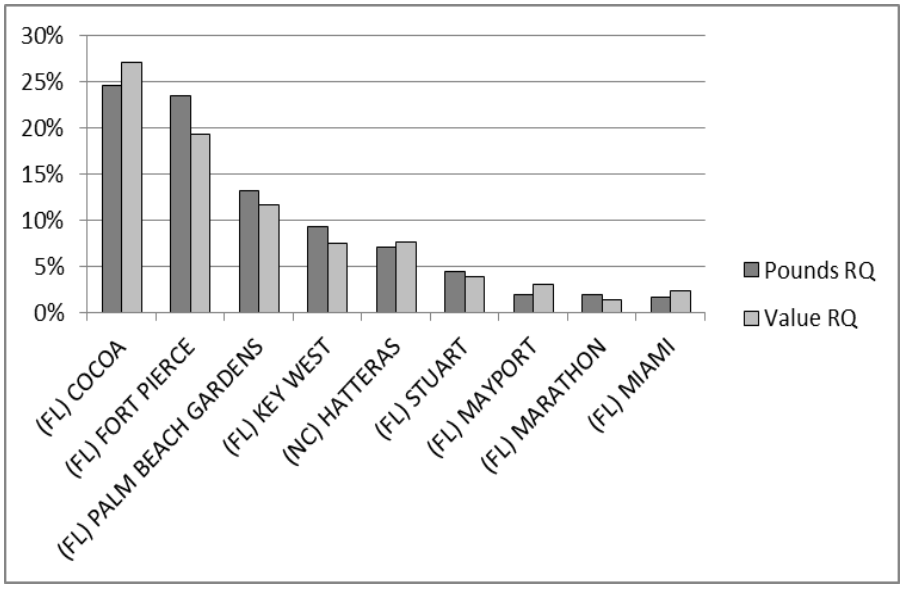

Figure 3-5. The top South Atlantic communities ranked by Pounds and Value Regional Quotient (RQ) of coastal migratory pelagic species. Only communities with Pounds RQ larger than 3% were included. Data source: ALS 2010.

The recreational sector of the CMP fishery is very important throughout the region, and recreational landings estimate vary depending on the region and species. There is a federal charter permit required for CMP species. The distribution of charter permits at the county level is included in Sections 3.4.6 through 3.4.9. Overall, Florida has the largest number of charter permits (**Table 3-3**). The primary communities in North Carolina are part of Dare County, New Hanover County, Brunswick County, and Carteret County. Communities in South Carolina with significant for-hire fleets are Charleston and Horry Counties, with some permits associated with Beaufort County and Georgetown County. Most Georgia permits are in Chatham and Glynn County. Almost half of the Florida permits are associated with Monroe County, followed by Palm Beach, Brevard, and Broward Counties.

Table 3-3. Federal CMP charter permits in the South Atlantic region (2012).

State	Number of CMP Charter Permits
North Carolina	265
South Carolina	114
Georgia	21
Florida	600
TOTAL	**1,006**

3.4.4 Dolphin-Wahoo Fishing Communities

Detailed demographic information on communities that target dolphin and wahoo is available in the Comprehensive ACL Amendment (SAFMC 2011c). **Figure 3-6** shows the top communities ranked by commercial pounds and value for dolphin and wahoo. Wanchese, NC makes up the significant proportion of commercial dolphin and wahoo landings and value. The value of dolphin and wahoo varies in the communities.

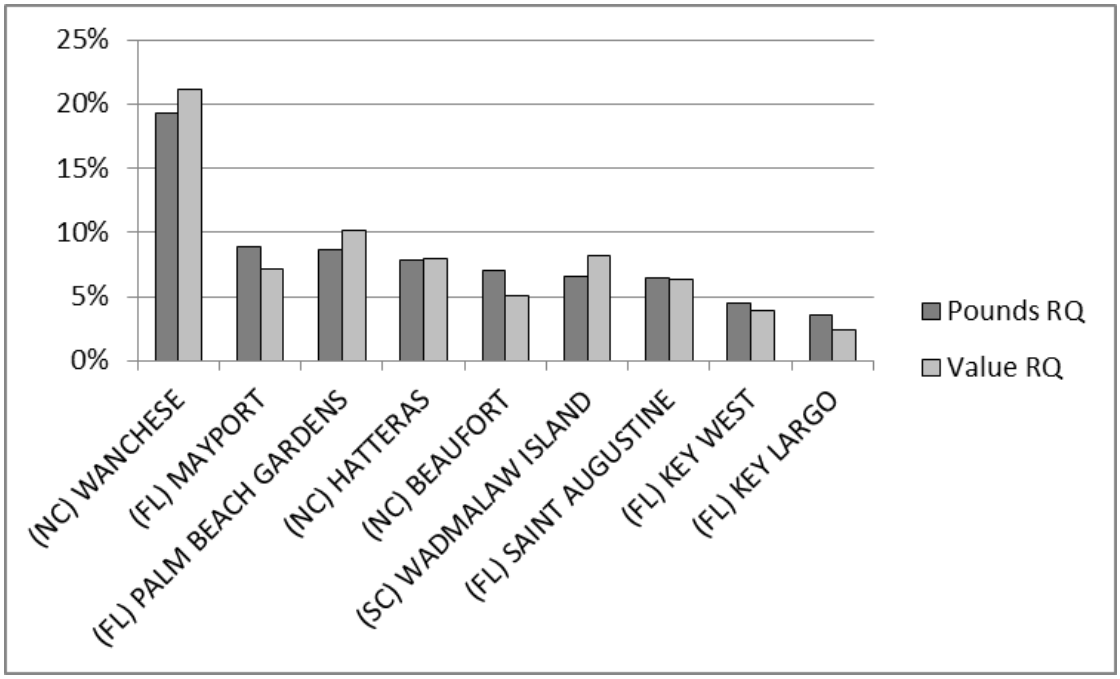

Figure 3-6. The top South Atlantic communities ranked by Pounds and Value Regional Quotient (RQ) of dolphin and wahoo. Only communities with Pounds RQ larger than 3% were included. Data source: ALS 2010.

Although there are commercial landings, almost all landings are from the recreational sector of the dolphin-wahoo fishery and the recreational quota is 97% of the total dolphin-wahoo ACL. Most of the recreational landings are from Florida and distributed between charter and private angling trips.

There is a federal charter permit required for dolphin-wahoo and the distribution of charter permits at the county level is included in Sections 3.4.6 through 3.4.9. Overall, Florida has the largest number of charter permits (**Table 3-4**). The primary communities in North Carolina are part of Dare County, New Hanover County, Brunswick County, and Carteret County. Communities in South Carolina with significant for-hire fleets are in Charleston County, and in Georgia, most of the permits are associated with communities in Chatham County and Glynn County. In Florida, almost half of the permits are from Monroe County, and a majority of the permits are associated with communities in south Florida (Brevard, Palm Beach, and Broward Counties).

Table 3-4. Federal dolphin-wahoo charter permits in the South Atlantic region (2012).

State	Number of Dolphin-Wahoo Charter Permits
North Carolina	292
South Carolina	111
Georgia	21
Florida	608
TOTAL	**1,032**

3.4.5 North Carolina

There are a number of North Carolina counties classified as being either medium high or high on the social vulnerability scale and within those counties there are numerous fishing communities (**Figure 3-7**). Those counties that are considered to be either medium high or high on the SoVI are: New Hanover, Onslow, Carteret, Washington, Bertie, Chowan, Pasquotank, and Perquimans.

Many fishermen in North Carolina work under the dual jurisdiction of the Mid-Atlantic Fishery Management Council and the South Atlantic Fishery Management Council.

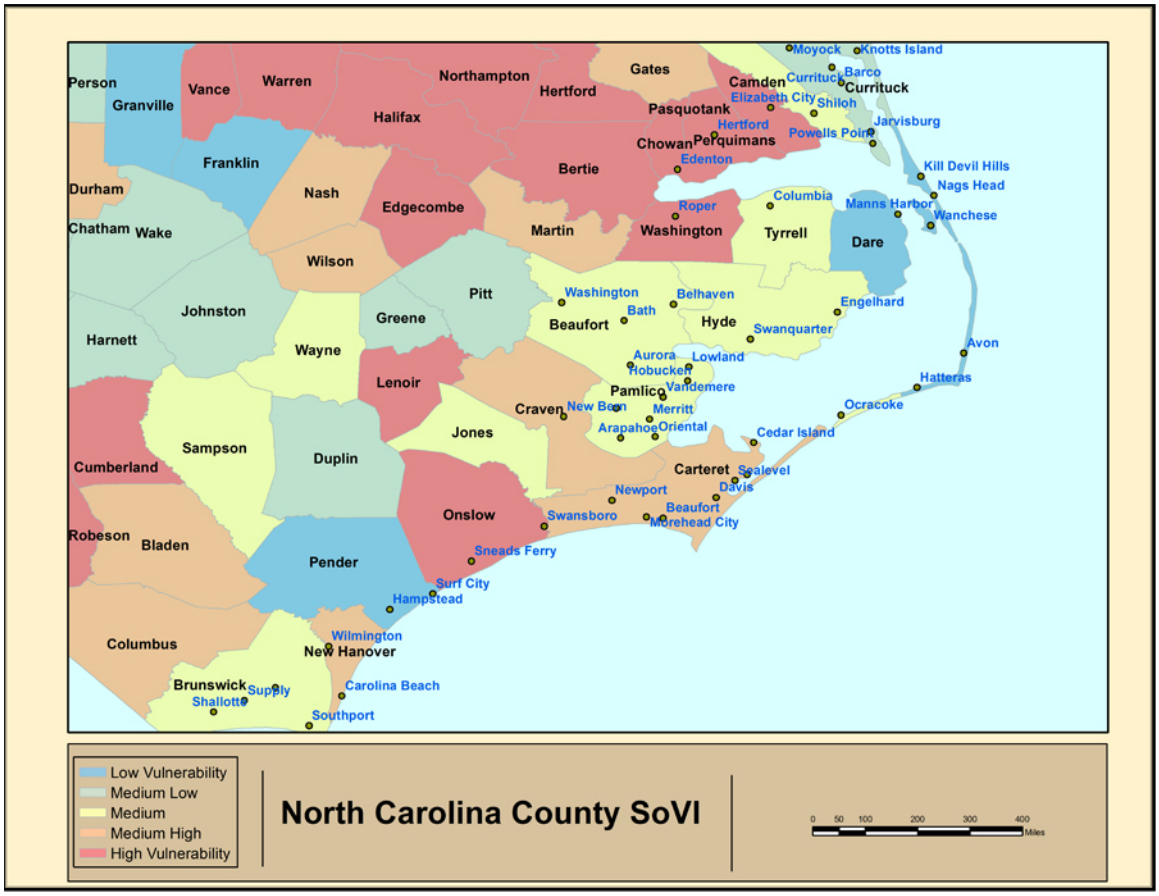

Figure 3-7. The Social Vulnerability Index applied to North Carolina Coastal Counties**.**

Recreational Fishing

Recreational fishing is well developed in North Carolina and, due to natural geography, is not limited to areas along the coast. North Carolina offers several types of private recreational licenses for residents and visitors, and for different durations (10-day, annual, and lifetime). Non-resident recreational license sales are high, indicating how coastal recreational fishing is tied to coastal tourism in the state. In general recreational license sales have remained stable or increased, with the exception of annual non-resident license sales, which have declined in recent years (**Table 3-5**).

Table 3-5. Coastal recreational fishing license sales by year and type.

License Type	2007	2008	2009	2010	2011
Annual Resident	23,793	19,222	19,398	20,254	19,270
Annual non-Resident	179,923	143,810	142,569	141,475	130,743
10-day Resident	40,255	39,110	45,724	47,619	45,467
10-day Non-Resident	131,105	125,564	132,193	137,066	130,026

Source: NC Division of Marine Fisheries

In 2012, there were 663 South Atlantic federal charter permits for dolphin wahoo, mackerel and cobia, and snapper grouper registered to individuals in North Carolina coastal counties (**Table 3-6**). A majority of the charter permits are from Dare County, Brunswick County, and Carteret County. It is common for charter vessels to hold all three federal charter permits.

Table 3-6. Federal charter permits in North Carolina coastal counties (2012).

County*	Dolphin Wahoo	Mackerels & Cobia	Snapper Grouper	Total
Beaufort	1	1	1	3
Brunswick	46	46	44	136
Carteret	40	34	34	108
Craven	3	2	2	7
Dare	89	83	78	250
Hyde	4	4	4	12
New Hanover	36	33	29	98
Onslow	6	7	7	20
Pasquotank	3	3	2	8
Pamlico	0	0	0	0
Pender	7	7	7	21
Total	**235**	**220**	**208**	**663**

* Based on the mailing address of the permit holder.

3.4.6 South Carolina

Coastal South Carolina had no counties that were either medium or highly vulnerable (**Figure 3-8**). This does not mean that communities could not be vulnerable to adverse impacts because of regulatory action. It may suggest that coastal South Carolina is more resilient and capable of absorbing such impacts without substantial social disruption. South Carolina had no communities with landings or value over 3% for any coastal pelagic. While there were no substantial commercial landings within the state, the recreational fishery may be important.

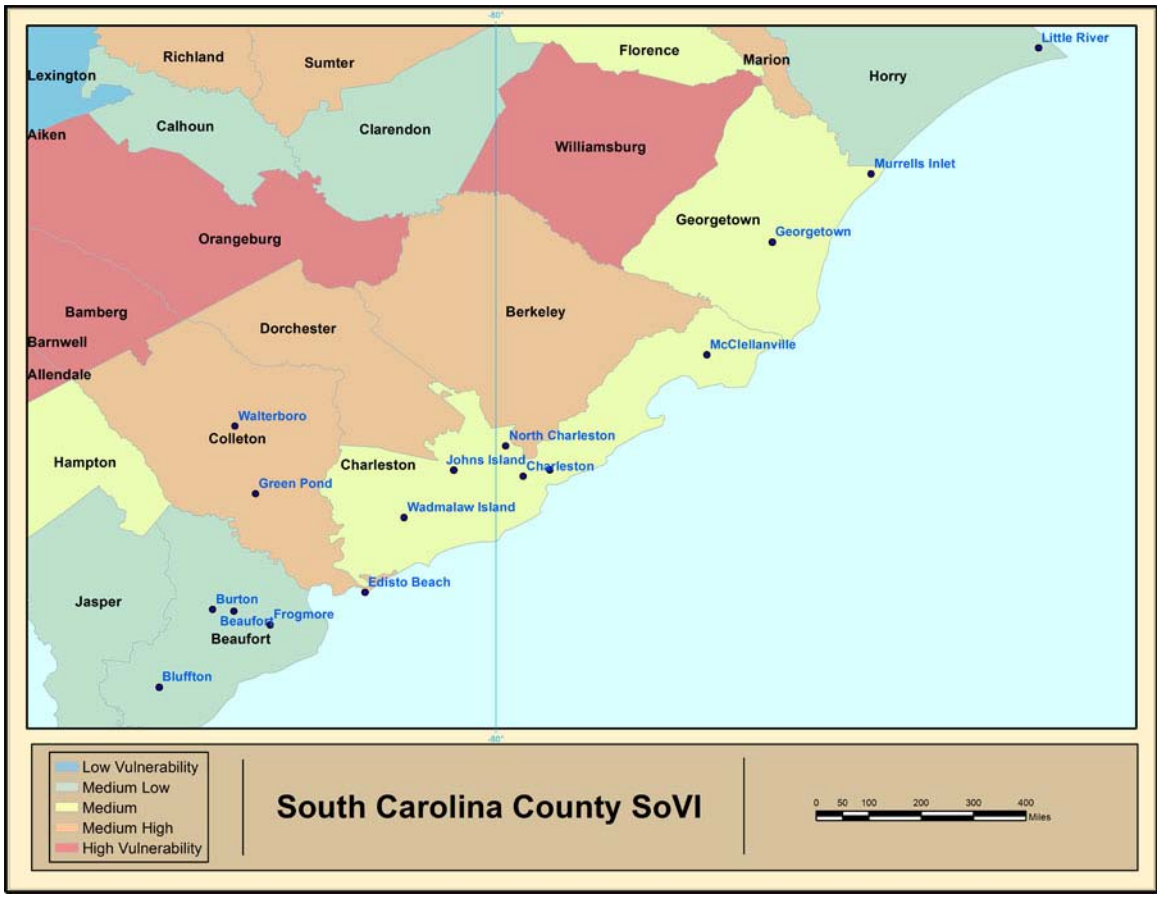

Figure 3-8. The Social Vulnerability Index applied to South Carolina Coastal Counties.

Recreational Fishing

Many areas that used to be dedicated to commercial fishing endeavors are now geared towards the private recreational angler and for-hire sector. Most of the charter permits are associated with vessels from Charleston, Horry, and Georgetown Counties (**Table 3-7**). It is common for charter vessels to have all three federal charter permits.

Table 3-7. Federal charter permits in South Carolina coastal counties (2012).

County*	Dolphin-Wahoo	Mackerels and Cobia	Snapper Grouper	Total
Beaufort	10	17	14	**41**
Berkeley	0	1	1	**2**
Charleston	43	38	36	**117**
Georgetown	18	19	19	**56**
Horry	28	28	25	**81**
Total	**99**	**103**	**95**	**297**

*Based on the mailing address of the permit holder.

The majority of South Carolina saltwater anglers target coastal pelagic species such as king mackerel, Spanish mackerel, tunas, dolphins, and billfish. A lesser number focus primarily on bottom fish such as snapper and groupers and often these species are the specialty of the headboats that run out of Little River, Murrells Inlet, and Charleston. There are 35 coastal marinas in the state and 34 sport fishing tournaments. South Carolina offers private recreational licenses for residents and visitors, and sales of all license types have more than doubled since 2006 (**Table 3-8**).

Table 3-8. Sales of all saltwater recreational license types in South Carolina.

Year	Number of Licenses Sold
2006	106,385
2007	119,255
2008	132,324
2009	124,193
2010	208,204
2011	218,834

Source: SC DNR.

3.4.7 Georgia

Overview

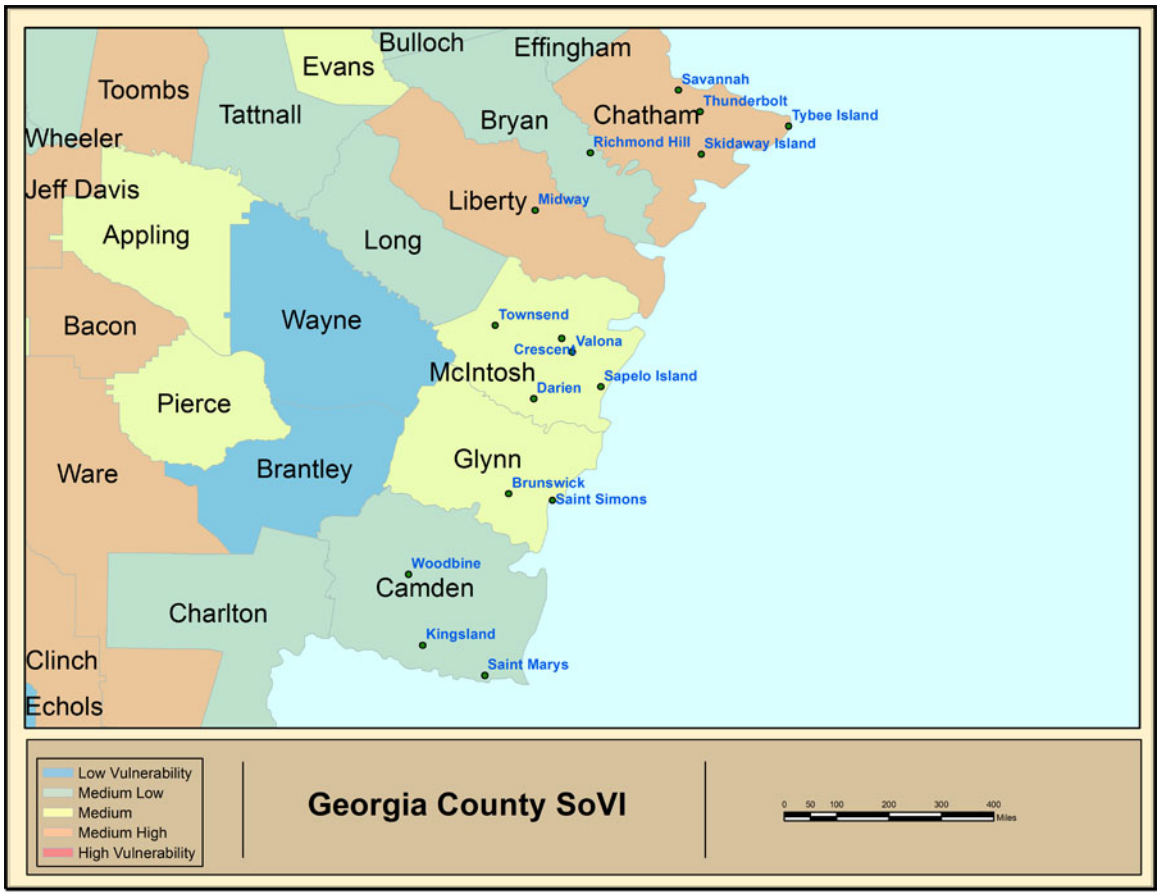

Figure 3-9. The Social Vulnerability Index applied to Georgia Coastal Counties.

There were two counties in Georgia with medium high vulnerability and those were Liberty and Chatham (**Figure 3-9**). The fishing communities located in those counties are Savannah, Thunderbolt, Tybee Island, and Skidaway Island in Chatham County, and Midway in Liberty County.

Recreational Fishing

Most federal charter permits are associated with Chatham and Glynn County (**Table 3-9**). Private recreational licenses in Georgia are included in a combination saltwater/freshwater license and offered in short-term and long-term licenses. Although license holders may or may not fish for saltwater species, license sales over the past five years (**Table 3-10**) suggest that in general, private recreational fishing in Georgia has stayed fairly steady with the exception of 2009, when license sales dropped for one year.

Table 3-9. Federal charter permits in Georgia coastal counties (2012).

County	Dolphin-Wahoo	Mackerels and Cobia	Snapper Grouper	Total
Chatham	9	10	9	**28**
Glynn	4	5	5	**14**
McIntosh	1	1	1	**3**
Total	**14**	**16**	**15**	**45**

*****Based on the mailing address of the permit holder.

Table 3-10. Sales of recreational fishing license types that include saltwater in Georgia.

Year	Number of Licenses Sold
2007	592,633
2008	526,294
2009	325,189
2010	567,175
2011	529,850

Source: GA DNR.

3.4.8 Florida

Figure 3-10. The Social Vulnerability Index applied to South Atlantic Florida Counties.

A good portion of Florida's east coast (**Figure 3-10**) is considered either medium high or highly vulnerable in terms of social vulnerability. In fact, the only counties not included in those two categories are Nassau, St. John's, and Monroe.

Commercial and recreational fishermen in the Florida Keys commonly fish both Gulf and Atlantic sides, and work under dual jurisdiction of the South Atlantic Fishery Management Council and the Gulf of Mexico Fishery Management Council.

Recreational Fishing

Recreational fishing is economically and socially important for all Florida coastal counties, and for both residents and tourists. Most charter permits are associated with the southern counties (**Table 3-11**), but there are at least 20 permits in all counties.

Table 3-11. Federal charter permits in Florida coastal counties (2012).

County*	Dolphin-Wahoo	Mackerels and Cobia	Snapper Grouper	Total
Brevard	66	65	65	**196**
Broward	58	57	59	**174**
Duval	17	16	17	**50**
Indian River	18	18	20	**56**
Martin	10	10	11	**31**
Miami-Dade	39	38	42	**119**
Monroe	285	278	294	**857**
Nassau	6	7	7	**20**
Palm Beach	49	49	63	**161**
St Johns	23	23	23	**69**
St Lucie	7	6	8	**21**
Volusia	30	33	32	**95**
Total	**608**	**600**	**641**	**1,849**

*Based on mailing address of the permit holder.

In 2010/2011, there were approximately 860,000 resident marine recreational licenses and 394,000 non-resident marine recreational licenses sold in Florida (FWC 2012). Eastern Florida recreational anglers took 10 million fishing trips: 5.4 million by private/rental boats, 4.5 million from shore, and 180,000 by party/charter boat (NMFS 2009).

3.5 Environmental Justice Considerations

Executive Order 12898 requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. This executive order is generally referred to as environmental justice (EJ).

To evaluate EJ considerations for the proposed actions, information on poverty and minority rates is examined at the county level. Information on the race and income status for groups at the different participation levels (vessel owners, crew, dealers, processors, employees, employees of associated support industries, etc.) is not available. Because the proposed action would be expected to affect fishermen and associated industries in several communities along the South Atlantic coast and not just those profiled, it is possible that other counties or communities have poverty or minority rates that exceed the EJ thresholds.

In order to identify the potential for EJ concern, the rates of minority populations (non-white, including Hispanic) and the percentage of the population that was below the poverty line were examined. The threshold for comparison that was used was 1.2 times the state average for minority population rate and percentage of the population below the poverty line. If the value for the community or county was greater than or equal to 1.2 times the state average, then the community or county was considered an area of potential EJ concern. Census data for the year 2000 was used. Estimates of the state minority and poverty rates, associated thresholds, and community rates are provided in **Table 3-12**; note that only communities that exceed the minority threshold and/or the poverty threshold are included in the table**.**

While some communities expected to be affected by this proposed amendment may have minority or economic profiles that exceed the EJ thresholds and, therefore, may constitute areas of concern, significant EJ issues are not expected to arise as a result of this proposed amendment. No adverse human health or environmental effects are expected to accrue to this proposed amendment, nor are these measures expected to result in increased risk of exposure of affected individuals to adverse health hazards. The proposed management measures would apply to all headboat participants in the affected area, regardless of minority status or income level, and information is not available to suggest that minorities or lower income persons are, on average, more dependent on the affected species than non-minority or higher income persons.

Table 3-12. Environmental Justice thresholds (2010 U.S. Census data) for counties in the South Atlantic region. Only coastal counties (east coast for Florida) with minority and/or poverty rates that exceed the state threshold are listed.

State	County	Minority Rate	Minority Threshold*	Poverty Rate	Poverty Threshold*
Florida		**47.4**	**56.88**	**13.18**	**15.81**
	Broward	52.0	-4.6	11.7	4.11
	Miami-Dade	81.9	-34.5	16.9	-1.09
	Orange County	50.3	-2.9	12.7	3.11
	Osceola	54.1	-6.7	13.3	2.51
Georgia		**50.0**	**60.0**	**15.0**	**18.0**
	Liberty	53.2	-3.2	17.5	0.5
South Carolina		**41.9**	**50.28**	**15.82**	**18.98**
	Colleton	44.4	-2.5	21.4	-2.42
	Georgetown	37.6	4.3	19.3	-0.32
	Hampton	59.0	-17.1	20.2	-1.22
	Jasper	61.8	-19.9	9.9	-0.92
North Carolina		**39.1**	**46.92**	**15.07**	**18.08**
	Bertie	64.6	-25.50	22.5	-4.42
	Chowan	39.2	-0.1	18.6	-0.52
	Gates	38.8	0.3	18.3	-0.22
	Hertford	65.3	-26.2	23.5	-5.42
	Hyde	44.5	-5.4	16.2	1.88
	Martin	48.4	-9.3	23.9	-5.82
	Pasquotank	43.4	-4.3	16.3	1.78
	Perquimans	27.7	11.4	18.6	-0.52
	Tyrrell	43.3	-4.2	19.9	-1.82
	Washington	54.7	-15.6	25.8	-7.72

*The county minority and poverty thresholds are calculated by comparing the county minority rate and poverty estimate to 1.2 times the state minority and poverty rates. A negative value for a county indicates that the threshold has been exceeded.

All of the fisheries affected by the proposed actions are economically and socially important to coastal counties in the South Atlantic region. The action in this proposed amendment is expected to incur social and economic benefits to users and communities by implementing management measures that would contribute to conservation of fish stocks and to protection of important habitat. Although there may be some impacts on vessels due to area closures and to permit holders due to reporting requirements, the overall long-term benefits are expected to contribute to the social and economic health of South Atlantic communities.

Finally, the general participatory process used in the development of fishery management measures (e.g., scoping meetings, public hearings, and open South Atlantic Council meetings) is expected to provide sufficient opportunity for meaningful involvement by potentially affected

individuals to participate in the development process of this amendment and have their concerns factored into the decision process. Public input from individuals who participate in the fishery has been considered and incorporated into management decisions throughout development of the amendment.

3.6 Administrative Environment

3.6.1 The Fishery Management Process and Applicable Laws

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. Exclusive Economic Zone (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 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 of Commerce (Secretary) is responsible for collecting and providing the data necessary for the councils to prepare fishery management plans and for promulgating regulations to implement proposed plans and amendments after ensuring that management measures are consistent with the Magnuson-Stevens Act and with other applicable laws. In most cases, the Secretary has delegated this authority to the National Marine Fisheries Service.

The South Atlantic 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 South Atlantic Council has thirteen voting members: one from the National Marine 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. South Atlantic 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 South Atlantic 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.

3.6.1.2 State Fishery Management

The state governments of North Carolina, South Carolina, Georgia, and Florida have the authority to manage fisheries that occur in waters extending three nautical miles from their respective shorelines. North Carolina's marine fisheries are managed by the Marine Fisheries Division of the North Carolina Department of 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 Atlantic States Marine Fisheries Commission (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.

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

3.6.1.3 Enforcement

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

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

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. NOAA General Counsel requested public comment through December 20 2010, on a new draft policy.

Chapter 4. Environmental Consequences

4.1 Action 1. Amend the Snapper Grouper, Dolphin and Wahoo, and Coastal Migratory Pelagic Resources Fishery Management Plans to modify data reporting for charter/headboat vessels

Alternative 1 (No Action). Retain existing permits and data reporting systems for the for-hire sector. Currently, the owner or operator of a vessel for which a charter vessel / headboat permit for Gulf coastal migratory pelagic fish, South Atlantic coastal migratory pelagic fish, Gulf reef fish, South Atlantic snapper grouper, or Atlantic dolphin and wahoo has been issued, or whose vessel fishes for or lands such coastal migratory pelagic fish, reef fish, snapper-grouper, or Atlantic dolphin or wahoo in or from state waters adjoining the applicable Gulf, South Atlantic, or Atlantic EEZ, and who is selected to report by the SRD, must maintain a fishing record for each trip, or a portion of such trips as specified by the SRD, on forms provided by the SRD. Completed records for charter vessels must be submitted to the Science and Research Director weekly, postmarked no later than 7 days after the end of each trip (Sunday). Completed records for headboats must be submitted to the Science and Research Director monthly and must either be made available to an authorized statistical reporting agent or be postmarked no later than 7 days after the end of each month.

Alternative 2. Require that vessels submit fishing records to the Science and Research Director (SRD) weekly via electronic reporting (via computer or internet). Weekly = 7 days after the end of each week (Sunday).

Sub-Alternative 2a. Charter
Sub-Alternative 2b. Headboat

Alternative 3. Require that vessels submit fishing records to the Science and Research Director (SRD) daily via electronic reporting (via computer or internet). Daily = by noon of the following day.

Sub-Alternative 3a. Charter
Sub-Alternative 3b. Headboat

Preferred Alternative 4. Require that vessels submit fishing records to the Science and Research Director (SRD) weekly or at intervals shorter than a week if notified by the SRD via electronic reporting (via computer or internet). Weekly = 7 days after the end of each week (Sunday).

Sub-Alternative 4a. Charter
Preferred Sub-Alternative 4b. Headboat

It is the Councils' intent that headboats must be current in reporting to be authorized to conduct trips (compliance measure) and that in catastrophic conditions, paper reporting be authorized (catastrophic measure). See discussion below for details.

Compliance Measure

"No-fishing forms" must be submitted at the same frequency, via the same process as specified in Action 1. A headboat would only be authorized to harvest and/or possess species in the Snapper Grouper, Dolphin/Wahoo, and Coastal Migratory Pelagic Resources Fishery Management Plans if the headboat's previous reports have been submitted by the headboat owner and received by NMFS in a timely manner. Any delinquent reports would need to be submitted and received by NMFS before a headboat could harvest and/or possess the affected species. Headboats reporting ahead of time if they are closed/not fishing for an extended period meets the intent of the weekly reporting in the preferred alternative.

This measure would require that headboats remain current on reports as a requirement to continue harvesting and/or possessing the affected species. This would improve timeliness and accuracy of headboat reporting, decreasing the likelihood of exceeding recreational ACLs for the affected species. The requirement to submit no-fishing forms reduces the uncertainty of reported headboat landings**.** NMFS would be better able to differentiate between periods when headboats were fishing and periods with missing reports.

Catastrophic Measure

It is the Councils' intent that during catastrophic conditions only, the headboat program provides for use of paper-based components for basic required functions as a backup. The Regional Administrator (RA) will determine when catastrophic conditions exist, the duration of the catastrophic conditions, and which participants or geographic areas are deemed affected by the catastrophic conditions. The RA will provide timely notice to affected participants via publication of notification in the Federal Register, NOAA weather radio, fishery bulletins, and other appropriate means and will authorize the affected participants' use of paper-based components for the duration of the catastrophic conditions. The paper forms will be available from NMFS. The RA has the authority to waive or modify reporting time requirements.

This measure would provide for paper-based reporting as a backup during catastrophic conditions. The paper forms would be available from NMFS. While this measure would permit paper-based reporting on subsequent impacts to timeliness and accuracy as compared to electronic reporting, this measure is expected to occur infrequently, for relatively short time periods. Moreover, this would only occur during catastrophic conditions, periods when fishing effort is typically low as compared to normal conditions.

Background

For-hire vessels (Charter and Headboat)

For-hire vessels selected to report by the Science and Research Director (SRD) must maintain a fishing record for each trip, or a portion of such trips as specified by the SRD, and on forms provided by the SRD. Furthermore, the owner or operator of a vessel for which a charter vessel/headboat permit for South Atlantic snapper-grouper has been issued, who is selected to report by the SRD must participate in the NOAA Fisheries-sponsored electronic logbook and/or video monitoring reporting program as directed by the SRD. Completed records for charter vessels must be submitted to the SRD weekly, postmarked no later than 7 days after the end of

each trip (Sunday) (Snapper Grouper Amendment 4; SAFMC 1991). Completed records for headboats must be submitted to the SRD monthly and must either be made available to an authorized statistical reporting agent or be postmarked no later than 7 days after the end of each month (Snapper Grouper Amendment 4; SAFMC 1991).

Currently, harvest and bycatch in the private and for-hire charter vessel sector is monitored by the Marine Recreational Fisheries Statistical Survey and the MRIP. A 10% sample of charter vessel captains are called weekly to obtain trip level information. In addition, the standard dockside intercept data is collected from charter vessels and charter vessel clients are sampled through the standard random digital dialing of coastal households. Other improvements have been and will be made that should result in better estimating recreational catches and the variances around those catch estimates. Currently, landings data are provided 45 days following the end of a two-month wave.

Harvest from headboats is monitored by NOAA Fisheries at the Southeast Fisheries Science Center (SEFSC) Beaufort Laboratory. Collection of discard data began in 2004. Daily catch records are obtained for all trips and are filled out by the headboat operators, or in some cases by NOAA Fisheries-approved headboat samplers based on personal communication with the captain or crew. Headboat trips are sub-sampled for data on species lengths and weights. Biological samples (scales, otoliths, spines, reproductive tissues, and stomachs) are obtained as time permits. Lengths of discarded fish are occasionally obtained but these data are not part of the headboat database.

For-Hire Pilot Projects

There have been two data collection projects in the Gulf of Mexico to evaluate programs with the goal of improving accuracy and timeliness of fisheries data from for-hire vessels. In September 2010, a one-year For-Hire Electronic Pilot Study was conducted in the Gulf of Mexico to test the feasibility of a mandatory electronic logbook reporting system, as well as methods to independently verify self-reported catch and effort data in the for-hire fishery. The expectation with a mandatory reporting system was that a complete census of effort and catch among all participants would be obtained. However, methods to independently validate self-reported fisheries data are needed to certify whether a true and accurate census of catch and effort is actually achieved, and to account for instances when it is not. Tracking methods are also important with any mandatory reporting requirement so that late or missing reports can be identified and participants in the fishery can be contacted in a timely manner. The full report from this project is expected to be completed in early 2013.

The iSnapper Electronic Logbook Project was conducted in the Gulf of Mexico using charter vessels and headboats during the 2011 and 2012 recreational red snapper fishing seasons. This pilot program distributed iPhones/iPads pre-loaded with the iSnapper application to charter and headboat captains in the for-hire sector in Texas, Louisiana, Alabama, and Florida. These for-hire fishing vessels targeted both reef fish (e.g., red snapper) and a variety of other pelagic species (e.g., king mackerel). In 2011, 16 captains participated from June 1 through July 18,

2011. Collectively, the group reported catch data from 327 trips, harvested more 10,000 fish of five major species, and provided information on discard rates and fish size.

Voluntary angler surveys, such as those used in the iSnapper application, can provide useful data but there are concerns about such data being susceptible to bias. The Mid-Atlantic Council, in cooperation with the MRIP, brought together a group of people involved in such programs in February 2012. They concluded that "opt-in angler data may be useful for certain kinds of data that are not likely to be susceptible to bias, although it is difficult to anticipate what these data may be. However, the unique characteristics of self-selected participants are likely to introduce bias into certain kinds of data, especially catch and effort data. Managers must be made aware of such biases, and the likely extent of such biases should be examined when implementation of these programs is considered." The Summary of the February 2, 2012 Workshop is included as **Appendix J**.

The Southeast Region Headboat Survey received FY2012 funding from the MRIP Operations Team for; *Pilot Project, Phase II: Survey-Wide Implementation of Electronic Logbook Reporting on Headboats Operating in the U.S. South Atlantic and Gulf of Mexico*.
The objective of this project is to develop and implement a web-based portal for electronic logbook data entry in the U.S. Atlantic and Gulf of Mexico headboat sector. This project will include development by a software contractor of additional features of the web-based data form useful to users and scientists (e.g., depth, location, on-demand fish identification catalogue, etc). SRHS staff will provide data validation via review of submitted data, helping to clear up any confusion that any of the participants may be having with data elements. These procedures will be tested for the first 60 days of the project, with an estimated rollout date of early 2013. Senior SRHS staff at the Beaufort Laboratory will work with NOAA Fisheries and Council staff to ensure that the proper legal framework exists or can be put in place to ensure that electronic logbook reporting becomes the accepted procedure, as well as to ensure that timely and complete reporting is linked to the ability to possess and keep a for-hire permit in the applicable fisheries.

Currently, for-hire vessels are subject to the following permitting and reporting requirements:
Code of Federal Regulations: Title 50
§ 622.2 Definitions and acronyms.
Science and Research Director (SRD), for the purposes of this part, means the Science and Research Director, Southeast Fisheries Science Center, NMFS (see Table 1 of § 600.502 of this chapter).

§ 622.4 Permits and fees.
(a) Permits required. To conduct activities in fisheries governed in this part, valid permits, licenses, and endorsements are required as follows: (1) Charter vessel/headboat permits. (i) For a person aboard a vessel that is operating as a charter vessel or headboat to fish for or possess, in or from the EEZ, species in any of the following species groups, a valid charter vessel/headboat permit for that species group must have been issued to the vessel and must be on board--
(A) Gulf coastal migratory pelagic fish.
(B) South Atlantic coastal migratory pelagic fish.
(C) Gulf reef fish.
(D) South Atlantic snapper-grouper.
(E) Atlantic dolphin and wahoo. (See paragraph (a)(5) of this section for the requirements for operator permits in the dolphin and wahoo fishery.)

(ii) See paragraph (r) of this section regarding a limited access system for charter vessel/headboat permits for Gulf reef fish and Gulf coastal migratory pelagic fish.

(iii) A charter vessel or headboat may have both a charter vessel/headboat permit and a commercial vessel permit. However, when a vessel is operating as a charter vessel or headboat, a person aboard must adhere to the bag limits.

§ 622.5 Recordkeeping and reporting.
Participants in fisheries governed in this part are required to keep records and report as follows.

(b) Charter vessel/headboat owners and operators—
(1) Coastal migratory pelagic fish, reef fish, snapper-grouper, and Atlantic dolphin and wahoo. The owner or operator of a vessel for which a charter vessel/headboat permit for Gulf coastal migratory pelagic fish, South Atlantic coastal migratory pelagic fish, Gulf reef fish, South Atlantic snapper-grouper, or Atlantic dolphin and wahoo has been issued, as required under § 622.4(a)(1), or whose vessel fishes for or lands such coastal migratory pelagic fish, reef fish, snapper-grouper, or Atlantic dolphin or wahoo in or from state waters adjoining the applicable Gulf, South Atlantic, or Atlantic EEZ, and who is selected to report by the SRD, must maintain a fishing record for each trip, or a portion of such trips as specified by the SRD, on forms provided by the SRD and must submit such record as specified in paragraph (b)(2) of this section.
(ii) Electronic logbook/video monitoring reporting. The owner or operator of a vessel for which a charter vessel/headboat permit for South Atlantic snapper-grouper has been issued, as required under § 622.4(a)(1), who is selected to report by the SRD must participate in the NMFS-sponsored electronic logbook and/or video monitoring reporting program as directed by the SRD. Compliance with the reporting requirements of this paragraph (b)(1)(ii) is required for permit renewal.

(2) Reporting deadlines--(i) Charter vessels. Completed fishing records required by paragraph (b)(1) of this section for charter vessels must be submitted to the SRD weekly, postmarked not later than 7 days after the end of each week (Sunday). Information to be reported is indicated on the form and its accompanying instructions.

(ii) Headboats. Completed fishing records required by paragraph (b)(1) of this section for headboats must be submitted to the SRD monthly and must either be made available to an authorized statistical reporting agent or be postmarked no later than 7 days after the end of each month. Information to be reported is indicated on the form and its accompanying instructions.

4.1.1 Biological Effects

Modifying data reporting for for-hire vessels is an administrative process for providing a means of collecting data from the industry but in itself does not directly affect the biological environment. Assuming compliance and accurate reporting by participants, there would be positive indirect biological effects from requiring electronic reporting if landings could be tracked accurately and in a timely manner. This could help prevent annual catch limits (ACLs) from being exceeded.

Alternative 1 (No Action) requires for-hire vessels for snapper grouper, coastal migratory pelagic and dolphin/wahoo fisheries selected to report by the SRD to maintain a fishing record for each trip, or a portion of such trips as specified by the SRD, and on forms provided by the SRD. Furthermore, the owner or operator of a vessel for which a charter vessel/headboat permit for South Atlantic snapper-grouper has been issued, who is selected to report by the SRD must participate in the NMFS-sponsored electronic logbook and/or video monitoring reporting program as directed by the SRD. **Alternative 1** does not require for-hire fisheries for coastal migratory pelagic, and dolphin/wahoo to submit their data via electronic reporting (computer/internet), and would retain existing data reporting systems for the for-hire sector (see Discussion above). Currently, harvest and bycatch in the private and for-hire charter vessel sector is monitored by the Marine Recreational Fisheries Statistical Survey (MRFSS) and the Marine Recreational Information Program (MRIP). These surveys use a combination of random digit dialed telephone intercepts of coastal households for effort information and dock-side intercepts for individual trips for catch information to statistically estimate total catch and discards by species for each sub-region, state, mode, primary area, and wave. Bycatch is enumerated by disposition code for each fish caught but not kept (B2). Prior to 2000, sampling of the charter vessel sector resulted in highly variable estimates of catch. However, since 2000, a new sampling methodology has been implemented. A 10% sample of charter vessel captains is called weekly to obtain trip level information. In addition, the standard dockside intercept data are collected from charter vessels and charter vessel clients are sampled through the standard random digital dialing of coastal households. Precision of charter vessel effort estimates has improved by more than 50% due to these changes (Van Voorhees et al. 2000). Recent improvements have been made to the MRFSS program, and the program is now called MRIP. Samples will now be drawn from a known universe of fishermen rather than randomly dialing coastal households. Other improvements have been and will be made that should result in better estimating recreational catches and the variances around those catch estimates.

Harvest from headboats is monitored by NOAA Fisheries at the Southeast Fisheries Science Center's (SEFSC) Beaufort Laboratory. Collection of discard data began in 2004. Daily catch records (trip records) are filled out by the headboat operators, or in some cases by NOAA Fisheries approved headboat samplers based on personal communication with the captain or

crew. Headboat trips are subsampled for data on species lengths and weights. Biological samples (scales, otoliths, spines, reproductive tissues, and stomachs) are obtained as time permits. Lengths of discarded fish are occasionally obtained but these data are not part of the headboat database.

Alternatives 2-Preferred Alternative 4 would require that all charter and/or headboat snapper grouper, coastal migratory pelagic, and dolphin wahoo fishermen submit logbook data to the SEFSC electronically via computer. A pilot study was conducted in the Gulf of Mexico to evaluate the feasibility of such a program for the recreational for-hire sector in the Gulf of Mexico.

There have been two pilot data collection projects in the Gulf of Mexico to evaluate programs aimed at improving accuracy and timeliness of fisheries data from for-hire vessels. In September 2010, a one-year For-Hire Electronic Pilot Study was conducted in the Gulf of Mexico to test the feasibility of a mandatory electronic logbook reporting system, along with methods to independently verify self-reported catch and effort data in the for-hire fishery. The expectation with a mandatory reporting system was that a complete census of effort and catch among all participants would be obtained. However, methods to independently validate self-reported fisheries data are needed to certify whether a true and accurate census of catch and effort is actually achieved, and to account for instances when it is not. Tracking methods are also important with any mandatory reporting requirement so that late or missing reports can be identified and participants in the fishery can be contacted in a timely manner. The full report from this project has not been released at the time of this writing.

A regional pilot study implemented in September 2010 included approximately 60 charter vessels from Corpus Christi, Texas, and 360 vessels from the northwest region of Florida that possess federal permits to harvest reef fish and/or pelagic species from the Gulf of Mexico. Field validations of self-reported data were collected using three methods: Dockside validations of fishing status; dockside interviews for harvested catch; and at-sea validations for released catch. Vessels selected to participate were required to submit trip reports each week as a condition for permit renewal. A Web-based electronic reporting system was developed, and participants were provided paper logsheets if electronic reporting was not possible. Compliance was monitored weekly and participants were contacted weekly and monthly to notify them of outstanding reports. Participants that did not submit reports at the end of one month were not cleared for permit renewal until all late trip reports were received. Preliminary results indicated there were significant problems with non-compliance and reporting timeliness. A presentation by SERO staff on this pilot project to the Council at their March 2012 meeting is available at the following link: http://www.safmc.net/LinkClick.aspx?fileticket=5YqBu6erpts%3d&tabid=722. The abstract describing the study is available at the following link: https://afs.confex.com/afs/2011/webprogram/Paper3899.html. The report is being revised and the MRIP team leads determined the report would benefit from peer review prior to being released (Source: Gordon Colvin email to Robert Mahood, 10/15/12). A final report on this project will be available in 2013 and will provide:

- Compliance success of the pilot study,

- Results of comparisons between self-reported trip data and independent field validations for both effort and catch, and
- Recommendations on the use of self-reported electronic logbook data for monitoring catch and effort in the for-hire sector.

The iSnapper Electronic Logbook Project was conducted in the Gulf of Mexico using charter vessels and headboats during the 2011 and 2012 recreational red snapper fishing seasons. This pilot program distributed iPhones/iPads pre-loaded with the iSnapper app to charter and headboat captains in the for-hire sector in Texas, Louisiana, Alabama, and Florida. These for-hire fishing vessels targeted both reef fish (e.g., red snapper) and a variety of other pelagic species (e.g., king mackerel). In 2011, 16 captains participated from June 1 through July 18, 2011. Collectively, the group reported catch data from 327 trips, harvested more 10,000 fish of five major species, and provided information on discard rates and fish size.

Voluntary Angler Surveys can provide useful data but there are concerns about such data being susceptible to bias. The Mid-Atlantic Council, in cooperation with the Marine Recreational Information Program, brought together a group of people involved in such programs in February 2012. They concluded, "Opt-in angler data may be useful for certain kinds of data that are not likely to be susceptible to bias, although it is difficult to anticipate what these data may be. However, the unique characteristics of self-selected participants are likely to introduce bias into certain kinds of data, especially catch and effort data. Managers must be made aware of such biases, and the likely extent of such biases should be examined when implementation of these programs is considered." The Summary of the February 2, 12012 Workshop is included as **Appendix J**.

Alternatives 2- Preferred Alternative 4 would require that data be submitted to the SEFSC more frequently than the current situation and electronically via computer possibly resulting in positive indirect biological effects. Sub-Alternatives under **Alternatives 2- Preferred Alternative 4** would apply to charter vessels (**Sub-Alternatives a**) or headboats (**Sub-Alternatives b**). Requiring charter vessels to report weekly or daily could greatly improve the timeliness of reporting over the current 2 month wave plus 45 days under MRFSS/MRIP. **Alternative 3** would require daily reporting and could result in the most positive indirect biological effects. **Alternative 2** would require weekly, which is the same required deadline as **Alternative 1** for charter vessels; however, **Alternative 2** would require data be submitted via computer. **Preferred Alternative 4** would initially require weekly, with the additional requirement for data to be submitted via computer, but allow the SRD to require faster data submissions in the future without the South Atlantic Fishery Management Council (South Atlantic Council) having to prepare an additional amendment.

Overall, ranked in terms of highest to lowest positive indirect biological effects, the alternatives/sub-alternatives are as follows:

1. **Sub-Alternative 3a.**
2. **Sub-Alternative 4a.**
3. **Sub-Alternative 2a.**
4. **Sub-Alternative 3b.**

5. **Sub-Alternative 4b.**
6. **Sub-Alternative 2b.**
7. **Alternative 1 (No Action).**

Results from the pilot study conducted for the for-hire recreational in the Gulf of Mexico will provide additional insight on the potential biological effects of **Alternatives 2- Preferred Alternative 4** and its sub-alternatives.

4.1.2 Economic Effects

Improved harvest monitoring would be expected to result in increased economic benefits because it would be expected to result in better resource protection, sustainable harvests, and fewer disruptions of normal fishing behavior. The assessment of the proposed alternatives for **Action 1** evaluates the expected change in economic effects from the perspective of the extent to which these alternatives would be expected to differ in supporting improved harvest monitoring compared to the associated cost burden to for-hire entities for compliance.

The proposed alternatives to **Action 1** vary by frequency of reporting. Each of these alternatives contains the same set of sub-alternatives specifying which for-hire permit holders would be required to report electronically. The following discussion of the expected economic effects of these alternatives and options will follow a similar organization, i.e., first examining the alternative methods of reporting, then contrasting the reporting frequency options.

Alternative 1 (No Action) would not change the frequency or method of reporting by sector. Currently, selected charter vessels must report weekly. Ten percent of the charter fleet is selected to report weekly. However, because sampling is done "with replacement," a single vessel could be selected more than one time in a year or not at all. Headboat operators must report monthly. Although current for-hire reporting does not require electronic submission, an electronic logbook is being developed for the headboat sector for implementation in 2013.

Electronic reporting would be expected to be more efficient than other forms of reporting because the information provided could be directly integrated into an electronic system that would allow a combination of records and tabulation of harvests. With electronic reporting, data would not have to be manually input from paper forms, faxes, or scanned documents. The specification of ACLs and AMs has increased the need for more timely collection of harvest data. The current frequency of data reporting would be expected to increase the likelihood of harvest overages. Only in the most extreme situations would potential overages be expected to be so severe that the status of a stock or a recovery plan be jeopardized under the current reporting schedule. However, overages have the potential, depending on the AMs, to result in significant disruption in fishing behavior the following year and reduce revenue and profit for for-hire vessels and associated businesses, and reduce potential fishing opportunities for anglers. **Alternative 1 (No Action)** would be expected to continue to result in these indirect economic effects.

Alternatives 2-Preferred Alternative 4 would require electronic submission of reports, the difference between alternatives being the frequency of requirement. Currently, federally permitted for-hire vessels in the South Atlantic are not reporting electronically. Under **Alternative 2, Sub-alternative 2a,** charter vessel operators selected for weekly reporting would be required to report on the same weekly schedule as they currently report. However, **Alternative 2, Sub-alternative 2a** would require all charter vessels to report weekly. Under **Alternative 2, Sub-alternative 2b**, weekly reporting would be an approximately fourfold increase in reporting frequency for headboat operators. **Alternative 3** is similar to **Alternative 2** except **Alternative 3** that would require daily electronic reporting. **Preferred Alternative 4** is a hybrid of **Alternatives 2** and **3** requiring either weekly or a more frequent reporting schedule.

Each of the **Alternatives 2 – 4 (Preferred)** has the same set of sub-alternatives. **Sub-Alternatives 2a, 3a,** and **4a** would require electronic reporting for charter vessels. **Sub-Alternatives 2b, 3b,** and **4b (Preferred)** would require electronic reporting for headboat vessels. **Sub-Alternatives 2a, 3a,** and **4a** would impact many more vessels than **Sub-Alternatives 2b, 3b,** and **4b** because there are far more charter vessels than headboat vessels. There is already a reporting requirement for headboat vessels, but only for a random subset of charter vessels. The two fleets tend to target different species. **Sub-Alternatives 2a, 3a,** and **4a** would make reporting a requirement for 100 percent of the charter fleet, resulting in complete reporting for this sector and thereby improving the data used for management as only 10 percent of the fleet is reporting at any one time. **Sub-Alternatives 2b, 3b,** and **4b** would not increase the amount of participation by the headboat fleet as all headboats are already reporting. While they do not report electronically, headboat operators do have experience with logbook reporting. An electronic platform for headboat data collection is under development. Implementing these reporting requirements for the charter boat fleet would be a higher hurdle as there currently is no system in place, nor is one under development. It should be noted that if the Council chooses any one of the **Alternatives 2 – 4 (Preferred)**, but does not select any of the sub-alternatives as a preferred, the selected alternative would apply to all charter and headboat vessels.

Potential regulatory change resulting from **Action 1**, would result in the highest costs to for-hire permit holders with **Alternative 3**, followed by **Preferred Alternative 4**, and **Alternative 2** when compared to **Alternative 1**. The gains that would be achieved through implementation of any of the **Alternatives 2 – 4 (Preferred)** would be expected to justify the increased cost to for-hire operators in terms of resource management. More accurate and timelier data collection would be expected to help prevent overruns of ACTs and ACLs, and reduce the likelihood that AMs would need to be implemented in future fishing seasons, thereby avoiding the adverse economic consequences of the short-term disruption of normal fishing practices that the imposition of AMs induce. From a data collection perspective, all alternatives other than **Alternative 1 (No Action)**, would have a positive impact on monitoring and stock management. Having complete data from both charter boats and headboats would be most advantageous. **Alternative 3** would provide the most frequent data and would be of greatest value for stocks that either have a very small ACL or are getting close to meeting their sector ACL. Yet it also has the greatest reporting burden, as well as a greater economic effect administratively. **Alternative 2** would only require weekly reporting and have less of an administrative economic effect, but perhaps would not provide enough precision when monitoring small ACLs or ACLs

that close to being met. **Alternative 4** represents a compromise between **Alternatives 2** and **3**. It would have the lower impact of **Alternative 2** until the Science Director deems it necessary to switch to more frequent reporting.

The use of computers, the internet, and other forms of electronic connections and communication is commonplace in the business environment, so the differences in the costs between these alternatives associated with reporting method may be minimal. This assessment does not attempt to estimate an average cost of equipment or connection fees per entity, nor total expected costs to for-hire permit holders, because of the range of options and prices available and an inability to estimate the number of entities that may not already use these tools and services in their current business. Electronic reporting would be expected to be part of the routine business practices of many for-hire operators that currently use computers and would be encompassed by these proposed alternatives, though the use of computers may be more common for recording the business aspects of their operation – bookings, accounting, etc, - than recording the catch results and other aspects of individual trips. Nonetheless, electronic reporting would be an additional burden to for-hire operators who do not currently use a computer because they would have to bear the additional costs associated with acquiring a computer and internet access, and possibly the cost of training to learn how to use the computer, or hiring personnel to enter the data.

In addition to the costs to permit holders, the costs of data processing should be considered. Requirements for electronic reporting eliminate the need for costly manual data input. Electronic reporting also potentially reduces the time required to acquire the data, process it, compute regional (or other subdivisions of) harvest totals, and take management action, when appropriate.

In summary, all alternatives except **Alternative 1 (No Action)** would change how the for-hire sector reports landings. The other alternatives would require weekly (**Alternative 2**) or daily (**Alternative 3**) electronic reporting. **Alternative 4 (Preferred)** would require weekly electronic reporting, but would shift to daily electronic reporting as necessary and determined by the SRD. The sub-alternatives for **Alternatives 2 – 4 (Preferred)** would differentiate whether the alternative would apply to just the charter boat sector (**Sub-Alternative a**) or to just the headboat sector (**Preferred Sub-Alternative b**). **Alternatives 2 – 4 (Preferred)** would incur costs of time and perhaps for computer equipment and staff time, but each alternative other than **Alternative 1 (No Action)** would provide managers with data in a more timely basis allowing for increased precision for recreational sector ACL management and help prevent sector overruns that would trigger AMs.

4.1.3 Social Effects

In general, negative social effects of for-hire reporting requirements would likely be associated with any added time and financial burden for permit holders to meet the requirements. Increased frequency in reporting under **Alternatives 2-Preferred Alternative 4** may have some negative effects on vessel owners and captains because businesses will need to allocate additional time or staff to submit reports. The daily reporting requirement under **Alternative 3** and the potential for daily reporting requirement under **Preferred Alternative 4** will be more burdensome for for-hire permit holders than the weekly reporting in **Alternative 2**. **Alternative 1 (No Action)** would not be expected to negatively impact the for-hire sector in terms of additional time and money requirements. Charterboat owners and captains would not be impacted under **Sub-alternative 2b, Sub-alternative 3b** and **Preferred Sub-alternative 4b**, but requirements for only headboats may not improve quota monitoring and accuracy to the extent that inclusion of the same requirements for charterboats under **Sub-alternatives 2a, 3a,** and **4a.**

The requirement for electronic reporting under **Alternatives 2- Preferred Alternative 4** would affect vessel owners who do not already use computer systems in their businesses. Some fishermen are not familiar with computers or internet, and some may simply be more comfortable with paper fishing records. There may also be an increased risk of errors for electronic reporting by fishermen who typically do not use computers and internet in their businesses.

However, requiring all for-hire permit holders to report electronically and more frequently (**Alternatives 2- Preferred Alternative 4**) is expected to result in broad social benefits. More frequent and timely reporting would be expected to contribute to improved quota monitoring, with which it will be less likely that an annual catch limit will be exceeded and the associated accountability measures (AMs) will negatively impact the for-hire fishermen and associated communities and businesses. AMs can have significant direct and indirect effects on the fishermen because they usually impose some restriction on harvest, during either the current season or the next. Early closures and paybacks (which in turn increase the likelihood of an earlier closure in the following year) are directly linked to the NMFS quota monitoring system and limitations in the agency's ability to close fisheries quickly enough to avoid AMs. While the negative effects of AMs are usually short-term, they may at times induce other indirect effects through changes in fishing behavior or business operations that could have long-term social effects. Some of those effects are similar to other thresholds being met and may involve switching to other species or discontinuing fishing altogether. Although additional reporting requirements may not prevent AMs from being triggered, these requirements would be expected to provide additional information to better forecast early closures and minimize post-season AMs, such as "pay-backs." Under **Alternative 1 (No Action)**, there would be no improvements to monitoring as a result of more timely reporting, and it would be more likely that AMs would continue to impact for-hire businesses, communities, and customers.

4.1.4 Administrative Effects

The administrative effects of changing permits and reporting requirements for the for-hire sector would be associated with rule-making, outreach and implementation of the revised reporting scheme. There also could be administrative effects associated with using self-reported data to monitor recreational ACLs. In general, increased frequency in reporting under **Alternatives 2-Preferred Alternative 4** would increase the administrative burden on the agency. As the number of vessels affected increases (under the sub-alternatives), so do the administrative impacts. As the frequency of reporting increases, so do the administrative impacts. **Alternative 3** would have the greatest increase in the administrative burden on the agency, the vessel owners, and captains due to the requirement for daily reporting. The alternative requires information to be sent via computer/internet, which may alleviate burden for some fishery participants and increase the burden for those who do not have access to a computer system. **Preferred Alternative 4** would allow the SRD to modify the frequency of reporting in the future. This alternative would have the potential to increase or decrease the administrative impacts on the fishery participants depending on what the SRD deems appropriate. **Preferred Alternative 4** would reduce the administrative impacts on the agency as the SRD could change the frequency of reporting without going through the Council and rule-making process. Of the three action alternatives and associated sub-alternatives, **Alternative 3** would be the most administratively burdensome to both the agency and fishery participants. Requiring daily reporting will increase the burden on anglers and require the agency to process data at a more rapid speed than the status quo.

Chapter 5. Council's Choice for the Preferred Alternative

The Council approved CE-BA 3 for public scoping during the December 2012 South Atlantic Council (Council) meeting. During the March 2012 meeting, Council received an overview of input from the public scoping meetings for CE-BA 3; the Council provided guidance to further develop a range of alternatives to bring back to the June 2012 meeting. The data collection actions in CE-BA 3 were approved for public hearings during the June 2012 meeting. At the September 2012 meeting, the Council further clarified that the data collection actions do not pertain to spiny lobster and shrimp species under management because bycatch for these two species has already been studied; the annual catch limit (ACL) for spiny lobster is tracked using the Florida trip ticket system; and there is no current ACL for shrimp species.

At the December 2012 meeting, the Council moved the action modifying data reporting for charter/headboat vessels from CE-BA 3 into a separate amendment.

Action 1. Amend the Snapper Grouper, Dolphin and Wahoo, and Coastal Migratory Pelagic Resources Fishery Management Plans to modify data reporting for charter/headboat vessels

During the June 2012 Ad Hoc Data Collection Committee, the Science and Research Director (SRD) of Southeastern Fisheries Science Center (SEFSC) discussed results from a pilot study for the charter fishery that was implemented in September 2010 assessing the feasibility of transitioning to electronic reporting. Because of the study, the SRD noted the SEFSC is only ready to move forward with requiring electronic reporting for the headboat sector; the charter sector will be addressed in the future. Further, the SRD stated that the SEFSC received additional funding to move forward with full implementation of electronic reporting for headboat vessels. Changing to weekly logbook reporting for the headboat sector would enable the SRD to develop more timely projections of the headboat catch as opposed to waiting for longer to receive logbook data and subsequently develop landings projections later. The SRD noted that projections of harvest and bycatch for charter vessels are not conducted through the SEFSC, but rather through the Marine Recreational Information Program (MRIP). The MRIP charter sector estimates are obtained through a combination of acquiring effort data via telephone interviews and obtaining landings data via dockside intercepts and integrating this data to determine catch-per-unit effort in order to be able to generate an estimate of total landings. The SRD noted that further consultation with MRIP would be necessary before moving forward with electronic reporting for the charter sector; however, the intent is to move towards this goal in the future.

The Council is concerned about the inability to receive estimates of the current year headboat catches as late as September, noting that the SRD's presentation on recreational catches included no estimate of the headboat sector. Current headboat catches would be very useful now to estimate the harvest of red snapper to help determine if the recreational season could be opened for another weekend. The Council is considering providing another opening for red snapper in 2013 and it is critical to have current and timely estimates of the headboat sector.

The SEFSC is ready to fully implement 100% electronic reporting in the headboat sector beginning January 1, 2013 and the Council is adopting **Preferred Alternative 4, Sub-Alternative 4b** for Action 1 as this implements what has been requested by the SEFSC. The preferred alternative also give the SRD the ability to move from weekly to daily reporting, if this becomes necessary in the future, without the Council having to prepare an amendment to the plan. Once implemented in early 2013, this will allow NMFS to require compliance prior to the start of the recreational red snapper and black sea bass recreational fisheries. This will help with tracking recreational ACLs and preventing overages.

The Council considered reporting changes for the charter sector but decided to defer this to a future joint amendment with the Gulf Council to allow the details to be worked out with MRIP and for the SEFSC to obtain funding to proceed. It is the Council's intent that this joint amendment be completed during 2013 with regulations in place beginning in 2014. The Council is interested in evaluating requiring the charter sector submit fishing records to the Science and Research Director weekly via electronic reporting similar to what is being proposed for headboats in this amendment. This would allow NMFS to focus the limited funding through MRIP on private recreational anglers and thereby improve those estimates. If the entire for-hire sector was providing weekly electronic reports, NMFS could use those estimates to track the for-hire component of the recreational ACLs. It is the Council's intent that NMFS use the headboat landings from the weekly electronic reporting specified in this amendment to track headboat landings to help ensure the recreational ACLs are not exceeded.

The Council concluded **Preferred Alternative 4, Sub-Alternative 4b** that requires headboat vessels submit fishing records to the SRD weekly, or at intervals shorter than a week if notified by the SRD, via electronic reporting (via computer or internet) best meets the purpose and need, the objectives of the snapper group fishery management plan, as amended, and other applicable law.

Chapter 6. Cumulative Effects

6.1 Biological

1. Identify the significant cumulative effects issues associated with the proposed action and define the assessment goals.

The Council on Environmental Quality (CEQ) cumulative effects guidance states that this step is done through three activities. The three activities and the location in the document are as follows:

I. The direct and indirect effects of the proposed actions **(Chapter 4)**;
II. Which resources, ecosystems, and human communities are affected **(Chapter 3)**; and
III. Which effects are important from a cumulative effects perspective **(information revealed in this Cumulative Effects Analysis (CEA)**?

2. Establish the geographic scope of the analysis.

The immediate impact area would be the federal 200-mile limit of the Atlantic off the coasts of North Carolina, South Carolina, Georgia, and east Florida to Key West, which is also the South Atlantic Fishery Management Council's (South Atlantic Council) area of jurisdiction. Impacts associated with Coastal Migratory Pelagic species would extend from New York to Florida, and those associated with dolphin and wahoo would extend from Maine to Florida. The extent of boundaries also would depend upon the degree of fish immigration/emigration and larval transport; whichever has the greatest geographical range. The ranges of affected species are described in **Section 3.2.1. Section 3.1.3** describes the essential fish habitat designation and requirements for species affected by this amendment.

3. Establish the timeframe for the analysis.

Establishing a timeframe for the CEA is important when the past, present, and reasonably foreseeable future actions are discussed. It would be advantageous to go back to a time when there was a natural, or some modified (but ecologically sustainable) condition. However, data collection for many fisheries began when species were already fully exploited. Therefore, the timeframe for analyses should be initiated when data collection began for the various fisheries. In determining how far into the future to analyze cumulative effects, the length of the effects will depend on the species and the alternatives chosen.

4. Identify the other actions affecting the resources, ecosystems, and human communities of concern (the cumulative effects to the human communities are discussed in Section 4).

Listed 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.

I. Fishery-related actions

A. Past

Amendment 13C to the Fishery Management Plan (FMP) for the Snapper Grouper Fishery of the South Atlantic Region (SAFMC 2006) became effective October 23, 2006. The amendment addresses overfishing for snowy grouper, golden tilefish, black sea bass, and vermilion snapper. The amendment also allows for a moderate increase in the harvest of red porgy as stocks continue to rebuild.

Amendment 14 to the FMP for the Snapper Grouper Fishery of the South Atlantic Region (SAFMC 2007) was implemented on February 12, 2009. Implementing regulations for Amendment 14 established eight Type 2 Marine Protected Areas (MPAs) within which, all fishing for snapper grouper species is prohibited, as is the use of shark bottom longline gear. Within the MPAs, trolling for pelagic species is permitted. The MPAs range in area from 50 to 506 square nautical miles and are located off of North Carolina, South Carolina, Georgia and Florida. The MPAs are expected to enhance the optimum size, age, and genetic structure of slow-growing, long-lived, deepwater snapper grouper species. A Type 2 MPA is an area within which fishing for or retention of snapper grouper species is prohibited but other types of legal fishing, such as trolling, are allowed. The prohibition on possession does not apply to a person aboard a vessel that is in transit with fishing gear appropriately stowed. MPAs are being used as a management tool to promote the optimum size, age, and genetic structure of slow growing, long-lived deepwater snapper grouper species (speckled hind, snowy grouper, warsaw grouper, yellowedge grouper, misty grouper, golden tilefish, blueline tilefish, and sand tilefish).

The final rule for Amendment 16 to the FMP for the Snapper Grouper Fishery of the South Atlantic Region (SAFMC 2009a), which was partially approved by the Secretary of Commerce, published on June 29, 2009. Amendment 16 includes provisions to extend the shallow water grouper spawning season closure, create a five month seasonal closure for vermilion snapper, require the use of dehooking gear if needed, reduce the aggregate bag limit from five to three grouper, and reduce the bag limit for black grouper and gag to one gag or black grouper combined within the aggregate bag limit. The expected effects of these measures include significant reductions in landings and overall mortality of several shallow water snapper grouper species including, gag, black grouper, red grouper, and vermilion snapper.

On September 1, 2009, Amendment 15B to the FMP for the Snapper Grouper Fishery of the South Atlantic Region (SAFMC 2008b) was approved by the Secretary. Management measures

in Amendment 15B that affect species in the Comprehensive Annual Catch Limit ACL Amendment include prohibition of the sale of bag limit caught snapper grouper species for fishermen not holding a Federal commercial permit for South Atlantic snapper grouper, an action to adopt, when implemented, the Atlantic Coastal Cooperative Statistics Program release, discard and protected species module to assess and monitor bycatch, allocations for snowy grouper, and management reference points for golden tilefish.

Comprehensive Ecosystem-Based Amendment 1 (CE-BA 1; SAFMC 2009c), implemented in July, 2010 consists of regulatory actions that focus on deepwater coral ecosystem conservation and non-regulatory actions that update existing essential fish habitat (EFH) information. Management actions in CE-BA 1 include the establishment of deepwater Coral HAPCs (CHAPCs) to protect what is currently thought to be the largest contiguous distribution (>23,000 square miles) of pristine deepwater coral ecosystems in the world. Actions in the amendment prohibit the use of bottom damaging fishing gear and allow for the creation of allowable fishing zones within the CHAPCs in the historical fishing grounds of the golden crab and deepwater shrimp fisheries. CE-BA 1 also provides spatial information on designated EFH in the SAFMC Habitat Plan (SAFMC 1998c).

The final rule for Amendment 17B to the FMP for the Snapper Grouper Fishery of the South Atlantic Region (SAFMC 2010b) was published on December 30, 2010, and includes ACLs and accountability measures (AMs) for species experiencing overfishing as well as a harvest prohibition for six snapper grouper species seaward of 240 ft .

Regulatory Amendment 11 to the Snapper Grouper FMP (Regulatory Amendment 11; SAFMC 2011b) was approved by the South Atlantic Council at their August 9, 2011, meeting. Regulatory Amendment 11 was approved and became effective on May 10, 2012. The amendment implemented regulations to remove the deepwater closure beyond 240 ft for six deepwater snapper grouper species that was approved in Amendment 17B.

The final rule for Amendment 17A to the FMP for the Snapper Grouper Fishery of the South Atlantic Region (SAFMC 2010a) was published on December 3, 2010, extending the prohibition of red snapper in federal waters throughout the South Atlantic exclusive economic zone**.** Amendment 17A addresses management measures to end overfishing of red snapper and rebuild the stock, including ACLs and AMs. Amendment 17A also includes a regulation requiring the use of non-stainless circle hooks north of 28 degrees N. latitude.

The South Atlantic Council voted to approve Regulatory Amendment 10 to the FMP for the Snapper Grouper Fishery of the South Atlantic Region (Regulatory Amendment 10; SAFMC 2011a) during its December 2010 meeting for submission to the Secretary of Commerce, with the preferred management alternative to eliminate the large area closure established through Amendment 17A for all snapper grouper species off the coasts of southern Georgia and north/central Florida. The regulatory amendment modified measures implemented in Amendment 17A to end overfishing for red snapper. The amendment was based on updated stock assessment information for red snapper (SEDAR 24 2010) and was approved by the Secretary of Commerce in April 2011. The Final Rule was effective on May 31, 2011.

Regulatory Amendment 9 to the FMP for the Snapper Grouper Fishery of the South Atlantic Region (Regulatory Amendment 9; SAFMC 2011d) was approved by the Council in March 2011 and the Final Rule published June 15, 2011. The amendment, as approved by the Secretary of Commerce, reduced the bag limit for black sea bass from 15 fish per person to 5 fish per person (effective June 22, 2011), established trip limits on vermilion snapper and gag (effective July 15, 2011), and increased the trip limit for greater amberjack (effective July 15, 2011).

Approved in 2003, the FMP for *Sargassum* Pelagic Habitat of the South Atlantic Region (SAFMC 2002) protects *Sargassum*, a free-floating seaweed, from extensive commercial harvest. *Sargassum* provides habitat to a wide variety of marine organisms including invertebrates, fish, sea turtles and marine birds. The approved plan includes strong limitations on future commercial harvest. Restrictions include prohibition of harvest south of the North Carolina/South Carolina state boundary, a total allowable catch of 5,000 lbs wet weight per year, limiting harvest to November through June to protect turtles, requiring observers onboard any vessel harvesting *Sargassum*, prohibiting harvest within 100 miles of shore, and gear specifications. An ACL for *Sargassum* was implemented through the Comprehensive ACL Amendment.

Approved in 2004, the FMP for the Dolphin and Wahoo Fishery of the Atlantic (SAFMC 2003) established historical allocations for dolphin and wahoo between the commercial and recreational sectors. Recognizing the significant importance of the dolphin wahoo fishery to the recreational fishing community in the Atlantic, the goal of the plan is to maintain the current harvest levels of dolphin and ensure that no new fisheries develop.

B. Present

In addition to snapper grouper fishery management issues being addressed in this amendment, several other snapper grouper amendments have been developed concurrently and are in the process of approval and implementation.

Amendment 18A to the Snapper Grouper FMP (SAFMC 2011f) contains measures to limit participation and effort in the black sea bass fishery, reduce bycatch in the black sea bass pot fishery, changes to the rebuilding strategy and other necessary changes to the management of black sea bass as a result of the ongoing stock assessment. In addition, Amendment 18A includes alternatives to improve data collection. The South Atlantic Council approved Amendment 18A in December 2011.

Regulatory Amendment 11 to the Snapper Grouper FMP (Regulatory Amendment 11; SAFMC 2011b) was approved by the South Atlantic Council at their August 9, 2011, meeting. If approved, Regulatory Amendment 11 would remove the current deepwater closure beyond 240 ft for six deepwater snapper grouper species.

The Comprehensive ACL Amendment (SAFMC 2011c) includes ACLs and AMs for federally managed species not undergoing overfishing in four FMPs (Snapper Grouper, Dolphin Wahoo, Golden Crab, and *Sargassum*. Actions contained within the Comprehensive ACL Amendment include: (1) Removal of species from the snapper grouper fishery management unit; (2) designating ecosystem component species; (3) allocations; (4) management measures to limit recreational and commercial sectors to their ACLs; (5) AMs; and (5) any necessary modifications to the range of regulations. The South Atlantic Council approved the Comprehensive ACL Amendment in September 2011. Regulations for the Comprehensive ACL Amendment were implemented on April 16, 2012.

Amendment 20A to the Snapper Grouper FMP (Amendment 20A; SAFMC 2011e) would distribute shares from inactive participants in the wreckfish individual transferable quota (ITQ) to active shareholders. The South Atlantic Council approved Amendment 20A in December 2011.

Amendment 24 to the Snapper Grouper FMP (Amendment 24; SAFMC 2011g) considers a rebuilding plan for red grouper, which is overfished and undergoing overfishing. The South Atlantic Council approved Amendment 24 in December 2011.

Regulatory Amendment 12 to the Snapper Grouper FMP (Regulatory Amendment 12; SAFMC 2012) includes alternatives to adjust the golden tilefish ACL based on the results of a new assessment, which indicates golden tilefish are no longer experiencing overfishing and are not overfished. Regulatory Amendment 12 also includes an action to adjust the recreational AM.

C. Reasonably Foreseeable Future

Amendment 20B to the Snapper Grouper FMP is currently under development. The amendment will include a formal review of the current wreckfish ITQ program, and will update/modify that program according to recommendations gleaned from the review. The amendments will also update the wreckfish ITQ program to comply with Magnuson-Stevens requirements.

II. Non-Council and other non-fishery related actions, including natural events

5. Characterize the resources, ecosystems, and human communities identified in scoping in terms of their response to change and capacity to withstand stress.

In terms of the biophysical environment, the resources/ecosystems identified in earlier steps of the CEA are the fish populations directly or indirectly affected by the regulations. This step should identify the trends, existing conditions, and the ability to withstand stresses of the environmental components.

6. Characterize the stresses affecting these resources, ecosystems, and human communities and their relation to regulatory thresholds.

This step is important in outlining the current and probable stress factors on snapper grouper species identified in the previous steps. The goal is to determine whether these species are approaching conditions where additional stresses could have an important cumulative effect beyond any current plan, regulatory, or sustainability threshold (CEQ 1997). Sustainability thresholds can be identified for some resources, which are levels of impact beyond which the resources cannot be sustained in a stable state. Other thresholds are established through numerical standards, qualitative standards, or management goals. The CEA should address whether thresholds could be exceeded because of the contribution of the proposed action to other cumulative activities affecting resources.

Fish populations

Quantitative definitions of overfishing and overfished for golden tilefish are identified in Amendments 11 and 12 to the Snapper Grouper FMP (SAFMC 1998b, 2000a). Numeric values of thresholds overfishing and overfished for golden tilefish were updated/modified in Amendment 15B (SAFMC 2008b). These values include maximum sustainable yield (MSY), the fishing mortality rate that produces MSY (F_{MSY}), the biomass or biomass proxy that supports MSY (B_{MSY}), the minimum stock size threshold below which a stock is considered to be overfished (MSST), the maximum fishing mortality threshold above which a stock is considered to be undergoing overfishing (MFMT), and optimum yield (OY). Amendment 15B to the Snapper Grouper FMP also provided new definitions of MSST for golden tilefish. Amendment 15b became effective in December 2009.

Climate change

Global climate changes could have significant effects on South Atlantic fisheries. However, the extent of these effects is not known at this time. Possible impacts include temperature changes in coastal and marine ecosystems that can influence organism metabolism and alter ecological processes such as productivity and species interactions; changes in precipitation patterns and a rise in sea level which could change the water balance of coastal ecosystems; altering patterns of wind and water circulation in the ocean environment; and influencing the productivity of critical coastal ecosystems such as wetlands, estuaries, and coral reefs (Kennedy et al. 2002).

It is unclear how climate change would affect species in the South Atlantic, Mid-Atlantic and New England. Climate change can affect factors such as migration, range, larval and juvenile survival, prey availability, and susceptibility to predators. In addition, the distribution of native and exotic species may change with increased water temperature, as may the prevalence of disease in keystone animals such as corals and the occurrence and intensity of toxic algae blooms. Climate change may significantly impact snapper grouper species in the future, but the level of impacts cannot be quantified at this time, nor is the time frame known in which these impacts will occur.

7. Define a baseline condition for the resources, ecosystems, and human communities.

The purpose of defining a baseline condition for the resource and ecosystems in the area of the proposed action is to establish a point of reference for evaluating the extent and significance of

expected cumulative effects. The SEDAR assessments show trends in biomass, fishing mortality, fish weight, and fish length going back to the earliest periods of data collection. For some species such as snowy grouper, assessments reflect initial periods when the stock was above B_{MSY} and fishing mortality was fairly low. However, some species such were heavily exploited or possibly overfished when data were first collected. As a result, the assessment must make an assumption of the biomass at the start of the assessment period thus modeling the baseline reference points for the species.

For a detailed discussion of the baseline conditions of each of the species addressed in this amendment the reader is referred to those stock assessment and stock information sources referenced in **Item Number 6** of this CEA.

8. Identify the important cause-and-effect relationships between human activities and resources, ecosystems, and human communities (Table 6-1).

Table 6-1. The cause and effect relationship of fishing and regulatory actions within the time period of the Cumulative Effects Analysis (CEA).

Time period/dates	Cause	Observed and/or Expected Effects
Pre-January 12, 1989	Habitat destruction, growth overfishing of vermilion snapper.	Damage to snapper grouper habitat, decreased yield per recruit of vermilion snapper.
January 1989	Trawl prohibition to harvest fish (SAFMC 1988a & b).	Increase yield per recruit of vermilion snapper; eliminate trawl damage to live bottom habitat.
Pre-January 1, 1992	Overfishing of many snapper grouper species.	Spawning stock ratio of these species is estimated to be less than 30% indicating that they are overfished.
January 1992	Prohibited gear: fish traps south of Cape Canaveral, FL; entanglement nets; longline gear inside of 50 fathoms; powerheads and bangsticks in designated SMZs off SC. Size/Bag limits: 10" TL vermilion snapper (recreational only); 12" TL vermilion snapper (commercial only); 10 vermilion snapper/person/day; snappers (excluding vermilion snapper) 10/person/da with no more than 2 red snapper; aggregate grouper bag limit of 5/person/day; and 20" TL red snapper and gag, red, black, scamp, yellowfin, and yellowmouth grouper size limit (SAFMC 1991).	Reduce mortality of snapper grouper species.
Pre-June 27, 1994	Damage to *Oculina* habitat.	Noticeable decrease in numbers and species diversity in areas of *Oculina* off FL
July 1994	Prohibition of fishing for and retention of snapper grouper species (HAPC renamed OECA; SAFMC 1993)	Initiated the recovery of snapper grouper species in OECA.

Time period/dates	Cause	Observed and/or Expected Effects
1992-1999	Declining trends in biomass and overfishing continue for a number of snapper grouper species including golden tilefish.	Spawning potential ratio for golden tilefish is less than 30% indicating that they are overfished.
July 1994	Commercial quota for golden tilefish; commercial trip limits for golden tilefish; include golden tilefish in grouper recreational aggregate bag limits.	
February 24, 1999	All S-G 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.	
October 23, 2006	Snapper grouper FMP Amendment 13C (SAFMC 2006)	Commercial vermilion snapper quota set at 1.1 million pounds gw; recreational vermilion snapper size limit increased to 12" TL to prevent vermilion snapper overfishing.
Effective February 12, 2009	Snapper grouper FMP Amendment 14 (SAFMC 2007)	Use marine protected areas (MPAs) as a management tool to promote the optimum size, age, and genetic structure of slow growing, long-lived deepwater snapper grouper species (e.g., speckled hind, snowy grouper, warsaw grouper, yellowedge grouper, misty grouper, golden tilefish, blueline tilefish, and sand tilefish). Gag and vermilion snapper occur in some of these areas.
Effective March 20, 2008	Snapper grouper FMP Amendment 15A (SAFMC 2008a)	Establish rebuilding plans and SFA parameters for snowy grouper, black sea bass, and red porgy.
Effective Dates Dec 16, 2009, to Feb 16, 2010.	Snapper grouper FMP Amendment 15B (SAFMC 2008b)	End double counting in the commercial and recreational reporting systems by prohibiting the sale of bag-limit caught snapper grouper, and minimize impacts on sea turtles and smalltooth sawfish.
Effective Date July 29, 2009	Snapper grouper FMP Amendment 16 (SAFMC 2009a)	Protect spawning aggregations and snapper grouper in spawning condition by increasing the length of the spawning season closure, decrease discard mortality by requiring the use of dehooking tools, reduce overall harvest of gag and vermilion snapper to end overfishing.

Time period/dates	Cause	Observed and/or Expected Effects
Effective Date January 4, 2010	Red Snapper Interim Rule	Prohibit commercial and recreational harvest of red snapper from January 4, 2010, to June 2, 2010 with a possible 186-day extension. Reduce overfishing of red snapper while long-term measures to end overfishing are addressed in Amendment 17A.
Effective Date December 4, 2010	Snapper Grouper FMP Amendment 17A (SAFMC 2010a).	SFA parameters for red snapper; ACLs and ACTs; management measures to limit recreational and commercial sectors to their ACTs; accountability measures. Establish rebuilding plan for red snapper.
Effective Date January 31, 2011	Snapper Grouper Amendment 17B (SAFMC 2010b)	ACLs and ACTs; management measures to limit recreational and commercial sectors to their ACTs; AMs, for species undergoing overfishing.
Effective Date July 1, 2012	Snapper Grouper FMP Amendment 18A (SAFMC 2011f)	Prevent overexploitation in the black sea bass fishery.
Effective Date April 16, 2012	Comprehensive ACL Amendment (SAFMC 2011c)	ACLs ACTs, and AMs for species not experiencing overfishing; accountability measures; an action to remove species from the fishery management unit as appropriate; and management measures to limit recreational and commercial sectors to their ACTs.
Effective Date May 10, 2012	Regulatory Amendment 11 (SAFMC 2011b)	Re-addresses the deepwater area closure implemented in Amendment 17B
Effective Date July 15, 2011	Regulatory Amendment 9 (SAFMC 2011d)	Harvest management measures for black sea bass; commercial trip limits for gag, vermilion and greater amberjack
Target 2012	Amendment 20A (Wreckfish) (SAFMC 2011g)	Redistribute inactive wreckfish shares.
Effective Date July 11, 2012	Amendment 24 (Red Grouper) (SAFMC 2011d)	Establishes a rebuilding plan for red grouper, specifies ABC, and establishes ACL, ACT and revises AMs for the commercial and recreational sectors.
Target 2012	Regulatory Amendment 12 (SAFMC 2012)	Adjusts the golden tilefish ACL based on the results of a new stock assessment and modifies the recreational golden tilefish AM.
Target 2013	Snapper Grouper Amendment 22 (under dev)	Develop a long-term management program for red snapper in the South Atlantic.

Time period/dates	Cause	Observed and/or Expected Effects
Target 2013	Regulatory Amendment 13 (under development)	Adjust ACLs and allocations for unassessed snapper grouper species with MRIP recreational estimates
Target 2013	Snapper Grouper Amendment 27 (under development)	Establish the SAFMC as the managing entity for yellowtail and mutton snappers and Nassau grouper in the Southeast U.S., modify the SG framework; modify placement of blue runner in an FMU or modify management measures for blue runner
Target 2013	Snapper Grouper Amendment 28 (under development; this amendment)	Modify red snapper management measures, including the establishment of a process to determine future annual catch limits and fishing seasons.

9. Determine the magnitude and significance of cumulative effects.

When species in the snapper grouper, dolphin/wahoo, and coastal migratory pelagics fishery management units are assessed, stock status may change as new information becomes available. In addition, changes in management regulations, fishing techniques, social/economic structure, etc. can result in shifts in the percentage of harvest between user groups over time. As such, the South Atlantic Council has determined that certain aspects of the current management system should be restructured. **Chapters 2** and **4** of this document--which considers changes to headboat reporting--describe in detail the magnitude and significance of effects of the alternatives considered.

The proposed action would not adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places as these are not in the South Atlantic Exclusive Economic Zone (EEZ). This action is not likely to result in direct, indirect, or cumulative effects to unique areas, such as significant scientific cultural, or historical resources, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas as the proposed action is not expected to substantially increase fishing effort or the spatial and/or temporal distribution of current fishing effort within the South Atlantic region. The U.S. Monitor, Gray's Reef, and Florida Keys National Marine Sanctuaries are within the boundaries of the South Atlantic EEZ. The proposed action is not likely to cause loss or destruction of these national marine sanctuaries because the action, which changes headboat reporting requirements, is not expected to result in appreciable changes to current fishing practices.

10. Modify or add alternatives to avoid, minimize, or mitigate significant cumulative effects.

The cumulative effects on the biophysical environment are expected to be negligible. Avoidance, minimization, and mitigation are not applicable.

11. Monitor the cumulative effects of the selected alternative and adopt management.

The effects of the proposed action are, and will continue to be, monitored through collection of data by NOAA Fisheries, states, stock assessments and stock assessment updates, life history studies, and other scientific observations.

6.2 Socioeconomic

Participation in and the economic performance of the fisheries addressed in this document have been affected by a combination of regulatory, biological, social, and external economic factors. Regulatory measures have obviously affected the quantity and composition of harvests of species addressed in this document, through the various size limits, seasonal restrictions, trip or bag limits, and quotas. Gear restrictions, notably fish trap and longline restrictions, have also affected snapper grouper harvests and economic performance. The limited access program implemented in 1998/1999 substantially affected the number of participants in the snapper grouper fishery. Approved in 2004, the FMP for the Dolphin and Wahoo Fishery of the Atlantic (SAFMC 2003) established historical allocations for dolphin and wahoo between the commercial and recreational sectors with the goal of maintaining harvest at levels observed in the 1990s and ensuring that no new fisheries develop.

Approved in 2003, the FMP for *Sargassum* Pelagic Habitat (SAFMC 2002) of the South Atlantic Region protects *Sargassum*, a free-floating seaweed, from extensive commercial harvest. *Sargassum* provides habitat to a wide variety of marine organisms including invertebrates, fish, sea turtles and marine birds. The approved plan includes strong limitations on future commercial harvest. Restrictions include prohibition of harvest south of the NC/SC state boundary, a total allowable catch of 5,000 lbs wet weight per year, limiting harvest to November through June to protect turtles, requiring observers onboard any vessel harvesting *Sargassum*, prohibiting harvest within 100 miles of shore, and gear specifications.

Biological forces that either motivate certain regulations or simply influence the natural variability in fish stocks have likely played a role in determining the changing composition of the fisheries addressed by this document. Additional factors, such as changing career or lifestyle preferences, stagnant to declining prices due to imports, increased operating costs (gas, ice, insurance, dockage fees, etc.), and increased waterfront/coastal value leading to development pressure for other than fishery uses have impacted both the commercial and recreational fishing sectors.

Given the variety of factors that affect fisheries, persistent data issues, and the complexity of trying to identify cause-and-effect relationships, it is not possible to differentiate actual or cumulative regulatory effects from external cause-induced effects. For each regulatory action, expected effects are projected. However, these projections typically only minimally, if at all, are capable of incorporating the variety of external factors, and evaluation in hindsight is similarly incapable of isolating regulatory effects from other factors, as in, what portion of a change was due to the regulation versus due to input cost changes, random species availability variability, the sale of a fish house for condominium development, or even simply fishermen behavioral changes unrelated to the regulation.

In general, it can be stated, however, that the regulatory environment for all fisheries has become progressively more complex and burdensome, increasing, in tandem with other adverse influences, the pressure on economic losses, business failure, occupational changes, and

associated adverse pressures on associated families, communities, and industries. Some reverse of this trend is possible and expected. The adoption of limited access privilege programs for the snapper grouper fishery would allow a simplified regulatory environment since trip or seasonal restrictions may no longer be needed and effort issues should be addressed by internal access-rights transfer, while rebuilding plans and the recovery of stocks would allow harvest increases. However, certain pressures would remain, such as total effort and total harvest considerations, increasing input costs, import induced price pressure, and competition for coastal access.

A description of the human environment, including a description of the commercial and recreational snapper grouper fishery, and dolphin and wahoo fishery, as well as associated key fishing communities is contained in **Section 3.8** and incorporated herein by reference. A description of the history of management of the fisheries addressed in this document is contained in **Appendix I** and is incorporated herein by reference. A description of the cumulative effects of actions in Amendments 17A and 17B, which established ACLs and AMs for snapper grouper species are contained in those amendments and incorporated herein by reference (SAFMC 2010a; SAFMC 2010b).

A detailed description of the expected social and economic impacts of the actions in this document is contained elsewhere in Sections 4 and 5 and is incorporated herein by reference. In general, the actions in the Comprehensive ACL Amendment established ACLs and AMs for species in four FMPs that are not experiencing overfishing. Actions in the Comprehensive ACL Amendment, however, are expected to have different effects in different areas. At any rate, the actions contained in this document are expected to prevent overfishing from occurring and to support the achievement of OY in the respective fisheries over time, resulting in social and economic gains.

ACLs, AMs and management measures have been developed in CE-BA 2 (SAFMC 2011h), Amendment 18 to the Coastal Migratory Pelagics FMP (GMFMC/SAFMC 2011), and Amendment 10 to the Spiny Lobster FMP (GMFMC/SAFMC 2011b). CE-BA 2 established ACLs and AMs for octocorals, transfer management of octocorals to the state of Florida, modify regulations in special management zones, and amend FMPs to designate new essential fish habitat-habitat areas of particular concern. Amendment 18 to the Coastal Migratory Pelagics FMP was developed by the South Atlantic Council and the Gulf of Mexico Council to establish ACLs and AMs for species in the FMP for Coastal Migratory Pelagic Resources in the Atlantic and Gulf of Mexico. Amendment 10 to the Spiny Lobster FMP was developed by the South Atlantic Council and the Gulf of Mexico Council to establish ACLs and AMs as well as management actions for spiny lobster including tailing permits, the use of undersized lobster as an attractant, and gear markings on trap lines.

Furthermore, additional actions were implemented or are being considered for snapper grouper species in Amendment 18A, Amendment 18B, Amendment 24, and Regulatory Amendment 9 (SAFMC 2011d). Snapper Grouper Amendment 18A (SAFMC 2011f) implemented measures to participation and effort in the black sea bass pot sector, among other actions, and Amendment 18B is considering actions to limit effort in the golden tilefish component of the snapper grouper fishery. While restrictions of this nature would in theory allow status quo total harvests for the

respective species to continue, these restrictions may result in the redistribution of harvests among traditional users, resulting in some participants who are able to increase their harvests, and associated social and economic benefits, and some participants who suffer reduced harvests, with associated losses in benefits. For those who would be expected to experience a possible reduction in harvests, these reductions may occur on top of declining benefits as a result of other recent or developing management action.

Snapper Grouper Amendments 20A and 20B (SAFMC under development) will include a formal review of the current wreckfish individual transferable quota (ITQ) program and will update/modify that program according to recommendations from the review. Depending on the actual management measures adopted, this amendment could provide increased or decreased opportunities for those whose fishing operations have been restricted by the present and past snapper grouper amendments.

Amendment 18 to the Coastal Migratory Pelagics FMP (GMFMC/SAFMC 2011a) established ACLs, AMs, and ACTs for king mackerel, Spanish mackerel, and cobia, and Spiny Lobster Amendment 10 (GMFMC/SAFMC 2011b) established ACLs, AMs, and ACTs for lobsters. Snapper grouper fishermen, and associated businesses and communities, who also participate in these fisheries could potentially face limited prospects for continued participation in multiple fisheries, at least in the short-term, as a result of these amendments.

Snapper Grouper Amendment 24 (SAFMC 2011g) established a rebuilding program for red grouper, which has recently been determined to be overfished and experiencing overfishing. Regulatory Amendment 9 (SAFMC 2011d) addressed trip limits for vermilion snapper, gag, and greater amberjack. Regulatory Amendment 9 also modified the bag limit for black sea bass.

The cumulative social and economic effects of past, present, and future amendments may be described as limiting fishing opportunities in the short-term. However, these amendments are expected to improve prospects for sustained participation in the respective fisheries over time.

Chapter 7. Other Things to Consider

7.1 Unavoidable Adverse Effects

There are several unavoidable adverse effects on the socioeconomic environment that may result from the implementation of the Joint South Atlantic/Gulf of Mexico Generic Headboat Reporting in the South Atlantic Amendment. Most of these adverse effects are related to the administrative impacts associated with developing a new reporting scheme.

7.2 Effects of the Fishery on Essential Fish Habitat

The biological impacts of the proposed actions are described in **Chapter 4**, including impacts on habitat. No actions proposed in this amendment are anticipated to have any adverse impact on essential fish habitat (EFH) or EFH-Habitat of Particular Concern (EFH-HAPC) for managed species. Any additional impacts of fishing on EFH identified during the public hearing process will be considered, therefore the South Atlantic Fishery Management Council (South Atlantic Council) has determined no new measures to address impacts on EFH are necessary at this time. The South Atlantic Council's adopted habitat policies, which may directly affect the area of concern, are available for download through the Habitat/Ecosystem section of the South Atlantic Council's website: http://map.mapwise.com/safmc/Default.aspx?tabid=56.

NOTE: The Final EFH Rule, published on January 17, 2002, (67 FR 2343) replaced the interim Final Rule of December 19, 1997 on which the original EFH and EFH-HAPC designations were made. The Final Rule directs the Councils to periodically update EFH and EFH-HAPC information and designations within fishery management plans. As was done with the original Habitat Plan (SAFMC 1998c), a series of technical workshops were conducted by Council staff and a draft plan that includes new information has been completed pursuant to the Final EFH Rule. For more detailed information, see **Appendix C**.

7.3 Damage to Ocean and Coastal Habitats

The actions proposed in this amendment would not result in any adverse impacts to ocean and coastal habitats. The action pertains to the collection of data and would not have any direct impact on habitat.

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

The relationship between short-term uses and long-term productivity will not be affected by this amendment. The proposed actions relate to the frequencies and methods of data reporting. The actions in this amendment will not have an impact on the short-term uses and long-term productivity.

7.5 Irreversible and Irretrievable Commitments of Resources

Irreversible commitments are defined as commitments that 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.

7.6 Unavailable or Incomplete Information

The Council on Environmental Quality, in its implementing regulations for the National Environmental Policy Act, addressed incomplete or unavailable information at 40 CFR 1502.22 (a) and (b). That regulation 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…".

The actions in this amendment pertain to modifications to data collection and methodology. There is no unavailable or incomplete information regarding the actions and alternatives.

Chapter 8. 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 South Atlantic Fishery Management Council's (South Atlantic Council) extensive use of public meetings, requests for comments, and consideration of comments. The proposed rule associated with this amendment will have a 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 (IQA). 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 Environmental Impact Statement 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 **Chapter 4**, the South Atlantic Council has concluded this amendment would improve federal management of South Atlantic fisheries and is consistent to the maximum extent practicable with the Coastal Zone Management Plans of Florida, Georgia, South Carolina, 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 must 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.

The IPT, Council Staff, and Council reviewed the actions proposed in this Amendment and concluded that there were no impacts on threatened or endangered species of their habitat designated as critical to their survival and recovery.

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 economically significant if it is likely to result in an annual effect on the economy of at least $100,000,000 or 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.

The RIR is included as **Appendix E**.

8.7 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.

8.8 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.

8.9 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.

8.10 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.

Part of the responsibility that NOAA Fisheries Service has under the MMPA involves monitoring populations of marine mammals to make sure that they stay at optimum levels. If a population falls below its optimum level, it is designated as "depleted". A conservation plan is then developed to guide research and management actions to restore the population to healthy levels.

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.

Under the MMPA, to legally fish in a Category I and/or II fishery, a fisherman must take certain steps. For example, owners of vessels or gear engaging in a Category I or II fishery are required to obtain a marine mammal authorization by registering with the Marine Mammal Authorization Program (50 CFR 229.4). They are also required to accommodate an observer if requested (50 CFR 229.7(c)), and they must comply with any applicable take reduction plans.

The actions in this amendment would modify the frequency and methods of data collection. None of the actions will have an impact on marine mammals.

8.11 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 countries, 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 the government.

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 National Environmental Policy Act (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.

8.12 National Environmental Policy Act

This amendment to the South Atlantic Snapper Grouper FMP has been written and organized in a manner that meets NEPA requirements, and thus is a consolidated NEPA document, including a final 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 1.4.**

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.**

8.13 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 exclusive economic zone are Gray's Reef and Florida Keys National Marine Sanctuaries.

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

8.14 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. PRA requires NOAA Fisheries Service to obtain approval from the OMB before requesting most types of fishery information from the public.

This amendment would require PRA approval related to the development of the electronic logbook and the requirement for VMS.

8.15 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, NOAA Fisheries Service 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.

The Regulatory Flexibility Analysis is included as **Appendix D**.

8.16 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, NOAA Fisheries Service, in implementing regulations, must make an assessment of how those regulations will affect small businesses. Economic and social impacts of the actions and alternatives are included in the analysis in **Chapter 4**.

8.17 Public Law 99-659: Vessel Safety

Public Law 99-659 amended the Magnuson-Stevens Fishery Conservation and Management Act to require that a Fishery Management Plan (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.

The actions and alternatives in this amendment would not modify fishing operations in a way that would result in a safety at sea issue. The actions refer to the frequency and method for the collection of self-reported data.

Chapter 9. List of Preparers

Table 8-1. List of preparers for the Joint South Atlantic/Gulf of Mexico Generic Headboat Reporting in the South Atlantic Amendment.

Name	Agency/Division	Area of Amendment Responsibility
Karla Gore	NMFS/SF	IPT Lead/Fishery Biologist
Anna Martin	SAFMC	IPT Lead/Fishery Biologist
Jack McGovern	NMFS/SF	Fishery Scientist
David Dale	NMFS/HC	EFH Specialist
Andy Herndon	NMFS/PR	Biologist
Nick Farmer	NMFS/SF	Biologist
Stephen Holiman	NMFS/SF	Economist
Kenneth Brennan	SEFSC	Fishery Scientist
Monica Smit-Brunello	NOAA/GC	Attorney Advisor
Brian Cheuvront	SAFMC	Fishery Economist
Kari MacLauchlin	SAFMC	Social Scientist
Myra Brouwer	SAFMC	Fishery Biologist
Gregg Waugh	SAFMC	Deputy Executive Director

NMFS = National Marine Fisheries Service, SAFMC = South Atlantic Fishery Management Council, SF = Sustainable Fisheries Division, PR = Protected Resources Division, SERO = Southeast Regional Office, HC = Habitat Conservation Division, GC = General Counsel, Eco=Economics

Chapter 10. List of Agencies, Organizations, and Persons Consulted

Responsible Agency

Joint SA/GM Generic Headboat Reporting in the SA Amendment:
South Atlantic Fishery Management Council
4055 Faber Place Drive, Suite 201
Charleston, South Carolina 29405
(843) 571-4366 (TEL)
Toll Free: 866-SAFMC-10
(843) 769-4520 (FAX)
safmc@safmc.net

Environmental Assessment:
NMFS, Southeast Region
263 13th Avenue South
St. Petersburg, Florida 33701
(727) 824-5301 (TEL)
(727) 824-5320 (FAX)

List of Agencies, Organizations, and Persons Consulted

SAFMC Law Enforcement Advisory Panel
SAFMC Coral Advisory Panel
SAFMC Shrimp Advisory Panel
SAFMC Deepwater Shrimp Advisory Panel
SAFMC Snapper Grouper Advisory Panel
SAFMC Scientific and Statistical Committee
North Carolina Coastal Zone Management Program
South Carolina Coastal Zone Management Program
Georgia Coastal Zone Management Program
Florida Coastal Zone Management Program
Florida Fish and Wildlife Conservation Commission
Georgia Department of Natural Resources
South Carolina Department of Natural Resources
North Carolina Division of Marine Fisheries
North Carolina Sea Grant
South Carolina Sea Grant
Georgia Sea Grant
Florida Sea Grant
Atlantic States Marine Fisheries Commission
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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