Modifications to Charter Vessel and Headboat Reporting Requirements

Amendment 39 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region

Amendment 9 to the Fishery Management Plan for the Dolphin and Wahoo Fishery of the Atlantic

Amendment 27 to the Fishery Management Plan for the Coastal Migratory Pelagics Fishery of the Gulf of Mexico and Atlantic Region

(including Environmental Assessment, Regulatory Impact Review, and Regulatory Flexibility Analysis)

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ENVIRONMENTAL ASSESSMENT COVER SHEET

Name of Action

Modifications to Charter Vessel and Headboat Report Requirements

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ABBREVIATIONS USED IN THIS DOCUMENT

ACL	Annual Catch Limit
ACCSP	Atlantic Coastal Cooperative Statistics Program
AM	Accountability Measure
AVHRR	Advanced Very High Resolution Radiometer
Council	Gulf of Mexico Fishery Management Council
CMP	Coastal Migratory Pelagics of the South Atlantic and Gulf of Mexico
EA	Environmental Assessment
EEZ	Exclusive Economic Zone
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
ELog	Electronic Logbook
EJ	Environmental Justice
E.O.	Executive Order
FMP	Fishery Management Plan
Gulf	Gulf of Mexico
MMPA	Marine Mammal Protection Act
MRIP	Marine Recreational Information Program
NAO	NOAA's Administrative Order
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
OY	Optimum Yield
RA	Regional Administrator
RFA	Regulatory Flexibility Act
RFAA	Regulatory Flexibility Act Analysis
RIR	Regulatory Impact Review
Secretary	Secretary of Commerce
SEDAR	Southeast Data Assessment and Review
SEFSC	Southeast Fisheries Science Center
SRD	Science and Research Director
SRHS	Southeast Region Headboat Survey

South Atlantic Fishery Management Council

FOR-HIRE REPORTING AMENDMENT

SUMMARY

What is being proposed?

The South Atlantic Fishery Management Council (South Atlantic Council) is considering mandatory electronic reporting for charter (six-pack) vessels and changes to existing reporting requirements for headboats.

Who has to do this?

Federally permitted charter vessels and headboats in the Snapper Grouper, Dolphin Wahoo, and Coastal Migratory Pelagics (mackerel and cobia) fisheries along the Atlantic Coast. A federal permit is required for all for-hire vessels (charter and headboats) operating more than 3 miles offshore (federal waters).

Why is this being done?

Electronic reporting is expected to improve the accuracy and timeliness of data collection. Electronic monitoring is expected to allow fishery managers to better monitor landings and discards, and more accurately assess the impacts of regulations on the charter/headboat (for-hire) industry fishing in federal waters.

The South Atlantic Council is proposing to implement the same reporting requirements for federally permitted charter (6-pack) vessels that currently exist for headboats, and modify the timing of headboat reports.

How many charter vessels will be impacted and will there be a cost for doing this?

There are currently 1,984 charter vessels and 76 headboats in the South Atlantic with Federal For-Hire Permits.

Cost: If you have a computer or access to a computer (for example in a library), it will only cost you the time to input the data. The South Atlantic Council is working on a pilot project, in cooperation with charter vessels (and some headboats), to develop very user-friendly software to make it easy and quick to enter these data.

(Continued)

Actions in the For-Hire Reporting Amendment

Action 1. Operators of charter vessels would report electronically:

- Alternative 1. No Action. If selected, a charter vessel operator must maintain a fishing record for each trip or portion of such trip. Reports must be postmarked no later than 7 days after the end of each week (Sunday).
- **Preferred Alternative 2.** Weekly or at intervals shorter than a week if notified. Electronic reports would be due by Tuesday following each week that ends on Sunday.
- Alternative 3. Daily. Electronic reports would be due by noon of the following day.

Action 2. Operators of headboats would report on a new deadline:

- Alternative 1. No Action. If selected, a headboat operator must submit an electronic fishing record for each trip of all fish harvested through the Southeast Region Headboat Survey. Electronic fishing records (reports) must be submitted weekly (or at intervals shorter than a week if notified) by 11:59 p.m., local time, the Sunday following a reporting week.

Preferred Alternative 2. Weekly or at intervals shorter than a week if notified. Electronic reports would be due by Tuesday following each week that ends on Sunday, instead of reports being due on Sunday. This is a change from 7 days to prepare and submit reports to 2 days.

- Alternative 3. Daily. Electronic reports would be due by noon of the following day.

Action 3. Operators of charter vessels would report catch locations the same way headboats currently report location:

- Alternative 1. No action. Charter vessels in the for-hire survey report area fished (inshore, state, or federal waters) if selected.
- **Preferred Alternative 2.** Operators of charter vessels would report location electronically by latitude/longitude in degrees and minutes or by clicking on a headboat chart. This is how headboats report now.

(Continued)

Timing for the For-Hire Reporting Amendment

- **December 7-11, 2015** (Atlantic Beach, North Carolina) – South Atlantic Council reviews document, picks preferred alternatives, and approves for public hearings.
- **January 19, 2016** – Informal Question and Answer Webinar
- **January 25-February 3, 2016** – Public hearings from North Carolina to Florida
- **February 8, 2016** – Webinar Public Hearing for Mid-Atlantic and New England fishermen
- **February 10, 2016** – Written comments due by 5 pm
- **March 7-11, 2016** (Jekyll Island, Georgia) – South Atlantic Council reviews public comments, modified preferred alternatives as required, and approves all actions. Public comment on Wednesday, March 9th beginning at 5:30 pm
- **June 13-17, 2016** (Cocoa Beach, Florida) – South Atlantic Council reviews complete document and approves for formal review. Public comment on Wednesday, June 15th beginning at 5:30 pm
- **June 30, 2016** – Send for review and implementation by Secretary of Commerce/National Marine Fisheries Service
- **January 1, 2017** – target date for regulations to be effective; operators of charter vessels begin electronic reporting and new deadline effective for headboats

CHAPTER 1. INTRODUCTION

The Magnuson-Stevens Fishery Conservation and Management Act requires the National Marine Fisheries Service (NMFS) and regional fishery management councils (Councils) to end overfishing, rebuild overfished stocks, and achieve, on a continuing basis, the optimum yield (OY) from federally managed fish stocks. As part of this process, it requires the Councils to set annual catch limits (ACL) with accountability measures. These mandates are intended to ensure that fishery resources are managed for the greatest overall benefit to the nation, particularly with respect to providing food production, recreational opportunities, and protecting marine ecosystems.

Accurate fisheries information about catch, effort, and discards is important to fulfill these legal mandates and necessary to achieve OY from federally managed fish stocks. The for-hire component of the recreational sector harvests a substantial proportion of the ACL for several federally managed fish species in the management area for South Atlantic Fishery Management Council (South Atlantic Council), such as cobia, dolphin, and wahoo. The for-hire component of the recreational sector includes headboats and charter vessels. Headboats carry recreational anglers where passage is charged on a per angler, or per head basis. Charter vessels also carry recreational anglers but fees are paid for chartering the vessel rather than paying individual angler fees. In general headboats are larger and carry 15 or more passengers; whereas, charter vessels generally carry six or fewer passengers.

1.1 Background

The South Atlantic Council has provided the public opportunities to comment during their meetings as this amendment has been developed (December 2013 onwards). Initially, this was a joint amendment with the Gulf of Mexico Fishery Management Council (Gulf Council) and they also provided opportunities for public comment at their meetings. The South Atlantic Council considers the process of providing opportunities for public comment during their meetings, and the extensive opportunities for comment during the Snapper Grouper visioning process, as meeting the South Atlantic Council's scoping requirements.

1.1.1 Recreational Reporting

The South Atlantic Council is proposing actions in the For-Hire Reporting Amendment that would change the method, frequency, and required data elements of fishery data reporting by for-hire operators. The South Atlantic Council is considering several changes that would require electronic reporting for the Snapper Grouper, Dolphin Wahoo, and Coastal Migratory Pelagic (CMP) species for charter vessels with federal permits for Snapper Grouper, Dolphin Wahoo, and CMP, and modify reporting requirements for headboats.

The intent of this amendment is to improve the timeliness and accuracy of catch data to prevent ACL overages and to improve the data used in stock assessments. More accurate data could extend fishing seasons in a given year, project longer fishing seasons the following year, and improve other measures designed to catch more fish while ensuring healthy fish stocks. A

necessary step is to get charter vessels reporting electronically as headboats currently do. A longer-term goal is to have the current Marine Recreational Information Program (MRIP) methodology for charter vessels replaced by an electronic logbook methodology with a MRIP-approved validation procedure.

The South Atlantic Council is a partner in an Atlantic Coast Cooperative Statistics Program (ACCSP) research project to test the use of tablets on charter vessels in recording fishery data. Vessels will be selected to participate from the states of North Carolina through Florida and will be provided with a tablet to report electronically. This project is based on work done with the charter industry in Rhode Island where the fishermen had extensive input in developing the system. Several projects were also conducted in the Gulf of Mexico and those results can be found in the Technical Subcommittee's report (**Appendix E**). In the South Atlantic project, fishermen will have many opportunities for making suggestions on how the data are reported during the project testing phase, and a small group will use an electronic measuring board to measure the length of fish that are released. These data will be very helpful in improving stock assessments. This work is expected to begin in the spring of 2016.

Separate from the ACCSP project, the South Atlantic Council is also working with NMFS and ACCSP on a project to develop a validation methodology for logbook data using the existing South Carolina charter vessel/headboat logbook program. Once this methodology is developed and approved by MRIP, the South Atlantic logbook program will meet the requirements and thus be MRIP-certified.

The South Atlantic Council is also working with NMFS to utilize the software from this project to be one possible avenue for fishermen to report. The software will operate on a tablet and will be transferable to a personal computer. The South Atlantic Council's goal is to have the logbook program begin January 1, 2017. However, there are many of details to be worked out and there is a need for flexibility as to when the reporting requirement becomes mandatory. The desire is to have all the details about how to report, software, location, etc. finalized before reporting becomes mandatory.

For a person aboard a vessel that is operating as a charter vessel or headboat to fish for or possess, in or from the exclusive economic zone (EEZ), South Atlantic snapper grouper, Atlantic dolphin or wahoo, or South Atlantic coastal migratory pelagic fish, a valid charter vessel/headboat permit for South Atlantic snapper grouper, Atlantic dolphin or wahoo, or Atlantic CMP species must have been issued to the vessel and must be onboard. South Atlantic snapper grouper are managed from North Carolina through the Florida Keys to the boundary between the Gulf and South Atlantic Councils. Atlantic dolphin or wahoo are managed by the South Atlantic Council along the entire east coast, from Maine to Florida. South Atlantic CMP species include New York through the Florida Keys to the Council boundary. Therefore, there is one combined charter vessel/headboat open access for-hire permit. The two types of operations (charter and for-hire) are separated by how they operate. The definitions and reporting requirements are shown in detail in **Appendix A**.

Currently, charter vessels in fisheries for snapper grouper, dolphin wahoo, and CMP are required to report, if selected, on forms provided by the Science and Research Director (SRD); however,

none have been selected to date. Headboat vessels in these fisheries are required to submit electronic reports at weekly intervals (or intervals shorter than a week if notified by the SRD) by 11:59 p.m., local time, the Sunday following a reporting week and to return those forms weekly (no later than 7 days after the end of the each week (Sunday). As established in the Amendment 31 to the Snapper Grouper FMP/Amendment 6 to the Dolphin Wahoo FMP/Amendment 22 to the CMP FMP (SAFMC 2013a), South Atlantic snapper grouper charter vessels selected to report by the SRD must participate in the NMFS-sponsored electronic logbook and/or video monitoring program as directed by the SRD. Completed fishing records may be required weekly or daily, as directed by the SRD. The requirement for both charter vessels and headboats to participate in a video monitoring program, if selected, would not be changed by any of the actions in this amendment.

The South Atlantic Council would continue to follow the provisions for catastrophic conditions, which allow for the use of paper forms for basic required reporting as authorized by the Regional Administrator (RA) through publication of timely notice. During catastrophic conditions, the RA also has the authority to waive or modify reporting time requirements.

An electronic report not received within the time specified is delinquent. A delinquent report automatically results in a prohibition on harvesting or possessing the applicable species by the permit holder, regardless of any additional notification to the delinquent permit owner and operator by NMFS. This prohibition is applicable until all required and delinquent reports have been submitted and received by NMFS according to the reporting requirements. Compliance in reporting is critical for the data to be useful. Failure to comply would also result in fines and, for repeated violations, would result in revocation of the user's federal permit. If no fishing activity took place during a reporting period, the permit holder would be required to submit an electronic report stating that no fishing activity occurred and this report must be submitted at the same time interval specified in the regulations (local time). A preliminary list of data elements for charter vessels participating in the effort portion of the Marine Recreational Information Program (MRIP) For-Hire Survey is shown in **Table 2.1.1**. The current required data elements for headboats is shown in **Table 2.2.1**.

The South Atlantic Council recognizes that improved data reporting in these fisheries could reduce the likelihood that ACLs are exceeded, and accountability measures are triggered. The harvest from charter vessels and headboats contributes to recreational landings that count towards the recreational ACLs and quotas. Currently, charter vessel landings and discards are monitored with MRIP, a dockside sampling program. Fishing effort is calculated based on a monthly phone sample (10%) of federally-permitted charter vessels in the South Atlantic Council's jurisdiction coupled with dockside monitoring. Headboats (catch and effort) are monitored through the Southeast Regional Headboat Survey (SRHS) administered by the Southeast Fisheries Science Center.

The current for-hire data collection and monitoring system is reported in 2-month waves for all South Atlantic states and data for monitoring are often not available until approximately 45 days after the end of the wave, making timely management decisions difficult. This current combination of data collection and monitoring systems can be inadequate for in-season monitoring for species with small ACLs or short recreational seasons, resulting in large ACL

overruns. Also, the survey methods (i.e., catch and effort estimates) can be imprecise for some species leading to greater scientific and management uncertainty that requires larger buffers to prevent ACL overages and may prevent the OY from consistently being achieved. Reporting data through the ACCSP could also allow for data to eventually be monitored over shorter time periods leading to improved monitoring of catch levels. The proposed changes could reduce uncertainty in catch (i.e., landings and discards) and effort data for the for-hire component of three fisheries, increasing the likelihood that the OY would be achieved and ACL overages would be avoided.

It is the South Atlantic Council's intent to extend the reporting requirements of the For-Hire Reporting Amendment through the Mid-Atlantic and New England Fishery Management Councils' areas for vessels with federal for-hire permits for Snapper Grouper, Dolphin Wahoo, and CMP species. Permit holders would report all fish harvested/discarded on all trips regardless of where harvested. Further, it is the South Atlantic Council's intent not to have duplicate reporting by individual vessels; one report submitted to, for example, ACCSP would then be available to each agency needing the data.

1.1.2 Commercial Reporting

Federally permitted commercial dealers are currently reporting weekly. Commercial dealers with a federal dealer permit must report electronically each week with reports due by Tuesday following a week ending on Sunday. Commercial dealers are subject to the same compliance, non-fishing, and catastrophic conditions as is required for headboats and proposed for charter vessels. This requirement went into effect on August 7, 2014.

Commercial fishermen with a snapper grouper, dolphin wahoo, or CMP federal permit must report via a paper logbook. In addition, approximately 20% of permit holders are being selected each year to complete a discard logbook and an additional 20% are selected to complete an economic logbook. Commercial fishermen are very interested in reporting electronically, and the South Atlantic Council is exploring ways to allow them to use software to report similar to what is being done in the northeast. In the future, the South Atlantic Council will also consider making electronic reporting a requirement for commercial fishermen.

South Atlantic Fishery Management Council

- 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 NMFS; and 4 non-voting members
- Responsible for developing fishery management plans and amendments, and recommends actions to NMFS for implementation

National Marine Fisheries Service

- Responsible for data needed by the Councils for management
- Responsible for conservation and management of fish stocks
- Approves, disapproves, or partially approves Council recommendations
- Implements regulations

The For-Hire Reporting Amendment affects headboat and charter vessel reporting requirements for species managed in the Fishery Management Plan (FMP) for the Snapper Grouper Fishery of the South Atlantic (Snapper Grouper FMP), FMP for the Dolphin and Wahoo Fishery of the Atlantic (Dolphin Wahoo FMP), and the FMP for the Coastal Migratory Pelagic Resources of the Gulf of Mexico and Atlantic Region (CMP FMP) (**Figure 1.1.1**).

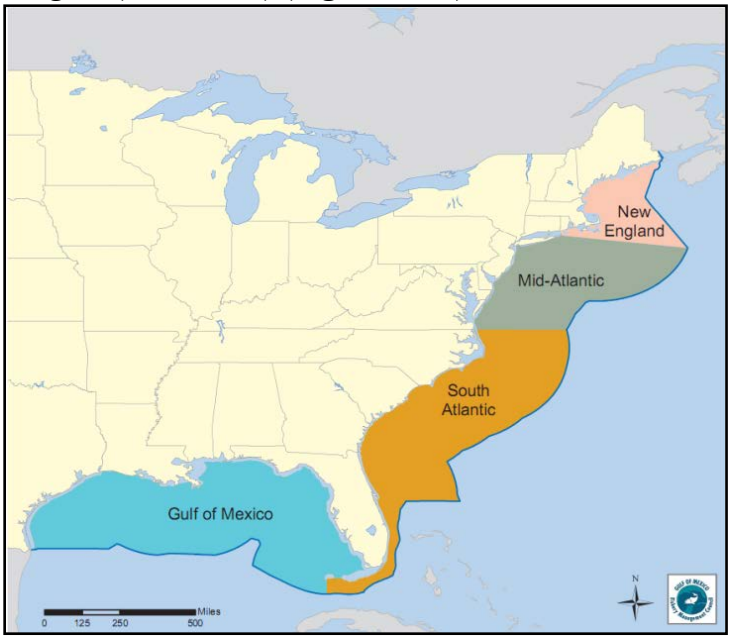

Figure 1.1.1. Jurisdictional boundaries of the Gulf of Mexico (blue), South Atlantic (orange), Mid-Atlantic (green), and New England (peach) Fishery Management Councils.

1.2 Purpose and Need

The *purpose* is to increase the accuracy and timeliness of landings, discards, effort and socio-economic data of federally permitted for-hire vessels participating in the South Atlantic managed fisheries.

The *need* is to improve charter vessel and headboat fishery data used for management and to improve monitoring and compliance of federally permitted for-hire vessels in the South Atlantic managed fisheries.

1.3 What is a Charter Vessel?

A charter vessel is less than 100 gross tons (90.8 metric tons) that meets the requirements of the U.S. Coast Guard to carry six or fewer passengers on a for-hire trip and that engages in charter fishing at any time during the calendar year (50 C.F.R. § 622.2). The number of federally-permitted charter vessels in the South Atlantic is shown in **Table 1.3.1**.

Table 1.3.1. Total number of federally-permitted charter vessels in the South Atlantic.

Year	FL	GA	NC	SC	Other States	Total
2010	1,124	24	396	144	453	2,141
2011	1,110	25	392	138	451	2,116
2012	1,131	25	365	143	455	2,119
2013	1,124	28	343	149	410	2,054
2014	1,071	32	332	157	392	1,984

Source: NMFS, Southeast Regional Office, Permits Office.

1.4 What is a Headboat?

Headboats are generally defined as vessels that hold a valid Certificate of Inspection issued by the U.S. Coast Guard to carry more than six passengers for hire. However, the SRHS includes only large capacity vessels that sell passage to recreational anglers primarily as headboats (i.e., charges by the "head"). Currently, a vessel is selected by the SRD to participate in the SRHS if it meets all, or a combination, of these criteria:

1) Vessel licensed to carry ≥ 15 passengers (Gulf); > 6 (South Atlantic).
2) Vessel fishes in the EEZ or state and adjoining waters for federally managed species.
3) Vessel charges primarily per angler (i.e., by the "head").

The number of headboats surveyed in the South Atlantic by the SRHS by state from 2010 through 2015 is provided in **Table 1.4.1** (South Atlantic).

Table 1.4.1. Total number of headboats in the South Atlantic participating in the SRHS 2010-2015.

Year	FL	GA	NC	SC	Total
2010	47	3	10	20	80
2011	43	3	10	21	77
2012	43	3	11	21	78
2013	44	3	11	18	76
2014	45	3	10	18	76
2015	46	3	9	18	76

Source: NMFS, Southeast Regional Headboat Survey

1.5 History of Management

Snapper Grouper FMP for the South Atlantic

The following amendments to the Snapper Grouper FMP contained actions that pertained to the for-hire sector including permit and reporting requirements.

Amendment 4 (SAFMC 1991) Amendment 4 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic (Snapper Grouper FMP) (SAFMC, 1991) established charterboat and headboat permits and required charterboats and headboats to report, if selected. Amendment 4 also required that recreational fishermen must make snapper grouper species, or parts thereof, available for inspection by the NMFS Science and Research Director or an authorized representative, upon request. Amendment 4 also designated prohibited gear, defined overfishing and established rebuilding timeframes, established gear marking requirements for black sea bass traps, size limits, bag limits and spawning season closures.

Amendment 7 (SAFMC 1994) established dealer permits for both charter and headboats, allowed sale under specified conditions, and adjusted bag limits and crew specifications for charter and headboats. Amendment 7 also adjusted specified size limits for hogfish and mutton snapper, modified the management unit to include scup and specified allowable gear and made allowances for experimental gear.

Amendment 16 (SAFMC 2009) established a prohibition on captain and crew on for-hire trips retaining the bag limit of vermilion snapper and species within the 3-fish grouper aggregate. Amendment 16 also specified allocations for gag and vermillion snapper, required dehooking tools for sea turtle bycatch, established a spawning season closure for gag and a reduced bag limit and recreational closed season for vermillion. Directed commercial quotas were also established for both gag and vermillion snapper.

Amendment 15B (SAFMC 2008) prohibited the sale of bag-limit caught snapper grouper species; reduced the effects of incidental hooking on sea turtles and smalltooth sawfish; adjusted commercial renewal periods and transferability requirements; implemented plan to monitor and assess bycatch; established reference points for golden tilefish; established allocations for snowy grouper (95% commercial & 5% recreational) and red porgy (50% commercial & 50% recreational). Amendment 15B also required that commercial vessels with a snapper grouper permit, for-hire vessels with a for-hire permit, and private recreational vessels if fishing for snapper grouper species in the EEZ, shall use observer coverage, logbooks, electronic logbooks, video monitoring, or any other method deemed necessary to measure by catch by NOAA Fisheries, if selected.

Amendment 31 to the Snapper Grouper FMP/Amendment 6 to the Dolphin Wahoo FMP/Amendment 22 to the CMP FMP (SAFMC 2013a) required electronic logbook reporting for headboat vessels fishing for Snapper Grouper, Dolphin Wahoo, and Coastal Migratory Pelagics. This amendment required selected vessels with a Federal for-hire Permit to report landings data electronically; and implemented a provision that authorizes NOAA Fisheries Service to require weekly or daily reporting as required.

South Atlantic Dolphin Wahoo

The following amendments to the Dolphin Wahoo FMP contained actions that pertained to the for-hire sector including permit and reporting requirements.

The Dolphin Wahoo FMP, which was implemented in 2003, contained many management measures for the operation of the fishery such as minimum size limits, allowable gear, closed areas, and quotas. The Dolphin Wahoo FMP required owners of commercial vessels and/or charter vessels/headboats to have vessel permits and, if selected, submit reports and required dealers to have permits and, if selected, submit reports. In 2004, the Dolphin Wahoo FMP required that operators of commercial vessels, charter vessels and headboats that are required to have a federal vessel permit for dolphin and wahoo must display operator permits.

Amendment 31 to the Snapper Grouper FMP/Amendment 6 to the Dolphin and Wahoo FMP/Amendment 22 to the CMP FMP (SAFMC 2013a) required electronic logbook reporting for headboat vessels fishing for Snapper Grouper, Dolphin Wahoo, and CMP.

CMP Fishery

The following amendments to the CMP FMP contained actions that pertained to the for-hire sector including permit and reporting requirements.

Amendment 2 (SAFMC 1987) to the CMP FMP (implemented in 1987) required that charter vessels and headboats fishing in the EEZ of the Gulf of Mexico or Atlantic for CMP species have permits.

Amendment 31 to the Snapper Grouper FMP/Amendment 6 to the Dolphin and Wahoo FMP/Amendment 22 to the CMP FMP (SAFMC 2013a) required electronic logbook reporting for headboat vessels fishing for Snapper Grouper, Dolphin Wahoo, and CMP.

CHAPTER 2. MANAGEMENT ALTERNATIVES

2.1 Action 1: Modify Frequency and Mechanism of Data Reporting for Charter Vessels

Alternative 1 (No Action). Under current regulations, the owner or operator of a charter vessel with a charter vessel/headboat permit for South Atlantic coastal migratory pelagic (CMP) species, South Atlantic snapper grouper, or Atlantic dolphin and wahoo has been issued, or whose vessel fishes for or lands such (CMP species, snapper grouper, or Atlantic dolphin or wahoo in or from state waters adjoining the applicable South Atlantic or Atlantic exclusive economic zone (EEZ), and who is 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, on forms provided by the SRD. Completed fishing records must be submitted to the SRD weekly, postmarked no later than 7 days after the end of each week (Sunday). Information to be reported is indicated on the form and its accompanying instructions.

For South Atlantic snapper grouper, charter vessels selected to report by the SRD must participate in the National Marine Fisheries Service (NMFS)-sponsored electronic logbook and/or video monitoring program as directed by the SRD. Completed fishing records may be required weekly or daily, as directed by the SRD.

Preferred Alternative 2. Require that federally permitted charter vessels, while operating as a charter vessel, submit fishing records to the SRD weekly or at intervals shorter than a week if notified by the SRD via electronic reporting (via NMFS approved hardware/software). Weekly = Tuesday following each fishing week. Snapper Grouper Advisory Panel preferred.

Preferred Sub-alternative 2a. Report all fish harvested/discarded on all trips regardless of where harvested. (current HB requirement)

Sub-alternative 2b. Report only South Atlantic federally-managed fish harvested/discarded on all trips regardless of where harvested. (snapper grouper, dolphin/wahoo, and CMP species)

Sub-Alternative 2c. Report all federally-managed fish harvested/discarded on all trips regardless of where harvested.

Alternative 3. Require that federally permitted charter vessels, while operating as a charter vessel, submit fishing records to the SRD daily via electronic reporting via electronic reporting (via NMFS approved hardware/software). Daily = by noon of the following day.

Sub-alternative 3a. Report all fish harvested/discarded on all trips regardless of where harvested. (current HB requirement)

Sub-alternative 3b. Report only South Atlantic federally-managed fish harvested/discarded on all trips regardless of where harvested. (snapper grouper, dolphin/wahoo, & CMP species)

Sub-Alternative 3c. Report all federally-managed fish harvested/discarded on all trips regardless of where harvested.

For both **Alternative 2** and **Alternative 3**, is the intent of the South Atlantic Fishery Management Council (South Atlantic Council) that during catastrophic conditions the use of paper forms for basic required reporting may be authorized by the Regional Administrator (RA) through publication of timely notice. During catastrophic conditions, the RA also has the authority to waive or modify reporting time requirements.

An electronic report not received within the time specified is delinquent. A delinquent report automatically results in a prohibition on harvesting or possessing the applicable species by the permit holder, regardless of any additional notification to the delinquent permit owner and operator by NMFS. This prohibition is applicable until all required and delinquent reports have been submitted and received by NMFS according to the reporting requirements.

If no fishing activity took place during a reporting period, the permit holder would be required to submit an electronic report stating that no fishing activity occurred and this report must be submitted at the same time interval specified in the regulations (local time). A preliminary list of data elements for charter vessels participating in the effort portion of the Marine Recreational Information Program (MRIP) For-Hire Survey is shown in **Table 2.1.1**

The requirement to participate in a video monitoring program if selected is not changed by any of the alternatives in this amendment.

Discussion

The current reporting regulations for the snapper grouper fishery were implemented through a series of amendments, starting in 1991 with Amendment 4 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic (Snapper Grouper FMP) (SAFMC, 1991) which required charterboat and headboat permits and required charterboats and headboats to report, if selected. Amendment 4 also required that recreational fishermen must make snapper grouper species, or parts thereof, available for inspection by the NMFS Science and Research Director or an authorized representative, upon request.

Amendment 15B (SAFMC 2008) required that "commercial vessels with a snapper grouper permit, for-hire vessels with a for-hire permit, and private recreational vessels if fishing for snapper grouper species in the EEZ, if selected, shall use observer coverage, logbooks, electronic logbooks, video monitoring, or any other method deemed necessary to measure by catch by NOAA Fisheries.

Amendment 31 to the Snapper Grouper FMP/Amendment 6 to the Dolphin Wahoo FMP/Amendment 22 to the CMP FMP (SAFMC 2013a) required electronic logbook reporting for headboat vessels fishing for Snapper Grouper, Dolphin Wahoo, and Coastal Migratory Pelagics.

Charter vessels are operationally defined as for-hire vessels that carry six or fewer passengers that also meet the requirements of the U.S. Coast Guard. To date, none of these vessels have

been selected by the SRD to submit fishing records as described in **Alternative 1 (No Action)**. Rather, these vessels have been monitored through the MRIP For-Hire Survey (measures effort) and the MRIP dockside intercept survey (measures catch). The MRIP For-Hire Survey includes charter vessels operating in the South Atlantic from eastern Florida through North Carolina. Charter vessel operators are required to report all trips taken during selected weeks (effort only) whenever they are selected to participate in the survey. Charter vessel operators are contacted by telephone (a weekly sample of 10% of the fleet) to collect these data (**Table 2.1.1)**. Catch data are collected in a separate dockside intercept survey of anglers. Adjustment factors for active charter vessels that are not in the sample frame (new to fleet, no contact information known, etc.) are produced from field intercept survey questions and applied to the raw effort estimate.

Table 2.1.1. Required data reporting elements for charter vessels participating in MRIP For-Hire Survey.

Reporting Elements
Area fished
Number of anglers who fished
Hours of actual fishing activity
Method of fishing
Target species (if any)

To enforce the mandatory reporting requirement for federally permitted charter vessels in the telephone component of the For-Hire Survey, permit holders who refuse to participate in the survey are notified by letter of their obligation to report as a condition for permit renewal. However, if a charter vessel operator cannot be contacted after five attempts for a selected week, the final interview status is "unsuccessful contact". It is impossible to identify permit holders who are deliberately evading the survey. Telephone contact rates vary by wave (i.e., MRIP 2-month sample period), state, and region, and the percent of selected vessels that are unable to be contacted by phone is quite high in some strata.

Preferred Alternative 2 would require federally permitted charter vessels participating in the subject fisheries to submit fishing records weekly or at intervals shorter than a week via electronic reporting (via NMFS approved hardware/software). **Preferred Alternative 2** could improve fishery dependent data in several ways. For example, fishery dependent data from charter vessels could be available for inclusion into the science and management process faster, potentially reducing the likelihood of exceeding annual catch limits (ACLs). **Preferred Alternative 2** could also improve data accuracy as reports would be completed shortly after each trip, potentially reducing problems associated with recall errors and reporting by Tuesday would standardize charter vessel logbook reporting with commercial logbook reporting (and headboats if **Alternative 2** is chosen for **Action 2**). However, **Preferred Alternative 2** would reduce the timing flexibility for report preparation by charter vessel operators and this burden could be acute during peak season when the number of trips taken, the number of passengers carried, and catch are greatest.

Alternative 3 would require charter vessels participating in the subject fisheries to submit a report for each day. As with **Preferred Alternative 2,** this report would be submitted

electronically and received by NMFS (due noon the following day). **Alternative 3** could further reduce the likelihood of exceeding ACLs with reduced recall error compared to **Alternative 1 (No Action)** and **Preferred Alternative 2**. However, **Alternative 3** would add additional burden and reduced flexibility compared to **Alternatives 1 (No Action)** and **Preferred Alternative 2.**

The South Atlantic Council's intent is that charter vessels with federal permits for snapper grouper, dolphin wahoo, and coastal migratory pelagics meet the minimum data elements currently collected for federal headboats (see **Table 2.1.2** and **Appendix D**) and for charter vessels and headboats in South Carolina (see **Table 2.1.3** and **Appendix C**). However, there needs to be sufficient flexibility in the structure and design of the data collection program to ensure that the system can be built in a timely and efficient manner.

Potential additional data elements:

1. Vessel Identification Number – helpful to match trips to federal vessel permit.
2. Fishing method – trolling, bottom fishing, diving.
3. Actual hours fished – time spent fishing excluding travel time.
4. Estimated pounds of kept species.
5. Condition of fish released – live versus dead.

Additional data that could be collected on a sample or voluntary basis from both charter vessels and headboats includes:

- releases/discards measured and specific location (depth) of release recorded
- retained catch at specific location (depth) recorded
- economic data (similar to what is currently being collected from commercial fishermen)
- social data

Table 2.1.2. Required data reporting elements for headboats participating in the SRHS.

Reporting Elements
Depart Date:Time
Return Date:Time
Vessel Name
Captain Name
Number of Anglers
Number of Paying Passengers
Number of Crew
Fuel used (gallons)
Price per gallon (estimate)
Minimum depth fished
Maximum depth fished
Primary depth fished
Latitude/Longitude Degrees
Latitude/Longitude Minutes
Species caught
Number kept
Number released

Table 2.1.3. South Carolina Department of Natural Resources (SCDNR) Logbook data elements and descriptions.

Field_Name	Field_Description
LDate	Date of charter trip – Only a single entry, most trips are one day, exception that we have seen are overnight swordfish trips, hours fished is the identifier
LicenseNum	Permit number of the charter – Matched to SC License Data, unique number each fiscal year/new license
TripNum	Trip number, if the charter vessel takes multiple trips in a single day, Time fishing trip started is the identifier, internally completed, not on the form
Location	Specific location of fishing trip as shown on the charter grid map, attached
Locale	Locale of fishing trip, identified as estuarine, nearshore (0 – 3 miles) or offshore (>3 miles)
NumAnglers	Number of anglers fishing
Method	Method of fishing, identified as troll, bottom, gig, dive, cast/fly, and combinations of such
TargetSp	Species targeted while fishing
Hours	Hours spent fishing
Reef	Artificial reef fished, name provided
TripStart	Time fishing trip started
ShallowDepth	Shallowest depth fished (feet)
DeepDepth	Deepest depth fished (feet)
StartLocation	Place where the fishing trip started from, name provided for location where the trip started (marina or boat ramp name)
Notes	Notes about the trip the captain wants to provide
SpCode	Species code of species caught
NumKept	Number of that particular species caught and kept
LbsLanded	Pound of that particular species kept
NumReleaseLive	Number of fish of that species released alive
NumReleaseDead	Number of fish of that species released dead

2.2 Action 2: Modify Frequency and Mechanism of Data Reporting for Headboats

Alternative 1 (No Action). Under current regulations, the owner or operator of a headboat with a charter vessel/headboat permit for South Atlantic CMP species, South Atlantic snapper grouper, or Atlantic dolphin and wahoo has been issued, or whose vessel fishes for or lands such CMP species, snapper grouper, or Atlantic dolphin or wahoo in or from state waters adjoining the applicable South Atlantic or Atlantic exclusive economic zone (EEZ), and who is selected to report by the Science and Research Director (SRD) must submit an electronic fishing record for each trip of all fish harvested via the SRHS. Electronic fishing records must be submitted at weekly intervals (or intervals shorter than a week if notified by the SRD) by 11:59 p.m., local time, the Sunday following a reporting week. If no fishing activity occurred during a reporting

week, an electronic report stating so must be submitted for that reporting week by 11:59 p.m., local time, the Sunday following a reporting week.

Note: The catastrophic conditions provisions, delinquent reporting, and the requirement to participate in a video monitoring program if selected are not changed by any of the alternatives in this amendment (described in further detail in **Section 1.1**).

During catastrophic conditions, the use of paper forms for basic required functions may be authorized by the Regional Administrator (RA) by publication of timely notice. During catastrophic conditions, the RA also has the authority to waive or modify reporting time requirements.

When an electronic report is not received within the time specified, it is delinquent. A delinquent report automatically results in a prohibition on harvesting or possessing the applicable species, regardless of any additional notification to the delinquent owner and operator by NMFS. This prohibition is applicable until all required and delinquent reports have been submitted and received by NMFS according to the reporting requirements.

For South Atlantic snapper grouper, headboats selected to report by the SRD must participate in the NMFS-sponsored electronic logbook and/or video monitoring program, as directed by the SRD. Completed fishing records may be required weekly or daily, as directed by the SRD.

Preferred Alternative 2. Require that headboats, while operating as a headboat, submit fishing records to the SRD weekly or at intervals shorter than a week if notified by the SRD via electronic reporting (via NMFS approved hardware/software). Weekly = Tuesday following each fishing week. Snapper Grouper Advisory Panel preferred.

Alternative 3. Require that headboats, while operating as a headboat, submit fishing records to the SRD daily via electronic reporting (via NMFS approved hardware/software). Daily = by noon of the following day.

Discussion

Historically, headboat vessels reported logbook information using paper forms. Beginning January 1, 2013, vessel owners/operators have been required to submit electronic logbooks. Vessel operators selected to report are required to report 100% of their vessel trips, regardless of whether the trips occur in the EEZ or in state waters. The current reporting requirements place the responsibility for submitting required information directly on the permit holder, and compliance is monitored and enforced as a condition for permit renewal. However, the Federal For-Hire Permit is open access, and a fisherman can purchase a new permit if a permit is lost or expired. If a vessel is delinquent for any trips, an e-mail reminder is sent to the vessel owner after the reporting week ends. If the vessel continues to be non-compliant, the Permit Office is notified to place the vessel permit renewal on hold. In some cases, the vessel permit is not up for renewal for several months; if a vessel in this status remains non-compliant, law enforcement is notified to prohibit this vessel from harvesting and possessing federally managed species. The obligation to report is reinforced annually via certified letter to each permit holder.

The SRHS, which is administered by the NMFS Southeast Fisheries Science Center (SEFSC), includes approximately 76 large capacity headboats operating in the South Atlantic from Florida through North Carolina (**Table 1.4.1**). Vessels included in this survey are required to report catch and effort data weekly to NMFS (**Table 2.1.2**).

Alternative 1 (No Action) requires headboats participating in South Atlantic Snapper Grouper, Atlantic Dolphin Wahoo, or Gulf of Mexico and Atlantic CMP fisheries, if selected by the SRD (Note: The headboat amendment required all headboats to report.), to submit electronic reports weekly (or at intervals less than a week if requested by the SRD) due seven days after the end of each week (Sunday).

Preferred Alternative 2 would continue the requirement for headboats participating in the subject fisheries to report weekly or at intervals shorter than a week if notified by the SRD via electronic reporting (via NMFS approved hardware/software). The difference between **Alternative 1 (No Action)** and **Preferred Alternative 2** is the time between the end of the fishing week (Sunday) and report submission. **Alternative 1 (No Action)** allows 7 days to prepare and submit reports while **Preferred Alternative 2** would allow only 2 days. **Preferred Alternative 2** could improve fishery data in several ways. Fishery data could be available in the science and management process faster, potentially reducing the likelihood of exceeding ACLs. **Preferred Alternative 2** could also improve accuracy as reports would be completed soon after each trip reducing problems associated with recall errors, and reporting by Tuesday would standardize headboat logbook reporting with commercial logbook reporting (and charter vessels if **Alternative 2** is chosen for **Action 1**). However, **Preferred Alternative 2** would reduce the flexibility of the headboat operators for the timing of report preparation and this could be acute during peak season when the number of trips, the number of passengers, and catch are greatest.

Alternative 3 would require headboats participating in the subject fisheries to submit a report each day. This report would be submitted electronically and would need to be received by NMFS (by noon the following day). **Alternative 3** could further reduce the likelihood of exceeding ACLs and reduce recall error compared to **Alternative 1** or **Preferred Alternative 2**. However, **Alternative 3** would add additional burden and reduced flexibility in comparison to **Alternative 1** or **Preferred Alternative 2.**

2.3 Action 3: Modify Electronic Reporting Requirements to Require Vessel or Catch Location Reporting

Alternative 1 (No Action). Current regulations require charter vessels participating in the for-hire survey to report area fished (inshore, state, or federal waters), if selected as part of the survey. Headboats participating in the SRHS are required to report latitude and longitude of area fished (degrees and minutes only; within 1 nautical mile $(nm)^2$ area).

Preferred Alternative 2. Require federally permitted charters vessels to report location electronically by latitude/longitude in degrees and minutes or by clicking on a headboat chart. Snapper Grouper Advisory Panel preferred.

Two Alternatives Considered

Section 1502.14(a) of the National Environmental Policy Act states that "agencies shall: rigorously explore and objectively evaluate all reasonable alternatives…." Two reasonable alternatives for this action, including the no action alternative, have been identified by NMFS and the South Atlantic Council. The South Atlantic Council is considering requiring charter vessels to report catch location in the same manner as is currently required for headboats. **Preferred Alternative 2** reflects the current manner in which headboats are required to report area fished. The South Atlantic Council and NMFS could consider a third alternative to not require charter vessels to report area fished, but that would not meet the purpose and need and is therefore unreasonable.

Discussion

Charter vessels that are surveyed using the MRIP for-hire survey (i.e., 10% weekly) are asked to report area fished (i.e., area fished, state, or federal waters) in addition to the other elements listed in **Table 2.1.1**.

Alternative 1 would maintain the current self-reporting systems in place, that is, report area fished if selected in the for-hire survey (charter vessel) or latitude/longitude of area fished within 1 nm^2 area (headboat).

Preferred Alternative 2 would require charter vessels to report location fished manually by latitude/longitude in degrees and minutes or by clicking on a geographic grid, which is currently required for headboats in the South Atlantic.

The South Atlantic Council's goal is to have the for-hire sector's landings available weekly similar to commercial landings. Headboats are currently required to report data weekly and, if the For-Hire Reporting Amendment is implemented, charter vessels would also be required to report weekly. Having the for-hire catches updated weekly would help inform the projection process for the private recreational sector's catches that are available 45 days after a 2-month wave.

Currently headboat catches are being reported 45 days after each 2-month wave at the same time the MRIP catches are available. Part of the reason for this time period is that the South Atlantic

Council has specified the recreational ACL in pounds and this requires the numbers of fish to be converted to pounds. Generating catch estimates in pounds requires the integration of mean weights collected by angler intercepts. This is accomplished for the headboat catches during the 45 day period after a 2-month wave. The MRIP catches are reported in numbers and weight. However, the SEFSC has developed a methodology for generating weight that they concluded is more accurate for the southeast. This adds an unspecified period of time after the MRIP data are released for the SEFSC to apply their conversion factors and provide a catch estimate in weight.

Electronic reporting would facilitate the availability of catch in numbers sooner than catch in pounds. The South Atlantic Council is considering specifying recreational ACLs in numbers of fish so that the headboat sector (and the charter vessel sector once this amendment is approved) can be tracked weekly. Specifying the recreational ACL in numbers of fish could also reduce the time in which MRIP data are available to track recreational ACLs.

The Technical Sub-Committee met in XXX and developed recommendations for the system design. The complete list of recommendations are in Appendix E.

3. Development of compliance tracking procedures that balance timeliness with available staff and funding resources.

5. Use validation methods developed in the Gulf of Mexico logbook pilot study as a basis to ensure that the actual logbook report is validated and standardized validation methodologies are employed among regions.

8. Require and maintain a comprehensive permit/email database of participants.

10. Include procedures for expanding estimates for non-reporting.

11. Allow multiple authorized applications or devices to report data as long as they meet required data and transferability standards.

CHAPTER 3. AFFECTED ENVIRONMENT

3.1 Description of the Physical Environment

3.1.1 Snapper Grouper

Habitat for Snapper Grouper Species

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

Essential Fish Habitat (EFH) for Snapper Grouper Species

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

EFH utilized by snapper grouper species in this region includes coral reefs, live/hard bottom, submerged aquatic vegetation, artificial reefs and medium to high profile outcroppings on and around the shelf break zone from shore to at least 183 meters [600 feet (but to at least 2,000 feet for wreckfish)] where the annual water temperature range is sufficiently warm to maintain adult populations of members of this largely tropical fish complex. EFH includes the spawning area in the water column above the adult habitat and the additional pelagic environment, including *Sargassum*, required for survival of larvae and growth up to and including settlement. In addition, the Gulf 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 feet) 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.

Habitat Areas of Particular Concern (HAPCs) for Snapper Grouper Species

Areas which meet the criteria for 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 HAPC; all hermatypic coral habitats and reefs; manganese outcroppings on the Blake Plateau; and South Atlantic Council-designated Artificial Reef SMZs. Areas that meet the criteria for 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 plans (FMPs) regulations, the South Atlantic Fishery Management Council (South Atlantic Council), in cooperation with National Marine Fisheries Service (NMFS), actively comments on non-fishing projects or policies that may impact essential fish habitat (EFH). The South Atlantic Council adopted a habitat policy and procedure document that established a four-state Habitat Advisory Panel and adopted a comment and policy development process. With guidance from the Advisory Panel, the South Atlantic Council has developed and approved habitat policies on: energy exploration, development, transportation and hydropower re-licensing; beach dredging and filling and large-scale coastal engineering; protection and enhancement of submerged aquatic vegetation; and alterations to riverine, estuarine and near shore flows, offshore aquaculture, invasive estuarine species, and invasive marine species (available at www.safmc.net).

EFH and HAPCs in the South Atlantic Region are show in in **Figure 3.1.1**.

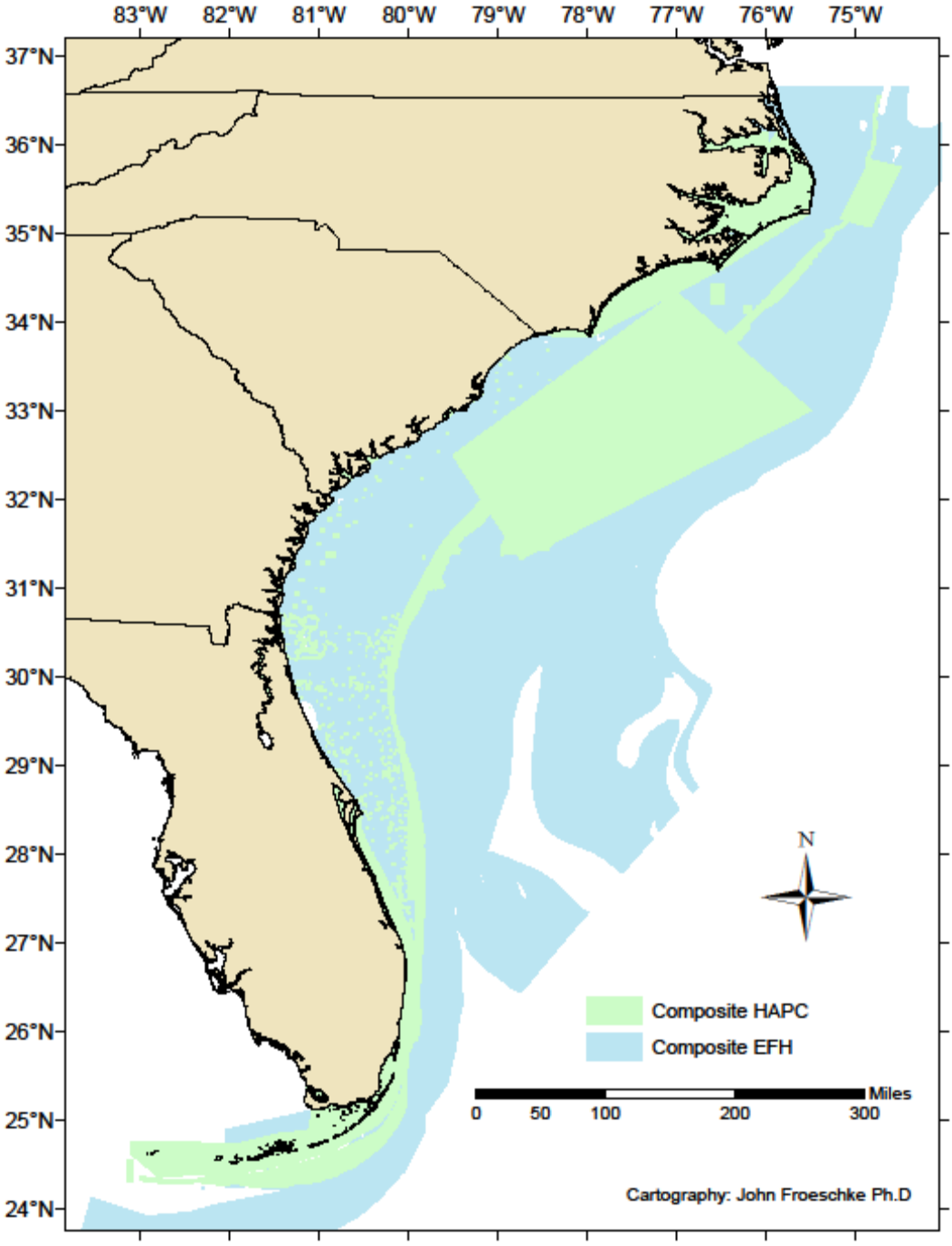

Figure 3.1.1. Composite map of HAPC and EFH in the South Atlantic Region.
Source: John Froescke, Ph.D. Gulf of Mexico Fishery Management Council

3.1.2 Dolphin and Wahoo

Habitat for Dolphin and Wahoo

Information on the habitat utilized by dolphin and wahoo is included in Volume II of the Fishery FEP (SAFMC 2009) and incorporated here by reference. The FEP can be found at: http://www.safmc.net/ecosystem/Home/EcosystemHome/tabid/435/Default.aspx

EFH for Dolphin and Wahoo

EFH for dolphin and wahoo is the Gulf Stream, Charleston Gyre, Florida Current, and pelagic *Sargassum.* 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 1998) (dolphin was included within the Coastal Migratory Pelagics FMP at that time, and the EFH definition has been carried forward through the establishment of the dolphin and wahoo FMP). This definition does not apply to extra-jurisdictional areas.

HAPCs for Dolphin and Wahoo

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. A map of these areas is available via the FEP link above. This 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 (dolphin was included within the Coastal Migratory Pelagics FMP).

3.1.3 Coastal Migratory Pelagics

Habitat for Coastal Migratory Pelagics

A description of the physical environment for coastal migratory pelagic (CMP) species is provided in Amendment 18 to the CMP FMP (GMFMC and SAFMC 2011), and is incorporated herein by reference.

EFH for Coastal Migratory Pelagics (CMP)

A description of the EFH for CMP species is provided in Amendment 18 to the CMP FMP (GMFMC and SAFMC 2011), and is incorporated herein by reference. EFH for CMPs include coastal estuaries from the US/Mexico border to the boundary between the areas covered by the Gulf of Mexico Fishery Management Council and the South Atlantic Council from estuarine waters out to depths of 100 fathoms (GMFMC 2004). In the South Atlantic, EFH 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*. In addition, all coastal inlets, all state-designated nursery habitats of particular importance to coastal migratory pelagics (for example, in North Carolina this would include all primary nursery areas and all secondary nursery areas).

For cobia, EFH also includes high salinity bays, estuaries, and seagrass habitat. In addition, the Gulf Stream is an essential fish habitat because it provides a mechanism to disperse coastal migratory pelagic larvae. For king and Spanish mackerel and cobia, essential fish habitat occurs in the South Atlantic and Mid-Atlantic Bights.

HAPCs for Coastal Migratory Pelagics (CMP)

A description of the HAPCs for CMP species is provided in Amendment 18 to the CMP FMP (GMFMC and SAFMC 2011), and is incorporated herein by reference. Areas which meet the criteria for HAPCs include 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 and cobia based on abundance data from the Estuarine Living Marine Resources Program. Estuaries meeting this criteria for Spanish mackerel include Bogue Sound and New River (North Carolina), for cobia, Broad River (South Carolina).

3.2 Description of the Biological, Physical and Ecological Environment

The biological environment in the areas affected by actions in this amendment is defined by two components (**Figure 3.2.1**). Each component will be described in detail in the following sections.

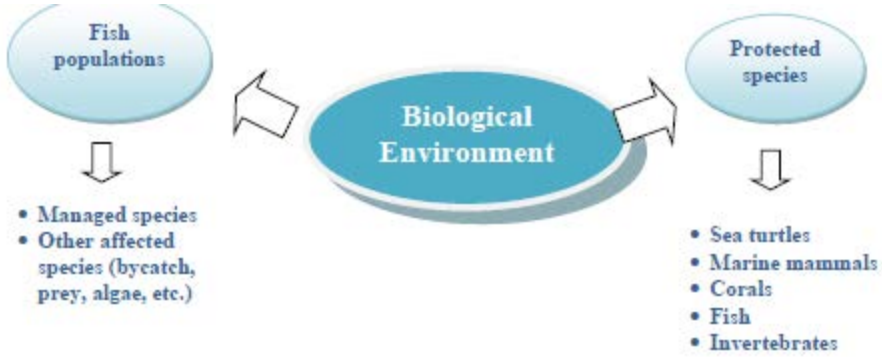

Figure 3.2.1. Two components of the biological environment described in this amendment.

3.2.1 Snapper Grouper

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

3.2.2 Coastal Migratory Pelagics

A description of CMP species biology is provided in Amendments 18, 20A, and 20B to the CMP FMP (GMFMC and SAFMC 2011, 2013, 2014), and is incorporated herein by reference.

3.2.3 Dolphin and Wahoo

Information on the biology of dolphin and wahoo is included in Volume II of the Fishery FEP (SAFMC 2009) and incorporated here by reference. The FEP can be found at: http://www.safmc.net/ecosystem/Home/EcosystemHome/tabid/435/Default.aspx

3.2.4 Protected Species

There are 40 listed species protected by federal law that may occur in the EEZ of the South Atlantic Region and are under the purview of NMFS. Thirty-one of these species are marine mammals protected under the Marine Mammal Protection Act (MMPA). Six of these marine mammal species (sperm, sei, fin, blue, humpback, and North Atlantic right whales) are also listed as endangered under the Endangered Species Act (ESA). In addition to those six marine

mammals, five species of sea turtles (green, hawksbill, Kemp's ridley, leatherback, and loggerhead); the smalltooth sawfish; five distinct population segments (DPSs) of Atlantic sturgeon; and two *Acropora* coral species (elkhorn [*Acropora palmata*] and staghorn [*A. cervicornis*]) are also protected under the ESA. Portions of designated critical habitat for North Atlantic right whales and *Acropora* corals occur within the South Atlantic Council's jurisdiction. Additionally, on September 10, 2014, NMFS listed 20 new coral species under the ESA, five of those species occur in the Caribbean (including Florida) and all of these are listed as threatened. The two previously listed *Acropora* coral species remain protected as threatened.

The NMFS has reviewed the potential impacts of the snapper grouper, coastal migratory pelagics and the dolphin wahoo fishery on protected species in the region. The potential impacts from the continued authorization of these fisheries on currently listed protected species have been considered in previous ESA Section 7 consultations or subsequent memoranda. Those consultations indicate that of the species listed above, sea turtles and smalltooth sawfish are the most likely to interact with these fisheries and are therefore discussed further below.

Turtles

Green, hawksbill, Kemp's ridley, leatherback, and loggerhead sea turtles are all highly migratory and travel widely throughout the South Atlantic. The following sections are a brief overview of the general life history characteristics of the sea turtles found in the South Atlantic region. Several volumes exist that cover the biology and ecology of these species more thoroughly (i.e., Lutz and Musick (eds.) 1997, Lutz et al. (eds.) 2003).

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

The **hawksbill's** pelagic stage lasts from the time they leave the nesting beach as hatchlings until they are approximately 22-25 cm in straight carapace length (Meylan 1988, Meylan and Donnelly 1999). The pelagic stage is followed by residency in developmental habitats (foraging areas where juveniles reside and grow) in coastal waters. Little is known about the diet of pelagic stage hawksbills. Adult foraging typically occurs over coral reefs, although other hard-bottom communities and mangrove-fringed areas are occupied occasionally. Hawksbills show fidelity to their foraging areas over several years (van Dam and Diéz 1998). The hawksbill's diet is highly specialized and consists primarily of sponges (Meylan 1988). Gravid females have been noted ingesting coralline substrate (Meylan 1984) and calcareous algae (Anderes Alvarez and Uchida 1994), which are believed to be possible sources of calcium to aid in eggshell

production. The maximum diving depths of these animals are not known, but the maximum length of dives is estimated at 73.5 minutes. More routinely, dives last about 56 minutes (Hughes 1974).

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

Leatherbacks are the most pelagic of all ESA-listed sea turtles and spend most of their time in the open ocean. Although they will enter coastal waters and are seen over the continental shelf on a seasonal basis to feed in areas where jellyfish are concentrated. Leatherbacks feed primarily on cnidarians (medusae, siphonophores) and tunicates. Unlike other sea turtles, leatherbacks' diets does not shift during their life cycle. Because leatherbacks' ability to capture and eat jellyfish is not constrained by size or age, they continue to feed on these species regardless of life stage (Bjorndal 1997). Leatherbacks are the deepest diving of all sea turtles. It is estimated that these species can dive in excess of 1,000 m (Eckert et al. 1989) but more frequently dive to depths of 50 m to 84 m (Eckert et al. 1986). Dive times range from a maximum of 37 minutes to more routines dives of 4 to 14.5 minutes (Standora et al. 1984, Eckert et al. 1986, Eckert et al. 1989, Keinath and Musick 1993). Leatherbacks may spend 74% to 91% of their time submerged (Standora et al. 1984).

Loggerhead hatchlings forage in the open ocean and are often associated with *Sargassum* rafts (Hughes 1974, Carr 1987, Walker 1994, Bolten and Balazs 1995). The pelagic stage of these sea turtles are known to eat a wide range of things including salps, jellyfish, amphipods, crabs, syngnathid fish, squid, and pelagic snails (Brongersma 1972). Stranding records indicate that when pelagic immature loggerheads reach 40-60 cm straight-line carapace length they begin to live in coastal inshore and nearshore waters of the continental shelf throughout the U.S. Atlantic (Witzell 2002). Here they forage over hard- and soft-bottom habitats (Carr 1986). Benthic foraging loggerheads eat a variety of invertebrates with crabs and mollusks being an important prey source (Burke et al. 1993). Estimates of the maximum diving depths of loggerheads range from 211 m to 233 m (692-764 ft) (Thayer et al. 1984, Limpus and Nichols 1988). The lengths of loggerhead dives are frequently between 17 and 30 minutes (Thayer et al. 1984, Limpus and Nichols 1988, Limpus and Nichols 1994, Lanyan et al. 1989) and they may spend anywhere from 80 to 94% of their time submerged (Limpus and Nichols 1994, Lanyan et al. 1989).

Fish

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

3.2.5 Bycatch

A summary of the bycatch and discards is provided in the Bycatch Practicability Analysis in Chapter X. The actions in this amendment will help to better quantify the bycatch and discard rates in the Snapper Grouper, CMP and Dolphin Wahoo fisheries in the Southeast Region. With more accurate and timely reporting, managers can better understand the level of bycatch and discards associated with the charter and for-hire components of these fisheries.

3.3 Description of the Economic Environment

3.3.1 Commercial Sector

The actions in this proposed amendment only pertain to the recreational for-hire sector (charter vessels and headboats). As a result a description of the economic environment for the commercial sector is not provided.

3.3.2 Recreational Sector

The actions in this proposed amendment would primarily apply to for-hire vessels operating in the South Atlantic. However, management of the CMP species and dolphin/wahoo by the South Atlantic Council extends up the U.S. Atlantic coast. Because the proposed actions would primarily affect South Atlantic for-hire vessels, the following discussion focuses on the characteristics of this fleet. Detailed information on the operation of the for-hire fleet in the mid- and northeast Atlantic is provided in Steinback and Brinson (2013) and is incorporated herein by reference.

Angler Effort

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

Estimates of the South Atlantic charter vessel angler effort (individual angler trips regardless of trip duration or species target intent or catch success) for 2011-2014 are provided in **Table 3.3.1**. These estimates are derived from the Marine Recreational Information Program (MRIP). Estimates of charter vessel angler effort for additional years, and measures of directed effort, are available at http://www.st.nmfs.noaa.gov/recreational-fisheries/access-data/run-a-data-query/queries/index.

Table 3.3.1. Number of South Atlantic charter vessel angler trips, by state, 2011-2014.

	Florida	Georgia	North Carolina	South Carolina	Total
2011	123,796	15,687	151,681	81,215	372,379
2012	143,663	19,920	160,097	24,662	348,342
2013	155,572	21,040	111,366	48,464	336,441
2014	192,504	22,342	102,419	79,186	396,452
Average	153,884	19,747	131,391	58,382	363,404

Source: MRIP database, NMFS, SERO.

The effort estimates provided in **Table 3.3.1** are from all charter vessels in the respective states and, thus, include effort for both federally permitted vessels and charter vessels that only fish in state waters. Although the MRIP data allows estimation of effort in federal waters, for which respective vessels would require a federal permit (see the permits discussion below), federally permitted vessels also fish in state waters and are subject to federal regulations wherever they fish. As a result, it is not possible with available data to estimate the number of charter vessel angler trips by only federally permitted charter vessels. Therefore, the estimates provided in **Table 3.3.1** exceed the angler effort on the vessels encompassed by the proposed actions in this amendment by an unknown number of trips.

Estimates of headboat angler effort in the South Atlantic for 2011-2014 are provided in **Table 3.3.2**. These estimates are derived from the NMFS Southeast Region Headboat Survey (SRHS). Headboat angler effort is calculated as angler days, which are a standardized count of trips that result from the combination of partial-day, full-day, and multiple-day trips. The SRHS includes some vessels that do not possess a federal for-hire permit. Thus, the estimates of headboat angler days, like the estimates of effort on charter vessels, do not reflect effort for just federally permitted vessels.

Table 3.3.2. South Atlantic headboat angler days, by state, 2011–2014.

	Angler Days			
	Florida-Georgia*	**North Carolina**	**South Carolina**	**Total**
2011	124,041	18,457	44,645	187,143
2012	139,623	20,766	41,003	201,392
2013	165,679	20,547	40,963	227,189
2014	195,890	22,691	42,025	260,606
Average	156,308	20,615	42,159	219,083

Source: SRHS.
*Florida and Georgia are combined for confidentiality purposes.

Permits

A federal charter/headboat (for-hire) vessel permit is required for fishing in federal waters for Atlantic dolphin/wahoo (DW permit), Atlantic CMP species (CMP permit), and South Atlantic snapper grouper (SG permit) species. On October 30, 2015, there were 2,138 vessels with at least one valid (non-expired) federal for-hire permit to fish for Atlantic dolphin/wahoo, Atlantic CMP species, or South Atlantic snapper-grouper species. Each of these permits is an open access permit, so the total number of permitted vessels changes year-to-year. Most for-hire vessels possess more than one for-hire permit. Among the vessels with at least one for-hire permit, 1,604 vessels had all three permits, 199 vessels had two permits (83 vessels possessed both the DW and CMP permits, 35 vessels possessed both the DW and SG permits, and 81 vessels possessed both the CMP and SG permits), and 335 vessels had only one for-hire permit (247 vessels possessed only the DW permit, 19 vessels possessed only the CMP permit, and 69 vessels possessed only the SG permit). The totals for valid Atlantic CMP permits and valid Atlantic permits include vessels operating in the mid- and northeast Atlantic. Finally, 402 of the

vessels with at least one for-hire permit also possessed at least one federal for-hire permit required to fish in federal waters in the Gulf of Mexico to fish for CMP or reef fish species.

Although the for-hire permit application collects information on the primary method of operation, the permit itself does not identify the permitted vessel as either a headboat or a charter vessel and vessels may operate in both capacities. However, if a vessel meets the selection criteria (see **Section 1.4**) used by the SRHS and is selected to report by the Science Research Director of the Southeast Fishery Science Center (SEFSC), the vessel is determined to operate primarily as a headboat and is required to submit harvest and effort information to the SRHS. As of February 2016, 74 South Atlantic headboats were registered in the SRHS (K. Fitzpatrick, NMFS SEFSC, pers. comm.). It is unknown how many headboats in the mid- or northeast Atlantic have an Atlantic CMP or Atlantic dolphin/wahoo for-hire permit.

Information on South Atlantic charter vessel and headboat operating characteristics is included in Holland et al. (2012) and is incorporated herein by reference.

Economic Value

Economic value for for-hire vessels can be measured by producer surplus (PS) per passenger trip (the amount of money that a vessel owner earns in excess of the cost of providing the trip). Estimates of the PS per for-hire passenger trip are not available. Instead, net operating revenue (NOR), which is the return used to pay all labor wages, returns to capital, and owner profits, is used as a proxy for PS. For vessels in the South Atlantic, the estimated NOR values are $160 per charter angler trip and $43 per headboat angler trip (C. Liese, NMFS SEFSC, pers. comm.). As previously noted, management by the SAFMC of the CMP species and dolphin/wahoo extends up the U.S. Atlantic coast and not just the South Atlantic region. The average NOR values per angler trip for for-hire vessels in the mid-Atlantic and Northeast region are $24 and $26, for charter vessels and headboats, respectively (S. Steinback, NMFS NEFSC, pers. comm.). All estimates are in 2015 dollars.

Business Activity

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

Recreational fishing generates business activity (economic impacts). Business activity for the recreational sector is characterized in the form of full-time equivalent jobs, output (sales) impacts (gross business sales), and value-added impacts (difference between the value of goods and the cost of materials or supplies). Estimates of the business activity (economic impacts) associated with recreational charter vessel angling in 2013 in the South Atlantic are provided in **Table 3.3.3**. These estimates and additional details are available

at http://www.st.nmfs.noaa.gov/economics/publications/feus/FEUS-2013/fisheries_economics_2013. More recent information is not available at this time.

The estimates provided in **Table 3.3.3** include only impacts at the state level. These numbers are not additive across the region. Addition of the state-level estimates to produce a regional (or national total) could either under- or over-estimate the actual amount of total business activity because of the complex relationship between different jurisdictions and the expenditure/impact multipliers. Neither regional nor national estimates are available at this time.

Estimates of the business activity associated with headboat effort are not available. Headboat vessels are not covered in the MRIP in the South Atlantic. As a result, estimation of the appropriate business activity coefficients for headboat effort has not been conducted. Beginning in August 2014, socio-economic data fields were added to the SRHS electronic logbook. However, these data refer to the vessel operation and not angler expenditures, which are the basis for estimating the business activity associated with the different recreational sector modes.

The estimates of business activity for the South Atlantic do not include the business activity associated with vessels that possess the appropriate South Atlantic Council mandated for-hire permits (DW or CMP), but operate north of the South Atlantic states. This information is not available at this time.

Table 3.3.3. 2013 business activity (thousands of 2013 dollars) associated with charter vessel trips in the South Atlantic. Output and value added impacts are not additive.

	Florida	Georgia	North Carolina	South Carolina
Output Impact	$111,816	$8,908	$55,103	$27,557
Value Added Impact	$67,910	$5,044	$31,429	$15,916
Jobs	1,019	95	585	306

Source: http://www.st.nmfs.noaa.gov/economics/publications/feus/FEUS-2013/fisheries_economics_2013

3.4 Description of the Social Environment

The proposed actions in this amendment would be expected to affect charter fishing businesses associated with the South Atlantic's snapper grouper, CMP, and dolphin wahoo fisheries, which are not already participating in the Southeast Region Headboat Survey (SRHS). A description of the current requirements for participants of the SRHS and a description of the information collected in the survey are provided in **Section 3.5.1.1** and in the South Atlantic Headboat Amendment (SAFMC 2013c). The proposed actions in this amendment do not pertain to the commercial sector. Therefore, a description of the social environment for the commercial sector is not provided.

Detailed descriptions of the social environment for each fishery are included in recent amendments and are herein incorporated by reference. These include Dolphin Wahoo Amendments 5 and 8 (SAFMC 2013b; 2015); Coastal Migratory Pelagics Amendment 20A (GMFMC/SAFMC 2013a); and Snapper Grouper Amendments 29 and 34 (SAFMC 2014; 2015).

Federal for-hire permits are currently required for vessels to take paying passengers to fish in federal waters. In the South Atlantic, the for-hire permits for snapper grouper, CMPs, and dolphin/wahoo are all open access; existing permits may not be transferred, but new permits may be issued. The annual application fee for these vessel permits is $25 for the first permit and $10 for each additional permit.

Table 3.4.1 shows the number of federal charter permits for South Atlantic dolphin wahoo, coastal migratory pelagics, and snapper grouper by region and state. Most permits are on vessels associated with one of the South Atlantic states, but there are also vessels with for-hire permits (particularly dolphin wahoo and coastal migratory pelagics) in the Mid-Atlantic region, New England region, and even in the Gulf of Mexico region.

The number of charter vessels possessing each type of for-hire permit is provided for the South Atlantic states by county in **Table 3.4.2**. In Florida, the communities with the highest number of vessels with at least one for-hire permit are in the counties of Monroe (Florida Keys), Volusia, Brevard, Palm Beach, Broward and Miami-Dade. Important tourism areas on the Florida east coast and Keys are generally the areas with higher numbers of for-hire businesses, such as St Augustine, Daytona Beach/Port Orange, Cocoa Beach, Canaveral, West Palm Beach, Merritt Island, Islamorada, Marathon and Key West.

In Georgia, most for-hire vessels are associated with the Savannah area (Chatham County) and St Simons/Brunswick (Glynn County). For South Carolina communities, most vessels with for-hire permits are near the Myrtle Beach area (including Little River and Murrells Inlet in Horry County), Charleston, and Hilton Head Island. The North Carolina communities with the most for-hire vessels include Hatteras and Manteo (Dare County), Morehead City/Atlantic Beach (Carteret County), and the Southport area (Brunswick County) (**Table 4.3.2**). As in Florida, all of these communities are also important areas for coastal tourism. These are also areas with high levels of engagement and reliance on recreational fishing (SAFMC 2013b; 2014; 2015).

Table 3.4.1. Distribution of South Atlantic charter permits, as of November 20, 2015.

	South Atlantic Charter Permits		
	Dolphin Wahoo	CMP	Snapper Grouper
South Atlantic Total	**1,069**	**1.061**	**1,098**
North Carolina	272	258	252
South Carolina	140	157	155
Georgia	24	33	32
Florida East Coast	339	326	355
Florida Keys	294	287	304
Gulf of Mexico Total	**280**	**289**	**282**
Florida West Coast	220	225	223
Alabama	20	27	25
Mississippi	1	2	1
Louisiana	7	7	6
Texas	32	28	27
Mid-Atlantic Total	**233**	**99**	**75**
Virginia	42	32	29
Maryland	60	22	15
Delaware	33	5	2
New Jersey	52	23	17
Pennsylvania	17	5	3
New York	29	12	9
New England Total	**19**	**10**	**9**
Connecticut	3		
Rhode Island	4	3	3
Massachusetts	9	4	3
New Hampshire	1	1	1
Maine	2	2	2
Other	**4**	**3**	**2**
TOTAL PERMITS	**1,605**	**1,462**	**1,466**

Source: SERO Permits Office

Table 3.4.2. Number of valid and renewable permits held by charter vessels in the South Atlantic, by coastal county as of November 20, 2015.

	Total # of Vessels with at least one South Atlantic Charter Permit	**Breakdown of # Vessels with Each South Atlantic Charter Permit**		
		Dolphin Wahoo	CMP	Snapper Grouper
Florida Keys TOTAL	**316**	**294**	**287**	**304**
Florida East Coast TOTAL	**378**	**339**	**326**	**355**
Nassau	9	7	9	9
Duval	16	16	16	16
Flagler/St Johns	26	25	25	26
Volusia	44	42	40	41
Brevard	64	63	62	61
Indian River	24	23	24	24
St Lucie	9	9	9	9
Martin	13	12	12	13
Palm Beach	67	61	55	60
Broward	44	40	38	41
Miami-Dade	62	41	36	55
Georgia TOTAL	**33**	**24**	**33**	**32**
Chatham	13	13	13	12
Bryan	5	5	5	5
McIntosh	1	1	1	1
Glynn	12	4	12	12
Camden	2	1	2	2
South Carolina TOTAL	**162**	**140**	**157**	**155**
Horry	62	**58**	**62**	**60**
Georgetown	4	4	4	4
Charleston	57	**51**	**52**	**54**
Colleton	6	4	6	6
Beaufort	33	**23**	**33**	**31**
North Carolina TOTAL	**281**	**272**	**258**	**252**
Currituck	5	5	4	5
Dare	105	103	102	97
Hyde	5	5	5	5
Carteret	64	62	52	53
Onslow	18	16	17	15
Pender	5	5	5	5
New Hanover	34	33	31	30
Brunswick	39	38	38	37
Other Counties	6	5	4	5
South Atlantic TOTAL	**1,170**	**1,069**	**1,061**	**1,098**

Source: SERO permits office.

3.4.1. Environmental Justice Considerations

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

South Atlantic federally permitted for-hire fishing businesses participating in the dolphin wahoo, coastal migratory pelagics, and snapper grouper fisheries would be expected to be affected by this proposed action. This action is expected to impact the administrative procedures of federally permitted charter for-hire businesses and would require the submission of electronic reports. Information on race and ethnicity of federally permitted charter for-hire business owners and their employees is not available; however it is very unlikely that there would be a disproportionately high impact on businesses including members of minority populations, as direct impacts from adopting the new reporting requirements are expected to be minimal. Further, it is expected that there would be no impact to low-income populations as owners of these businesses are likely not in poverty. As discussed elsewhere in the document (such as in the Effects on the Social Environment section, **Chapter 4**, and **Chapter 5**) because the economic and social effects would be expected to be minimal to non-existent in the short-run (charter vessels are currently required to report if selected by the SRD, but to date, have not been selected) and positive in the long-run (more timely harvest reporting supporting improved management decisions), no adverse effects would be expected to accrue to charter vessel customers, or associated businesses and communities. Thus, no EJ concerns are expected to arise from this proposed action.

3.5 Description of the Administrative Environment

3.5.1. Federal Fishery Management

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

Responsibility for federal fishery management decision-making is divided between the U.S. Secretary of Commerce (Secretary) and eight regional Fishery Management Councils that represent the expertise and interests of constituent states. Regional Councils are responsible for preparing, monitoring, and revising management plans for fisheries needing management within their jurisdiction. The Secretary is responsible for collecting and providing the data necessary for the Councils to prepare fishery management plans and for promulgating regulations to implement proposed plans and amendments after ensuring that management measures are consistent with the Magnuson-Stevens Act and with other applicable laws summarized in **Appendix B**. In most cases, the Secretary has delegated this authority to NMFS.

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 with the exception of two fishery management plans: Coastal Migratory Pelagics is managed from New York to Florida and Dolphin/Wahoo is managed from Maine to Florida. The South Atlantic Council has thirteen voting members: one from NMFS; one each from the state fishery agencies of North Carolina, South Carolina, Georgia, and Florida; and eight public members appointed by the Secretary. There are two public members from each of the four South Atlantic States. Non-voting members include representatives of the U.S. Fish and Wildlife Service, U.S. Coast Guard (USCG), Department of State, 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. In addition, provisions allow the Mid-Atlantic Fishery Management Council 2 voting seats at the committee level for snapper grouper and CMP, and both the Mid-Atlantic and New England Fishery Management Councils have 1 voting seat at the committee level for dolphin/wahoo. Council members serve three-year terms and are recommended by State Governors and appointed by the Secretary from lists of nominees submitted by state governors. Appointed members may serve a maximum of three consecutive terms.

Public interests also are involved in the fishery management process through participation on Advisory Panels and through Council meetings, which, with few exceptions, are open to the public. The Councils use Scientific and Statistical Committees 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.

3.5.1.1. South Atlantic Region Reporting Requirements

Currently, the owner or operator of a vessel for which a charter vessel permit for South Atlantic coastal migratory pelagic 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, snapper grouper, or Atlantic dolphin or wahoo in or from state waters adjoining the applicable South Atlantic or Atlantic exclusive economic zone (EEZ), and who is 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, 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). Currently, all headboats are required to 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).

The Southeast Region recreational reporting requirements by fishery management plan are summarized in **Table 3.5.1**. Detailed information on electronic reporting requirements and the future implementation plan for the Southeast region can be found in the NOAA Fisheries Southeast Region Electronic Monitoring and Reporting Regional Implementation Plan (NMFS 2015) and is hereby incorporated by reference.
http://sero.nmfs.noaa.gov/sustainable_fisheries/documents/pdfs/em_er_implementation_plan_southeast.pdf

Table 3.5.1. Summary of the existing monitoring tools currently implemented in recreational fisheries of the Southeast Region. Green cells indicate fisheries where electronic technologies have already been implemented and regulated programs are in place. Fisheries where additional Electronic Reporting (ER) and Electronic Monitoring (EM) could potentially be suitable are noted, and yellow cells indicate those fisheries that have been identified as the highest priority for implementation.

Region	Fishery	Current Requirements					Additional ER Potentially Suitable?	EM Potentially Suitable?
		Paper logbooks/reports	Electronic Logbooks	VMS	Video	Observers		
Caribbean	Reef Fish	N	N	N	N	N		
	Queen Conch	N	N	N	N	N		
	Spiny Lobster	N	N	N	N	N		
	Corals and Reef Associated Plants and Invertebrates	Harvest and possession prohibited except with Federal permit for scientific research, exempted fishing, or exempted educational activity						
Gulf of Mexico	Reef Fish	Y - Headboat only	Y - Headboat only	N	N	N	eLogbooks for charter; pilot testing electronic apps for private sector	VMS, if used in conjunction with electronic reporting or catch share program; pilot testing VMS in Headboat Collaborative
	Shrimp	Shrimp are not recreationally harvested in the Gulf of Mexico EEZ						
	Aquaculture	Proposed for commercial purposes only.						
	Red Drum	N	N	N	N	N		
	Corals	Live rock harvested for commercial purposes. Harvest and possession of corals prohibited except with Federal permit for scientific research, exempted fishing, or exempted educational activity						
Gulf of Mexico and South Atlantic	Coastal Migratory Pelagics	Y - Headboat only	Y - Headboat only	N	N	N	eLogbooks for charter	
	Spiny Lobster	N	N	N	N	N		
South Atlantic	Snapper-Grouper	Y - Headboat only	Y - Headboat only	N	N	N	eLogbooks for charter	
	Shrimp	Shrimp are not recreationally harvested in the South Atlantic EEZ						
	Dolphin-Wahoo	Y - Headboat only	Y - Headboat only	N	N	N	eLogbooks for charter	
	Golden Crab	Golden crabs are not recreationally harvested in the South Atlantic EEZ						
	Sargassum	Sargassum is not recreationally harvested in the South Atlantic EEZ						
	Corals	Live rock harvested for commercial purposes. Harvest and possession of corals prohibited except with Federal permit for scientific research, exempted fishing, or exempted educational activity						

3.5.1.2. Greater Atlantic Region Reporting Requirements

The Greater Atlantic Region Fisheries Office (GARFO) requires that all federally-permitted vessels whether fishing in state or federal waters report catch as described in **Table 3.5.2** and below.

Defining fishing trip activity that requires a VTR

If your vessel is issued any of the fishery permits with reporting requirements shown in the table above, you are required to complete a vessel trip report (VTR) for every fishing trip, whether the vessel is fishing in state or federal waters, or in another region of the country, such as the South Atlantic. This is true for all trips, no matter what species is being fished for or caught. Having an observer or at-sea monitor on board during a trip does not relieve you from this requirement. These instructions clarify that a VTR is required for any trip on a federally permitted vessel when you catch fish, or when your operations include activities that would support fishing, such as preparing to catch or harvest fish, or attempting to catch or harvest fish. All such fishing activities must be reported, even if no landings are made. The trip is the period of time during which these activities are conducted, beginning when the vessel leaves port and ending when the vessel returns to port.

There are only two instances where a VTR isn't required for a specific trip:

- *If you are transiting without any product onboard and don't engage in any fishing activity. For example, you're moving your vessel to a shipyard or you're returning to your home port.*
- *If you are operating under a scientific Letter of Acknowledgement*

You are required to report fishing trips even if no fish are caught or onboard if the following events occur:

- *If you begin a fishing trip, but must return to port before setting or retrieving gear because of issues like bad weather or mechanical problems, then you must still complete a VTR. In this case, you must complete the information in VTR Fields 1-6, along with fields 24-27, and enter "No Effort" in the lower portion of the VTR.*
- *If you make a fishing trip just to set out gear you must still complete a VTR. Complete the information in VTR fields 1-6, along with fields 24-27, and enter "Set Only" in the lower portion of the VTR.*
- *If you make an unsuccessful trip, and don't catch any fish, you must still complete a VTR. In this case, you must complete all of the trip information in VTR Fields 1-16, and enter "No Catch" or "NC" in the species code field (#17).*

Table 3.5.2. Greater Atlantic Region Fisheries Office (GARFO) vessel trip report (VTR) requirements by vessel permit type.

	Frequency of reporting	**Report deadline**	**If you did not fish…..**
If a vessel is issued a permit for: *Atlantic herring; *Atlantic mackerel; *Illex squid; *Longfin squid/butterfish; *Northeast multispecies; *Ocean quahogs: *Surfclams	Then the owner/operator must submit trip reports weekly	Reports must be postmarked or received by midnight of the Tuesday following the reporting week (Sunday through Saturday). If a trip starts in one week, and offloads in the next, it should be reported in the week the catch was offloaded.	If subject to weekly reporting, you must submit a Did Not Fish report for each week that there is no fishing trip activity. If you know your vessel will be inactive, you may submit these reports electronically up to 3 months in advance.
If a vessel is issued a permit for: *Atlantic bluefish *Atlantic deep-sea red crab *Atlantic sea scallop *Black sea bass *Monkfish *Northeast skate *Scup *Spiny dogfish *Summer flounder *Tilefish	Then the owner/operator must submit trip reports monthly	Reports must be postmarked or received within 15 days of the end of the month. If a trip starts in one month, and offloads in the next, it should be reported for the month in which the catch was offloaded	If subject to monthly reporting, you must submit a Did Not Fish report for each month that there is no fishing trip activity. If you know your vessel will be inactive, you may submit these reports electronically up to 3 months in advance.
If a vessel is issued a permit for American lobster **and** no other Greater Atlantic Region vessel permit	Then the owner/operator is not required to submit trips reports (check with your state, which may require reporting).	--	--

Submitting a VTR if you conducted no fishing trip activity
As noted in the table, you must submit a VTR even if you did not use your vessel for any fishing activity for the entire reporting period, weekly or monthly, that is applicable to your permit types. In this case, you must fill out the "Did Not Fish" field at the top of the form, complete the vessel identification information in Fields 1-3, and sign and submit the form. However, we remind you that activity such as starting a fishing trip or preparing to catch fish is considered fishing activity. For example, if you start a fishing trip on Wednesday, but land and offload your catch the following Monday (i.e., after a trip of 6 days), the VTR must be submitted by midnight Tuesday of the third week and must provide all of the information about the trip. In this case, there is no week in which you "Did Not Fish".

Did Not Fish (DNF) reports may be submitted on the NMFS issued paper VTR or through our secure webpage, "Fish-On-Line" at https://www.greateratlantic.fisheries.noaa.gov/NMFSlogin ***DNF reports submitted electronically through Fish-On-Line do not need to be mailed into NMFS.*** *If you need your confidential vessel Personal Identification Number (PIN) or cannot access Fish-On-Line please contact NMFS at (978) 281- 9133 or by email at nmfs.gar.data.requests@noaa.gov*

You must report all species caught (both kept and discarded), including all protected species. To report sea turtles or ESA-listed fish species (e.g., Atlantic salmon or sturgeon) incidentally caught, injured, or killed, enter the species code for each turtle or fish under the species code name column (#17) on the VTR. Enter the actual number (count) of sea turtles or listed fish caught in the discard column (#19). Under the vessel name column (#21), comment on the condition of the sea turtles or listed fish (e.g., alive, injured, or dead).

When an incidental mortality or injury of a marine mammal (seals, dolphins, porpoises, and whales) occurs during commercial fishing activities, you must also fill out and return the Marine Mammal Authorization Program Mortality & Injury Reporting Form within 48 hours of returning from the trip on which the incident occurred. You may obtain additional information, including a reporting form at: www.greateratlantic.fisheries.noaa.gov/prot_res/mmap/certificate.html or call 978-281-9328.

3.5.1.3. Highly Migratory Species (HMS) Management Division Reporting Regulations for Charter Vessels and Headboats

Owners of vessels that carry passengers for-hire and fish for, possess, or retain Atlantic HMS (tunas, billfish, swordfish, and sharks) must obtain an annual Atlantic HMS Charter/Headboat permit and have a valid Merchant Marine License or Uninspected Passenger Vessel License. HMS charter vessels and headboats operate under different rules depending on whether they are on a "for-hire" or a "non-for-hire" trip, and the combination of permits held by the charter vessel/headboat.

If the vessel owner only holds an Atlantic HMS Charter/Headboat permit, that owner is required to report catch in the appropriate NOAA Fisheries logbook program, if selected. Entries on a day's fishing activities must be entered on the logbook form within 48 hours of completing the day's activities, or before offloading, whichever is sooner. The owner or operator must submit the logbook forms postmarked within 7 days of offloading all Atlantic HMS. If a selected vessel did not fish during a calendar month, then that vessel must submit a no-fishing form no later than 7 days after the end of the month. Atlantic HMS Charter vessels and headboats may also be selected for cost-earnings reporting.

If a vessel owner issued an HMS Charter/Headboat permit also has a permit issued in a non-HMS fishery that is required to report, any landings should be reported, as required, under the appropriate NOAA Fisheries Regional vessel logbook program.

All HMS Charter/Headboat vessel owners/operators must report all recreational landings (i.e., fish kept) of Atlantic billfish (blue marlin, white marlin, roundscale spearfish, and sailfish), swordfish, and bluefin tuna (landings *and* dead discards) to NOAA Fisheries within 24 hours of landing at the dock (with the exception of fish landed in Maryland or North Carolina) either via a web-based reporting system or by calling the appropriate Reporting Hotline. Participation in surveys such as the LPS or MRIP does not fulfill recreational reporting obligations.
Please refer to the Charter/Headboat sections of the Atlantic HMS Commercial and Recreational Compliances guides for additional information on the Atlantic HMS Charter Headboat fleet: http://www.nmfs.noaa.gov/sfa/hms/compliance/guides/index.html

3.5.2 State Fishery Management

The state governments of North Carolina, South Carolina, Georgia, and the east coast of 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 Division of Marine Fisheries of the North Carolina Department of Environmental Quality. 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 in the management of marine fisheries through the Atlantic States Marine Fisheries Commission (ASMFC). 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 only has voting authority at the committee level.

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

3.5.3 Enforcement

Both the National Oceanic and Atmospheric Administration (NOAA) Fisheries Office for 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.

Administrative monetary penalties and permit sanctions are issued pursuant to the guidance found in the Policy for the Assessment of Civil Administrative Penalties and Permit Sanctions for the NOAA Office of the General Counsel – Enforcement Section. This Policy is published at the Enforcement Section's website: http://www.gc.noaa.gov/enforce-office3.html .

CHAPTER 4. ENVIRONMENTAL CONSEQUENCES

4.1. Action 1: Modify Frequency and Mechanism of Data Reporting for Charter Vessels

Action 1: Modify Frequency and Mechanism of Data Reporting for Charter Vessels

Alternative 1 (No Action).*
Preferred Alternative 2. Require that federally permitted charter vessels, while operating as a charter vessel, submit fishing records to the SRD weekly or at intervals shorter than a week if notified by the SRD via electronic reporting (via NMFS approved hardware/software). Weekly = Tuesday following each fishing week. SG AP Preferred.

Preferred Sub-alternative 2a. Report all fish harvested/discarded on all trips regardless of where harvested. (current HB requirement)

Sub-alternative 2b. Report only South Atlantic federally-managed fish harvested/discarded on all trips regardless of where harvested. (snapper grouper, dolphin/wahoo, & CMP species)

Sub-Alternative 2c. Report all federally-managed fish harvested/discarded on all trips regardless of where harvested.

Alternative 3. Require that federally permitted charter vessels, while operating as a charter vessel, submit fishing records to the SRD daily via electronic reporting via electronic reporting (via NMFS approved hardware/software). Daily = by noon of the following day.

Sub-alternative 3a. Report all fish harvested/discarded on all trips regardless of where harvested. (current HB requirement)

Sub-alternative 3b. Report only South Atlantic federally-managed fish harvested/discarded on all trips regardless of where harvested. (snapper grouper, dolphin/wahoo, & CMP species)

Sub-Alternative 3c. Report all federally-managed fish harvested/discarded on all trips regardless of where harvested.

4.1.1 Direct and Indirect Effects on the Physical/Biological/Ecological Environment

The charter vessel reporting requirement is an administrative process for providing a means of collecting data from the industry, and does not directly affect the physical or biological environment, but does have an indirect effect. There would be positive indirect biological effects because having all charter vessels report electronically would make it easier to track landings in a timely manner. This would help prevent exceeding annual catch limits (ACLs), leading to healthier fish stocks by reducing the likelihood of overfishing. **Alternative 1 (No Action)** already requires that vessels, if selected, must maintain a fishing record for each trip, or a portion of such trips as specified by the Science and Research Director (SRD), on forms provided by the SRD; however, no charter vessels have been selected. Completed fishing records must be submitted to the SRD weekly, postmarked no later than 7 days after the end of each week (Sunday). **Alternative 1 (No Action)** could result in adverse impacts if landings are not reported in a timely fashion and allowable harvests are exceeded. Reporting provides a method to estimate mortality, which is then used to assess the stock conditions. Current levels of reporting results in stock assessments that are based on a high degree of uncertainty which is not as useful for management purposes. Electronic reporting by charter vessels, as proposed by **Preferred Alternative 2** and **Alternative 3** (and associated sub-

alternatives) could reduce the likelihood of overages of the ACLs by providing a means for more timely reporting as well as providing a source for better data collection to support the stock assessments and future management.
Overages of the ACLs can have an adverse effect to the stock and stock conditions. For overfished species in the South Atlantic, any overages are deducted from the allowable harvest the following fishing year. In these instances, the adverse effects may be mitigated. However, especially for species under a rebuilding plan, simply lowering the following year ACL may not offset the adverse impacts of the overage. For example, the reduction in spawning potential of the stock due to exceeding the ACL is not fully compensated by an equivalent harvest reduction in the next fishing year.

In these cases overages may prevent achieving the rebuilding target and optimum yield. All of the alternatives, (even Alternative 1) require some kind of reporting, if selected. **Preferred Alternative 2** and Preferred Alternative 3 would require that the reporting be done electronically and Preferred Alternative 2 would require reports to be submitted weekly or at intervals shorter than a week, based on the Science Center Directors request. **Alternative 3** would require daily electronic reporting. All of the action alternatives would require that data be submitted to the Southeast Fisheries Science Center (SEFSC) more frequently than the current requirements and electronically resulting in positive indirect biological effects.

Fishermen are required to meet the reporting requirements associated with their permit (CFR 50 Section 622.5). With electronic reporting, as proposed in Preferred Alternative 2 and Alternative 3, it would be much easier to track those who are not meeting the reporting requirements of their permit and may result in a permit being invalid and the permit holder not being able to legally harvest or possess those species until another permit is obtained. As of February 2016, there are 74 headboats (**Table 1.4.1**) in the South Atlantic reporting catches electronically; however, there are approximately 2,000 charter vessels (**Table 1.3.1**) that would need to use the new electronic reporting system. Thus, tracking charter vessels electronically, and taking action when they do not report could be more difficult than for headboat vessels because there are so many more charter vessels.

Alternative 1 (No Action), **Preferred Alternative 2**, and **Alternative 3** are unlikely to result in any direct adverse impacts on protected species such as endangered or threatened whales, sea turtles, corals, or Habitat-Areas-of-Particular-Concern (HAPCs). All alternatives would modify reporting requirements for the charter sector, but overall, this would not change current fishing practices. Total harvest would still be restrained by the commercial and recreational ACLs, and accountability measures (AMs) would still be used to help prevent overfishing. It is unlikely any alternative would result in increased or modified fishing effort in the dolphin wahoo, coastal migratory pelagic, or snapper grouper fishery; therefore, no adverse biological impacts on protected species or physical environment, or bycatch or prey species is expected as a result of this action.

4.1.2 Direct and Indirect Effects on the Economic Environment

Alternative 1 (no action) would maintain current reporting requirements for federally permitted charter vessels and would therefore not affect the harvest and customary uses of South Atlantic

snapper grouper, Atlantic dolphin wahoo, or coastal migratory pelagics. Consequently, **Alternative 1** would not be expected to result in direct economic effects. However, **Alternative 1** would continue to allow for a time lag in the collection of landings information. If the time lags result in delaying needed management measures, e.g., a timely closure of a fishery, and adversely affect fish stocks, adverse indirect economic effects would be expected to result. Additionally, the absence of logbook trip reports limits the information on which to base other management decisions (beyond the timing of quota closure) and restricts the management options available for implementation. These limitations may have economic implications for both this component of the recreational sector, the recreational sector as a whole, and the commercial sector. For example, better data would enable more accurate assessments of harvests, effort, and operational costs. This would support improved monitoring of quotas (as previously discussed), better ensuring overruns not occur, as well as improved forecasts of the expected biological, economic, and social effects of current and proposed regulations. As part of the larger recreational sector, circumstances that limit understanding of the performance of charter vessels by extension affects understanding of the performance of the recreational sector as a whole and the expected economic effects of proposed management measures. For example, a stock assessment that is adversely affected by poor harvest or effort data from charter vessels would have harvest and management implications on all users within the recreational sector as well as the commercial sector.

Electronic reporting would 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. Recreational AMs vary from in-season closures for some species such as black sea bass, red grouper, and golden tilefish to a reduction in the length of the fishing season in the year following an ACL overage for many other species. The current frequency of data reporting could increase the likelihood of harvest overages for species that have in-season closures like black sea bass. For species with a recreational AM that shortens the length of the following fishing season, better and more timely data could help ensure landings do not exceed the ACL in the year following an overage. Only in extreme situations would potential overages be expected to be so severe that the status of a stock or a recovery plan would be jeopardized under the current reporting schedule. However, overages have the potential, depending on the AMs, to result in significant disruption in fishing behavior 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.

Electronic reporting could have benefits for charter vessel owners. Electronic submission of data could provide a warehouse for storing data for a vessel. Reports can be generated that will allow vessel owners to track performance over time. Reports could even be generated to compare a vessel's fishing success against that of the average charter fishing vessel.

Preferred Alternative 2 and **Alternative 3** would require federally permitted charter vessels to submit fishing records via electronic reporting. **Preferred Alternative 2** and **Alternative 3** would require weekly and daily submissions, respectively. **Preferred Sub-alternatives 2a**/**3a**,

Sub-alternatives 2b/3b, and **Sub-alternatives 2c/3c** would required reporting for all fish harvested/discarded, reporting only for SAFMC-managed species, or reporting for all federally-managed species, respectively.

In terms of time necessary to complete the requests and associated costs, a ranking from least to most onerous would be **Preferred Alternative 2** then **Alternative 3**. From and economic perspective, there are no substantial differences between the sub-alternatives of **Preferred Alternative 2** and **Alternative 3**.

The costs expected to be borne by charter operators to report would be minimal if they own a computer or have access to a computer. Additionally, whatever computer that is used would need to have access to the Internet. However, if they do not own or have access to a computer (e.g., at a library), they would need to purchase a computer. For this analysis, it is not known how many charter vessel owners already have computers or access to the Internet. According to **Table 1.3.1**, in 2014 there were 1,984 federally-permitted charter vessels in the South Atlantic. It is not known how many of the vessels have the same owner that would report landings using the same computer. Therefore, the worst-case scenario is that all vessels would need a basic computer on which to report landings and a basic Internet connection. A basic computer system can be purchased for $260 (in 2016 dollars; www.amazon.com/Dell-Optiplex-Included-Processor-Professional/dp/B00UTV6ZWM/ref=sr_1_98?ie=UTF8&qid=1453746419&sr=8-98&keywords=PC+Computer+with+monitor). A tablet computer with a detachable keyboard can be purchased for as little as $120 (in 2016 dollars; www.amazon.com/Viking-Pro-Computer-Touchscreen-Detachable/dp/B0174AX43I/ref=sr_1_1?ie=UTF8&qid=1453748342&sr=8-1&keywords=tablet+computer). The cost of a basic monthly Internet connection is $46.92 (in 2014 dollars; http://www.ask.com/business-finance/average-internet-bill-439f4e05fc0bb3c7). The estimated one time cost, if all 1,984 permitted vessel owners needed to purchase a computer would be $515,840. To purchase a tablet computer would be $238,080. An annual cost for the average Internet connection would be approximately $1,117,071 for all of the vessel owners. What is not included in these estimates are costs associated with training to learn how to use a computer, if needed, nor is maintenance or replacement, as needed. However, the costs associated with implementing electronic reporting are likely to be highly over-estimated because many charter vessel owners are already using the Internet for various business-related activities such as to promote their business, attract customers, and upload photographs from successful trips.

All data will be entered at the trip level into software. The only difference is the frequency with which the data need to be entered. Once the user learns the data entry software, it is estimated that data entry would be less than one hour per week for either alternative, regardless of the species that would need to be input.

The Atlantic Coast Cooperative Statistics Program has approved the development of software for at-sea data entry using a tablet computer. The amount for the software development is $195,680. NMFS SERO has developed computer software currently being used by headboat operators that could be modified, as needed, for use by charter vessels. The cost of such modifications, until delineated, are unknown.

Similarly, costs expected to be borne by the Agency to administer these data collection efforts cannot be determined. If it is assumed that shortening the reporting frequency from weekly to daily reporting would result in marked improvements in the data collected and that these improvements would result in more effective management, then **Alternative 3** would be expected to result in the greatest economic benefits, followed by **Preferred Alternative 2**. However, the net economic effects expected to result from these alternatives cannot be determined at this time because the potential benefits that would be expected to result from the proposed changes and the costs of the hardware and software that would be approved by NMFS cannot be estimated at this time.

4.1.3 Direct and Indirect Effects on the Social Environment

Section 3.4 (Social Environment) includes detailed information about fishermen and communities that may be affected by changes to reporting requirements for for-hire permit holders. In general, negative social effects of charter vessel reporting requirements would likely be associated with any added time and financial burden for charter vessel operators to meet the requirements. Increased frequency in reporting under **Preferred Alternative 2** and **Alternative 3** may have some negative effects on charter vessel owners and captains because businesses would need to allocate additional time or staff to submit reports. The daily reporting requirement under **Alternative 3** would be more burdensome for charter vessels than the weekly reporting in **Preferred Alternative 2**. **Alternative 1 (No Action)** would not be expected to negatively impact charter vessels in terms of additional time and money requirements.

The requirement for electronic reporting under **Preferred Alternative 2** and **Alternative 3** would affect charter vessel owners and operators who do not already use computer systems or some other electronic devices 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 or some other electronic device, and Internet in their businesses.

However, requiring all charter vessels to report electronically and more frequently (**Preferred Alternative 2** and **Alternative 3**) is expected to result in broad social benefits. Assuming compliance from fishery participants, more frequent and timely reporting would be expected to contribute to improved quota monitoring. This could lead to increased likelihood that an in-season accountability measure being triggered (such as an in-season closure) and there may be some short-term negative effects on the entire recreational sector due to restricted or no access to a species. However, the long-term biological benefits of timely accountability measures that keep recreational catch below the recommended levels will be more beneficial in the long term for consistent and stable recreational fishing opportunities.

Reporting requirements in **Preferred Alternative 2** and **Alternative 3** are expected to provide additional information that may help to better forecast early closures and minimize frequency of post-season AMs, such as reduced seasons in the subsequent year. This could help for-hire operators in annual or multi-year business planning. 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 charter businesses, communities, and customers.

4.1.4 Direct and Indirect Effects on the Administrative Environment

Alternative 1 (No Action) would result in no increase in administrative burden on NMFS as this is the status quo of how data are currently collected. **Preferred Alternative 2** and **Alternative 3** would increase the administrative burden on NMFS, as all federally-permitted charter vessels would be required to submit electronic records to the Science and Research Director (SRD). There is currently no application to accept this information, so a database would also have to be developed. These costs could be minimized by having the data submitted to Atlantic Coastal Cooperative Statistics Program. In order of administrative impacts to the agency, **Alternative 3** would have the highest administrative impact with trip daily reporting, then **Preferred Alternative 2** with mandatory weekly reporting.

4.2. Action 2: Modify Frequency and Mechanism of Data Reporting for Headboats

Action 2: Modify Frequency and Mechanism of Data Reporting for Headboats

Alternative 1 (No Action).
Preferred Alternative 2. Require that headboats, while operating as a headboat, submit fishing records to the SRD weekly or at intervals shorter than a week if notified by the SRD via electronic reporting (via NMFS approved hardware/software). Weekly = Tuesday following each fishing week. SG AP Preferred.
Alternative 3. Require that headboats, while operating as a headboat, submit fishing records to the SRD daily via electronic reporting (via NMFS approved hardware/software). Daily = by noon of the following day.
*See Chapter 2 for a detailed statement of the Alternatives.

4.2.1 Direct and Indirect Effects on the Physical/Biological/Ecological Environment

The headboat vessel reporting requirement is an administrative process for providing a means of collecting data from the industry, and does not directly affect the biological environment, but does have an indirect effect. **Alternative 1 (No Action)** requires the owner or operator of a headboat for which a charter vessel/headboat permit for South Atlantic coastal migratory pelagic (CMP) species, South Atlantic snapper grouper, or Atlantic dolphin and wahoo has been issued, or whose vessel fishes for or lands such CMP species, snapper grouper, or Atlantic dolphin or wahoo in or from state waters adjoining the applicable South Atlantic or Atlantic exclusive economic zone (EEZ), and who is selected to report by the SRD (Note: The headboat amendment specified that all headboats must report.) must submit an electronic fishing record for each trip of all fish harvested via the Southeast Region Headboat Survey (SRHS). Electronic fishing records must be submitted at weekly intervals (or intervals shorter than a week if notified by the SRD) by 11:59 p.m., local time, the Sunday following a reporting week. If no fishing activity occurred during a reporting week, an electronic report stating so must be submitted for that reporting week by 11:59 p.m., local time, the Sunday following a reporting week. The action alternatives would modify the frequency of reporting and would require that any vessel operating under a headboat permit must report electronically, not just those headboat selected by the SRD. **Alternative 1 (No Action)** could result in adverse impacts if landings are not reported in a timely fashion and allowable harvests are exceeded. Reporting provides a method to estimate mortality, which is then used to assess the stock conditions. Stock assessment results based on data with a high degree of uncertainty are not as useful for management purposes.

Like **Alternative 1 (No Action)**, **Preferred Alternative 2** would require electronic reporting by headboats. However, instead of reporting by 11:59 p.m., local time, the Sunday following a reporting week, **Preferred Alternative 2** would require reporting on Tuesday following each fishing week. Thus, landings would be provided to the SRD sooner under **Preferred Alternative 2** than under **Alternative 1 (No Action)**. **Alternative 3** would increase the frequency of reporting from weekly to daily. **Preferred Alternative 2** and **Alternative 3** could provide positive effect to fish stocks by provided data to the SRD more quickly than **Alternative 1 (No Action)**, which can reduce the

likelihood of exceeding the ACLs, thus reducing the likelihood of overfishing. Overages of the ACLs have an adverse effect to the stock and stock conditions.

Alternative 1 (No Action), **Preferred Alternative 2**, and **Alternative 3** are unlikely to result in any direct adverse impacts on protected species such as endangered or threatened whales, sea turtles, corals, or HAPCs. All alternatives would modify reporting requirements for the headboat sector, but overall, this would not change current fishing practices. Total harvest would still be restrained by the commercial and recreational ACLs, and AMs would still be used to help prevent overfishing. It is unlikely any alternative would result in increased or modified fishing effort in the dolphin wahoo, coastal migratory pelagic, or snapper grouper fishery; therefore, no adverse biological impacts on protected species or physical environment, or bycatch or prey species, are expected under this action.

4.2.2 Direct and Indirect Effects on the Economic Environment

Alternative 1 (No Action) would not affect the harvest and customary uses of South Atlantic snapper grouper, Atlantic dolphin wahoo, or coastal migratory pelagic species because it would maintain current reporting requirements for headboats. Therefore, **Alternative 1 (No Action)** would not be expected to result in direct economic effects. However, **Alternative 1 (No Action)** would continue to collect data at any given time from a subset of the headboat fleet, as opposed to a census of headboat landings. Having census data would provide more accurate and timely knowledge of landings leading to more precise management.

Preferred Alternative 2 and **Alternative 3** would require all headboats to submit fishing records via electronic reporting at different times. The fishing records would be electronically submitted using NMFS approved hardware/software. **Preferred Alternative 2** and Alternative **3** would require weekly and daily submissions, respectively.

Electronic reporting by all headboats could have benefits for headboat owners. Electronic submission of data could provide a warehouse for storing data for a vessel. Reports can be generated that will allow vessel owners to track performance over time. Reports could even be generated to compare a vessel's fishing success against that of the average headboat vessel.

It is not clear how many headboat operators are currently using computers and have an Internet connection. Like charter vessel operators, many already use computers and the internet for marketing purposes; therefore, additional costs for hardware and an Internet connection would not be an economic factor. Nonetheless, in the worst case scenario, according to **Table 1.4.1**, in 2015 there were 76 vessel permitted to operate as a headboat in the South Atlantic. Using the hardware/Internet access costs from **Action 1**, and assuming all 76 headboat vessels needed to buy a computer or tablet computer and begin Internet service, the cost would be $19,760 assuming all purchased a computer, or $9,120 if all bought a basic tablet computer. Establishing internet service for the 76 vessel operators would be $3,566 annually. The same software being developed for charter vessels (**Action 1**) could be used by headboats, or they could all use the software already developed by NMFS to be used by a computer.

In terms of time necessary to complete the requests and associated costs to headboats, a ranking from least to most onerous would be **Preferred Alternative 2** followed by **Alternative 3**. The

costs expected to be borne by headboat operators to report would be minimal if they own a computer or have access to a computer. However, if they do not own or have access to a computer (e.g., library), they would need to purchase a computer, or some other electronic device. Similarly, costs expected to be borne by the Agency to administer these data collection efforts cannot be determined. If it is assumed that shortening the reporting frequency would result in marked improvements in the data collected and that these improvements would result in more effective management, then **Alternative 3** would be expected to result in the greatest economic benefits, followed by **Preferred Alternative 2**. However, the net economic effects expected to result from these alternatives cannot be determined at this time because the potential benefits that would be expected to result from the proposed changes and the costs of the hardware and software that would be approved by NMFS cannot be estimated at this time.

4.2.3 Direct and Indirect Effects on the Social Environment

Section 3.4 (Social Environment) includes detailed information about fishermen and communities that may be affected by changes to reporting requirements for for-hire permit holders with headboat businesses. The effects of reporting requirements on headboat businesses would be similar to expected effects on charter vessels, as described in **Section 4.1.3** (Action 1 Social Effects). In general, negative social effects of headboat reporting requirements would likely be associated with any added time and financial burden for headboat owners and crew to meet the requirements. Increased frequency in reporting under **Preferred Alternative 2** and **Alternative 3** may have some negative effects on headboat owners and captains because businesses would need to allocate additional time or staff to submit reports. The daily reporting requirement under **Alternative 3** would be more burdensome for headboats than the weekly reporting in **Preferred 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. The requirement for increased electronic reporting under **Preferred Alternative 2** and **Alternative 3** would affect vessel owners who do not already use computer systems in their businesses, or could result in errors. However, requiring all headboats to report electronically and more frequently (**Alternative 3**) is expected to result in broad social benefits by improving quota monitoring, as discussed in **Section 4.1.3**.

There may also be some positive benefits for individual charter fishing businesses associated with having a consistent record of catch on the charter boat's trips under **Preferred Alternative 2** or **Alternative 3**. This information could be used for marketing purposes to demonstrate the ability and knowledge of the captain and crew. Additionally, a database could be established that would allow charter business owners to access their own records and compare them to summarized reports at a local or regional level.

4.2.4 Direct and Indirect Effects on the Administrative Environment

Alternative 1 (No Action), the status quo alternative, would not be expected to result in an increase in administrative burden to NMFS. This is the how data are currently collected for

fishery quota monitoring. **Preferred Alternative 2** and **Alternative 3**, would increase the administrative burden on NMFS, as all federally permitted vessels would be required to submit records to the SRD.

Alternative 1 (No Action), the status quo alternative, would not be expected to result in any increase in administrative burden on vessel owners**.** **Alternative 3** would result in more burden to the vessels owners as they would be required to report daily compared to weekly (or shorter than a week) in **Preferred Alternative 2.**

4.3 Action 3: Modify Electronic Reporting Requirements to Require Vessel or Catch Location Reporting

Action 3. Modify Electronic Reporting Requirements to Require Vessel or Catch Location Reporting.

Alternative 1 (No Action). Charter vessels participating in the For-Hire survey are required to report area fished (inshore, state, or federal waters), if selected as part of the survey. Headboats participating in the Southeast Region Headboat survey (SRHS) are required to report latitude and longitude of area fished (degrees and minutes only; within 1 nm^2 area).

Preferred Alternative 2. Require federally permitted charters vessels to report location electronically by latitude/longitude in degrees and minutes or by clicking on a headboat chart. SG AP Preferred.

4.3.1 Direct and Indirect Effects on the Physical/Biological/Ecological Environment

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

Preferred Alternative 2 would require electronic reporting of latitude/longitude in degrees and minutes or by clicking on a geographic chart for charter vessels fishing in the South Atlantic. Neither Alternative 1 nor Preferred Alternative 2 will have direct impacts on the physical, biological or ecological environment but Preferred Alternative 2 may result in better management decisions that can ultimately result in biological benefits to the species.

Two Alternatives Considered

Section 1502.14(a) of the National Environmental Policy Act states that "agencies shall: rigorously explore and objectively evaluate all reasonable alternatives…." Two reasonable alternatives for this action, including the no action alternative, have been identified by NMFS and the South Atlantic Council. The South Atlantic Council is considering requiring charter vessels to report catch location in the same manner as is currently required for headboats to ensure consistency in reporting throughout the region.

4.3.2 Direct and Indirect Effects on the Economic Environment

As **Alternative 1 (No Action)** is the status quo and no requirement is in place to require charter vessel or catch location reporting, it is expected not to have any additional economic effects. Assuming electronic reporting becomes a requirement for charter vessels (**Action 1**), **Preferred Alternative 2** is not expected to have additional economic effects. If electronic monitoring is not required for charter vessels, then there may be additional costs associated with **Preferred Alternative 2**. Those costs could include additional time by charter vessel owners to record lat/long coordinates for fishing locations. The additional costs associated with the changes in reporting, while not possible to accurately estimate, are not expected to be substantial.

4.3.3 Direct and Indirect Effects on the Social Environment

Section 3.4 (Social Environment) includes detailed information about fishermen and communities that may be affected by location reporting requirements for for-hire permit holders. In general, the expected social effects would likely be at the individual level and would be associated with a financial burden on fishermen to purchase and maintain any required equipment. Detailed analysis of the expected economic effects is included in **Section 4.3.2** (economic effects). Under **Alternative 1 (No Action)**, there would be no additional financial burden.

There are some expected benefits to the fleet and other long-term broad social benefits from the location reporting requirements under **Preferred Alternative 2**. Reporting location information under **Preferred Alternative 2** would also improve data collection on fishing behavior and important fishing grounds. For example, impacts on charter vessels from a potential marine protected area would be clarified and quantified if data are available at a finer resolution (headboat grids). Location data could also be used in broader long-term studies to better understand fleet dynamics and environmental factors affecting fishing decisions. These benefits would not be possible under **Alternative 1 (No Action)**.

It is likely that some charter boat and headboat owners and crew will not be supportive of reporting location (**Preferred Alternative 2**) because it may be perceived as an invasion of privacy or could disclose fishing areas they depend on in their for-hire businesses. **Alternative 1 (No Action)** would not require location information and would not be expected to result in negative perceptions from the for-hire fleet.

Overall, the expected benefits to the fleet and to the public will be reduced by the negative impacts from the additional short-term and long-term costs to purchase and maintain equipment necessary to meet location reporting requirements under **Preferred Alternative 2**.

4.3.4 Direct and Indirect Effects on the Administrative Environment

Alternative 1 (No Action), the status quo alternative, would not be expected to result in an increase in administrative burden to NMFS as this alternative does not change how data are currently collected. **Preferred Alternative 2** would have a very small administrative burden relative to **Alternative 1 (No Action)** in that it would merely extend the current headboat requirement to report latitude and longitude or location on a chart to charter vessels fishing in the South Atlantic. Since this system is already in place and being utilized, collecting information from charter vessels would not add much to the administrative burden.

4.4 Cumulative Effects Analysis

As directed by the National Environmental Policy Act (NEPA), federal agencies are mandated to assess not only the indirect and direct impacts, but the cumulative impacts of proposed actions as well. NEPA defines a cumulative impact as *"the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time"* (40 C.F.R. 1508.7). Cumulative effects can either be additive or synergistic. A synergistic effect is when the combined effects are greater than the sum of the individual effects.

4.4.1 Cumulative Biological Impacts

1 Affected Area

The For-Hire Amendment includes Amendment 39 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (Amendment 39), Amendment 9 to the Fishery Management Plan for the Dolphin and Wahoo Fishery of the Atlantic (Dolphin Wahoo Amendment 9), Amendment 27 to the Fishery Management Plan for the Coastal Migratory Pelagics Fishery of the Gulf of Mexico and Atlantic Region (CMP Amendment 27).

The South Atlantic Council manages the snapper grouper resource in Federal waters off Florida, Georgia, South Carolina and North Carolina. The South Atlantic Council, in cooperation with the Mid-Atlantic Fishery Management Council and the New England Fishery Management Council, is responsible for conservation and management of dolphin and wahoo in federal waters off the Atlantic states. The South Atlantic Council, in cooperation with the Gulf of Mexico Fishery Management Council is responsible for the Coastal Migratory Pelagic Resources in the Gulf of Mexico and the Atlantic Region.

The immediate impact area for this amendment is the federal 200-mile limit of the Atlantic off the coasts of Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, and east Florida to Key West.

The ranges of affected species are described in **Section 3.2.1**. **Section 3.1.1** describes the essential fish habitat designation and requirements for snapper-grouper, dolphin, and coastal migratory pelagics.

2 Past, Present, and Reasonably Foreseeable Actions Impacting the Affected Area

For this action, the cumulative effects analysis (CEA) includes an analysis of actions and events dating back to when the original dolphin wahoo, coastal migratory pelagics, and snapper-grouper fishery management plan (FMP) were implemented, and through what is expected to take place approximately before or within 2015-2016.

The reader is referred to **Appendix D** (History of Management**)** of this document for a comprehensive list of past regulatory activity for dolphin, coastal migratory pelagics, and snapper-grouper. For the purposes of this discussion the past, present and foreseeable actions listed below are those related to data collection in the snapper-grouper, coastal migratory pelagics, and dolphin wahoo fisheries.

Past Actions

Snapper-Grouper

The following amendments to the Snapper Grouper FMP contained actions that pertained to the for-hire sector including permit and reporting requirements.

Amendment 4 (SAFMC 1991) Amendment 4 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic (Snapper Grouper FMP) (SAFMC, 1991) established charterboat and headboat permits and required charterboats and headboats to report, if selected. Amendment 4 also required that recreational fishermen must make snapper grouper species, or parts thereof, available for inspection by the NMFS Science and Research Director or an authorized representative, upon request. Amendment 4 also designated prohibited gear, defined overfishing and established rebuilding timeframes, established gear marking requirements for black sea bass traps, size limits, bag limits and spawning season closures.

Amendment 7 (SAFMC 1994) established dealer permits for both charter and headboats, allowed sale under specified conditions, and adjusted bag limits and crew specifications for charter and headboats. Amendment 7 also adjusted specified size limits for hogfish and mutton snapper, modified the management unit to include scup and specified allowable gear and made allowances for experimental gear.

Amendment 16 (SAFMC 2009) established a prohibition on captain and crew on for-hire trips retaining the bag limit of vermilion snapper and species within the 3-fish grouper aggregate. Amendment 16 also specified allocations for gag and vermillion snapper, required dehooking tools for sea turtle bycatch, established a spawning season closure for gag and a reduced bag limit and recreational closed season for vermillion. Directed commercial quotas were also established for both gag and vermillion snapper.

Amendment 15B (SAFMC 2008) prohibited the sale of bag-limit caught snapper grouper species; reduced the effects of incidental hooking on sea turtles and smalltooth sawfish; adjusted commercial renewal periods and transferability requirements; implemented plan to monitor and assess bycatch; established reference points for golden tilefish; established allocations for snowy grouper (95% commercial & 5% recreational) and red porgy (50% commercial & 50% recreational). Amendment 15B also required that commercial vessels with a snapper grouper

permit, for-hire vessels with a for-hire permit, and private recreational vessels if fishing for snapper grouper species in the EEZ, shall use observer coverage, logbooks, electronic logbooks, video monitoring, or any other method deemed necessary to measure by catch by NOAA Fisheries, if selected.

Amendment 31 to the Snapper Grouper FMP/Amendment 6 to the Dolphin Wahoo FMP/Amendment 22 to the CMP FMP (SAFMC 2013a) required electronic logbook reporting for headboat vessels fishing for Snapper Grouper, Dolphin Wahoo, and Coastal Migratory Pelagics. This amendment required selected vessels with a Federal for-hire Permit to report landings data electronically; and implemented a provision that authorizes NOAA Fisheries Service to require weekly or daily reporting as required.

South Atlantic Dolphin Wahoo

The following amendments to the Dolphin Wahoo FMP contained actions that pertained to the for-hire sector including permit and reporting requirements.

The Dolphin Wahoo FMP, which was implemented in 2003, contained many management measures for the operation of the fishery such as minimum size limits, allowable gear, closed areas, and quotas. The Dolphin Wahoo FMP required owners of commercial vessels and/or charter vessels/headboats to have vessel permits and, if selected, submit reports and required dealers to have permits and, if selected, submit reports. In 2004, the Dolphin Wahoo FMP required that operators of commercial vessels, charter vessels and headboats that are required to have a federal vessel permit for dolphin and wahoo must display operator permits.

Amendment 31 to the Snapper Grouper FMP/Amendment 6 to the Dolphin and Wahoo FMP/Amendment 22 to the CMP FMP (SAFMC 2013a) required electronic logbook reporting for headboat vessels fishing for Snapper Grouper, Dolphin Wahoo, and CMP.

CMP Fishery

The following amendments to the CMP FMP contained actions that pertained to the for-hire sector including permit and reporting requirements.

Amendment 2 (SAFMC 1987) to the CMP FMP (implemented in 1987) required that charter vessels and headboats fishing in the EEZ of the Gulf of Mexico or Atlantic for CMP species have permits.

Amendment 31 to the Snapper Grouper FMP/Amendment 6 to the Dolphin and Wahoo FMP/Amendment 22 to the CMP FMP (SAFMC 2013a) required electronic logbook reporting for headboat vessels fishing for Snapper Grouper, Dolphin Wahoo, and CMP.

Present Actions

Along with this reporting amendment, the Gulf of Mexico Fishery Management Council is developing the Generic Amendment to the Reef Fish Resources of the Gulf of Mexico and Coastal Migratory Pelagic Resources of the Gulf of Mexico and South Atlantic which would require electronic reporting for vessels fishing in the reef fish and coastal migratory pelagics fisheries. This amendment is on a slightly different timeline than the For Hire Amendment and may have implications for management that overlap with the For Hire Amendment.

Reasonably Foreseeable Actions

The Joint Commercial Logbook Reporting Amendment would require electronic reporting of landings information by federally-permitted commercial vessels, which would increase the timeliness and accuracy of landings data; currently, fishermen report using paper logbooks.

3 Consideration of Climate Change and Other Non-Fishery Related Issues

Climate Change

Global climate changes could have significant effects on 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 (Link et al, 2015).

It is unclear how climate change would affect fish species in the Atlantic. 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 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.

Weather Variables

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

Deepwater-Horizon Oil Spill

On April 20, 2010, an explosion occurred on the Deepwater Horizon MC252 oil rig, resulting in the release of an estimated 4.9 million barrels of oil into the Gulf. In addition, 1.84 million

gallons of Corexit 9500A dispersant were applied as part of the effort to constrain the spill. The cumulative effects from the oil spill and response may not be known for several years. The oil spill affected more than one-third of the Gulf area from western Louisiana east to the panhandle of Florida and south to the Campeche Bank in Mexico. The impacts of the Deepwater Horizon MC252 oil spill on the physical environment are expected to be significant and may be long-term. Oil is dispersed on the surface, and because of the heavy use of dispersants, oil is also documented as being suspended within the water column, some even deeper than the location of the broken well head. Floating and suspended oil washed onto shore in several areas of the Gulf, as well as non-floating tar balls. Whereas suspended and floating oil degrades over time, tar balls are more persistent in the environment and can be transported hundreds of miles. Oil on the surface of the water could restrict the normal process of atmospheric oxygen mixing into and replenishing oxygen concentrations in the water column. In addition, microbes in the water that break down oil and dispersant also consume oxygen; this could lead to further oxygen depletion. Zooplankton that feed on algae could also be negatively impacted, thus allowing more of the hypoxia-fueling algae to grow. The highest concern is that the oil spill may have impacted spawning success of species that spawn in the summer months, either by reducing spawning activity or by reducing survival of the eggs and larvae. Effects on the physical environment, such as low oxygen, could lead to impacts on the ability of larvae and post-larvae to survive, even if they never encounter oil. In addition, effects of oil exposure may create sub-lethal effects on the eggs, larva, and early life stages. The stressors could potentially be additive, and each stressor may increase the susceptibility to the harmful effects of the other. The oil from the spill site was not detected in the South Atlantic region, and does not likely pose a threat to the South Atlantic species addressed in this amendment. However, the effects of the oil spill on fish species would be taken into consideration in future Southeast Data Assessment and Review assessments. Indirect and inter-related effects on the biological and ecological environment of the fisheries in concert with the Deepwater Horizon MC252 oil spill are not well understood. Changes in the population size structure could result from shifting fishing effort to specific geographic segments of populations, combined with any anthropogenically induced natural mortality that may occur from the impacts of the oil spill. The impacts on the food web from phytoplankton, to zooplankton, to mollusks, to top predators may be significant in the future.

4 Overall Impacts Expected from Past, Present, and Future Actions

The For Hire Amendment proposes changes to the current reporting requirements to collect data from fishermen through electronic reports and would modify the frequency of reporting for headboats. **Chapters 2** and **4** of this document describe in detail the magnitude and significance of effects of the trip limit alternatives for the charter and for hire sectors of the CMP, snapper grouper and dolphin wahoo fisheries and none of the impacts have been determined to be significant.

The cumulative effects of the actions proposed in combined with effects of other past, present, and future actions, are not expected to affect the magnitude of bycatch, diversity, and ecosystem

structure of fish communities, or safety at sea of fishermen. The actions in this amendment are mainly administrative in action and combined with past, present and foreseeable actions would not cause significant impacts to the resource or to the fishery participants.

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 Atlantic region. The Stellwagen Bank off the Northeastern U.S., USS Monitor, Gray's Reef, and Florida Keys National Marine Sanctuaries are within the boundaries of the Atlantic exclusive economic zone.

5 Monitoring and Mitigation

The effects of the proposed actions are, and will continue to be, monitored through collection of landings data by NMFS, stock assessments and stock assessment updates, life history studies, economic and social analyses, and other scientific observations. The proposed actions relate to data collection, and the activity does not itself introduce non-indigenous species, and is not reasonably expected to facilitate the spread of such species through depressing the populations of native species. Additionally, the actions in the amendment do not propose any activity, such as increased ballast water discharge from foreign vessels, which is associated with the introduction or spread on nonindigenous species. None of the beneficial or adverse impacts from the proposed management action (as summarized in Chapter 2 of this document) have been determined to be significant.

See Chapter 4 for the detailed discussions of the magnitude of the impacts of the preferred alternatives on the human environment. The actions in the For Hire Amendment would not have significant biological, social, or economic effects because the actions are administrative and will not have any direct impacts on harvest of species. Therefore, the cumulative effects of the action proposed in the For Hire Amendment are not expected to affect the magnitude bycatch, diversity and ecosystem structure of fish communities, or safety at sea of fishermen targeting dolphin and wahoo, coastal migratory pelagics or snapper grouper. Based on the cumulative effects analysis presented herein, the proposed action would not have any significant adverse cumulative impacts compared to, or combined with, other past, present, and foreseeable future actions.

4.5 Recommendations to NMFS

It is the South Atlantic Fishery Management Council's (South Atlantic Council) intent to extend the reporting requirements of the For-Hire Reporting Amendment through the Mid-Atlantic and New England Fishery Management Councils' areas for vessels with a federal for-hire permit for Snapper Grouper, Dolphin Wahoo, and Coastal Migratory Pelagic species. Further, it is the South Atlantic Council's intent not to have duplicate reporting by individual vessels; one report submitted to, for example, Atlantic Coastal Cooperative Statistics Program (ACCSP) would then be available to each agency needing the data. One issue to be resolved is the timing for reports: any South Atlantic permitted vessel would be required to report electronically via the charter vessel logbook the Tuesday following the end of the week (Sunday) whereas the vessel reports for the Greater Atlantic Region permitted vessels are currently due on or before 11:59 pm the Saturday following the end of the fishing week that is Sunday through Saturday.

The NMFS Southeast Fisheries Science Center (SEFSC) would develop the specific details of how the reporting and data management system would operate and would provide the Council the opportunity to have input into the system design. The reporting and data management system would include the following items as recommended by the Technical Sub-committee:

a) Logbook data collected via authorized platform, ex. web, tablet, phone, or vessel monitoring system (VMS) application
b) Data submitted to ACCSP or Gulf Fisheries Information Network (GulfFIN);
c) Data integrated by ACCSP or GulfFIN into single composite data set;
d) Composite data set distributed to appropriate agencies for analyses and use, and made available to the public via ACCSP.
e) NMFS and/or ACCSP/GulfFIN are to develop a compliance tracking procedure that balances timeliness with available staff and funding resources.
f) NMFS is to use validation methods developed in the Gulf of Mexico logbook pilot study and the Marine Resources Information Program /South Carolina validation project as a basis to ensure that the actual logbook report is validated and standardized validation methodologies are employed among regions.
g) Dual survey methods (existing MRIP and new mandatory reporting) maintained for no less than 3 years, and no management advice expected from the new method during the first year.
h) NMFS is to require and maintain a comprehensive permit/email database of participants.
i) NFMS is to include procedures for expanding estimates for non-reporting.
j) NMFS is to allow multiple authorized applications or devices that can transmit data from sea to report data as long as they meet required data and transferability standards.
k) Explore ways to determine the impact of state permitted vessels on landings of federally managed species, and pursue a long-term strategy of including the entire fleet, federal and non-federally permitted, in the reporting program.

CHAPTER 5. COUNCIL CONCLUSIONS

The South Atlantic Council concluded it is important for the public to understand the timing of full implementation:

1. South Atlantic Council approves document for formal review – June 2016
2. Document review by NMFS and approved/partially approved/disapproved – late 2016
3. Target implementation date – January 1, 2017. Charter vessels and headboats required to report minimum data elements according to the specifics in the final amendment. Begin collecting data submitted electronically.

(To be completed following Council meeting and guidance)

5.1 Action 1: Modify Frequency and Mechanism of Data Reporting for Charter Vessels

Action 1 Alternatives

(preferred alternatives in bold)

1. Alternative 1. No Action. If selected, a charter vessel operator must maintain a fishing record for each trip or portion of such trip. Reports must be postmarked no later than 7 days after the end of each week (Sunday).
2. **Preferred Alternative 2. Require that federally permitted charter vessels, while operating as a charter vessel, submit fishing records to the SRD weekly or at intervals shorter than a week if notified by the SRD via electronic reporting (via NMFS approved hardware/software). Weekly = Tuesday following each fishing week. Snapper Grouper Advisory Panel preferred.**
   - **Preferred Sub-alternative 2a. Report all fish harvested/discarded on all trips regardless of where harvested. (current HB requirement)**
   - Sub-alternative 2b. Report only South Atlantic federally-managed fish harvested/discarded on all trips regardless of where harvested. (snapper grouper, dolphin/wahoo, & CMP species)
   - Sub-Alternative 2c. Report all federally-managed fish harvested/discarded on all trips regardless of where harvested.
3. Alternative 3. Require that federally permitted charter vessels, while operating as a charter vessel, submit fishing records to the SRD daily via electronic reporting via electronic reporting (via NMFS approved hardware/software). Daily = by noon of the following day.
   - Sub-alternative 3a. Report all fish harvested/discarded on all trips regardless of where harvested. (current HB requirement)
   - Sub-alternative 3b. Report only South Atlantic federally-managed fish harvested/discarded on all trips regardless of where harvested. (snapper grouper, dolphin/wahoo, & CMP species)
   - Sub-Alternative 3c. Report all federally-managed fish harvested/discarded on all trips regardless of where harvested.

5.2 Action 2: Modify Frequency and Mechanism of Data Reporting for Headboats

Action 2 Alternatives

(preferred alternatives in bold)

1. Alternative 1. No Action. If selected, a headboat operator must submit an electronic fishing record for each trip of all fish harvested through the Southeast Region Headboat Survey. Electronic fishing records (reports) must be submitted weekly (or at intervals shorter than a week if notified) by 11:59 p.m., local time, the Sunday following a reporting week.
2. **Preferred Alternative 2. Require that headboats, while operating as a headboat, submit fishing records to the SRD weekly or at intervals shorter than a week if notified by the SRD via electronic reporting (via NMFS approved hardware/software). Weekly = Tuesday following each fishing week.** Snapper Grouper Advisory Panel preferred.
3. Alternative 3. Require that headboats, while operating as a headboat, submit fishing records to the SRD daily via electronic reporting (via NMFS approved hardware/software). Daily = by noon of the following day.

5.3 Action 3: Modify Electronic Reporting Requirements to Require Vessel or Catch Location Reporting

Action 3 Alternatives

(preferred alternatives in bold)

1. **Alternative 1 (No Action)**. Current regulations require charter vessels participating in the for-hire survey to report area fished (inshore, state, or federal waters), if selected as part of the survey. Headboats participating in the Southeast Region Headboat Survey (SRHS) are required to report latitude and longitude of area fished (degrees and minutes only; within 1 nm^2 area).
2. **Preferred Alternative 2. Require federally permitted charters vessels to report location electronically by latitude/longitude in degrees and minutes or by clicking on a headboat chart.** Snapper Grouper Advisory Panel preferred.

CHAPTER 6. BYCATCH PRACTICABILITY ANALYSIS

Background/Overview

The South Atlantic Fishery Management Council (South Atlantic Council) is required by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) §303(a) (11) to establish a standardized bycatch reporting methodology for federal fisheries and to identify and implement conservation and management measures to the extent practicable and in the following order: 1) minimize bycatch and 2) minimize the mortality of bycatch that cannot be avoided. The Magnuson-Stevens Act defines bycatch as "fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards. The definition does not include fish released alive under a recreational catch-and-release fishery management program" (Magnuson-Stevens Act §3(2)). Economic discards are fish that are discarded because they are undesirable to the harvester. This category of discards generally includes certain species, sizes, and/or sexes with low or no market value.

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

Guidance provided at 50 CFR 600.350(d)(3) identifies the following ten factors to consider in determining whether a management measure minimizes bycatch or bycatch mortality to the extent practicable:

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

The South Atlantic Council is encouraged to adhere to the precautionary approach outlined in Article 6.5 of the Food and Agriculture Organization of the United Nations Code of Conduct for Responsible Fisheries when uncertain about these factors.

Commercial Discard Rates

The increase in frequency of vessel reporting may increase the amount of discards for species that have reached their commercial sector annual catch limit (ACL). By having vessels report on daily or weekly basis versus the current basis, managers may have the ability to close the sector in a more timely manner. A season closure could result in an increase in bycatch for those fishermen that continue to fish; however, the overall level of fishing mortality would be expected to decrease. For species that have not reached their ACL, no change in discards is expected as a result of the increase in frequency of vessel reporting as these species would most likely be retained.

Recreational Discard Rates

For species that have a sector specific recreational allocation, no change in the amount of discards is expected as a result of an enhancement of reporting by the recreational sector.

Sea Turtles, Smalltooth Sawfish, and Other Protected Species Bycatch

No change in sea turtle, smalltooth sawfish, or other potential protected species bycatch is expected as a result of the increase in recreational vessel reporting. The proposed action is unlikely to alter fishing in ways that would jeopardize the continued existence of any endangered or threatened species under the jurisdiction of the NMFS or result in the destruction or adverse modification of critical habitat. Protected resources are discussed in **Sections 3.2.1 - 3.2.3** of the Environmental Assessment; the biological impacts are discussed in **Sections 4.1.1, 4.2.1,** and **4.3.1**.

Alternatives Being Considered to Minimize Bycatch

Reductions in dead discards can be accomplished either by reducing the number of fish discarded or reducing the release mortality rate of discards. To reduce the number of discards, management measures must limit fishing effort or change the selectivity of fishing gear in such a way that reduces the harvest of sub-legal fish. To reduce the discard mortality rate, ACLs must not be exceeded or fishing seasons closed.

Practicability Analysis

Criterion 1: Population effects for the bycatch species
This amendment discusses the harvest and reporting of 64 species, and thus the net population effects on bycatch is undeterminable. However, season closures could potentially increase the amount of bycatch. A recreational season closure resulting from landings exceeding their ACL could result in an increase in the amount of bycatch should fishers continue fishing for co-occurring species. Bycatch due to management measures such as fixed closed seasons, in-season closures, and ACL payback conditions could result in loss of yield. However, better data reporting that prevents ACLs overages and allows for a species to be closed when an ACL is reached, would be expected to reduce the overall level of fishing mortality.

Criterion 2: Ecological effects due to changes in the bycatch of managed species (on other species in the ecosystem)

Relationships among species in marine ecosystems are complex and poorly understood, making the nature and magnitude of ecological effects difficult to predict. Reductions in bycatch and fishing mortality would allow stocks to increase in abundance, resulting in increased competition for prey with other predators. Consequently, it is possible that forage species and competitor species could decrease in abundance in response to in season closures resulting from ACLs being reached or exceeded. However, actions in the amendment that allow for better data reporting to prevent ACL overages and allow for a species to be closed when an ACL is reached, would be expected to reduce the overall level of fishing mortality. Thus, positive ecological effects are expected from the actions proposed in this amendment.

Criterion 3: Changes in the bycatch of other species of fish and invertebrates and the resulting population and ecosystem effects

The biological environment would benefit by the increase in the frequency of vessel reporting. Fish populations are expected to be affected in a positive manner through this amendment. The increase in the frequency of vessel reporting would assist managers in determining when species are approaching their ACL. By managing landings below their ACL, populations would be healthier and provide for a more stable environment.

Positive impacts to the biological environment include implementing accountability measures to prevent overfishing and maintain stocks at healthy levels in a consistent and structured manner across all fishery management plans.

Criterion 4: Effects on marine mammals and birds

No effects on marine mammals and birds are expected as a result of the increase in vessel reporting. The proposed action is unlikely to alter fishing in ways that would jeopardize the continued existence of any marine mammal and bird species under the jurisdiction of NMFS or result in the destruction or adverse modification of critical habitat. Protected resources are discussed in **Sections 3.2.1 - 3.2.3** of the EA; the biological impacts are discussed in **Sections 4.1.1**, **4.2.1**, and **4.3.1**.

Criterion 5: Changes in fishing, processing, disposal, and marketing costs

Reporting landings more frequently may affect costs associated with fishing operations. Implementing in-season closures would have direct impacts to fishermen. Fishermen would incur losses in revenue due to season closures and would incur greater losses in consumer surplus resulting from a seasonal closure.

Criterion 6: Changes in fishing practices and behavior of fishermen

Seasonal closures could alter angler effort, at least initially, and may affect decisions about when and where to fish. Shifts or changes in fishing locations and seasons could have an effect on fishing behavior and practices that may potentially affect the bycatch.

Criterion 7: Changes in research, administration, and enforcement costs and management effectiveness

Establishing more timely reporting requirements for vessels would be expected to increase enforcement costs and management effectiveness. The increase in the frequency of reporting would be expected to result in more opportunities for non-compliance. This may result in an increasing the burden to law enforcement.

Criterion 8: Changes in the economic, social, or cultural value of fishing activities and non-consumptive uses of fishery resources

Economic and social effects from this proposed amendment are discussed in **Section 4.1**.

Criterion 9: Changes in the distribution of benefits and costs

The actions in this amendment would increase costs associated with vessel reporting to the actual vessels themselves. As a result of increasing the amount of vessel reporting the fishing industry should benefit by not exceeding its ACLs as often, which in turns leads to closed seasons and overage paybacks.

Criterion 10: Social effects

Social effects of additional vessel permit requirements would likely be associated with any added time and financial burden for vessels and seafood businesses to meet reporting requirements that would be part of the permit responsibilities.

CONCLUSIONS

Analysis of the ten bycatch practicability factors indicates there are potential negative impacts to bycatch and bycatch mortality. However, the benefits of reducing harvest, ending overfishing, and rebuilding the stocks is estimated to outweigh the benefits of further reducing discard mortality.

The South Atlantic Council will need to consider the practicability of implementing the bycatch minimization measures discussed above with respect to the overall objectives of the FMPs, the Magnuson-Stevens Act, and the Endangered Species Act.

Bycatch is currently considered to be reduced to the extent practicable in all fisheries subject to this amendment. However, increasing the frequency of reporting may impact bycatch. The precise impacts of these limits are currently unknown, but any potential increase in bycatch is believed to be outweighed by the benefits associated with enforcing ACLs. Better vessel reporting, and the ability to prohibit harvest when the ACL is met is expected to decrease the overall level of fishing mortality for a species. For species that have not reached their ACL, no change in discards is expected as a result of the increase in frequency of vessel reporting as these species would most likely be retained. Further, bycatch levels and associated implications will continue to be monitored in the future and issues will be addressed based on new information.

CHAPTER 7: LIST OF PREPARERS AND AGENCIES CONSULTED

Name	Expertise	Responsibility	Agency
Gregg Waugh	Executive Director	Amendment Development	SAFMC
John Carmichael	Science & Statistics Program Manager	Co-Team Lead - Amendment Development	SAFMC
Karla Gore	Fishery Biologist	Co-Team Lead & Biological analyses	NMFS/SERO
Randy Blankinship	Southeast Branch Chief, Atlantic Highly Migratory Species Management Division	Reviewer	NMFS/SERO
Jennifer Cudney	Fish Biologist, SE Branch, Atlantic Highly Migratory Species Management Division	Reviewer	NMFS/SERO
Kenneth Brennan	Coordinator, Southeast Region Headboat Survey	Biological analyses	NMFS/SEFSC
Myra Brower	Fishery Biologist	Reviewer	SAFMC
Brian Cheuvront	Economist	Economic analyses	SAFMC
Adam Bailey	Technical Writer Editor	Regulatory writer	NMFS/SERO
Chip Collier	Fishery Biologist	Reviewer	SAFMC
Nicholas Farmer	Fishery Biologist	Reviewer	NMFS/SERO
David Gloeckner	Chief, Fisheries Monitoring Branch	Reviewer	NMFS/SEFSC
Stephen Holiman	Economist	Economic analyses	NMFS/SERO
Monica Smit-Brunello	Attorney Advisor	Legal review	NMFS/GC
Kari McLaughlin	Fishery Social Scientists	Social analyses	SAFMC
Carolyn Sramek	Supervisory Management & Program Analyst	Reviewer	NMFS/SERO
Christina Package	Anthropologist	Reviewer	NMFS/SERO
Noah Silverman	Natural Resource Management Specialist	National Environmental Policy Act Review	NMFS/SERO
Mike Errigo	Fishery Biologist	Data	SAFMC
Chip Collier	Fishery Scientist	Corals	SAFMC
Roger Pugliese	Senior Fishery Biologist	Habitat	SAFMC

NMFS = National Marine Fisheries Service
SAFMC = South Atlantic Fishery Management Council
GMFMC = Gulf of Mexico Fishery Management Council
SEFSC = Southeast Fisheries Science Center
SERO = Southeast Regional Office
GC = General Counsel

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APPENDIX A

Relevant Federal Regulations

Code of Federal Regulations: Title 50
§ 622.2 Definitions and acronyms.

Charter vessel means a vessel less than 100 gross tons (90.8 mt) that is subject to the requirements of the USCG to carry six or fewer passengers for hire and that engages in charter fishing at any time during the calendar year. A charter vessel with a commercial permit, as required under § 622.4(a)(2), is considered to be operating as a charter vessel when it carries a passenger who pays a fee or when there are more than three persons aboard, including operator and crew, except for a charter vessel with a commercial vessel permit for Gulf reef fish or South Atlantic snapper-grouper. A charter vessel that has a charter vessel permit for Gulf reef fish and a commercial vessel permit for Gulf reef fish or a charter vessel permit for South Atlantic snapper-grouper and a commercial permit for South Atlantic snapper-grouper (either a South Atlantic snapper-grouper unlimited permit or a 225-lb (102.1-kg) trip limited permit for South Atlantic snapper-grouper) is considered to be operating as a charter vessel when it carries a passenger who pays a fee or when there are more than four persons aboard, including operator and crew. A charter vessel that has a charter vessel permit for Gulf reef fish, a commercial vessel permit for Gulf reef fish, and a valid Certificate of Inspection (COI) issued by the USCG to carry passengers for hire will not be considered to be operating as a charter vessel provided–-

(1) It is not carrying a passenger who pays a fee; and

(2) When underway for more than 12 hours, that vessel meets, but does not exceed the minimum manning requirements outlined in its COI for vessels underway over 12 hours; or when underway for not more than 12 hours, that vessel meets the minimum manning requirements outlined in its COI for vessels underway for not more than 12-hours (if any), and does not exceed the minimum manning requirements outlined in its COI for vessels that are underway for more than 12 hours.

Headboat means a vessel that holds a valid Certificate of Inspection (COI) issued by the USCG to carry more than six passengers for hire.

(1) A headboat with a commercial vessel permit, as required under this part, is considered to be operating as a headboat when it carries a passenger who pays a fee or--

(i) In the case of persons aboard fishing for or possessing

South Atlantic snapper-grouper, when there are more persons aboard than the number of crew specified in the vessel's COI; or

(ii) In the case of persons aboard fishing for or possessing coastal migratory pelagic fish, when there are more than three persons aboard, including operator and crew.

(2) However a vessel that has a headboat permit for Gulf reef fish, a commercial vessel permit for Gulf reef fish, and a valid COI issued by the USCG to carry passengers for hire will not be considered to be operating as a headboat provided–-

(i) It is not carrying a passenger who pays a fee; and

(ii) When underway for more than 12 hours, that vessel meets, but does not exceed the minimum manning requirements outlined in its COI for vessels underway over 12 hours; or when underway for not more than 12 hours, that vessel meets the minimum manning requirements outlined in its COI for vessels underway for not more than 12-hours (if any), and does not exceed the minimum manning requirements outlined in its COI for vessels that are underway for more than 12 hours.

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).

SUBPART I--SNAPPER-GROUPER FISHERY OF THE SOUTH ATLANTIC REGION

§ 622.170 Permits and endorsements.

(b) Charter vessel/headboat permits--(1) South Atlantic snapper-grouper. 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, South Atlantic snapper-grouper, a valid charter vessel/headboat permit for South Atlantic snapper-grouper must have been issued to the vessel and must be on board. 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. See the definitions of "Charter vessel" and "Headboat" in § 622.2 for an explanation of when vessels are considered to be operating as a charter vessel or headboat, respectively.

§ 622.176 Recordkeeping and reporting

(b) Charter vessel/headboat owners and operators--(1)

General reporting requirement--(i) Charter vessels. The owner or operator of a charter vessel for which a charter vessel/headboat permit for South Atlantic snapper-grouper has been issued, as required under § 622.170(b)(1), or whose vessel fishes for or lands such snapper-grouper in or from state waters adjoining the South Atlantic EEZ, 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.

(iii) 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 § 622.170(b)(1), or whose vessel fishes for or lands such snapper-grouper in or from state waters adjoining the South Atlantic EEZ, who is selected to report by the SRD must participate in the NMFS-sponsored electronic logbook and/or video monitoring program as directed by the SRD. Compliance with the reporting requirements of this paragraph (b)(1)(iii) is required for permit renewal.

(2) Reporting deadlines--(i) Charter vessels. Completed fishing records required by paragraph (b)(1)(i) of this section for charter vessels must be submitted to the SRD weekly, postmarked no later than 7 days after the end of each week (Sunday). Completed fishing records required by paragraph (b)(1)(iii) of this section for charter vessels may be required weekly or daily, as directed by the SRD. Information to be reported is indicated on the form and its accompanying instructions.

SUBPART M--DOLPHIN AND WAHOO FISHERY OFF THE ATLANTIC STATES

§ 622.270 Permits.

(b) Charter vessel/headboat permits. (1) For a person aboard a vessel that is operating as a charter vessel or headboat to fish for or possess Atlantic dolphin or wahoo, in or from the Atlantic EEZ, a valid charter vessel/headboat permit for Atlantic dolphin and wahoo must have been issued to the vessel and must be on board. (See paragraph (c)(1) of this section for the requirements for operator permits in the dolphin and wahoo fishery.)

(2) 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. See the definitions of "Charter vessel" and "Headboat" in § 622.2 for an explanation of when vessels are considered to be operating as a charter vessel or headboat, respectively.

§ 622.271 Recordkeeping and reporting.

(b) Charter vessel/headboat owners and operators--(1) General reporting requirement--(i) Charter vessels. The owner or operator of a charter vessel for which a charter vessel/headboat permit for Atlantic dolphin and wahoo has been issued, as required under § 622.270(b)(1), or whose vessel fishes for or lands Atlantic dolphin or wahoo in or from state waters adjoining the Atlantic EEZ, 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.

(2) Reporting deadlines--(i) Charter vessels. Completed fishing records required by paragraph (b)(1)(i) of this section for charter vessels must be submitted to the SRD weekly, postmarked no later than 7 days after the end of each week (Sunday). Information to be reported is indicated on the form and its accompanying instructions.

SUBPART Q—-COASTAL MIGRATORY PELAGIC RESOURCES (GULF OF MEXICO AND SOUTH ATLANTIC)

§ 622.370 Permits.

(b) Charter vessel/headboat permits. (1) 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, Gulf coastal migratory pelagic fish or South Atlantic coastal migratory pelagic fish, a valid charter vessel/headboat permit for Gulf coastal migratory pelagic fish or South Atlantic coastal migratory pelagic fish, respectively, must have been issued to the vessel and must be on board.

(i) See § 622.373 regarding a limited access system for

charter vessel/headboat permits for Gulf coastal migratory pelagic fish.

(ii) 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. See the definitions of "Charter vessel" and "Headboat" in § 622.2 for an explanation of when vessels are considered to be operating as a charter vessel or headboat, respectively.

§ 622.374 Recordkeeping and reporting.

(b) Charter vessel/headboat owners and operators--(1) General reporting requirement--(i) Charter vessels. The owner or operator of a charter vessel for which a charter vessel/headboat permit for Gulf coastal migratory pelagic fish has been issued, as required under § 622.370(b)(1), or whose vessel fishes for or lands Gulf or South Atlantic coastal migratory fish in or from state waters adjoining the Gulf or South Atlantic EEZ, 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)(i) of this section.

(2) Reporting deadlines--(i) Charter vessels. Completed fishing records required by paragraph (b)(1)(i) of this section for charter vessels must be submitted to the SRD weekly, postmarked no later than 7 days after the end of each week (Sunday). Information to be reported is indicated on the form and its accompanying instructions.

APPENDIX B

Considered but Rejected

2.4 Action 4: Amend the Gulf Reef Fish, South Atlantic Snapper Grouper, Coastal Migratory Pelagics, and Atlantic Dolphin and Wahoo Fishery Management Plans to Specify Certain Aspects of Reporting for For-Hire Vessels

Alternative 1 (No Action). There is no specified time for data to be made available to the public and to the Councils.

Alternative 2. Specify the following data flow via electronic reporting:

a) Logbook data collected via authorized platform, ex. web, tablet, phone, or VMS application
b) Data submitted to ACCSP or GulfFIN;
c) Data integrated by ACCSP or GulfFIN into single composite data set;
d) Composite data set distributed to appropriate agencies for analyses and use.

Sub-alternative 2a. Apply to charter vessels reporting.
Sub-alternative 2b. Apply to headboat reporting.

Alternative 3. Specify the following aspects of electronic reporting:

a) NMFS and/or ACCSP develop a compliance tracking procedure that balances timeliness with available staff and funding resources.
b) NMFS is to use validation methods developed in the Gulf of Mexico logbook pilot study as a basis to ensure that the actual logbook report is validated and standardized validation methodologies are employed among regions.
c) NMFS is to require and maintain a comprehensive permit/email database of participants.
d) NFMS is to include procedures for expanding estimates for non-reporting.
e) NMFS is to allow multiple authorized applications or devices to report data as long as they meet required data and transferability standards.

Sub-alternative 3a. Apply to charter vessel reporting.
Sub-alternative 3b. Apply to headboat reporting.

Discussion

The technical subcommittee recommends a multi-faceted approach where a number of reporting platforms can be used so long as the minimum data standards and security protocols are met. Data standards would need to be developed and the subcommittee agreed that the National Marine Fisheries Service (NMFS), the GulfFIN, and Atlantic Coastal Cooperative Statistics Program (ACCSP) could work collaboratively to develop appropriate standards.

The subcommittee recommends this process for data storage and management:

1. Logbook data collected via authorized platform, ex. web, tablet, phone, or VMS application
2. Data submitted to ACCSP or GulfFIN;
3. Data integrated by ACCSP or GulfFIN into single composite data set;
4. Composite data set distributed to appropriate agencies for analyses and use.

This process could eliminate duplicate reporting for some participants (e.g., South Carolina headboats and charter vessels) so long as appropriate data standards are in place and the respective agencies agree to confidentiality standards, which would allow sharing and accepting one another's data for use. Elimination of duplicate reporting (e.g., separate state and federal reports) would be a substantial benefit to participants in this survey program and could mitigate any additional reporting requirements for comparison to the current MRIP survey program.

The South Atlantic Council is concerned about the time it takes to get data needed to track recreational catches. The current South Atlantic blueline tilefish recreational ACL versus recreational catches is currently unknown pending receipt of the first wave of MRIP data (should be available 45 days after the end of February) and any headboat catches. Part of the time it takes to get data is related converting numbers of fish to pounds. This adds an unspecified period of time after the MRIP data are released for the Southeast Fisheries Science Center to apply their conversion factors and provide a catch estimate. The South Atlantic Council is considering specifying recreational ACLs in numbers of fish so that the headboat sector (and the charter vessel sector once this amendment is approved) can be tracked weekly. Specifying the recreational ACL in numbers of fish would also reduce the delay in using the MRIP data to track recreational ACLs.

Action 4 addresses the following recommendations from the Technical Sub-Committee:

- Development of compliance tracking procedures that balance timeliness with available staff and funding resources.
- Use validation methods developed in the Gulf of Mexico logbook pilot study as a basis to ensure that the actual logbook report is validated and standardized validation methodologies are employed among regions.
- Require and maintain a comprehensive permit/email database of participants.
- Include procedures for expanding estimates for non-reporting.
- Allow multiple authorized applications or devices to report data as long as they meet required data and transferability standards.

The technical subcommittee recommends building upon the validation methodology developed in the Gulf of Mexico MRIP pilot study.

The technical subcommittee recommends use of an MRIP certified methodology for validation with the following elements: Gulf of Mexico MRIP pilot study methodologies, including dockside validation of catch and vessel activity, and maintenance of site and vessel registries.

The technical subcommittee recommends dual survey methods (existing and new) for no less than three years. Data from the new program would not be expected to provide management advice during the first year of operation. Moreover, this would allow the possibility of an initial phase-in or limited implementation to identify and solve significant problems prior to

implementation for all participants.

The technical subcommittee recommends that the Councils move forward with development of a reporting system that includes federally permitted for-hire vessels while also exploring ways to determine the impact of state permitted vessels on landings estimates of federally managed species. Long term, the subcommittee recommends that both state and federally permitted charter vessels participate in this census to include the entire fleet of charter vessels harvesting federally managed species.

Weekly electronic dealer and headboat reporting are fully implemented. However, it takes some time to have updated landings available to the public for their use in planning trips and to the Councils for monitoring ACLs. A solution, in the Atlantic, could be to have the raw weekly data fed to ACCSP and made available to the public via the ACCSP website. The "official" numbers for quota closures would continue to be the numbers maintained by NMFS and available on the NMFS Website but this would provide more timely and useful updates to the public.

The result would be updated and current catch data available on a daily basis for the public, states, NMFS, and the Councils to use in monitoring ACLs and planning fishing trips.

APPENDIX C

South Carolina Logbook Report

ATTACHMENT 1

DNR
www.dnr.sc.gov

SOUTH CAROLINA HEADBOAT LOG

Section 50-5-1915 of the South Carolina Code of Laws requires all licensed headboats to maintain a trip log, copies of which must be submitted monthly to the South Carolina Department of Natural Resources. **A report must be received even if no trips were made during the month. To submit a no trips report, write "No Business For (month) in the middle of a report form. (For example, No Business For January).** Date and sign the report.

To fulfill both the mandatory reporting of the NMFS and the requirements of state law without an undue burden on the permit holder, South Carolina will use the existing NMFS Headboat logbook. The white copy should be mailed or faxed to the address below so it is received no later than the 10th of the month following the report month. For example, June reports should reach our office by 10 July. The yellow copy should be retained for the NMFS representative, and the pink copy should be retained for your records. Complete a separate form for each trip. Should you need more reports, attach a note to your reports or call our office.

Please mail or FAX the white copies to the:

SCDNR - Fisheries Statistics Program
P.O. Box 12559
Charleston, SC 29422-2559
TELEPHONE: (843) 953-9313 **FAX**: (843) 953-9362

INSTRUCTIONS

To complete a trip report, record the following information in the proper blanks:

VESSEL: Enter vessel name and SC Charterboat Permit Number.
DATE: Enter the date(s) of the trip.
DEPART TIME: Enter the time of departure from the dock.
ARRIVE TIME: Enter the time of arrival back at the dock.
OPERATOR'S LICENSE NUMBER: Enter the vessel USCG or state documentation #.
FULL DAY, 3/4 DAY, ETC.: Check the appropriate box for the length of trip.
NIGHT: Check 1st if the trip departed between 6:00PM and midnight. Check 2nd if the trip departed after 12:00 midnight.
DISTANCE FROM SHORE: Check the appropriate box.
PAY TYPE: Check the appropriate box.
LOCATION: Please enter the location code for your fishing area using the grid printed inside the flip cover.

Example: Refer to the grid and the small block marked **X** in grid 32-78 (lat/long). Read up or down the column to determine the letter code (C in this example). Read left or right across the row to determine the number code (1 in this example). This location code entry would be **32-78-C1**. Each individual small square is 10 miles long by 10 miles wide or roughly 100 square miles.

NUMBER OF ANGLERS: Enter the number of passengers who went to fish.
NUMBER OF ANGLERS WHO FISHED: Enter the number of passengers who actually fished.

CATCH INFORMATION

SPECIES: Use blank lines to list additional species caught.
NUMBER AND WEIGHT: Enter the total number and weight (to the nearest whole pound) of all species retained in the NUMBER CAUGHT and TOTAL WEIGHT columns.
NUMBER RELEASED: Regardless of disposition, ALL FISH must be reported. Please enter the number of each species released in the appropriate column. DO NOT include releases in the number caught or total weight columns.

SC DAILY CATCH (HEADBOAT)

ATTACHMENT 1 4-2004

Vessel: ____________ Date: ____________ Depart Time: ________ Arrive Time: ________

Operator's License No.: ____________ Full Day: ☐ Night: ☐ 1st ☐ 2nd

Location: ____________ 3/4 Day: ☐ Overnight: ☐

Number of Anglers: ____________ 1/2 Day: ☐ AM ☐ PM

Number of Anglers Who Fished: ________ Other: ____________

Distance from Shore: > 3 miles ☐ ≤ 3 miles ☐ Inland ☐

Pay Type: Per Person ☐ Per Group ☐ No Charge ☐

AGENCY USE ONLY

1 2	3 4	5 6	7	8 9	10 11	12 13	14 15	16 17	18 19 20	21	22 23 24	44	45 46 47	48
Yr	Mo	Day		Area	Lat	Lon	CA CN	Trip Type	Anglers	VT	Vessel	PT	Ang Fished	DFS

25-27	Fish Species	Number Caught 28-31	Total Weight 32-37	# Released Alive 38-40	# Released Dead 1-43
	GROUPERS				
29	Gag				
30	Scamp				
20	Speckled Hind				
21	Snowy Grouper				
22	Red Grouper				
23	Warsaw Grouper				
26	Rock Hind				
31	Yellowfin Grouper				
27	Red Hind				
39	Yellowfin Grouper				
88	Graysby				
	SEA BASSES				
33	Black Sea Bass				
34	Bank Sea Bass (Yellow)				
38	Sand Perch				
	GRUNTS				
50	White Grunts				
51	Tomtate (Redmouth)				
54	Bluestriped Grunt				
53	Margate				
35	Porkfish				
	PORGIES				
01	Red Porgy				
02	Whitebone Porgy				
03	Knobbed Porgy				
04	Spottail Pinfish				
05	Jolthead Porgy				
06	Littlehead Porgy				
08	Scup (Northern)				
83	Pinfish				
	SHARKS				
230	Sharpnose Shark				
234	Sandbar Shark				
231	Blacktip Shark				
119	Smooth Dogfish				
250	Nurse Shark				
232	Dusky Shark				
140	Remora				
	TRIGGERFISHES				
77	Gray Triggerfish				
82	Queen Triggerfish				

25-27	Fish Species	Number Caught 28-31	Total Weight 32-37	# Released Alive 38-40	# Released Dead 1-43
	SNAPPERS				
10	Vermilion Snapper				
11	Red Snapper				
12	Silk Snapper				
14	Blackfin Snapper				
15	Yellowtail Snapper				
16	Lane Snapper				
17	Cubera Snapper				
18	Gray Snapper				
19	Mutton Snapper				
	MACKERELS				
74	King Mackerel				
56	Spanish Mackerel				
	JACKS				
60	Greater Amberjack				
62	Almaco Jack				
123	Banded Rudderfish				
97	Blue Runner				
57	Rainbow Runner				
90	African Pompano				
87	Crevalle Jack				
	TUNAS, etc.				
79	Bluefish				
55	Cobia				
117	Dolphin				
133	Wahoo				
116	Little Tunny (Bonito)				
126	Blackfin Tuna				
147	Yellowfin Tuna				
121	Great Barracuda				
	REEF FISHES				
78	Squirrelfish				
98	Bigeye (Toro)				
86	Short Bigeye				
80	Hogfish (Hog Snapper)				
47	Spadefish				
72	Inshore Lizardfish				
	TILEFISHES				
40	Blueline Tilefish (Gray)				
44	Sand Tilefish				
	OTHER FISH				

Signature ____________________

Revised 6/99

04-6619

ATTACHMENT 2
Revised 4-2012

SOUTH CAROLINA CHARTERBOAT LOGBOOK

Vessel (Please Print): _____ Date: _____ Permit No.: _____

Number of Anglers: _____ Trip Start Time: _____ Actual Hours Fished: _____ Location: _____ Example: 32-78-C1 (see map)

Trip Start Location: _____ Artificial Reef Name: _____ Target Species: _____ (Please specify)

Locale: ☐ Estuarine ☐ 0 – 3 miles ☐ Offshore

Method: ☐ Troll ☐ Bottom ☐ Cast / Fly ☐ Dive ☐ Gig

Water Depth: Shallowest: _____ feet Deepest: _____ feet

MAIL OR FAX REPORT BY THE 10TH OF THE MONTH TO:
SCDNR Fisheries Statistics Section, P.O. Box 12559, Charleston, SC 29422-2559
FAX: (843) 953-9362 Phone: (843) 953-9313

AGENCY USE ONLY

Yr | Mo | Day | Permit # | Location | Locale | Area# | Meth

Target Sp. | Hrs. | Reef | Trip Start | Shallowest | Deepest

	Species	# Kept	Lbs Kept	# Released Alive	# Released Dead		Species	# Kept	Lbs Kept	# Released Alive	# Released Dead
1050	Dolphin					1423	Gag				
4710	Wahoo					1424	Scamp				
4655	Yellowfin Tuna					1414	Snowy Grouper				
4658	Blackfin Tuna					1416	Red Grouper				
3026	Sailfish					1410	Other Grouper				
2177	White Marlin						(Specify)				
2179	Blue Marlin					3302	Red Porgy (Pinks)				
1940	King Mackeral					3295	Other Porgies				
3840	Spanish Mackeral						(Specify)				
4653	Little Tunny					3764	Red Snapper				
0330	Bonita					3765	Vermillion Snapper				
4654	Skip Jack					3360	Black Sea Bass				
0180	Barracuda					3314	Spottail Pinfish				
3810	Spadefish					1441	White Grunt				
0030	Amberjack					1440	Other Grunts				
0870	Crevalle Jack						(Specify)				
0230	Bluefish					4560	Triggerfish				
0570	Cobia					1082	Red Drum				
4350	Tarpon					1081	Black Drum				
	Other Fish					3447	Spotted Seatrout				
	(Specify)					3446	Weakfish				
						1209	Flounder				
						3560	Sheepshead				
						4410	Ladyfish				
						1970	Whiting				
						2670	Inshore Pinfish				
						3518	Sharpnose Shark				
						3495	Blacktip Shark				
						3483	Bonnethead Shark				
						3521	Spiny Dogfish				
						3511	Smooth Dogfish				
						3508	Other Sharks				
							(Specify)				
						2860	Stingrays				

Captain's Notes:

Signature: _____

Print Name: _____

ATTACHMENT 2

SOUTH CAROLINA CHARTERBOAT LOG

Section 50-5-1915 of the South Carolina Code of Laws requires all permitted charter vessels to submit daily trip reports for all trips to the Marine Resources Division on a monthly basis. These reports must specify: 1) the number of persons fishing, 2) the number of hours fished, 3) the number of fish of each species caught, and 4) their total weight. Subsequent charter vessel permits will not be issued unless these requirements are met.

Please complete a logsheet for each trip following the instructions below. If you made two or more trips on a particular date, complete a separate report for each trip. Trip reports are required even if no fish were caught. Mail or FAX the white copy to the address below by the 10th of the following month. Retain the yellow copy for your records.

SCDNR - Fisheries Statistics Program
P.O. Box 12559
Charleston, SC 29422-2559
TELEPHONE - (843) 953-9313 **FAX** - (843) 953-9362

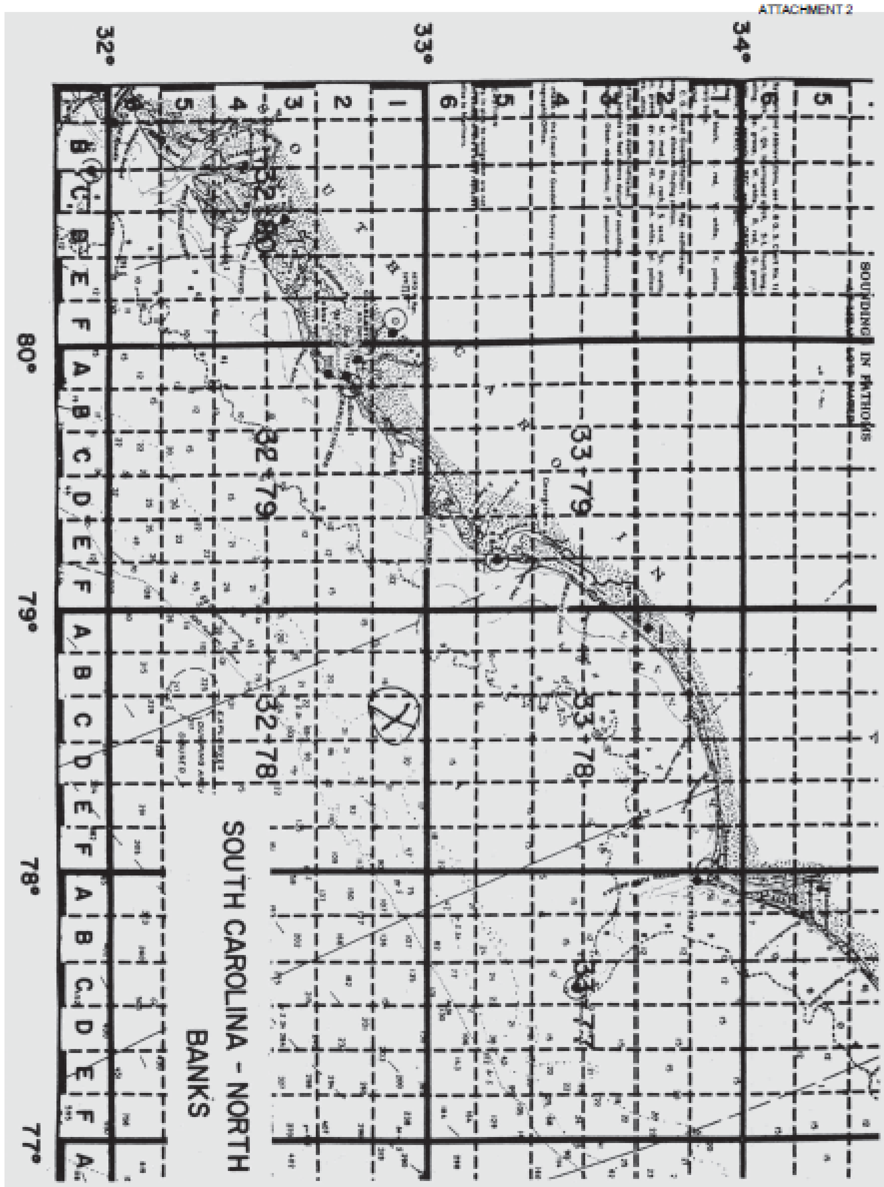
A report must be received even if no trips were made during the month. To submit a no trip report, write "No Business For The Month Of (month) on the middle of a report form. Date and sign the report.

The Captain's Notes space may be used to record trip data such as weather, fuel, addresses, etc.

INSTRUCTIONS

- **VESSEL:** Enter the name of your vessel. If unnamed, enter the registration number of your boat, e.g. SC-1234-AB.
- **DATE:** Enter the date of the trip.
- **PERMIT NO.:** Enter your SC charter vessel permit number (number provided on your license).
- **# ANGLERS:** Enter the number of persons who fished, not including crew.
- **TRIP START TIME:** Enter the time the boat left the dock or landing, e.g. 11:30 AM, 1:00 PM, 3:30 PM, etc.
- **HOURS FISHED:** Enter the number of hours actually fished to the nearest hour, not including travel time.
- **LOCATION:** Enter the location code where MOST of your fishing took place. Refer to the map printed on the inside of the flip cover and the following example. If you fished in the grid marked **X**, Grid 32-78, read up or down the column to determine the letter code (C here). Read left or right across the row to determine the number code (1 here). The proper entry for this location is **32-78-C1**.
- **TRIP START LOCATION:** Enter the marina/boat landing name where this trip originates/end (i.e. where you pick up/drop off customers).
- **ARTIFICIAL REEF:** If you fished at an artificial reef, enter the reef name in the blank.
- **TARGET SPECIES:** Enter the name of the species you were MOST interested in catching, whether any were caught or not. Enter ANY if you had no preference.
- **LOCALE:** Check the appropriate zone fished.
- **METHOD:** Check the fishing method.
- **WATER DEPTH:** Enter the shallowest water depth and deepest water depth (in feet) that were fished.
- **CATCH INFORMATION:** Enter the number of each species kept and their weight to the nearest whole pound in the appropriate spaces. Enter the number of each species released in the proper columns. Additional species may be added on the blank spaces or if additional space is needed, you may cross out an existing name and add the new species.

ATTACHMENT 2



APPENDIX D

Southeast Region Headboat Survey Forms

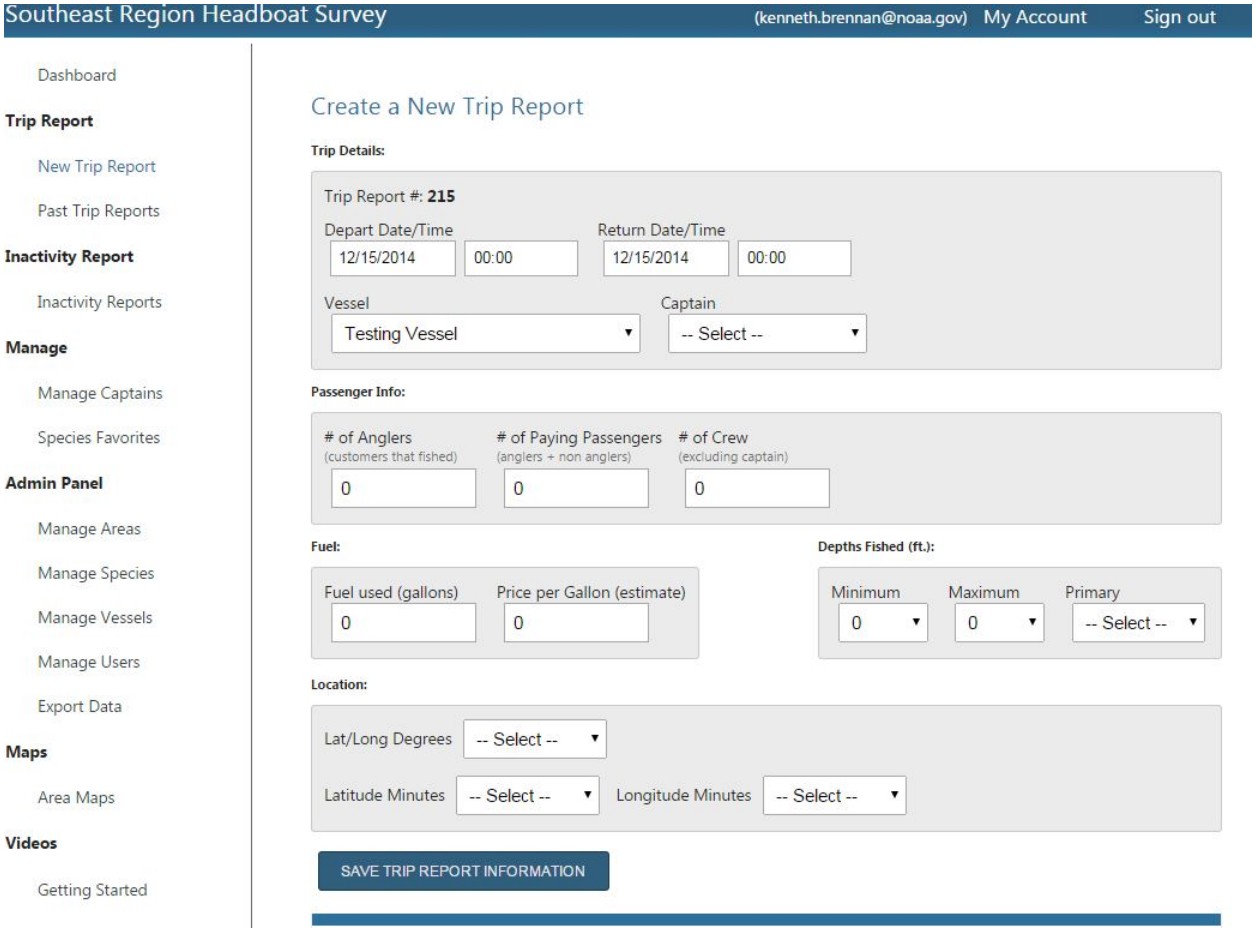


Figure D1. Example Southeast Region Headboat Survey trip report form for headboats.

Catch Information

☐ Show Species Grid
☐ Show All Species
☐ Order Species By Most Reported

Species: -- Select -- Number Kept: 0 Number Released: 0

SAVE CATCH INFORMATION

	Species Name	Number Kept	Number Released	
Edit	ALMACO JACK	5	0	Delete
Edit	BANDED RUDDERFISH	7	0	Delete
Edit	ATLANTIC SHARPNOSE SHARK	0	14	Delete
Edit	BLACK SEABASS	25	300	Delete
Edit	GAG	2	1	Delete
Edit	LITTLE TUNNY	2	0	Delete
Edit	RED PORGY	11	38	Delete
Edit	RED SNAPPER	0	21	Delete
Edit	REMORA	0	3	Delete
Edit	SPOTTAIL PINFISH	45	0	Delete
Edit	GRAY TRIGGERFISH	77	0	Delete
Edit	VERMILION SNAPPER	132	48	Delete

Figure D2. Example Southeast Region Headboat Survey catch report form for headboats.

APPENDIX E

11/26/2014

Technical Subcommittee Report to the South Atlantic and Gulf of Mexico Fishery Management Councils: Recommendations for Electronic Logbook Reporting

November 2014

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Abbreviations used in this Document

ACCSP	Atlantic Coastal Cooperative Statistics Program
EEZ	Exclusive Economic Zone
FHS	For-hire-survey
FWC	Florida Fish and Wildlife Conservation Commission
FIN	Fisheries Information Network
GulfFin	Gulf of Mexico Fisheries Information Network
GMFMC	Gulf of Mexico Fishery Management Council
GSMFC	Gulf States Marine Fisheries Commission
GPS	Global Positioning System
HMS	Highly Migratory Species
MRIP	Marine Recreational Information Program
NOAA	National Oceanic and Atmospheric Administration
NCDENR	North Carolina Department of Environment and Natural Resources
NRC	National Research Council
PPS	Proportional Probability Sampling
SAFMC	South Atlantic Fisheries Management Council
SCDNR	South Carolina Department of Natural Resources
SERO	Southeast Regional Office
SRHS	Southeast Region Headboat Survey
SEFSC	Southeast Fisheries Science Center
TPWD	Texas Parks and Wildlife Department
VMS	Vessel Monitoring System

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Catch from recreational anglers comprises a substantial proportion of total catch for many species in the regions managed by the Gulf of Mexico and South Atlantic Fishery Management Councils. For-hire charter vessels are an important component of the recreational fishery both in terms of fishing effort and harvest. There is a need to improve data collection practices for charter vessels to address evolving needs of science and management and to capitilze on the improvements of emerging electronic reporting technologies. The Gulf of Mexico and South Atlantic Fishery Mangement Councils are considering changes in management for these purposes and formed a technical subcommittee to provide recomendations to implement electronic logbook reporting for charter vessels in the Gulf of Mexico and South Altantic Fishery Management Councils respecitve jurisdictions.

Currently, for-hire data collection programs gather information on fishing effort and catch by marine recreational anglers fishing on professionally licensed for-hire vessels (including charter, guide, and large party boats). NOAA Fisheries, in coordination with the states, ACCSP, and FINS, support regional programs to collect these statistics, with the ultimate goal of building a system of data collection programs that are responsive to regional needs and are coordinated at the national level to provide standard data elements for both regional and national assessments of fish stocks and associated fisheries management.

The technical subcommittee was formed from state and federal biologists and resource managers that have the requisite experience to develop best practices for an improved for-hire data collection program. The technical subcommitte was instructed to provide these recommendations by December 1, 2014 and this report reflects these recommendations. The group met May 27-28, 2014 and drafted initial reccommendations for the Gulf of Mexico and South Atlantic Fishery Management Councils' review. This guidance has been integrated into the report to the extent practibable yet, the recommendations remain those of the technical subcommittee.

The subcommittee recommends a census style, electronic reporting system that builds upon the Gulf of Mexico electronic logbook pilot program, the electronic reporting program for headboats, and the recently implemented electronic dealer reporting program. A brief overview of the recommendations is below:

- Complete census of all participants;
- Mandatory, trip level reporting with weekly electronic submission. Give flexibility to require submission more frequently than weekly if necessary. Give flexibility to declare periods of inactivity in advance;
- Development of compliance tracking procedures that balance timeliness with available staff and funding resources;
- Implementation of accountability measures to ensure compliance;

- Use validation methods developed in the Gulf of Mexico logbook pilot study as a basis to ensure that the actual logbook report is validated and standardized validation methodologies are employed among regions;
- Minimize reporting burden to anglers by reducing (or preferably eliminating) paper reporting and eliminating duplicate reporting;
- Maintain capability for paper-based reporting during catastrophic conditions;
- Require and maintain a comprehensive permit/email database of participants;
- Develop and implement the program in close coordination with MRIP, SERO, SEFSC, HMS, state agencies, ACCSP, and GulfFIN;
- Include procedures for expanding estimates for non-reporting; and,
- Allow multiple authorized applications or devices to report data as long as they meet required data and transferability standards.

The technical subcommittee has provided these recommendations within the framework of finite fiscal and personnel resources with consideration of reporting burden and technology requirements for charter vessel operators. The recommended program should be flexible enough to accomodate changes in technology or funding availability without compromising the integrity of the long-term data series. The technical subcommittee also realizes that advances in data collection technologies will continue and the program will require evaluation, and likely subsequent improvement to meet the evolving needs of science and management.

SECTION 1. BACKGROUND

Catch from recreational anglers comprises a substantial proportion of total catch for many species in the regions managed by the Gulf of Mexico and South Atlantic Fishery Management Councils (GMFMC, SAFMC). For-hire data collection programs gather information on fishing effort and catch by marine recreational anglers fishing on professionally licensed for-hire vessels (including charter, guide, and large party boats). NOAA Fisheries, in coordination with the states, ACCSP, and FINs, supports regional programs to collect these statistics, with the ultimate goal of building a system of data collection programs that are responsive to regional needs and are coordinated at the national level to provide standard data elements for both regional and national assessments of fish stocks and associated fisheries management.

Recreational harvest from for-hire vessels in the Southeast Region are monitored through a combination of effort and dockside intercept surveys. The Marine Recreational Information Program's (MRIP) for-hire survey (FHS) and the Southeast Region Headboat Survey. The FHS estimates charter vessel catches of state and federally managed species off the U.S. Atlantic and Gulf coast states, with the exception of Texas and more recently Louisiana. The Texas Parks and Wildlife Department conducts their own creel survey to estimate private and charter landings. Since 1993, South Carolina has administered a paper-based logbook reporting program for every licensed six-pack charter operator. These data are primarily used for state management and quota monitoring for federally managed species occurs as part of the MRIP for-hire survey. North Carolina is also developing an electronic logbook system for their own use with the goal of supplanting the MRIP for-hire survey once fully operational and compatible with MRIP. In recent years, interest by constituents and the Councils has been growing to implement electronic reporting requirements in the for-hire sector. There is general distrust of MRIP landings estimates for the for-hire survey and managers and fishermen have expressed a need for more timely and accurate data to support fishery monitoring, science, and management. Additionally, the National Research Council's (NRC) review of recreational survey methods concluded that in most cases charter boats should be required to maintain logbooks of fish landed and kept. These factors led to an electronic logbook pilot study of Texas and Florida charter vessels in 2010-11 and new electronic reporting regulations for headboats in 2014. Four additional projects have also been funded by MRIP or the National Fish and Wildlife Foundation in 2014 to test new approaches for monitoring charter vessel catch and effort. The GMFMC and SAFMC have also passed motions at recent meetings expressing their interest in electronic reporting by charter vessels and they formed this technical subcommittee to develop recommendations for the Councils' consideration by December 1, 2014, on how to best achieve an electronic reporting system for charter vessels. The technical subcommittee met May 27-28, 2014 to develop recommendations to the Councils. The technical subcommittee reached consensus of several aspects on a proposed program and identified a framework for implementation.

SECTION 2. OBJECTIVES

The Councils appointed this technical subcommittee (membership list below) to develop recommendations to implement an improved data collection program to support the needs of science, fisheries management, and address stakeholder concerns about data quality and redundancy in reporting. Specifically, the technical subcommittee was charged with developing recommendations to implement electronic reporting for charter vessels in the Gulf of Mexico and US South Atlantic in support of the following objectives:

- Increasing the timeliness of catch estimates for in-season monitoring;
- Increasing the temporal (and/or spatial) precision of catch estimates for monitoring;
- Providing vessel-specific catch histories for management;
- Reducing biases associated with collection of catch statistics; and,
- Increasing stakeholder trust and buy-in associated with data collection.

SECTION 3. TECHNICAL SUBCOMMITTEE MEMBERS

3.1 Membership

- Gregg Bray – GSMFC
- Ken Brennan – SEFSC
- Mike Cahall – ACCSP
- Mike Errigo – SAFMC
- Mark Fisher - TPWD
- John Froeschke – GMFMC
- Eric Hiltz – SCDNR
- Doug Mumford – NCDENR
- Ron Salz – MRIP
- Beverly Sauls – FWC
- George Silva – HMS
- Andy Strelcheck – SERO

3.2 Timeline

- May 2014 – Technical subcommittee meeting in Tampa, Florida
- June 2014 - Provide meeting summary to Councils for review and guidance;
- July 2014 - Technical subcommittee conference call to discuss Councils' review and guidance;
- September 2014 - Technical subcommittee webinar to discuss items needed to complete the report;
- November 2014 - Draft report sent to subcommittee for review;
- December 1, 2014 - Provide report to Gulf and South Atlantic Councils.

SECTION 4. RECOMMENDATIONS

The technical subcommittee discussed trade offs and limitations of potential modifications to fisheries reporting in for-hire fisheries. The subcommittee agreed (by consensus) on preferred approaches for several aspects and discussed barriers to implementation of a new program. The subcommittee solicited and received preliminary input from both Councils following the May 27-28 meeting. This guidance has been integrated into the report to the extent practibable yet, the recommendations remain those of the technical subcommittee.

The subcommittee emphasized that the program should ***not*** be designed around a single species, and should be flexible enough to accommodate different reporting requirements for different segments of the for-hire fleet. For example, if federally permitted vessels were required to report more frequently during the recreational red snapper season, other vessels that do not participate in this fishery should be able to continue reporting at their normal frequency. Similarly, an electronic reporting system should be able to accommodate vessels already required to carry VMS units for participation in commercial fisheries without necessarily requiring all for-hire vessels to report through VMS. Although not currently required, the Gulf Council expressed interest in using VMS and hail-out, hail-in protocols to improve effort estimates. This practice certainly could improve the quality of effort estimation in the for-hire fleet, although, implemenation would not be without challenges. The cost of a VMS program both in terms of vessel equipment and agency staff/infrastructure would require additional, long-term funding (see section about costs). This may be beyond current resource availability. Rather than recommend fleet-wide implementation of VMS and hail-out, hail-in requirements, the subcommittee recommends structuring the charter fishery monitoring program such that it is scaleable and expandable as management needs, technology, and funding availability change. This recommendation would allow improved data collection in the near term building on the recently implemented electronic reporting system for southeast region headboats (i.e., weekly, electronic reporting) and the MRIP charter vessel pilot program, yet would not require full implemention of VMS to move beyond the current process.

The current survey methodology was deemed inadequate to meet the objectives posed to the group (although not necessarily the original intent of the charter vessel survey). Specifically, timeliness, bias reduction, and stakeholder buy-in could be improved with an electronic reporting system without the inherant expense and time for implementation of VMS technology in the charter fleet (of course, the introduction of new biases is possible). These improvements are necessary given the requirement to establish annual catch limits for federally managed species and close the fishery when the target harvest level has been caught each year. This requirement for in-season quota monitoring is far beyond the management needs when the original charter vessel survey was designed and implemented and the guidance herein attempts to match the data collection effort to the needs of the current and future fisheries management.

4.1 Mandatory or voluntary participation

The technical subcommittee discussed participation in any new charter vessel monitoring program. Specifically, the subcommittee considered if participation in the program by charter vessel owner/operators could be voluntary or if mandatory participation is necessary. Voluntary

reporting programs can be advantageous in that reporting burden is reduced (or absent) from participants that do not wish to participate. This would also reduce the number of reports that require processing for catch and effort estimation. However, in absence of a complete sample, estimation procedures are necessary. Estimation procedures can be accurate and robust in a well-designed survey, however, likely at the expense of reduced timeliness. Developing estimates of total catch from a volunteer program is problematic as the proportion of participants may be highly variable through time or across the survey area and volunteer participants may not be representative of all possible participants in this survey. This pattern has been demonstrated previously (e.g., angler avidity) in other studies of volunteer programs and will bias estimates when expanded to the total sector. Voluntary programs would also require careful consideration of the characteristics of the participants and those who choose not to participate as it is impossible to compare catch patterns with participants and non-participants; and an assumption that they are identical is necessary but likely inaccurate. The subcommittee agreed that the potential for bias is too great to recommend any voluntary reporting program and suggested that any program (i.e., census or survey) require reporting from participants be mandatory if selected (e.g., Southeast Region Headboat Survey (SRHS)).

The subcommittee agreed that the potential for bias is too great to recommend any voluntary reporting program and mandatory participation is necessary for vessel/owneroperators selected. This is recommended to best achieve the overarching objectives of the proposed program.

4.2 Survey or census

Both census and statistical surveys can (and are) used to estimate catch and effort in marine fisheries. Surveys are beneficial in that a representative sample of anglers (as opposed to the entire "population" of anglers in the fishery) and their catch is used to estimate the total catch. However, management often requires these estimates over relatively small areas, short-time scales, or for rare event species. In these situations, survey estimates sometimes lack the precision necessary or desired for management decisions.The common remedy is to increase sample effort (i.e., sample size) to achieve desired precision levels, however, the necessary sample size may exceed program resources. An additional challenge of surveys is that the strata (e.g., area, time-period) require complete coverage before making an estimate. In practice, this means that surveys generally have a longer lag between the time fishing occurs and when the resulting data are available for use.

A census provides a sum of the total effort and catch by tabulating these metrics from all participants in the fishery. In theory, reporting and subsequent use of these data in management can be rapid as no additional estimation procedures are necessary and the report submission frequency can be established (e.g., weekly) to balance management needs with reporting burden on fishery participants. In practice, estimating catch and effort from a census can be challenging if some participants do not report their catch and effort data within the specified reporting periods. In this event, the census is incomplete and requires an expansion factor to calculate the total catch and effort. As with any survey design, this estimation routine requires additional time, resources, and reduces precision of the estimate. In extreme cases, expanding an incomplete census to a total estimate can be difficult or impossible if the proportion of non-compliant

participants is large or if the non-compliant participants are markedly different than those that are reporting as required. Nonetheless, this capability is essential in a real-world census and is important to consider when developing reporting requirements (frequencies and accountability measures) and minimum acceptable lag-time for use in fisheries management.

The technical subcommittee recommends the development and implementation of a electronic logbook *census* program to estimate catch and effort for southeast region charter vessels, including procedures for expanding for non-reporting. This recommendation was based in part on the inability of the current survey to meet the needs of science and management applications and the requirement of timeliness beyond which is readily achievable through a survey approach.

4.3 Reporting frequency

The subcommittee discussed how often reports need to be submitted to provide timely data for science and management. Frequent reporting has at least two benefits. Reporting as frequently as practicable reduces recall error/bias when producing catch reports. Frequent reporting also can make these data available for use sooner. Currently, the GMFMC and SAFMC require electronic reporting on a weekly basis for commercial seafood dealers and federally permitted headboat operators. Similarly, the subcommittee recommends mandatory weekly reporting, or at shorter intervals if necessary (e.g., The Gulf Council may want to require daily logbook submission during the recreational red snapper season) for a new charter vessel program. A second recommendation was that reports be due from the prior fishing week as soon as practicable. Commercial seafood dealer reports must be submitted by the Tuesday following the previous fishing week (Monday through Sunday). This was considered preferable over the headboat reporting requirements where trip reports are due one week after the end of the fishing week. The reduced lag addresses both advantages identified above.

The technical subcommittee recommends trip level reporting with weekly submission due the Tuesday following each fishing week. This would include no activity reports that could be submitted in advance if periods of inactivity are known. The technical subcommittee discussed that a daily reporting requirement may not be feasible or enforceable, however, reporting systems and user interfaces should be designed to encourage "real-time" at-sea reporting of catch and catch related data elements (e.g. fishing location, fishing method, target species).

4.4 Data collection

A variety of software applications are available for data collection and submission including web, smart phone, and tablet based technology. Web-based software provide the capability to report fisheries data after completing the trip. Smart phone or tablet technology could be used for at-sea or real time reporting of catch and effort. This approach may limit the complexity of reporting options but could provide enhanced validation methods because catch and effort data could be submitted before returning to port allowing enhanced dockside validation. Smart phone and tablet technology can also allow for data input without a current

network connection and are also capable of recording vessel positions during a trip via global positioning system (gps) (a far cheaper technology than VMS, but not in real-time).

The subcommittee recommends a multi-faceted approach where a number of reporting platforms can be used so long as the minimum data standards and security protocols are met. Data standards would need to be developed and the subcommittee agreed that NOAA Fisheries, the GulfFIN, and ACCSP could work collaboratively to develop appropriate standards.

These recommendations encompass two overarching objectives of the monitoring program: 1) Flexibility for specific regions, species, or time periods; 2) A flexible framework to allow incorportion of improved technologies as they become available. Electronic monitoring and reporting capabilities are rapidly evolving and the options available in the near-future may far exceed the current suite of tools. It is necessary to allow (and encourage) this developement such that in can be leveraged effectively to meet the needs of fisheries management.

4.5 Data storage and management

The subcommittee discussed data storage and management that would be necessarily expanded from the status quo in a census based monitoring program. The ACCSP and GulfFIN expressed willingness to handle these raw data and indicated this could be accomplished with extant resources.

The subcommittee recommends this process:

1. Logbook data collected via authorized platform, ex. web, tablet, phone, or VMS application
2. Data submitted to ACCSP or GulfFIN;
3. Data integrated by ACCSP or GulfFIN into single composite data set;
4. Composite data set distributed to appropriate agencies for analyses and use.

This process could eliminate duplicate reporting for some participants so long as appropriate data standards are in place and the respective agencies agree to confidentiality standards, which would allow sharing and accepting one another's data for use. Elimination of duplicate reporting (e.g., separate state and federal reports) would be a substantial benefit to participants in this survey program and could mitigate any additional reporting requirements for comparison to the current MRIP survey program.

4.6 Validation and estimation

A successful electronic for-hire program will require adequate validation of catch and effort data and will require collaboration among state, federal, and fishery information network (FIN) programs. A census is likely to be incomplete and estimation procedures for adjusting catch estimates will need to be developed in cooperation with MRIP. The time lag necessary to expand an incomplete census to an estimate (of harvest or effort) should be built into the

timeliness need for science and management applications. The Gulf MRIP pilot program tested new validation procedures and provided guidance on improvements necessary before full implementation. The pilot program was successful in that electronic reporting was used (almost exclusively) and supported many of the goals (e.g., more timely, simplified reporting process) yet, many participants failed to submit reports within the required time frame complicating the use of these data for management. The rates of compliance increased over the length of the pilot study period and similar result would be expected with full implementation highlighting the need for validation and an estimation procedure to calculate total catch and effort.

The technical subcommittee recommends building upon the validation methodology developed in the Gulf MRIP pilot study. An overview of the proposed methodolgy is below.

Dockside Validation of Logbook Trip Reports (Catch and Effort)

Validation procedures are critical to assessing the accuracy and completeness of submitted logbook reports. Critical components of validation include the creation and review of a site and vessel registry, and methods to validate catch and effort of self-reported data. There is currently a MRIP funded project; *Pilot Project; Validation Methods for Headboat Logbooks,* which is testing dockside sampling methods that could be used to validate headboat logbooks. Results from this project will be available in the spring of 2015.

Site and Vessel Registry

A registry of all vessels required to report via logbooks should include detailed docking location information for each vessel. The port city and mailing address for owners of all federally permitted vessels (both active and non-active) is available from the permit frame maintained by NMFS SERO, and may be used as a starting point for indentifying where vessels are located. A regularly updated list of all active charter vessels (both federal and state permitted) with docking site information is also maintained in states where the MRIP FHS is administered. From the vessel registry, a list of all known docking locations should be generated and each site should be given a unique identification code. Information contained in the site list should also include site location descriptions, site telephone numbers, contact person at the site, GPS location coordinates, and the total number of vessels located at the site. The site registry should be used to randomly select sites for dockside validation assignments (described below).

Validation of Catch

Dockside assignments for validating harvest should be randomly selected from the site registry and stratified by region (e.g. state or sub-region within large states) using probability proportional to size (PPS) sampling with replacement, with the size measure being the number of vessels at each site. This method is used in statistical sampling designs where sample clusters (e.g. sites where charter vessels dock) differ widely with respect the number of sample units (charter vessels) contained within. PPS sampling selects sites with a higher number of vessels more frequently and prevents potential sample bias by insuring that vessels at low pressure sites do not have a higher probability for selection. Sample days should be distributed across weeks and across weekend/weekday strata, and more weight should be given towards high fishing activity periods (summer and weekends). It is recommended that the site selection program be run monthly by a regional coordinating entity, such as GSMFC, who provides draw files to local

coordinators (states or other entities). Local coordinators should report tallies for the number of completed assignments and successful interviews to the regional entity weekly.

During an assignment, field samplers should arrive at the assigned site at least one hour before half-day charter fishing trips are expected to return. For sites where overnight fishing trips take place, field staff should call or visit the site the day before the assignment to determine if overnight trips are returning and arrive on site early if necessary to intercept those vessels. Upon arrival, samplers should survey the site and attempt to locate each vessel listed on the vessel register for that site. Each vessel at the site should be recorded on an Assignment Summary Form and coded as one of the following:

1 = vessel in
2 = vessel out, charter fishing (this must be verified)
3 = unable to validate (vessel sold, moved to unknown location, etc.)
4 = vessel out, NOT charter fishing (this must be verified)
5 = vessel out, fishing status unknown (use when unable to verify the fishing status)

For vessels coded as 2 (out charter fishing), the field sampler should attempt to verify the expected return time and record this time on the Assignment Summary Form. As each vessel returns from fishing, the sampler should record on a separate Dockside Intercept Survey Form the vessel name, vessel ID number, and the return date and time. Samplers should first approach the vessel operator for permission to weigh and measure all harvested fish, and the sampler should then observe the harvested catch and record the total number of fish for each species, as well as length at the mid-line (mm) and weight (kg) of whole fish that can be measured. After the catch is inspected, the field sampler should then conduct an interview in person with a crew member (captain and/or mate). It is important to conduct interviews directly with vessel operators, rather than with charter vessel clients, since the purpose of the dockside validation is to measure recall error and bias in trip data recorded by vessel operators on logbook trip reports. During the in-person interview, the following information should be recorded:

- Departure date
- Departure and return time
- Number of passengers (fishing and non-fishing, not including crew)
- Number of anglers (total number of passengers that fished at any time during the trip)
- Number of crew, including captain
- Target species
- Primary area fished (crew should be asked to identify the statistical area where the majority of fishing took place during the trip using statistical maps provided)
- The minimum and maximum depths (in feet) fished for the trip
- The percent of fishing time spent fishing in federal waters, state waters, and inland waters
- Primary fishing methods (bottom fishing, drifting, trolling, spear fishing)

- Hours fished (number of hours spent with gear in the water)
- For each species released or could otherwise not be observed by the field sampler, the total number released for each disposition:

  1 – Thrown back alive

  3 – Eaten/plan to eat

  4 – Used for bait/plan to use for bait

  5 – Sold/plan to sell

  6 – Thrown back dead/plan to throw away

  7 – Other purpose

Samplers should remain on site until the last vessel known to be out fishing has returned (with the exception of overnight trips).

Validation of Vessel Activity and Inactivity (Effort)

Validation of vessel activity (or inactivity) is critical to determining compliance with logbook reporting requirements. Information on whether or not a vessel is in or out of port on a particular day can be matched with logbook records or hail out/hail in requirements to determine if vessel activity was accurately reported. To validate vessel activity and inactivity before reporting in the logbook reporting system, sites should be clustered into groups of sufficient size that all sites within the selected region may be visited within a 6 to 8 hour time period, including driving time. Site clusters should be selected each week within a month using simple random sampling, without replacement. For small states where all sites may be visited in a single day, sites may all be included in a single cluster that is validated each week.

During a scheduled vessel activity validation assignment, the field sampler should visit all sites within a selected vessel activity validation region and attempt to verify the fishing status for all vessels at each site within that region. The sampler should record the fishing status and time for each vessel on a Vessel Status Validation Form using the following codes:

1 – Vessel in

2 – Vessel out, charter fishing (must be verified)

3 – Unable to validate

4 – Vessel out, not charter fishing (must be verified)

5 – Vessel out, status unknown

If possible, the sampler should verify the fishing status with someone at the dock or in the booking booth. If unable to verify the fishing status of a vessel, the sampler should use code 5.

Dockside validation will also serve the secondary, and essential, function of collecting biological samples from the for-hire fishery. These samples are necessary to characterize the

catch for use in stock assessments and to monitor the health of the stocks. If practicable, the subcommittee recommends using observers on six-pack charter vessels. Additionally, VMS in conjunction with hail-out, hail-in to improve validation could be considered to improve validation and data quality, although at the expense of additional cost and reporting burden.

The subcommittee recommends use of an MRIP certified methodology for validation with the following elements: Gulf MRIP pilot study methodologies, including dockside validation of catch and vessel activity, and maintenance of site and vessel registries.

The following additional elements should also be considered:

- At-sea observer coverage; and,
- Fine-scale discard data, depths of capture, area fished, release mortality.

If VMS and hail in/hail out requirements are implemented, methods for validation could be modified as VMS technicians could validate when trips occur through vessel position coordinates.

4.7 Accountability measures

Procedures to ensure timely and accurate reporting of data are essential to the success of any program. Late or missing reports can reduce accuracy (recall bias), increase uncertainty (e.g., requires procedure to estimate catch from missing reports), and can prevent timely use of these data for science and management. The Councils recently began requiring electronic submission of reports from commercial seafood dealers. Dealer reports and the associated problems with late or missing reports were discussed at length by the Councils. The Councils now require timely submission (weekly, with reports submitted by the Tuesday following the previous fishing week) and that seafood dealers are *only* authorized to purchase seafood if they are up to date on previous reports. A similar procedure should be developed for charter vessels requiring submission of previous reports to maintain a valid charter vessel permit and take passengers on for-hire trips. The subcommittee recognizes that accountability will be challenging and costly to implement due to the mobility, turnover and sheer number of charter vessels.

The principle objective is to encourage compliance without issuing fines and/or penalties. However, the full range of potential accountability measures should be enumerated in consultation with NOAA General Counsel through development of management regulations and penalty schedules. Similar (or identical) reporting requirements should be established between the South Atlantic and Gulf of Mexico management regions that will ease reporting burden and aid in compliance. Extensive outreach, training (as necessary), positive messaging, and industry participation in the design of the data collection system should aid in reporting compliance and meeting the goals of the program.

The subcommittee recommends accountability measures and reporting requirements similar to those implemented for commercial seafood dealers in the southeast

region (i.e., weekly submission of trip level reports, including periods of no activity due Tuesday following each week). A charter vessel owner/operator would only be authorized to harvest or possess federally managed species if previous reports have been submitted by the charter vessel owner/operator and received by NMFS (NMFS) in a timely manner. Any delinquent reports would need to be submitted and received by NMFS before a charter vessel owner/operator could harvest or possess federally managed species from the EEZ or adjacent state waters.

4.8 Calibration with existing survey

Transitioning into the proposed program will require an upstart period of at least one year to conduct outreach and ensure a high level of compliance. **The subcommittee recommends dual survey methods (existing and new) for no less than three years.** This overlap in survey periods will provide a basis to calibrate the new census results to the historical catch and effort data from the existing charter vessel survey. Historical catch data are critical inputs for science (e.g., stock assessments) and management (e.g., season length) and implementation of a new system without calibration would compromise the value of the historical catch information. Additionally, implementation of the new program is likely to have start-up difficulties that require modification, as such, the *existing survey would not be expected to provide the best scientific information available (at least for the first year)* until the new program is deemed operational.

Data from the new program would not be expected to provide management advice during the first year of operation. Moreover, this would allow the possibility of an initial phase-in or limited implementation to identify and solve significant problems prior to implementation for all participants.

4.9 Should state permitted for-hire vessels be required to participate?

The subcommittee discussed the objectives of the proposed program (i.e., improved estimates of catch both in terms of timeliness and accuracy), as well as the importance of mandating participation from state permitted for-hire vessels. The possibility of state vessels landing federally managed species in state waters does exist but the magnitude of those landings is unknown at this time, but expected to be relatively small for most federally managed species. The difficulties in establishing rules to mandate state vessel participation may be too great and should not be a barrier to developing a reporting program for federally permitted vessels. However, incorporation of state vessels into the program should be a long-term objective that would aid in timeliness and accuracy of data from the entire for-hire fleet and could simplify validation protocols that would not require distinguishing between state and federally permitted vessels.

The subcommittee recommends that the Councils move forward with development of a reporting system that includes federally permitted for-hire vessels while also exploring ways to determine the impact of state permitted vessels on landings estimates of federally

managed species. Long term, the subcommittee recommends that both state and federally permitted charter vessels participate in this census to include the entire fleet of charter vessels harvesting federally managed species.

4.10 Program coordination

The subcommittee discussed that the success of the program requires a smooth and well-coordinated program throughout the region. This is to meet timeliness needs, improve accuracy (and precision), and minimize duplication of effort.

To this end, the subcommittee recommends that GulfFIN and ACCSP committees work jointly with end users (i.e., MRIP, SERO, SEFSC, HMS, and state agencies) to coordinate this new reporting program. Both quality control and quality assurance units in the program to ensure data meets required standards. A timeline for program implementation must be developed with the Councils, states, and other agencies.

4.11 Budgetary implications

The vision of the subcommittee is that the proposed census program may be funded through MRIP and incorporate MRIP certified validation and estimation procedures but operation would be decentralized from MRIP to regional and state entities through their FINs**. It is expected that the census approach recommended by this subcommittee would result in additional costs for monitoring compliance and validating trip activity. Additional infrastructure and personnel may be necessary to maintain and process these data.**

Electronic Logbook Costs

Cost estimates are an important component to the development of any new reporting program, and provide resource managers and scientists with a sense of how much funding is needed to support both implementation and maintenance of a program. Costs for electronic reporting may include: software development, reporting and/or monitoring hardware, monthly service fees, and personnel for data management, validation, and estimation. Costs are incurred both by the government, as well as fishermen who report these data. The following provides a summary of estimated costs for the electronic reporting program developed by the Technical Subcommittee. Cost estimates from existing programs and pilot studies, such as MRIP, the Southeast Headboat Survey, the commercial coastal logbook program, and the MRIP electronic logbook pilot study, are also provided for comparative purposes. Implementation of a new reporting program would require side-by-side comparative testing for calibration purposes, and those costs are not considered herein. Costs for observer coverage are also not included. Rather, costs are focused on the initial implementation, ongoing administration, data management, and statistical estimation of an electronic reporting program in the Gulf of Mexico and South Atlantic.

<u>Current and Pilot Study Program Costs</u>
The Marine Recreational Information Program (MRIP) is the primary source of charter for-hire data in the Southeast Region. MRIP collects catch and effort data from both state-licensed and

federally-permitted charter vessels from North Carolina through Mississippi. Charter vessel catch and effort data are also collected by the Louisiana Department of Fish and Wildlife and Texas Parks and Wildlife Department through creel surveys, and side-by-side comparison testing is planned for Louisiana in 2015. Annually, MRIP spends approximately $4.3 million dollars to conduct dockside sampling and validation in the Southeast Region (North Carolina to Louisiana) for both private and charter vessels. Costs for specifically conducting charter sampling were not estimated, as those costs are difficult to estimate due to a combination of factors (survey procedures, contractual pricing, fixed costs and staffing/administrative considerations), but obviously would be less than the overall costs indicated above. An additional $600 thousand dollars is spent conducting the for-hire telephone survey annually. A total of 3,920 charter vessels are currently included in the MRIP for-hire survey frame.

Headboat catch for 145 vessels is monitored through electronic logbooks by the SEFSC. A total of 13 federal, state, and contract personnel are involved in administering the program and monitoring fishing activity from North Carolina to Texas, including biological sampling and validation of reports of landings and effort. Costs for the program include salaries and benefits, vehicles, travel, supplies, and software development and maintenance. Total funding for the Southeast Headboat Survey is approximately $888 thousand dollars, which equates to $6,124 per vessel annually.

The SEFSC coastal logbook program for commercial fisheries is a paper-based logbook program, which obtains data from about 3,000 permit holders (vessels). Annually, the SEFSC spends $775 thousand dollars for data entry, personnel, printing, storage, software maintenance, and overhead for this program. These costs do not include Trip Interview Program sampling, which is used for validation and biological sampling of commercial landings. The costs also do not include compliance enforcement.

Lastly, MRIP conducted an electronic logbook pilot study in 2011. The study included 410 vessels from the Florida Panhandle and Port Aransas, Texas. Costs for the pilot program included $213.5 thousand dollars for start-up expenses, including a stakeholder workshop, software development, certified letters, outreach meetings, and working group meetings. Project expenses for logbook reporting and validation for one-year totaled $385.6 thousand dollars. These expenses included salaries and overhead for a full-time coordinator, a database manager, and four field staff. Expenses were also included for travel and training expenses, equipment, printing costs, at-sea observer passenger fares, and GSMFC administrative costs. The average cost per vessel was $1,340 for Texas vessels and $658 for Florida vessels. Many more vessels were concentrated in a small geographic area in the Florida Panhandle, resulting in lower costs relative to Texas. In-kind contributions from NMFS and state employees were not included for many staff who served on the project team for the pilot study and conducted analyses, customer service, and database management. Therefore costs presented in the final report are less than the true costs of the project. On average, the cost per vessel as reported in the pilot study was $911 after excluding observer passenger fares and paper-based logbook printing.

Table 1. Estimated Costs for an Electronic Logbook Program. Estimates are based on 2,555 federally permitted charter vessels. Headboat vessels are excluded from cost estimates, as well as vessels already possessing a commercial reef fish permit and VMS unit.

Activity	Cost Type	Estimated Expenses	Comments/Source
Software Development	Start-up (gov't)	$100,000	Costs for Web site/app development. These costs could be reduced if existing software applications (SE Headboat Survey or iSnapper) are used instead of any new software developed. However, modifications of data fields, data storage and data export procedures would be required to accommodate the increased number of vessels.
Hardware/database infrastructure	Start-up (gov't)	$25,000	Purchase of a server to store data.
Hardware/database maintenance	Reoccurring (gov't)	$20,000	There would be reoccurring costs for hardware/software and database maintenance.
Database manager(s) and administration	Reoccurring (gov't)	$150,000	Salaries and administrative costs for database management.
Certified Letters	Start-up, with period reoccurring compliance letters (gov't)	$15,858	2,643 vessels @ $6 per letter
Stakeholder Outreach Workshops	Start-up (gov't)	$30,000	15 meetings @ $2,000 per meeting
Field Samplers – Salaries, Benefits, and Overhead	Reoccurring (gov't)	$3,392,000	53 port agents @ 50 vessels per port agent. $64,000 for salary, benefits, and overhead per port agent – source SE Headboat Survey. If costs per vessel ($658-$1,340) from MRIP pilot study are used, then total costs range from $1.74 to $3.54 million.
Data Analyst(s) – Salary and Benefits	Reoccurring (gov't)	$215,000	1 Gulf and 1 South Atlantic analyst @ GS-13 salary + benefits
Training, Travel, and Equipment for Field Samplers	Reoccurring (gov't)	$158,700	~$60 per vessel – source MRIP pilot study; costs are higher for more remote areas vs. ports with large concentrations of vessels.
Enforcement and Compliance Monitoring – Enforcement officer salaries, benefits, and overhead.	Reoccurring (gov't)	$800,000	Data timeliness is critical for a logbook program. Additional compliance monitoring and enforcement for misreporting and non-compliance with reporting will be required. To properly conduct compliance an increase of 5 Enforcement Officers and 1

			Supervisory Enforcement Officer are estimated to be needed.
VMS units (if required)	Start-up (gov't or industry)	$5,750,000 (low estimate) $7,750,000 (high estimate) (Reimbursement to fishermen for the purchase of VMS units may be available from NOAA Fisheries' Electronic Monitoring Grant Fund, but this money is currently not in hand and OLE would need to request funds through the budgetary process)	Currently 107 charter for-hire vessels have a commercial reef fish permit and VMS unit and another 145 vessels participate in the SE Headboat Survey. Approximately 2,500 charter for-hire vessels would need to obtain a VMS, if required. Costs for VMS units range from $2,300 to $3,800. Up to $3,100 is currently authorized for reimbursement.
VMS installation	Start-up (industry)	$500,000 (low estimate) $1,500,000 (high estimate)	2,500 vessels x $600 for marine technician to install VMS unit. Installation costs range from $200 to $600 depending upon proximity of vessel to marine electrician.
VMS personnel	Reoccurring (gov't)	$530,000	Salary and benefits for five VMS technical staff (monitor 500+ vessels each) and one OLE Helpdesk person.
VMS annual service charges	Reoccurring (industry)	$1,800,000	$60 per month per vessel; $720 annually per vessel x 2,500 vessels
VMS unit software	Reoccurring (gov't)	$50,000	If VMS units will report any unique information, units will need to have initial and periodically updated software installed at a cost up to $50,000.
Total Costs (w/o VMS)		$170,858 (Start-up) $4,735,700 (Reoccurring) $4,906,558 (Start-up + reoccurring)	
Total Costs (w/ VMS)		$6,420,858 (Start-up – low est.) $9,420,858 (Start-up – high est.) $7,115,700 (Re-occurring) $13,536,558 (Total – low est.) $16,536,558 (Total – high est.)	If VMS is required, some expenses for port sampling validation of fishing effort and enforcement compliance may be reduced.

SECTION 5. CHALLENGES

5.1 Calibration with existing survey

The subcommittee recommends the use of dual survey methods (existing and new) for no less than three years. This overlap in survey periods will provide a basis to calibrate the new census results to the historical catch and effort data from the existing charter vessel survey. Historical catch data are critical inputs for science (e.g., stock assessments) and management (e.g., season length) and implementation of a new system without calibration would compromise the value of the historical catch information. Additionally, implementation of the new program is likely to have start-up difficulties that require modification, as such, the *proposed census would not be expected to provide the best scientific information available (at least for the first year)* until the new program was deemed operational.

5.2 Reporting burden

Although frequent reporting with as short as practicable lags between end of fishing period and report submission is desirable, the burden of reporting on vessel operators is an important concern. Wherever feasible, the reporting burden should be minimized. Implementation of this new program would require additional reporting burden over the status quo. To mitigate this requirement, the subcommittee recommends reducing duplicate reporting (submission of reports to multiple agencies, possibly in different formats) to ease reporting requirements. For example, charter vessels selected for the current For-Hire telephone survey should be able to submit their data electronically satisfying the submission requirements for both programs.

5.3 Compliance

Ensuring compliance is likely the biggest barrier to achieving the objectives for this program; more timely data with improved accuracy and stakeholder confidence. The MRIP Gulf logbook pilot project was negatively affected by late or missing reports from participants. In a census program, this is detrimental to both timeliness and accuracy as complete catch estimates cannot be generated with missing reports. Late reporting also affects accuracy because of recall bias (i.e., difficult to remember what was caught several weeks earlier). In addition, an incomplete census will require an estimation procedure to account for un-reported landings that requires time and adds uncertainty to the final catch and effort estimates.

Adequate accountability measures are essential to achieving high compliance rates (i.e., 100% timely reporting). The subcommittee recommended an approach similar to the accountability measures recently developed for commercial seafood dealers and headboats. Briefly, commercial seafood dealers are only authorized (i.e., possess valid permit) to purchase seafood if their weekly purchase reports have been submitted. As is the case with headboat reporting, charter boats would not be allow to harvest or possess federally managed species from the EEZ or adjacent state waters untilprevious trip (including no activity) reports have been submitted. The effectiveness of this accountability measure is dependent of the capability of law

enforcement to enforce reporting requirements. **The subcommittee recommends consultation with the Office of Law Enforcement and NOAA General Counsel to explore the selection of appropriate and enforceable accountability measures.**

5.4 Collaboration with states

Individual States would be tasked with data collection and validation within their collective states. State requirements vary regarding reporting of fishery data with some states (e.g., South Carolina) requiring the submission of paper-based reporting. Other states (e.g., North Carolina) are progressing rapidly toward electronic logbooks with the other states within this range. **Long term**, **the subcommittee recommends that both state and federally permitted charter vessels participate in this census to include the entire fleet of charter vessels harvesting federally managed species.** In the near-term, implementation of electronic logbook reporting for the federally permitted for-hire fleet would substantially improve the data collection program but not depend on delays and uncertainties associated with requiring similar regulations for state-permitted vessels at this time. Consideration of only federally permitted vessels would ease the implementation of this process with the caveat that a large proportion of charter vessels would not be included in the census and their catch (and effort) would have to be estimated via other means that would reduce effectiveness of the census program. However, for state-permitted vessels, requiring electronic reporting without duplicate paper reporting may require legislative changes in some states (e.g., South Carolina) and there is uncertainty if or when this could be accomplished.

APPENDIX F

ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED CONSIDERATION

Action 1: Modify Frequency and Mechanism of Data Reporting for Charter Vessels

Gulf Preferred Alternative 4. Require that federally permitted charter vessels submit fishing records to the SRD for each trip via electronic reporting (via NMFS approved hardware/software) prior to arriving at the dock.

Action 2: Modify Frequency and Mechanism of Data Reporting for Headboats

Gulf Preferred Alternative 4. Require that headboats submit fishing records to the SRD for each trip via electronic reporting (via NMFS approved hardware/software) prior to arriving at the dock.

Action 3: Modify Electronic Reporting Requirements to Require Vessel or Catch Location Reporting

Gulf Preferred Alternative 2. Require federally permitted for-hire vessels to use a NMFS approved electronic device that automatically records vessel location at specified time intervals for later transmission:

Gulf Preferred Sub-Alternative 2a. In the Gulf (headboat)
Gulf Preferred Sub-Alternative 2b. In the Gulf (charter vessel)
Sub-Alternative 2c. In the South Atlantic (headboat)
Sub-Alternative 2d. In the South Atlantic (charter vessel)

Alternative 3. Require federally permitted for-hire vessels in the Gulf to use a NMFS approved Vessel Monitoring System (VMS) to record vessel location at specified time intervals:

Sub-Alternative 3a. In the Gulf (headboat)
Sub-Alternative 3b. In the Gulf (charter vessel)